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ECONOMIC REPORT OF THE PRESIDENT



TRANSMITTED TO THE CONGRESS FEBRUARY 2010

TOGETHER WITH THE ANNUAL REPORT OF THE COUNCIL OF ECONOMIC ADVISERS

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^{*}For a detailed table of contents of the Council's Report, see page 15.



ECONOMIC REPORT OF THE PRESIDENT



ECONOMIC REPORT OF THE PRESIDENT

To the Congress of the United States:

As we begin a new year, the American people are still experiencing the effects of a recession as deep and painful as any we have known in generations. Traveling across this country, I have met countless men and women who have lost jobs these past two years. I have met small business owners struggling to pay for health care for their workers; seniors unable to afford prescriptions; parents worried about paying the bills and saving for their children's future and their own retirement. And the effects of this recession come in the aftermath of a decade of declining economic security for the middle class and those who aspire to it.

At the same time, over the past two years, we have also seen reason for hope: the resilience of the American people who have held fast even in the face of hardship—to an unrelenting faith in the promise of our country.

It is that determination that has helped the American people overcome difficult periods in our Nation's history. And it is this perseverance that remains our great strength today. After all, our workers are as productive as ever. American businesses are still leaders in innovation. Our potential is still unrivaled. Our task as a Nation—and our mission as an Administration—is to harness that innovative spirit, that productive energy, and that potential in order to create jobs, raise incomes, and foster economic growth that is sustained and broadly shared. It's not enough to move the economy from recession to recovery. We must rebuild the economy on a new and stronger foundation.

I can report that over the past year, this work has begun. In the coming year, this work continues. But to understand where we must go in the next year and beyond, it is important to remember where we began one year ago. Last January, years of irresponsible risk-taking and debt-fueled speculation—unchecked by sound oversight—led to the near-collapse of our financial system. We were losing an average of 700,000 jobs each month. Over the course of one year, \$13 trillion of Americans' household wealth had evaporated as stocks, pensions, and home values plummeted. Our gross domestic product was falling at the fastest rate in a quarter century. The flow of credit, vital to the functioning of businesses large and small, had ground to a halt. The fear among economists, from across the political spectrum, was that we could sink into a second Great Depression.

Immediately, we took a series of difficult steps to prevent that catastrophe for American families and businesses. We acted to get lending flowing again so ordinary Americans could get financing to buy homes and cars, to go to college, and to start businesses of their own; and so businesses, large and small, could access loans to make payroll, buy equipment, hire workers, and expand. We enacted measures to stem the tide of foreclosures in our housing market, helping responsible homeowners stay in their homes and helping to stop the broader decline in home values.

To achieve this, and to prevent an economic collapse, we were forced to use authority enacted under the previous Administration to extend assistance to some of the very banks and financial institutions whose actions had helped precipitate the turmoil. We also took steps to prevent the collapse of the American auto industry, which faced a crisis partly of its own making, to prevent another round of widespread job losses in an already fragile time. These decisions were not popular, but they were necessary. Indeed, the decision to stabilize the financial system helped to avert a larger catastrophe, and thanks to the efficient management of the rescue—with added transparency and accountability—we have recovered most of the money provided to banks.

In addition, even as we worked to address the crises in our banking sector, in our housing market, and in our auto industry, we also began attacking our economic crisis on a broader front. Less than one month after taking office, we enacted the most sweeping economic recovery package in history: the American Recovery and Reinvestment Act of 2009. The Recovery Act not only provided tax cuts to small businesses and 95 percent of working families and provided emergency relief to those out of work or without health insurance; it also began to lay a new foundation for long-term growth. With investments in health care, education, infrastructure, and clean energy, the Recovery Act has saved or created roughly two million jobs so far, and it has begun the hard work of transforming our economy to thrive in the modern, global era. Because of these and other steps, we can safely say that we've avoided the depression many feared. Our economy is growing again, and the growth over the last three months was the strongest in six years. But while economic growth is important, it means nothing to somebody who has lost a job and can't find another. For Americans looking for work, a good job is the only good news that matters. And that's why our work is far from complete.

It is true that the steps we have taken have slowed the flood of job losses from 691,000 per month in the first quarter of 2009 to 69,000 in the last quarter. But stemming the tide of job loss isn't enough. More than 7 million jobs have been lost since the recession began two years ago. This represents not only a terrible human tragedy, but also a very deep hole from which we'll have to climb out. Until jobs are being created to replace those we've lost—until America is back at work—my Administration will not rest and this recovery will not be finished.

That's why I am continuing to call on the Congress to pass a jobs bill. I've proposed a package that includes tax relief for small businesses to spur hiring, that accelerates construction on roads, bridges, and waterways, and that creates incentives for homeowners to invest in energy efficiency, because this will create jobs, save families money, and reduce pollution that harms our environment.

It is also essential that as we promote private sector hiring, we continue to take steps to prevent layoffs of critical public servants like teachers, firefighters, and police officers, whose jobs are threatened by State and local budget shortfalls. To do otherwise would not only worsen unemployment and hamper our recovery; it would also undermine our communities. And we cannot forget the millions of people who have lost their jobs. The Recovery Act provided support for these families hardesthit by this recession, and that support must continue.

At the same time, long before this crisis hit, middle-class families were under growing strain. For decades, Washington failed to address fundamental weaknesses in the economy: rising health care costs, growing dependence on foreign oil, an education system unable to prepare all of our children for the jobs of the future. In recent years, spending bills and tax cuts for the very wealthiest were approved without paying for any of it, leaving behind a mountain of debt. And while Wall Street gambled without regard for the consequences, Washington looked the other way.

As a result, the economy may have been working for some at the very top, but it was not working for all American families. Year after year, folks were forced to work longer hours, spend more time away from their loved ones, all while their incomes flat-lined and their sense of economic security evaporated. Growth in our country was neither sustained nor broadly shared. Instead of a prosperity powered by smart ideas and sound investments, growth was fueled in large part by a rapid rise in consumer borrowing and consumer spending.

Beneath the statistics are the stories of hardship I've heard all across America—hardships that began long before this recession hit two years ago. For too many, there has long been a sense that the American dream—a chance to make your own way, to work hard and support your family, save for college and retirement, own a home—was slipping away. And this sense of anxiety has been combined with a deep frustration that Washington either didn't notice, or didn't care enough to act.

These weaknesses have not only made our economy more susceptible to the kind of crisis we have been through. They have also meant that even in good times the economy did not produce nearly enough gains for middle-class families. Typical American families saw their standards of living stagnate, rather than rise as they had for generations. That is why, in the aftermath of this crisis, and after years of inaction, what is clear is that we cannot go back to business as usual.

That is why, as we strive to meet the crisis of the moment, we are continuing to lay a new foundation for prosperity: a foundation on which the middle class can prosper and grow, where if you are willing to work hard, you can find a good job, afford a home, send your children to worldclass schools, afford high-quality health care, and enjoy retirement security in your later years. This is the heart of the American Dream, and it is at the core of our efforts to not only rebuild this economy—but to rebuild it stronger than before. And this work has already begun.

Already, we have made historic strides to reform and improve our education system. We have launched a Race to the Top in which schools are competing to create the most innovative programs, especially in math and science. We have already made college more affordable, even as we seek to increase student aid by ending a wasteful subsidy that serves only to line the pockets of lenders with tens of billions of taxpayer dollars. And I've proposed a new American Graduation Initiative and set this goal: by 2020, America will once again have the highest proportion of college graduates in the world. For we know that in this new century, growth will be powered not by what consumers can borrow and spend, but what talented, skilled workers can create and export.

Already, we have made historic strides to improve our health care system, essential to our economic prosperity. The burdens this system

places on workers, businesses, and governments is simply unsustainable. And beyond the economic cost—which is vast—there is also a terrible human toll. That's why we've extended health insurance to millions more children; invested in health information technology through the Recovery Act to improve care and reduce costly errors; and provided the largest boost to medical research in our history. And I continue to fight to pass real, meaningful health insurance reforms that will get costs under control for families, businesses, and governments, protect people from the worst practices of insurance companies, and make coverage more affordable and secure for people with insurance, as well as those without it.

Already, we have begun to build a new clean energy economy. The Recovery Act included the largest investment in clean energy in history, investments that are today creating jobs across America in the industries that will power our future: developing wind energy, solar technology, and clean energy vehicles. But this work has only just begun. Other countries around the world understand that the nation that leads the clean energy economy will be the nation that leads the global economy. I want America to be that nation. That is why we are working toward legislation that will create new incentives to finally make renewable energy the profitable kind of energy in America. It's not only essential for our planet and our security, it's essential for our economy.

But this is not all we must do. For growth to be truly sustainable for our prosperity to be truly shared and our living standards to actually rise—we need to move beyond an economy that is fueled by budget deficits and consumer demand. In other words, in order to create jobs and raise incomes for the middle class over the long run, we need to export more and borrow less from around the world, and we need to save more money and take on less debt here at home. As we rebuild, we must also rebalance. In order to achieve this, we'll need to grow this economy by growing our capacity to innovate in burgeoning industries, while putting a stop to irresponsible budget policies and financial dealings that have led us into such a deep fiscal and economic hole.

That begins with policies that will promote innovation throughout our economy. To spur the discoveries that will power new jobs, new businesses—and perhaps new industries—I have challenged both the public sector and the private sector to devote more resources to research and development. And to achieve this, my budget puts us on a path to double investment in key research agencies and makes the research and experimentation tax credit permanent. We are also pursuing policies that will help us export more of our goods around the world, especially by small businesses and farmers. And by harnessing the growth potential of international trade—while ensuring that other countries play by the rules and that all Americans share in the benefits—we will support millions of good, high-paying jobs.

But hand in hand with increasing our reliance on the Nation's ingenuity is decreasing our reliance on the Nation's credit card, as well as reining in the excess and abuse in our financial sector that led large firms to take on extraordinary risks and extraordinary liabilities.

When my Administration took office, the surpluses our Nation had enjoyed at the start of the last decade had disappeared as a result of the failure to pay for two large tax cuts, two wars, and a new entitlement program. And decades of neglect of rising health care costs had put our budget on an unsustainable path.

In the long term, we cannot have sustainable and durable economic growth without getting our fiscal house in order. That is why even as we increased our short-term deficit to rescue the economy, we have refused to go along with business as usual, taking responsibility for every dollar we spend. Last year, we combed the budget, cutting waste and excess wherever we could, a process that will continue in the coming years. We are pursuing health insurance reforms that are essential to reining in deficits. I've called for a fee to be paid by the largest financial firms so that the American people are fully repaid for bailing out the financial sector. And I've proposed a freeze on nonsecurity discretionary spending for three years, a bipartisan commission to address the long-term structural imbalance between expenditures and revenues, and the enactment of "pay-go" rules so that Congress has to account for every dollar it spends.

In addition, I've proposed a set of common sense reforms to prevent future financial crises. For while the financial system is far stronger today than it was one year ago, it is still operating under the same rules that led to its near-collapse. These are rules that allowed firms to act contrary to the interests of customers; to hide their exposure to debt through complex financial dealings that few understood; to benefit from taxpayer-insured deposits while making speculative investments to increase their own profits; and to take on risks so vast that they posed a threat to the entire economy and the jobs of tens of millions of Americans.

That is why we are seeking reforms to empower consumers with the benefit of a new consumer watchdog charged with making sure that financial information is clear and transparent; to close loopholes that allowed big financial firms to trade risky financial products like credit defaults swaps and other derivatives without any oversight; to identify system-wide risks that could cause a financial meltdown; to strengthen capital and liquidity requirements to make the system more stable; and to ensure that the failure of any large firm does not take the economy down with it. Never again will the American taxpayer be held hostage by a bank that is "too big to fail."

Through these reforms, we seek not to undermine our markets but to make them stronger: to promote a vibrant, fair, and transparent financial system that is far more resistant to the reckless, irresponsible activities that might lead to another meltdown. And these kinds of reforms are in the shared interest of firms on Wall Street and families on Main Street.

These have been a very tough two years. American families and businesses have paid a heavy price for failures of responsibility from Wall Street to Washington. Our task now is to move beyond these failures, to take responsibility for our future once more. That is how we will create new jobs in new industries, harnessing the incredible generative and creative capacity of our people. That is how we'll achieve greater economic security and opportunity for middle-class families in this country. That is how in this new century we will rebuild our economy stronger than ever before.

THE WHITE HOUSE FEBRUARY 2010





THE ANNUAL REPORT OF THE COUNCIL OF ECONOMIC ADVISERS



LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS Washington, D.C., February 11, 2010

Mr. President:

The Council of Economic Advisers herewith submits its 2010 Annual Report in accordance of the Employment Act of 1946 as amended by the Full Employment and Balanced Growth Act of 1978. Sincerely,

Christing D. Komer

Christina D. Romer Chair

Austan Goolsbee Member

Cecilia Elena Rouse Member



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CHAPTER 1

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TO RESCUE, REBALANCE, AND REBUILD

President Obama took office at a time of economic crisis. The recession that began in December 2007 had accelerated following the financial crisis in September 2008. By January 2009, 11.9 million people were unemployed and real gross domestic product (GDP) was falling at a breakneck pace. The possibility of a second Great Depression was frighteningly real.

In the first months of the Administration, the President and Congress took unprecedented actions to restore demand, stabilize financial markets, and put people back to work. Just 28 days after his inauguration, the President signed the American Recovery and Reinvestment Act of 2009, the boldest countercyclical fiscal stimulus in American history. The Financial Stability Plan, announced in February, included wide-ranging measures to strengthen the banking system, increase consumer and business lending, and stem foreclosures and support the housing market. These and a host of other actions stabilized the financial system, supported those most directly affected by the recession, and walked the economy back from the brink.

But the Administration always knew that stabilizing the economy would not be enough. The problems that led to the crisis were years in the making. Continued action will be necessary to return the economy to full employment. In the process, an important rebalancing will need to occur. For too many years, America's growth and prosperity were fed by a boom in consumer spending stemming from rising asset prices and easy credit. The Federal Government had likewise been living beyond its means, resulting in large and growing budget deficits. And our regulatory system had failed to keep up with financial innovation, allowing risky practices to endanger the system and the economy. For this reason, the Administration has sought to help restore the economy to health on a foundation of greater investment, fiscal responsibility, and a well-functioning and secure financial system. Even this important rebalancing would not be sufficient. In addition to the problems that had set the stage for the crisis, long-term challenges had been ignored and the U.S. economy was failing at some of its central tasks. Our health care system was beset by steadily rising costs, and millions of Americans either had no health insurance at all or were unsure whether their coverage would be there when they needed it. Middle-class families had seen their real incomes stagnate during the previous eight years, while those at the top of the income distribution had seen their incomes soar. A failure to slow the consumption of fossil fuels had contributed to global warming and continued dependence on foreign oil. And a country built on its record of innovation was failing to invest enough in research and development.

The President has dedicated his Administration to dealing with these long-run problems as well. As the new decade opens, Congress has come closer than ever before to passing landmark legislation reforming the health insurance system. This legislation would make health insurance more secure for those who have it and affordable for those who do not, and it would slow the growth rate of health care costs. Over the past year, the Administration has also worked with Congress to make important new investments to sustain and improve K-12 education and community colleges, jump-start the transition to a clean energy economy, and spur innovation through increased research and development. These and numerous other initiatives will help to rebuild the American economy stronger than before and put us on the path to sustained growth and prosperity. Enacting these policies will help to ensure that our children and grandchildren inherit a country as full of promise and as economically secure as ever in our history.

Rescuing an Economy in Freefall

In December 2007, the American economy entered what at first seemed likely to be a mild recession. As Figure 1-1 shows, real house prices (that is, house prices adjusted for inflation) had risen to unprecedented levels, almost doubling between 1997 and 2006. The rapid run-up in prices was accompanied by a residential construction boom and the proliferation of complex mortgages and mortgage-related financial assets. The fall of national house prices starting in early 2007, and the associated declines in the values of mortgage-backed and other related assets, led to a slowdown in the growth of consumer spending, increases in mortgage defaults and home foreclosures, significant strains on financial institutions, and reduced credit availability.

Figure 1-1 House Prices Adjusted for Inflation



By early 2008, the economy was contracting. Employment fell by an average of 137,000 jobs per month over the first eight months of 2008. Real GDP rose only anemically from the third quarter of 2007 to the second quarter of 2008.

Then in September 2008, the character of the downturn worsened dramatically. The collapse of Lehman Brothers and the near-collapse of American International Group (AIG) led to a seizing up of financial markets and plummeting consumer and business confidence. Parts of the financial system froze, and assets once assumed to be completely safe, such as money-market mutual funds, became unstable and subject to runs. Credit spreads, a common indicator of credit market stress, spiked to unprecedented levels in the fall of 2008. The value of the stock market plunged 24 percent in September and October, and another 15 percent by the end of January. As Figure 1-2 shows, over the final four months of 2008 and the first month of 2009, the economy lost, on average, a staggering 544,000 jobs per month, the highest level of job loss since the demobilization at the end of World War II. Real GDP fell at an increasingly rapid pace: an annual rate of 2.7 percent in the third quarter of 2008, 5.4 percent in the fourth quarter of 2008, and 6.4 percent in the first quarter of 2009.



Figure 1-2

Source: Department of Labor (Bureau of Labor Statistics), Current Employment Statistics survey Series CES000000001.

Rescuing the Economy from the Great Recession

Thus, the first imperative of the new Administration upon taking office had to be to turn around an economy in freefall. Chapter 2 describes the unprecedented policy actions the Administration has taken, together with Congress and the Federal Reserve, to address the immediate crisis. The large fiscal stimulus in the American Recovery and Reinvestment Act, the programs to stabilize financial markets and restart lending, and the policies to assist small businesses and distressed homeowners have all played a role in generating one of the sharpest economic turnarounds in post–World War II history. Real GDP is growing again, job loss has moderated greatly, house prices appear to have stabilized, and credit spreads have almost returned to normal levels. A wide range of evidence indicates that in the absence of the aggressive policy actions, the recession and the attendant suffering of ordinary Americans would have been far more severe and could have led to catastrophe.

Yet, because the economy's downward momentum was so great and the barriers to robust growth from the weakened financial conditions of households and financial institutions are so strong, the economy remains distressed and many families continue to struggle. A change from freefall to growing GDP and moderating job losses is a dramatic improvement, but it is not nearly enough. Chapter 2 therefore also examines the challenges that remain in achieving a full recovery. It discusses some possible additional measures to spur private sector job creation.

Crisis and Recovery in the World Economy

In the early fall of 2008, there was hope that the impact of the crisis on the rest of the world would be limited. Those hopes were dashed during the months that followed. In the fourth quarter of 2008 and the first quarter of 2009, real GDP fell sharply—often at double-digit rates—in the United Kingdom, Germany, Japan, Taiwan, and elsewhere. The surprisingly rapid spread of the downturn to the rest of the world reduced the demand for U.S. exports sharply, and so magnified our economic contraction.

The worldwide crisis required a worldwide response. Chapter 3 describes both the actions taken by individual countries and those taken through international institutions and cooperation. As described in the leaders' statement from the September summit of the Group of Twenty (G-20) nations, the result was "the largest and most coordinated fiscal and monetary stimulus ever undertaken" (Group of Twenty 2009). Just as the actions in the United States have begun to turn the domestic economy around, these international actions appear to have put the worst of the global crisis behind us. But the firmness of the budding recovery varies considerably across countries, and significant challenges still remain.

Rebalancing the Economy on the Path to Full Employment

The path from budding recovery to full employment will surely be a difficult one. The problems that sowed the seeds of the financial crisis need to be dealt with so that the economy emerges from the recession with a stronger, more durable prosperity. There needs to be a rebalancing of the economy away from low personal saving and large government budget deficits and toward investment. Our financial system must be strengthened both to provide the lending needed to support the recovery and to reduce the risk of future crises.

Saving and Investment

The expansion of the 2000s was fueled in part by high consumption. As Figure 1-3 shows, the share of GDP that takes the form of consumption has been on a generally upward trend for decades and reached unprecedented heights in the 2000s. The personal saving rate fell to exceptionally low levels, and trade deficits were large and persistent. A substantial amount

of the remainder of GDP took the form of housing construction, which may have crowded out other kinds of investment. Such an expansion is not just unstable, as we have learned painfully over the past two years. It also contributes too little to increases in standards of living. Low investment in equipment and factories slows the growth of productivity and wages.



Figure 1-3 Personal Consumption Expenditures as a Share of GDP

Chapter 4 examines the transition from consumption-driven growth to a greater emphasis on investment and exports. It discusses the likelihood that consumers will return to saving rates closer to the postwar average than to the very low rates of the early 2000s. It also describes the Administration's initiatives to encourage household saving. Greater personal saving will tend to encourage investment by helping to maintain low real interest rates. The increased investment will help to fill some of the gap in demand left by reduced consumption. Chapter 4 discusses additional Administration policies, such as investment tax incentives, designed to promote private investment. Higher saving relative to investment will reduce net international capital flows to the United States. Because net foreign borrowing must equal the current account deficit, lower net capital inflows imply a closer balance of exports and imports, which will help create further demand for American products. The Administration also supports aggressive export promotion measures to further increase demand for our exports. The end

Source: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.10.

result of this rebalancing will be an economy that is more stable, more investment-oriented, and more export-oriented, and thus better for our future standards of living.

Addressing the Long-Run Fiscal Challenge

A key part of the rebalancing that must occur as the economy returns to full employment and beyond involves taming the Federal budget deficit. Figure 1-4 shows the actual and projected path of the budget surplus based on estimates released by the Congressional Budget Office (CBO) in January 2009, just before President Obama took office. As the figure makes clear, the budget surpluses of the late 1990s turned to substantial deficits in the 2000s, and the deficits were projected to grow even more sharply over the next three decades. As discussed in Chapter 5, the change to deficits in the 2000s largely reflects policy actions that were not paid for, such as the 2001 and 2003 tax cuts and the introduction of the Medicare prescription drug benefit. The projection of steadily increasing future deficits is largely due to the continuation of the decades-long trend of rising health care costs.



Note: CBO baseline surplus projection adjusted for CBO's estimates of costs of continued war spending, continuation of the 2001 and 2003 tax cuts, preventing scheduled cuts in Medicare's physician payment rates, and holding other discretionary outlays constant as a share of GDP.

Sources: Congressional Budget Office (2009a, 2009b).

Chapter 5 describes the likely consequences of these projected deficits over time and the importance of restoring fiscal discipline. It also discusses the President's plan for facing this challenge. A period of severe economic weakness is no time for a large fiscal contraction. Instead, the Nation must tackle the long-run deficit problem through actions that address the underlying sources of the problem over time. The single most important step that can be taken to reduce future deficits is to adopt health care reform that slows the growth rate of costs without compromising the quality of care. In addition, the President's fiscal 2011 budget includes other significant measures, such as allowing President Bush's tax cuts for the highest-income earners to expire, reforming international tax rules to discourage tax avoidance and encourage investment in the United States, and imposing a three-year freeze in nonsecurity discretionary spending; alongside a proposal for a bipartisan commission process to address the long-run gap between revenues and expenditures.

Building a Safer Financial System

Risky credit practices both encouraged some of the imprudent rise in consumption and homebuilding in the previous decade and set the stage for the financial crisis. Chapter 6 analyzes the role that financial intermediaries play in the economy and diagnoses what went wrong during the meltdown of financial markets. The crisis showed that the Nation's financial regulatory structure, much of which had not been fundamentally changed since the 1930s, failed to keep up with the evolution of financial markets. The current system provided too little protection for the economy from actions that could threaten financial stability and too little protection for ordinary Americans in their dealings with sophisticated and powerful financial institutions and other providers of credit. Strengthening our financial system is thus a key element of the rebalancing needed to assure stable, robust growth.

Chapter 6 discusses financial regulatory modernization. What is needed is a system where capital requirements and sensible rules are set in a way to control excessive risk-taking; where regulators can consider risks to the system as a whole and not just to individual institutions; where institutions cannot choose their regulators; where regulators no longer face the unacceptable choice between the disorganized, catastrophic failure of a financial institution and a taxpayer-funded bailout; and where a dedicated agency has consumer protection as its central mandate. For this reason, the President put forward a comprehensive plan for financial regulatory reform last June and is working with Congress to ensure passage of these critical reforms this year.
Rebuilding a Stronger Economy

Even before the crisis, the economy faced significant long-term challenges. As a result, it was doing poorly at providing rising standards of living for the vast majority of Americans. Figure 1-5 shows the evolution of before-tax real median family income since 1960. Beginning around 1970, slower productivity growth and rising income inequality caused incomes for most families to grow only slowly. After a half-decade of higher growth in the 1990s, the real income of the typical American family actually fell between 2000 and 2006.



Notes: Income measure is total money income excluding capital gains and before taxes. Annual income deflated using CPI-U-RS. Source: Department of Commerce (Census Bureau), Current Population Survey, Annual

Social and Economic Supplement, Historical Income Table F-12.

A central focus of Administration policy both over the past year and for the years to come is to build a firmer foundation for the economy. The President is committed to policies that will raise living standards for all Americans.

Reforming Health Care

Health care is a key challenge that long predates the current economic crisis. The existing system has left many Americans who have health insurance inadequately covered, poorly protected against insurance industry abuses, and fearful of losing the insurance they have. And it has left tens of millions of Americans with no insurance coverage at all. The system also delivers too little benefit at too high a cost. Comparisons across countries and, especially, across regions of the United States reveal large differences in health care spending that are not associated with differences in health outcomes and that cannot be fully explained by factors such as differences in demographics, health status, income, or medical care prices. These large differences in spending suggest that up to nearly 30 percent of health care spending could be saved without adverse health consequences. The unnecessary growth of health care costs is eroding the growth of take-home pay and is central to our long-run fiscal challenges. These adverse effects will only become more severe if cost growth is not slowed.

To illustrate what could happen to workers' earnings in the absence of reform, Figure 1-6 shows the historical and projected paths of real total compensation per worker (which includes nonwage benefits such as health insurance) and total compensation net of health insurance premiums. As health insurance premiums absorb a growing fraction of workers' compensation, the remaining portion of compensation levels off and then starts to decline.



Figure 1-6 Total Compensation Including and Excluding Health Insurance

Note: Health insurance premiums include the employee- and employer-paid portions. Sources: Actual data from Department of Labor (Bureau of Labor Statistics); Kaiser Family Foundation and Health Research and Educational Trust (2009); Department of Health and Human Services (Agency for Healthcare Research and Quality, Center for Financing, Access, and Cost Trends), 2008 Medical Expenditure Panel Survey-Insurance Component. Projections based on CEA calculations.

Chapter 7 describes the actions the Administration and Congress took in 2009 to begin the process of improvement, including an expansion of the Children's Health Insurance Program to provide access to health care for millions of children and important investments in the modernization of the health care system through the Recovery Act. It also describes the key elements of successful health insurance reform and discusses the progress that has been made on reform legislation. Successful reform involves making insurance more secure for those who have it and expanding coverage to those who lack it. It must include delivery system reforms, reductions in waste and improper payments in the Medicare system, and changes in consumer and firm incentives that will slow the growth rate of costs substantially, while maintaining and even improving quality. Slowing the growth rate of health care costs will have benefits throughout the economy: it will raise standards of living for families, help reduce the Federal budget deficit relative to what it otherwise would be, benefit state and local governments, and encourage job growth and improved macroeconomic performance.

Strengthening the American Labor Force

American workers have suffered greatly in the current recession. As described in Chapter 8, long-term unemployment is at record levels. The unemployment rate, which was 10 percent for the country as a whole in December, is far higher for blacks, Hispanics, and other demographic groups. The decline in house prices has eroded the nest eggs that many Americans had been counting on for their retirement. The Administration has initiated many actions to help support workers and their families through the recession and beyond. These actions range from extended and expanded unemployment insurance, to measures to make health insurance more affordable, to initiatives to promote retirement saving.

American workers also face the persistent problem of stagnating incomes. A key determinant of growth in standards of living is the rate of increase in the education and skills of our workforce. More and more jobs require education and training beyond the high school level, along with the ability to complete tasks that are open-ended and interactive. But, as Figure 1-7 shows, the years of education U.S. workers have brought to the labor market have risen little in the past four decades. And, as is well known, U.S. students lag behind those from many other countries in their performance on standardized tests.

Chapter 8 describes the Administration's initiatives to improve the skills of our workers. The Administration is pursuing reform to eliminate wasteful subsidies to student loan providers, the savings from which will fund

new investments in education. The Administration has proposed a major initiative to support and improve community colleges, which are a neglected but critical link in our education system. It has also proposed increasing Pell Grants, and is taking steps to simplify the student aid application process so that eligible students are no longer discouraged by a complicated process from even applying for aid. All of these actions will help to achieve one of the President's key educational goals for the country—that the proportion of adults with a college degree be the largest in the world by 2020.



Figure 1-7 Mean Years of Schooling by Birth Cohort

Notes: Years of schooling at 30 years of age. Methodology described in Goldin and Katz (2007). Sources: Department of Commerce (Bureau of the Census), 1940-2000 Census IPUMS, 2005 CPS MORG; Goldin and Katz (2007).

Transforming the Energy Sector and Addressing Climate Change

Climate change and energy independence present a very different long-run challenge. Continued reliance on fossil fuels is leading to the buildup of greenhouse gases in the atmosphere and is changing our climate. Left unaddressed, these trends will have increasingly severe consequences over time. What is more, the United States imports the majority of the oil it uses, much of it from sources that are potentially subject to disruption.

Chapter 9 analyzes how economic policy can play a critical role in moving the United States toward a clean energy economy that is less dependent on fossil fuels and fossil fuel imports. Slowing climate change requires slowing the emission of greenhouse gases. A market-based approach, such as that supported by the Administration and currently working its way through Congress, can provide the signals needed to accomplish this slowing of emissions efficiently and with minimal disruptions.

The support for research and development (R&D) and incentives for investment in clean energy technologies and energy efficiency in the Recovery Act and the President's budget, as well as in the energy and climate legislation, can help foster the transition to a clean energy economy and spur growth in vital new industries. These new industries have the potential to reinvigorate the American manufacturing sector and generate secure, high-quality jobs.

Fostering Productivity Growth Through Innovation and Trade

The ultimate driver of growth in average standards of living is productivity growth. Increased investment in capital and in the skills of our workforce are two important sources of that growth. Chapter 10 examines two other sources of productivity gains: innovation and international trade.

Innovation comes from many sources. But a central one is investment in R&D. Figure 1-8 shows the share of GDP devoted to R&D over the past 50 years. In the mid-1960s, R&D constituted a larger share of total spending





Note: Data for 2008 are preliminary. Sources: National Science Foundation, Science and Engineering Indicators 2010 Tables 4-1 and 4-7. than it has in the past decade. And in some other countries, such as Korea, Sweden, and Japan, R&D spending is a larger fraction of GDP than in the United States. The President is committed to raising the share of output devoted to R&D to 3 percent, so that America can continue to be a leader in new technologies and American workers and businesses can benefit from more rapid economic growth.

Through the Recovery Act and other measures, the Administration is investing both directly in basic scientific research and development and in the infrastructure to support that research. Most innovation, however, comes from the private sector. Here, the Administration is providing critical incentives for R&D both in general and in such vital areas as clean energy technologies. The Administration is also pursuing a wide range of policies to support the small businesses that contribute so much to technological progress—policies ranging from programs to maintain the flow of credit to small businesses to health insurance reform that will help level the playing field between small and large businesses.

Finally, international trade can be an important source of productivity growth and incentives for innovation. Trade has the potential to allow the U.S. economy to expand output in areas where it is more productive and to enable higher-productivity firms to expand. Access to a world market encourages American firms to invest in the research needed to become technological leaders. Through these routes, a free and fair trade regime can play an important part in lifting living standards in the long run. But for trade to play this role, it is essential to enforce existing trade rules and pursue policies that ensure that the benefits of trade are widely shared.

CONCLUSION

The past year has been one of great challenge for all Americans. Nearly every family has been touched in some way by the fallout from the crisis in financial markets, the drying up of credit, and the rise in unemployment. These challenges, moreover, have come after a decade in which ordinary Americans have seen their living standards stagnate, their health insurance become less secure, and their environment deteriorate.

The rest of this *Report* describes in more detail the actions the President has taken to end the recession, foster stable growth by rebalancing production and demand, and rebuild the foundation of the American economy. More fundamentally, it describes the work that remains to be done to create the prosperous, dynamic economy the American people need and deserve.

CHAPTER 2

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RESCUING THE ECONOMY FROM THE GREAT RECESSION

The first and most fundamental task the Administration faced when President Obama took office was to rescue an economy in freefall. In November 2008, employment was declining at a rate of more than half a million jobs per month, and credit markets were stretched almost to the breaking point. As the economy entered 2009, the decline accelerated, with job loss in January reaching almost three-quarters of a million. The President responded by working with Congress to take unprecedented actions. These steps, together with measures taken by the Federal Reserve and other financial regulators, have succeeded in stabilizing the economy and beginning the process of healing a severely shaken economic and financial system. But much work remains. With high unemployment and continued job losses, it is clear that recovery must remain the key focus of 2010.

AN ECONOMY IN FREEFALL

According to the National Bureau of Economic Research, the United States entered a recession in December 2007. Unlike most postwar recessions, this downturn was not caused by tight monetary policy aimed at curbing inflation. Although economists will surely analyze this downturn extensively in the years to come, there is widespread consensus that its central precipitating factor was a boom and bust in asset prices, especially house prices. The boom was fueled in part by irresponsible and in some cases predatory lending practices, risky investment strategies, faulty credit ratings, and lax regulation. When the boom ended, the result was widespread defaults and crippling blows to key financial institutions, magnifying the decline in house prices and causing enormous spillovers to the remainder of the economy.

The Run-Up to the Recession

The rise in house prices during the boom was remarkable. As Figure 2-1 shows, real house prices almost doubled between 1997 and 2006. By 2006, they were more than 50 percent above the highest level they had reached in the 20th century.





Stock prices also rose rapidly. The Standard and Poor's (S&P) 500, for example, rose 101 percent between its low in 2002 and its high in 2007. That rise, though dramatic, was not unprecedented. Indeed, in the five years before its peak in March 2000, during the "tech bubble," the S&P 500 rose 205 percent, while the more technology-focused NASDAQ index rose 506 percent.

The run-up in asset prices was associated with a surge in construction and consumer spending. Residential construction rose sharply as developers responded to the increase in housing demand. From the fourth quarter of 2001 to the fourth quarter of 2005, the residential investment component of real GDP rose at an average annual rate of nearly 8 percent. Similarly, consumers responded to the increases in the value of their assets by continuing to spend freely. Saving rates, which had been declining since the early 1980s, fell to about 2 percent during the two years before the recession. This spending was facilitated by low interest rates and easy credit, with household borrowing rising faster than incomes.

The Downturn

House prices began to drop in some markets in 2006, and then nationally beginning in 2007. This process was gradual at first, with prices measured using the LoanPerformance house price index declining just 3½ percent nationally between January and June 2007. Lenders had lent aggressively during the boom, often providing mortgages whose soundness hinged on continued house price appreciation. As a result, the comparatively modest decline in house prices threatened large losses on subprime residential mortgages (the riskiest class of mortgages), as well as on the slightly higher-quality "Alt-A" mortgages. As the availability of mortgage credit tightened, the downward pressure on real estate prices intensified. National house prices declined 6 percent between June and December 2007.

The negative feedback between credit availability and the housing market weighed on household and business confidence, restraining consumer spending and business investment. Although residential construction led the slowdown in real activity through 2007, by early 2008 outlays for consumer goods and services and business equipment and software had decelerated sharply, and total employment was beginning to decline. Real gross domestic product (GDP) fell slightly in the first quarter of 2008.

In February 2008, Congress passed a temporary tax cut. Figure 2-2 shows real after-tax (or disposable) income and consumer spending before and after rebate checks were issued. Consumption was maintained despite a tremendous decline in household wealth over the same period. Total household and nonprofit net worth declined 9.1 percent between June 2007 and June 2008. Microeconomic studies of consumer behavior in this episode confirm the role of the tax rebate in maintaining spending (Broda and Parker 2008; Sahm, Shapiro, and Slemrod 2009). The fact that real GDP reversed course and grew in the second quarter of 2008 is further tribute to the helpfulness of the policy. But, in part because of the lack of robust, sustained stimulus, growth did not continue.

Financial institutions had invested heavily in assets whose values were tied to the value of mortgages. For many reasons—the opacity of the instruments, the complexity of financial institutions' balance sheets and their "off-balance-sheet" exposures, the failure of credit-rating agencies to accurately identify the riskiness of the assets, and poor regulatory oversight—the extent of the institutions' exposure to mortgage default risk was obscured. When mortgage defaults rose, the result was unexpectedly large losses to many financial institutions.

In the fall of 2008, the nature of the downturn changed dramatically. More rapid declines in asset prices generated further loss of confidence in the ability of some of the world's largest financial institutions to honor

Figure 2-2 Income and Consumption Around the 2008 Tax Rebate



Sources: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 2.6, line 30, and Table 2.8.6, line 1.

their obligations. In September, the Lehman Brothers investment bank declared bankruptcy, and other large financial firms (including American International Group, Washington Mutual, and Merrill Lynch) were forced to seek government aid or to merge with stronger institutions. What followed was a rush to liquidity and a cascading of retrenchment that had many of the features of a classic financial panic.

Risk spreads shot up to extraordinary levels. Figure 2-3 shows both the TED spread and Moody's BAA-AAA spread. The TED spread is the difference between the rate on short-term loans among banks and a safe short-term Treasury interest rate. The BAA-AAA spread is the difference between the interest rates on high-grade and medium-grade corporate bonds. Both spreads rose dramatically during the heart of the panic. Indeed, one way to put the spike in the BAA-AAA spread in perspective is to note that the same spread barely moved during the Great Crash of the stock market in 1929, and rose by only about half as much during the first wave of banking panics in 1930 as it did in the fall of 2008.

The same loss of confidence shown by the rise in credit spreads translated into declining asset prices of all sorts. The S&P 500 declined 29 percent in the second half of 2008. Real house prices tumbled another 11 percent over the same period (see Figure 2-1). All told, household and

TED Spread and Moody's BAA-AAA Spread Through December 2008 Percentage points 5 Oct. 10, 2008 4 3 Aug. 20, 2007 2 TED BAA-AAA 1 0 Dec-2005 Jun-2006 Dec-2006 Jun-2007 Dec-2007 Jun-2008 Dec-2008

Figure 2-3

Notes: The TED spread is defined as the three-month London Interbank Offered Rate (Libor) less the yield on the three-month U.S. Treasury security. Moody's BAA-AAA spread is the difference between Moody's indexes of yields on AAA and BAA rated corporate bonds. Source: Bloomberg.

nonprofit net worth declined 20 percent between December 2007 and December 2008, or by about \$13 trillion. Again, a useful way to calibrate the size of this shock is to note that in 1929, household wealth declined only 3 percent—about one-seventh as much as in 2008. This is another indication that the shocks hitting the U.S. economy in 2008 were enormous.

The decline in wealth had a severe impact on consumer spending. This key component of aggregate demand, which accounts for roughly 70 percent of GDP and is traditionally quite stable, declined at an annual rate of 3.5 percent in the third quarter of 2008 and 3.1 percent in the fourth quarter. Some of this large decline may have also reflected the surge in uncertainty about future incomes. Not only did asset prices fall sharply, leading to the decline in wealth; they also became dramatically more volatile. The standard deviation of daily stock returns in the fourth quarter, for example, was 4.3 percentage points, even larger than in the first months of the Great Depression.

The financial panic led to a precipitous decline in lending. Bank credit continued to rise over the latter portion of 2008, as households and firms that had lost access to other forms of credit turned to banks. However, bank loans declined sharply in the first and second quarters of 2009 as banks tightened their terms and standards. Other sources of credit showed even more substantial declines. One particularly important market is that for commercial paper (short-term notes issued by firms to finance key operating costs such as payroll and inventory). The market for lower-tier nonfinancial (A2/P2) commercial paper collapsed in the fall of 2008, with the average daily value of new issues falling from \$8.0 billion in the second quarter of 2008 to \$4.3 billion in the fourth quarter. In addition, securitization of automobile loans, credit card receivables, student loans, and commercial mortgages ground to a halt.

This freezing of credit markets, together with the decline in wealth and confidence, caused consumer spending and residential investment to fall sharply. Real GDP declined at an annual rate of 2.7 percent in the third quarter of 2008, 5.4 percent in the fourth quarter, and 6.4 percent in the first quarter of 2009. Industrial production, which had been falling steadily over the first eight months of 2008, plummeted in the final four months dropping at an annual rate of 18 percent.

Many industries were battered by the financial crisis and the resulting economic downturn. The American automobile industry was hit particularly hard. Sales of light motor vehicles, which had exceeded 16 million units every year from 1999 to 2007, fell to an annual rate of only 9.5 million in the first quarter of 2009. Employment in the motor vehicle and parts industry declined by 240,000 over the 12 months through January 2009. Two domestic manufacturers, General Motors (GM) and Chrysler, required emergency loans in late December 2008 and early January 2009 to avoid disorderly bankruptcy.

The most disturbing manifestation of the rapid slowdown in the economy was the dramatic increase in job loss. Over the first months of 2008, job losses were typically between 100,000 and 200,000 per month. In October, the economy lost 380,000 jobs; in November, 597,000 jobs. By January, the economy was losing jobs at a rate of 741,000 per month. Commensurate with this terrible rate of job loss, the unemployment rate rose rapidly—from 6.2 percent in September 2008 to 7.7 percent in January 2009. It then continued to rise by roughly one-half of a percentage point per month through the winter and spring; it reached 9.4 percent in May, and ended the year at 10.0 percent.

Wall Street and Main Street

As described in more detail later, policymakers have focused much of their response to the crisis on stabilizing the financial system. Many Americans are troubled by these policies. Because to a large extent it was the actions of credit market participants that led to the crisis, people ask why policymakers should take actions focused on restoring credit markets. The basic reason for these policies is that the health of credit markets is critically important to the functioning of our economy. Large firms use commercial paper to finance their biweekly payrolls and pay suppliers for materials to keep production lines going. Small firms rely on bank loans to meet their payrolls and pay for supplies while they wait for payment of their accounts receivable. Home purchases depend on mortgages; automobile purchases depend on car loans; college educations depend on student loans; and purchases of everyday items depend on credit cards.

The events of the past two years provide a dramatic demonstration of the importance of credit in the modern economy. As the President said in his inaugural address, "Our workers are no less productive than when this crisis began. Our minds are no less inventive, our goods and services no less needed." Yet developments in financial markets—rises and falls in home and equity prices and in the availability of credit—have led to a collapse of spending, and hence to a precipitous decline in output and to unemployment for millions.

Numerous academic studies before the crisis had also shown that the availability of credit is critical to investment, hiring, and production. One study, for example, found that when a parent company earns high profits and so has less need to rely on credit, the additional funds lead to higher investment by subsidiaries in completely unrelated lines of business (Lamont 1997). Another found that when a small change in a firm's circumstances frees up a large amount of funds that would otherwise have to go to pension contributions, the result is a large change in spending on capital goods (Rauh 2006). Other studies have shown that when the Federal Reserve tightens monetary policy, small firms, which typically have more difficulty obtaining financing, are hit especially hard (Gertler and Gilchrist 1994), and firms without access to public debt markets cut their inventories much more sharply than firms that have such access (Kashyap, Lamont, and Stein 1994).

Research before the crisis had also found that financial market disruptions could affect the real economy. Ben Bernanke, who is now Chairman of the Federal Reserve, demonstrated a link between the disruption of lending caused by bank failures and the worsening of the Great Depression (Bernanke 1983). A smaller but more modern example is provided by the impact of Japan's financial crisis in the 1990s on the United States: construction lending, new construction, and construction employment were more adversely affected in U.S. states where subsidiaries of Japanese banks had a larger role, and thus where credit availability was more affected by the collapse of Japan's bubble (Peek and Rosengren 2000). That a financial disruption in a trading partner can have a detectable adverse impact on our economy through its impact on credit availability suggests that the effect of a full-fledged financial crisis at home would be enormous—an implication that, sadly, has proven to be correct.

Finally, microeconomic evidence from the recent crisis also shows the importance of the financial system to the real economy. For example, firms that happened to have long-term debt coming due after the crisis began, and thus faced high costs of refinancing, cut their investment much more than firms that did not (Almeida et al. 2009). Another study found that a majority of corporate chief financial officers surveyed reported that their firms faced financing constraints during the crisis, and that the constrained firms on average planned to reduce investment spending, research and development, and employment sharply compared with the unconstrained firms (Campello, Graham, and Harvey 2009).

In short, the goal of the policies to stabilize the financial system was not to help financial institutions. The goal was to help ordinary Americans. When the financial system is not working, individuals and businesses cannot get credit, demand and production plummet, and job losses skyrocket. Thus, an essential step in healing the real economy is to heal the financial system. The alternative of letting financial institutions suffer the consequences of their mistakes would have led to a collapse of credit markets and vastly greater suffering for millions and millions of Americans.

The policies to rescue the financial sector were, however, costly, and often had the side effect of benefiting the very institutions whose irresponsible actions contributed to the crisis. That is one reason that the President has endorsed a Financial Crisis Responsibility Fee on the largest financial firms to repay the Federal Government for its extraordinary actions. As discussed in Chapter 6, the Administration has also proposed a comprehensive plan for financial regulatory reform that will help ensure that Wall Street does not return to the risky practices that were a central cause of the recent crisis.

THE UNPRECEDENTED POLICY RESPONSE

Given the magnitude of the shocks that hit the economy in the fall of 2008 and the winter of 2009, the downturn could have turned into a second Great Depression. That it has not is a tribute to the aggressive and effective policy response. This response involved the Federal Reserve and other financial regulators, the Administration, and Congress. The policy tools were similarly multifaceted, including monetary policy, financial market interventions, fiscal policy, and policies targeted specifically at housing.

Monetary Policy

The first line of defense against a weak economy is the interest rate policy of the independent Federal Reserve. By increasing or decreasing the quantity of reserves it supplies to the banking system, the Federal Reserve can lower or raise the Federal funds rate, which is the interest rate at which banks lend to one another. The funds rate influences other interest rates in the economy and so has important effects on economic activity. Using changes in the target level of the funds rate as their main tool of countercyclical policy, monetary policymakers had kept inflation low and the real economy remarkably stable for more than two decades.

The Federal Reserve has used interest rate policy aggressively in the recent episode. The target level of the funds rate at the beginning of 2007 was 5¼ percent. The Federal Reserve cut the target by 1 percentage point over the last four months of 2007 and by an additional 2¼ percentage points over the first four months of 2008. After the events of September, it cut the target in three additional steps in October and December, bringing it to its current level of 0 to ¼ percent.

Conventional interest rate policy, however, could do little to deal with the enormous disruptions to credit markets. As a result, the Federal Reserve has used a range of unconventional tools to address those disruptions directly. For example, in March 2008, it created the Primary Dealer Credit Facility and the Term Securities Lending Facility to provide liquidity support for primary dealers (that is, financial institutions that trade directly with the Federal Reserve) and the key financial markets in which they operate. In October 2008, when the critical market for commercial paper threatened to stop functioning, the Federal Reserve responded by setting up the Commercial Paper Funding Facility to backstop the market.

Once the Federal Reserve's target for the funds rate was effectively lowered to zero in December 2008, there was another reason to use unconventional tools. Nominal interest rates generally cannot fall below zero: because holding currency guarantees a nominal return of zero, no one is willing to make loans at a negative nominal interest rate. As a result, when the Federal funds rate is zero, supplying more reserves does not drive it lower. Statistical estimates suggest that based on the Federal Reserve's usual response to inflation and unemployment, the subdued level of inflation and the weak state of the economy would have led the central bank to reduce its target for the funds rate by about an additional 5 percentage points if it could have (Rudebusch 2009).

This desire to provide further stimulus, coupled with the inability to use conventional interest rate policy, led the Federal Reserve to undertake large-scale asset purchases to reduce long-term interest rates. In March 2009, the Federal Reserve announced plans to purchase up to \$300 billion of long-term Treasury debt; it also announced plans to increase its purchases of the debt of Fannie Mae, Freddie Mac, and the Federal Home Loan Banks (the government-sponsored enterprises, or GSEs, that support the mortgage market) to up to \$200 billion, and its purchases of agency (that is, Fannie Mae, Freddie Mac, and Ginnie Mae) mortgage-backed securities to up to \$1.25 trillion.

Finally, the Federal Reserve has attempted to manage expectations by providing information about its goals and the likely path of policy. Officials have consistently stressed their commitment to ensuring that inflation neither falls substantially below nor rises substantially above its usual level. In addition, the Federal Reserve has repeatedly stated that economic conditions "are likely to warrant exceptionally low levels of the Federal funds rate for an extended period." To the extent this statement provides market participants with information they did not already have, it is likely to keep longer-term interest rates lower than they otherwise would be.

One effect of the Federal Reserve's unconventional policies has been an enormous expansion of the quantity of assets on the Federal Reserve's balance sheet. Figure 2-4 shows the evolution of Federal Reserve asset holdings since the beginning of 2007. One can see both that asset holdings nearly tripled between January and December 2008 and that there was a dramatic move away from short-term Treasury securities.



Figure 2-4 Assets on the Federal Reserve's Balance Sheet

Notes: Agency debt refers to obligations of Fannie Mae, Freddie Mac, and the Federal Home Loan Banks. Agency mortgage-backed securities are also included in this category. Source: Federal Reserve Board, H.4.1 Table 1.

The flip side of the large increase in the Federal Reserve's asset holdings is a large increase in the quantity of reserves it has supplied to the financial system. Some observers have expressed concern that the large expansion in reserves could lead to inflation. In this regard, two key points should be kept in mind. First, as already described, most statistical models suggest that the Federal Reserve's target interest rate would be substantially lower than it is today if it were not constrained by the fact that the Federal funds rate cannot fall below zero. As a result, monetary policy is in fact unusually tight given the state of the economy, not unusually loose. Second, the Federal Reserve has the tools it needs to prevent the reserves from leading to inflation. It can drain the reserves from the financial system through sales of the assets it has acquired or other actions. Indeed, despite the weak state of the economy, the return of credit market conditions toward normal is leading to the natural unwinding of some of the exceptional credit market programs. Another reliable way the Federal Reserve can keep the reserves from creating inflationary pressure is by using its relatively new ability to raise the interest rate it pays on reserves: banks will be unwilling to lend the reserves at low interest rates if they can obtain a higher return on their balances held at the Federal Reserve.

Financial Rescue

Efforts to stabilize the financial system have been a central part of the policy response. As just discussed, even before the financial crisis in September 2008, the Federal Reserve was taking steps to ease pressures on credit markets. The events of the fall led to even stronger actions. On September 7, Fannie Mae and Freddie Mac were placed in conservatorship under the Federal Housing Finance Agency to prevent a potentially severe disruption of mortgage lending. On September 16, concern about the potentially catastrophic effects of a disorderly failure of American International Group (AIG) caused the Federal Reserve to extend the firm an \$85 billion line of credit. On September 19, concerns about the possibility of runs on money-market mutual funds led the Treasury to announce a temporary guarantee program for these funds.

On October 3, Congress passed and President Bush signed the Emergency Economic Stabilization Act of 2008. This Act provided up to \$700 billion for the Troubled Asset Relief Program (TARP) for the purchase of distressed assets and for capital injections into financial institutions, although the second \$350 billion required presidential notification to Congress and could be disallowed by a vote of both houses. The initial \$350 billion was used mainly to purchase preferred equity shares in financial institutions, thereby providing the institutions with more capital to help them withstand the crisis.

At President-Elect Obama's request, President Bush notified Congress on January 12, 2009 of his plan to release the second \$350 billion of TARP funds. With strong support from the incoming Administration, the Senate defeated a resolution disapproving the release. These funds provided policymakers with critical resources needed to ensure financial stability.

On February 10, 2009, Secretary of the Treasury Timothy Geithner announced the Administration's Financial Stability Plan. The plan represented a new, comprehensive approach to the financial rescue that sought to tackle the interlocking sources of instability and increase credit flows. An overarching theme was a focus on transparency and accountability to rebuild confidence in financial markets and protect taxpayer resources.

A key element of the plan was the Supervisory Capital Assessment Program (or "stress test"). The purpose was to assess the capital needs of the country's 19 largest financial institutions should economic and financial conditions deteriorate further. Institutions that were found to need an additional capital buffer would be encouraged to raise private capital and would be provided with temporary government capital if those efforts did not succeed. This program was intended not just to examine the capital positions of the institutions and ensure that they obtained more capital if needed, but also to strengthen private investors' confidence in the soundness of the institutions' balance sheets, and so strengthen the institutions' ability to obtain private capital.

Another element of the plan was the Consumer and Business Lending Initiative, which was aimed at maintaining the flow of credit. In November 2008, the Federal Reserve had created the Term Asset-Backed Securities Loan Facility to help counteract the dramatic decline in securitized lending. In the February announcement of the Financial Stability Plan, the Treasury greatly expanded the resources of the not-yet-implemented facility. The Treasury increased its commitment to \$100 billion to leverage up to \$1 trillion of lending for businesses and households. By facilitating securitization, the program was designed to help unfreeze credit and lower interest rates for auto loans, credit card loans, student loans, and small business loans guaranteed by the Small Business Administration (SBA).

A third element of the plan was a Treasury partnership with the Federal Deposit Insurance Corporation and the Federal Reserve to create the Public-Private Investment Program. A central purpose was to remove troubled assets from the balance sheets of financial institutions, thereby reducing uncertainty about their financial strength and increasing their ability to raise capital and hence their willingness to lend. Partnership with the private sector served two important objectives: it leveraged scarce public funds, and it used private competition and incentives to ensure that the government did not overpay for assets. There were two other key components of the Financial Stability Plan. One was a wide-ranging program to reduce mortgage interest rates and help responsible homeowners stay in their homes. These policies are described later in the section on housing policy. The other component was a range of measures to help small businesses. Many of these were included in the American Recovery and Reinvestment Act and are discussed in the section on fiscal stimulus.

Failure of the two troubled domestic automakers (GM and Chrysler) threatened economy-wide repercussions that would have been magnified by related problems at the automakers' associated financial institutions (GMAC and Chrysler Financial). To avoid these consequences, the Bush Administration set up the Auto Industry Financing Program within the TARP. This program extended \$17.4 billion in funding to the two companies in late December 2008 and early January 2009. The program also extended \$7.5 billion in funding to the two auto finance companies around the same time. Upon taking office, the Obama Administration required the automakers to submit plans for restructuring and a return to viability before additional funds were committed. To sustain the industry during this planning process, the Treasury established the Warranty Commitment Program to reassure consumers that warranties of the troubled firms would be honored. It also initiated the Auto Supplier Support Program to maintain stability in the auto supply base.

Over the spring of 2009, the Administration's Auto Task Force worked with GM and Chrysler to produce plans for viability. In the case of Chrysler, the task force determined that viability could be achieved by merging with the Italian automaker Fiat. For GM, the task force determined that substantial reductions in costs were necessary and charged the company with producing a more aggressive restructuring plan. For both companies, a quick, targeted bankruptcy was judged to be the most efficient and successful way to restructure. Chrysler filed for bankruptcy on April 30, 2009; GM, on June 1. In addition to concessions by all stakeholders, including workers, retirees, creditors, and suppliers, the U.S. Government invested substantial funds to bring about the orderly restructuring. In all, more than \$80 billion of TARP funds had been authorized for the motor vehicle industry as of September 20, 2009.

Fiscal Stimulus

The signature element of the Administration's policy response to the crisis was the American Recovery and Reinvestment Act of 2009 (ARRA). The President signed the Recovery Act in Denver on February 17, just 28 days after taking office. At an estimated cost of \$787 billion, the Act is

the largest countercyclical fiscal action in American history. It provides tax cuts and increases in government spending equivalent to roughly 2 percent of GDP in 2009 and 2¼ percent of GDP in 2010. To put those figures in perspective, the largest expansionary swing in the budget during Franklin Roosevelt's New Deal was an increase in the deficit of about 1½ percent of GDP in fiscal 1936. That expansion, however, was counteracted the very next fiscal year by a contraction that was even larger.

The fiscal stimulus was designed to fill part of the shortfall in aggregate demand caused by the collapse of private demand and the Federal Reserve's inability to lower short-term interest rates further. It was part of a comprehensive package that included stabilizing the financial system, helping responsible homeowners avoid foreclosure, and aiding small businesses through tax relief and increased lending. The President set as a goal for the fiscal stimulus that it raise employment by 3½ million relative to what it otherwise would have been.

Several principles guided the design of the stimulus. One was that it be spread over two years, reflecting the Administration's view that the economy would need substantial support for more than one year. At the same time, the Administration also strongly supported keeping the stimulus explicitly temporary. It was not to be an excuse to permanently expand the size of government.

A second key principle was that the stimulus be well diversified. Different types of stimulus affect the economy in different ways. Individual tax cuts, for example, affect production and employment in a wide range of industries by encouraging households to spend more on consumer goods, while government investments in infrastructure directly increase construction activity and employment. In addition, underlying economic conditions affect the efficacy of fiscal policy in ways that can be quantitatively important and sometimes difficult to forecast. Likewise, different types of stimulus affect the economy with different speeds. For instance, aid to individuals directly affected by the recession tends to be spent relatively quickly, while new investment projects require more time. Because of the need to provide broad support to the economy over an extended period, the Administration supported a stimulus plan that included a broad range of fiscal actions.

A third principle was that emergency spending should aim to address long-term needs. Some spending, such as unemployment insurance, is aimed at helping those directly affected by the recession maintain a decent standard of living. But government investment spending should aim to create enduring capital investments that increase productivity and growth.

The Recovery Act reflected those guiding principles. The Congressional Budget Office (CBO) estimated that almost one-quarter of the stimulus

would be spent by the end of the third quarter of 2009, and an additional half would be spent over the next four quarters (Congressional Budget Office 2009b). So far, the pace of the spending and tax cuts has largely matched CBO's estimates.

The final package was very well diversified. Roughly one-third took the form of tax cuts. The most significant of these was the Making Work Pay tax credit, which cut taxes for 95 percent of working families. Taxes for a typical family were reduced by \$800 per couple for each of 2009 and 2010. Another provision of the bill provided roughly \$14 billion for one-time payments of \$250 to seniors, veterans, and people with disabilities. The macroeconomic effects of these payments are likely to be similar to those of tax cuts.

Businesses received important tax cuts as well. The most important of these was an extension of bonus depreciation, which reduced taxes on new investments by allowing firms to immediately deduct half the cost of property and equipment purchases. One advantage of such temporary investment incentives is that they can affect the timing of investment, moving some investment from future years when the economy does not have a deficiency of aggregate demand to the present, when it does.

In addition, because the financial market disruptions had a particularly paralyzing effect on the financial plans of small businesses, the Act included additional measures targeted specifically at those businesses. Tax cuts for small businesses included an expansion of provisions allowing for the carryback of net operating losses, a temporary 75 percent exclusion from capital gains taxes on small business stock, and the ability to immediately expense up to \$250,000 of qualified investment purchases. In addition to reducing taxes, these provisions improve cash flow at firms facing credit constraints and provide extra incentives for individuals to invest in small businesses. The Act also included measures to help increase small business lending through the SBA. In particular, it raised to 90 percent the maximum guarantee on SBA general purpose and working capital loans (the 7(a) program) and eliminated fees on both 7(a) loans and loans for fixed-asset capital and real estate investment projects (the 504 program).

Another important part of the stimulus consisted of fiscal relief to state governments. Because almost every state has a balanced-budget requirement, the declines in revenues caused by the recession forced states to cut spending or raise taxes, thereby further contracting demand and magnifying the downturn. Federal fiscal relief can help prevent these contractionary responses, helping to maintain critical state services and state employment, prevent tax increases on families already suffering from the recession, and cushion the fall in demand. And because many states were already raising taxes and cutting spending when the ARRA was passed, the effects were likely to occur relatively quickly. The Act therefore included roughly \$140 billion of state fiscal relief.

The Recovery Act also included approximately \$90 billion of support for individuals directly affected by the recession. This support serves two critical purposes. First, it provides relief from the recession's devastating impact on families and individuals. Second, because the recipients typically spend this support quickly, it provides an immediate boost to the broader economy. Among the major components of this relief were an extension and expansion of unemployment insurance benefits, subsidies to help the unemployed continue to obtain health insurance, and additional funding for the Supplemental Nutritional Assistance Program. The Act also reduced taxes on unemployment insurance benefits, the effect of which is similar to an expansion of benefits.

Finally, the Recovery Act included direct government investment spending. Because government investment raises output in the short run both through its direct effects and by increasing the incomes and spending of the workers employed on the projects, its output effects are particularly large. In addition, because this type of stimulus is spent less quickly than other types, it will play a vital role in providing support to the economy after 2009. And by funding critical investments, this spending will raise the economy's output even in the long run.

The Act included funding both for traditional government investment projects, such as transportation infrastructure and basic scientific research, and for initial investments to jump-start private investment in emerging new areas, such as health information technology, a smart electrical grid, and clean energy technologies. The Act also included tax credits for specific types of private spending, such as home weatherization and advanced energy manufacturing, which are likely to have effects similar to direct government investment spending. Altogether, roughly one-third of the budget impact of the Recovery Act will take the form of these investments and tax credits.

Fiscal stimulus actions did not end with the passage and implementation of the Recovery Act. In June 2009, the Administration worked with Congress to set up the Car Allowance Rebate System (CARS). Commonly known as the "Cash for Clunkers" program, CARS gave rebates of up to \$4,500 to consumers who replaced older cars and trucks with newer, more fuel-efficient models. The program was in effect for July and most of August. After the program's popularity led to quick exhaustion of the original funding of \$1 billion, the funding was increased to \$3 billion to allow more consumers to participate.

In November, the Worker, Homeownership, and Business Assistance Act of 2009 cut taxes for struggling businesses and strengthened the safety net for workers. In particular, the Act extended the net operating loss provisions of the Recovery Act that allowed small businesses to count their losses this year against taxes paid in previous years for an additional year, and expanded the benefit to medium and large businesses. The Act also provided up to 20 additional weeks of unemployment insurance benefits for workers who were reaching the end of their emergency unemployment benefits. In December, an amendment to the Department of Defense Appropriations Act of 2010 continued through the end of February 2010 the unemployment insurance provisions of the Recovery Act, the November extension of emergency benefits, and the COBRA subsidy program that helps unemployed workers maintain their health insurance. It also expanded the COBRA premium subsidy period from 9 to 15 months and extended the increased guarantees and fee waivers for SBA loans.

Housing Policy

The economic and financial crisis began in the housing market, and an important part of the policy response has been directed at that market. The Administration initiated the Making Home Affordable program (MHA) in March 2009. This program was designed to support low mortgage rates, keep millions of homeowners in their homes, and stabilize the housing market.

As described earlier, the Federal Reserve undertook large-scale purchases of GSE debt and mortgage-backed securities in an effort to reduce mortgage interest rates. At the same time, the Treasury Department made an increased funding commitment to the GSEs. This increased government support for the agencies also reduced their borrowing costs and so helped lower mortgage interest rates.

Importantly, MHA also included a program to help households take advantage of lower interest rates. The Home Affordable Refinance Program helps families whose homes have lost value and whose mortgage payments can be reduced by refinancing at historically low interest rates. This program expanded the opportunity to refinance to borrowers with loans owned or guaranteed by the GSEs who had a mortgage balance up to 125 percent of their home's current value.

Another key component of MHA is the Home Affordable Modification Program (HAMP), which is providing up to \$75 billion to encourage loan modifications. It offers incentives to investors, lenders, servicers, and homeowners to encourage mortgage modifications in which all stakeholders share in the cost of ensuring that responsible homeowners can afford their monthly mortgage payments. To protect taxpayers, HAMP focuses on sound modifications. No payments are made by the government unless the modification lasts for at least three months, and all the payments are designed around the principle of "pay for success." All parties have aligned incentives under the program to achieve successful modifications at an affordable and sustainable level.

The Administration has supported additional programs to help the housing sector. The Recovery Act included an \$8,000 first-time homebuyer's credit for home purchases made before December 1, 2009. As with temporary investment incentives, this credit can help the economy by changing the timing of decisions, bringing buyers into the housing market who were not planning on becoming homeowners until after 2009 or were postponing their purchases in light of the distress in the market. In November, this credit was expanded and extended by the Workers, Homeownership, and Business Assistance Act of 2009.

The Recovery Act also gave considerable resources to the Neighborhood Stabilization Program, a program administered by the Department of Housing and Urban Development to stabilize communities that have suffered from foreclosures and abandoned homes. The Administration also provided assistance to state and local housing finance agencies and their efforts to aid distressed homeowners, stimulate first-time home buying, and provide affordable rental homes. These agencies had faced a significant liquidity crisis resulting from disruptions in financial markets.

THE EFFECTS OF THE POLICIES

The condition of the American economy has changed dramatically in the past year. At the beginning of 2009, financial markets were functioning poorly, house prices were plummeting, and output and employment were in freefall. Today, financial markets have stabilized and credit is starting to flow again, house prices have leveled off, output is growing, and the employment situation is stabilizing. Because of the depth of the economy's fall, we are a long way from full recovery, and significant challenges remain. But the trajectory of the economy is vastly improved.

There is strong evidence that the policy response has been central to this turnaround. The actions to stabilize credit markets have prevented further destructive failures of major financial institutions and helped maintain lending in key areas. The housing and mortgage policies have kept hundreds of thousands of homeowners in their homes and brought mortgage rates to historic lows. The speed of the economy's change in direction has been remarkable and matches up well with the timing of the fiscal stimulus. And both direct estimates as well as the assessments of expert observers underscore the crucial role played by the stimulus.

The Financial Sector

Given the powerful impact of the financial sector on the real economy, a necessary first step to recovery of the real economy was recovery of the financial sector. And the financial sector has unquestionably begun to recover. Figure 2-5 extends the graph of the TED spread and the BAA-AAA spread shown in Figure 2-3 through December 2009. After spiking to unprecedented levels in October 2008, the TED spread fell rapidly over the next two months but remained substantially elevated at the beginning of 2009. It then declined gradually through August and is now at normal levels. This key indicator of the basic functioning of credit markets suggests substantial financial recovery. The BAA-AAA spread remained very high through April but then fell rapidly from April to September. This spread, which normally rises when the economy is weak because of higher corporate default risks, is now at levels comparable to those at the beginning of the recession and below its levels in much of 1990-91 and 2002-03. Thus, the current level of the spread appears to reflect mainly the weak state of the economy rather than any specific difficulties in credit markets.



Figure 2-5 FD Spread and Moody's BAA-AAA Spread Through December 2009

Notes: The TED spread is defined as the three-month London Interbank Offer Rate (LIBOR) less the yield on the three-month U.S. Treasury security. Moody's BAA-AAA spread is the difference between Moody's indexes of yields on AAA and BAA rated corporate bonds. Source: Bloomberg.

Another broad indicator of the health of the financial system is the level of stock prices, which depend both on investors' expectations of future earnings and on their willingness to bear risk. Figure 2-6 shows the behavior of the S&P 500 stock price index since January 2006. This series declined by 18 percent from its peak in October 2007 through the end of August 2008, fell precipitously in September, and continued to fall through March 2009 as the economy deteriorated sharply and investors became extremely fearful. The stabilization of the economy and the restoration of more normal workings of financial markets have led to a sharp turnaround in stock prices. As of December 31, 2009, the S&P 500 was 65 percent above its low in March. As with the BAA-AAA spread, the current level of stock prices relative to their pre-recession level appears to reflect the weaker situation of the real economy rather than any specific problems with financial markets or investors' willingness to bear risk.



These indicators show that financial markets have evolved toward normalcy, which was a necessary step in stopping the economic freefall. But for the economy to recover fully, that is not enough: credit must be available to sound borrowers. On this front, the results are more mixed. Some sources of credit are coming back strongly, but others remain weak.

As described in more detail later, one critical market where policies have succeeded in lowering interest rates and maintaining credit flows is the mortgage market. Another market that has recovered substantially is the market for commercial paper. In late 2008 and early 2009, this market was functioning in large part because of the direct intervention of the Federal Reserve. By mid-January, the Federal Reserve's Commercial Paper Funding Facility (CPFF) was holding \$350 billion of commercial paper. As credit conditions have stabilized, however, firms have been able to place their commercial paper privately on better terms than through the CPFF, and levels of commercial paper outstanding have remained stable even as the Federal Reserve has reduced its holdings to less than \$15 billion. Nonetheless, quantities of commercial paper outstanding remain well below their pre-crisis levels.

Another crucial source of credit that has stabilized is the market for corporate bonds. As risk spreads have fallen, corporations have found it easier to obtain funding by issuing longer-term bonds than by issuing such instruments as commercial paper. As a result, corporate bond issuance, which fell sharply in the second half of 2008, is now running above pre-crisis levels.

An important financial market development occurred in response to the stress test conducted in the spring. This comprehensive review of the soundness of the Nation's 19 largest financial institutions, together with the public release of this information, strengthened private investors' confidence in the institutions. Partly as a result, the institutions were able to raise \$55 billion in private common equity, improving their capital positions and their ability to lend.

The fact that financial institutions are increasingly able to raise private capital is reducing their need to rely on public capital. Only \$7 billion of TARP funds have been extended to banks since January 20, 2009. Many financial institutions have repaid their TARP funds, and the expected cost of the program to the government has been revised down by approximately \$200 billion since August 2009.

Policy initiatives have also had a clear impact on small business lending. Figure 2-7 shows the amount of SBA-guaranteed loans that have been made since October 2006. SBA loan volume experienced its first significant decrease in September and October 2007; following the failure of Lehman Brothers in September 2008, it fell by more than half. The recovery in small business lending coincided with the passage of the Recovery Act in February 2009. In the months between Lehman's fall and passage of the Recovery Act, average monthly loan volume was \$830 million; immediately after passage, loan volume began to steadily recover and averaged \$1.3 billion per month through September 2009. In September, loan volume reached \$1.9 billion, which was the highest level since August 2007; this has since been exceeded by November 2009's monthly loan volume of

Figure 2-7 Monthly Gross SBA 7(a) and 504 Loan Approvals



Source: Unpublished monthly data provided by the Small Business Administration.

\$2.2 billion. In total, between February and December 2009 the SBA guaranteed nearly \$15 billion in small business lending.

Nonetheless, overall credit conditions have not returned to normal. Many small business owners report continued difficulties in obtaining credit. In addition, the severity of the downturn is leading to elevated rates of failure of small banks, potentially disrupting their lending to small businesses and households. The market for asset-backed securities is also far from fully recovered. As a result, it is often hard for banks and other lenders to package and sell their loans, which forces them to hold a greater fraction of the loans they originate and thus limits their ability to lend.

One important source of data on credit availability is the Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices. The survey, conducted every three months, examines whether banks are tightening lending standards, loosening them, or keeping them basically unchanged. The October 2008 survey found that the overwhelming majority of banks were tightening standards. This fraction has declined steadily, and by October 2009 less than 20 percent were reporting that they were tightening standards for commercial and industrial loans, though none reported loosening standards. Thus, credit conditions remain tight.

Housing

As described earlier, policymakers have taken unprecedented actions to maintain mortgage lending. One result has been a major shift in the composition of mortgage finance. In 2006, private institutions provided 60 percent of liquidity while the GSEs, the Federal Housing Agency (FHA), and the Veterans Administration (VA) provided the remaining 40 percent. As home prices began to decline nationally in 2007, private financing for mortgages began to dry up. As of November 2009, the mortgages guaranteed by the GSEs, FHA, and the VA accounted for nearly all mortgage originations. About 22 percent of mortgage originations are guaranteed by FHA or VA, up from less than 3 percent in 2006. About 75 percent of mortgage originations are guaranteed by the GSEs, up from less than 40 percent in 2006.

As Figure 2-8 shows, mortgage rates fell to historic lows in 2009 consistent with the government's increased funding commitment to Fannie Mae and Freddie Mac and the Federal Reserve's purchases of mortgagebacked securities. These low mortgage rates support home prices and thus benefit all homeowners. More directly, households that have refinanced their mortgages at the lower rates have obtained considerable savings. These savings have effects similar to tax cuts, improving households' financial positions and encouraging spending on other goods. With the help of the Home Affordable Refinance Program, approximately 3 million borrowers have refinanced, putting more than \$6 billion of purchasing power at an annual rate into the hands of households.





Note: Contract interest rate for first mortgages. Source: Freddie Mac, Primary Mortgage Market Survey. In addition, the Home Affordable Modification Program has been successful in encouraging mortgage modifications. When the program was launched, the Administration estimated that it could offer help to as many as 3 million to 4 million borrowers through the end of 2012. On October 8, 2009, the Administration announced that servicers had begun more than 500,000 trial modifications, nearly a month ahead of the original goal. As of November, the monthly pace of trial modifications exceeded the monthly pace of completed foreclosures. Of course, not all trial modifications will become permanent, but the Administration is making every effort to ensure that as many sound modifications as possible do.

One important result of the policies aimed at the housing market and of the broader policies to support the economy is that the housing market appears to have stabilized. National home price indexes have been relatively steady for the past several months, as shown in Figure 2-9. The Federal Housing Finance Agency purchase-only house price index, which is constructed using only conforming mortgages (that is, mortgages eligible for purchase by the GSEs), has changed little since late 2008. The LoanPerformance house price index, another closely watched measure that uses conforming and nonconforming mortgages with coverage of repeat sales transactions for more than 85 percent of the population, rose 6 percent between March and August 2009 before declining slightly in recent months. In addition, the pace of sales of existing single-family homes has increased substantially. Sales in the fourth quarter of 2009 were 29 percent above their low in the first quarter of 2009 and comparable to levels in the first half of 2007.

Finally, there are signs of renewed building activity. After falling 81 percent from their peak in September 2005 to their low in January 2009, single-family housing permits (a leading indicator of housing construction) rose 49 percent through December 2009. Similarly, after falling for 14 consecutive quarters, the residential investment component of real GDP rose in the third and fourth quarters of 2009.

Inventories of vacant homes for sale remain at high levels, and many vacant homes are being held off the market and will likely be put up for sale as home prices increase. This overhang may lead to some additional price declines, although prices are unlikely to fall at the same rate as they did during the crisis. Thus, the recovery of the housing sector is likely to be slow. Of course, we should neither expect nor want the housing market to return to its pre-crisis condition. In the long run, as discussed in more detail in Chapter 4, neither the extraordinarily high levels of housing construction and price appreciation before the crisis nor the extraordinarily low levels of construction and the rapid price declines during the crisis are sustainable.

Figure 2-9 FHFA and LoanPerformance National House Price Indexes



Sources: Federal Housing Finance Agency, purchase-only index; First American Core Logic LoanPerformance.

Overall Economic Activity

The direction of overall economic activity changed dramatically over the course of 2009. Figure 2-10 shows the quarterly growth rate of real GDP, the broadest indicator of national production. After falling at an annual rate of 6.4 percent in the first quarter, real GDP declined at a rate of just 0.7 percent in the second quarter. It then grew at a 2.2 percent rate in the third quarter and a 5.7 percent rate in the fourth. Such a rapid turnaround in growth is remarkable. The improvement in growth of 8.6 percentage points from the first quarter to the third quarter (that is, the swing from growth at a -6.4 percent rate to growth at a 2.2 percent rate) was the largest since 1983. Similarly, the three-quarter improvement from the first quarter to the fourth of 12.1 percentage points was the largest since 1981, and the second largest since 1958.

One limitation of these simple statistics is that they do not account for the usual dynamics of the economy. A more sophisticated way to gauge the extent of the change in the economy's direction is to compare the path the economy has followed with the predictions of a statistical model. There are many ways to construct a baseline statistical forecast. The particular one used here is a vector autoregression (or VAR) that includes the logarithms of real GDP (in billions of chained 2005 dollars) and payroll employment (in thousands, in the final month of the quarter), using four lags of each variable

Figure 2-10 Real GDP Growth



Source: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.1, line 1.

and estimated over the period 1990:Q1–2007:Q4. Because the sample period ends in the fourth quarter of 2007, the coefficient estimates used to construct the forecast are not influenced by the current recession. Rather, they show the normal joint short-run dynamics of real GDP and employment over an extended period. GDP and employment are then forecast for the final three quarters of 2009 using the estimated VAR and actual data through the first quarter of the year. The resulting comparison of the actual and projected paths of the economy shows the differences between the economy's actual performance and what one would have expected given the situation as of the first quarter and the economy's usual dynamics.¹ Although the results presented here are based on one specific approach to constructing the baseline projection, other reasonable approaches have similar implications.

This more sophisticated exercise also finds that the economy's turnaround has been impressive. The statistical forecast based on the economy's normal dynamics projects growth at a -3.3 percent rate in the second quarter of 2009, -0.5 percent in the third, and 1.3 percent in the fourth. In all three quarters, actual growth was substantially higher than the projection. Figure 2-11 shows that as a result, the *level* of GDP exceeded the projected level by an increasing margin: 0.7 percent in the second quarter, 1.4 percent in the third quarter, and 2.5 percent in the fourth.

¹ For more details on this approach and the model-based approach discussed later, see Council of Economic Advisers (2010).

Figure 2-11 Real GDP: Actual and Statistical Baseline Projection



Sources: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.6, line 1; CEA calculations. See Council of Economic Advisers (2010).

The gap between the actual and projected paths of GDP provides a rough way to estimate the effect of economic policy. The most obvious sources of the differences are the unprecedented policy actions. However, the gap reflects all unusual influences on GDP. For example, the rescue actions taken in other countries (described in Chapter 3) could have played a role in better American performance. At the same time, the continuing stringency in credit markets is likely lowering output relative to its usual cyclical patterns. Thus, while some factors work in the direction of causing the comparison of the economy's actual performance with its normal behavior to overstate the contribution of economic policy actions, others work in the opposite direction.

One way to estimate the specific impact of the Recovery Act is to use estimates from economic models. Mainstream estimates of economic multipliers for the effects of fiscal policy can be combined with figures on the stimulus to date to estimate how much the stimulus has contributed to growth. (For the financial and housing policies, this approach is not feasible, because the policies are so unprecedented that no estimates of their effects are readily available.) When this exercise is performed using the multipliers employed by the Council of Economic Advisers (CEA), which are based on mainstream economic models, the results suggest a critical role for the fiscal stimulus. They suggest that the Recovery Act contributed approximately 2.8 percentage points to *growth* in the second quarter, 3.9 percentage points in the third, and 1.8 percentage points in the fourth. As a result, this approach suggests that the *level* of GDP in the fourth quarter was slightly more than 2 percent higher than it would have been in the absence of the stimulus.

Knowledgeable outside observers agree that the Recovery Act has increased output substantially relative to what it otherwise would have been. For example, in November 2009, CBO estimated that the Act had raised the level of output in the third quarter by between 1.2 and 3.2 percent relative to the no-stimulus baseline (Congressional Budget Office 2009a). Private forecasters also generally estimate that the Act has raised output substantially.

A final way to look for the effects of the rescue policies on GDP is in the behavior of the components of GDP. Figure 2-12 shows the contribution of various components of GDP to overall GDP growth in each of the four quarters of 2009. One area where policy's role seems clear is in business investment in equipment and software. A key source of the turnaround in GDP is the change in this type of investment from a devastating 36 percent annual rate of decline in the first quarter to a 13 percent rate of increase by the fourth quarter. Two likely contributors to this change were the investment incentives in the Recovery Act and the many measures to stabilize the financial system and maintain lending. Similarly, the housing and financial



Figure 2-12 Contributions to Real GDP Growth

Notes: Bars sum to quarterly change in GDP growth (-6.4% in Q1; -0.7% in Q2; 2.2% in Q3; 5.7% in Q4). PCE is personal consumption expenditures; Nonres. Struct. is nonresidential fixed investment in structures; Equip I. is nonresidential fixed investment in equipment and software; Res. Fixed I is residential fixed investment; Inventory I is inventory investment; Federal Gov't is Federal Government purchases; S&L Gov't is state and local government purchases; Net Exports is net exports.

Source: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.2.

market policies were surely important to the swing in the growth of residential investment from a 38 percent annual rate of decline in the first quarter to increases in the third and fourth quarters.

Two other components showing evidence of the policies' effects are personal consumption expenditures and state and local government purchases. The Making Work Pay tax credit and the aid to individuals directly affected by the recession meant that households did not have to cut their consumption spending as much as they otherwise would have, and the Cash for Clunkers program provided important incentives for motor vehicle purchases in the third quarter. Consumption was little changed in the first two quarters of 2009 and then rose at a healthy 2.8 percent annual rate in the third quarter—driven in considerable part by a 44 percent rate of increase in purchases of motor vehicles and parts—and at a 2.0 percent rate in the fourth quarter. And, despite the dire budgetary situations of state and local governments, their purchases rose at the fastest pace in more than five years in the second quarter and were basically stable in the third and fourth quarters. This stability almost surely could not have occurred in the absence of the fiscal relief to the states.

The figure also shows the large role of inventory investment in magnifying macroeconomic fluctuations. When the economy goes into a recession, firms want to cut their inventories. As a result, inventory investment moves from its usual slightly positive level to sharply negative, contributing to the fall in output. Then, as firms moderate their inventory reductions, inventory investment rises—that is, becomes less negative—contributing to the recovery of output.

Finally, the turnaround in the automobile industry has been substantial. The Cash for Clunkers program appears to have generated a sharp increase in demand for automobiles in July and August 2009 (Council of Economic Advisers 2009). Sales of light motor vehicles averaged 12.6 million units at an annual rate during these two months, up from an annual rate of 9.6 million units in the second quarter. Although some observers had hypothesized that the July and August sales boost would be offset by a corresponding loss of sales in the months immediately following, sales in September (9.2 million at an annual rate) roughly matched the pace of sales in the first half of 2009, and sales subsequently rebounded to a 10.8 million unit annual pace in the fourth quarter. Employment in motor vehicles and parts hit a low of 633,300 in June 2009 and has increased modestly since then. In December 2009, employment was 655,200.

Both GM and Chrysler proceeded through bankruptcy in an efficient manner, and the new companies emerged far more quickly than outside experts thought would be possible. The companies are performing in line with their restructuring plans, and in November 2009, GM announced its intention to begin repaying the Federal Government earlier than originally expected. It made a first payment of \$1 billion in December.

The Labor Market

The ultimate goal of the economic stabilization and recovery policies is to provide a job for every American who seeks one. The recession's impact on the labor market has been severe: employment in December 2009 was 7.2 million below its peak level two years earlier, and the unemployment rate was 10 percent. Moreover, although real GDP has begun to grow, employment losses are continuing.

Nonetheless, there is clear evidence that the labor market is stabilizing. Figure 2-13 shows the average monthly job loss by quarter since 2006. Average monthly job losses have moderated steadily, from a devastating 691,000 in the first quarter of 2009 to 428,000 in the second quarter, 199,000 in the third, and 69,000 in the fourth. The *change* in the average monthly change in employment from the first quarter to the third was the largest over any two-quarter period since 1980, and the change from the first to the fourth quarter was the largest three-quarter change since 1946. Given what we now know about the terrible rate of job loss over the winter, it would have been very difficult for the labor market to stabilize more rapidly than it has.



Figure 2-13 Average Monthly Change in Employment

Source: Department of Labor (Bureau of Labor Statistics), Current Employment Statistics survey Series CES000000001.
One can again use the VAR described earlier to obtain a more refined estimate of how the behavior of employment has differed from its usual pattern. This statistical procedure implies that given the economy's behavior through the first quarter of 2009 and its usual dynamics, one would have expected job losses of about 597,000 per month in the second quarter, 513,000 in the third quarter, and 379,000 in the fourth. Thus, actual employment as of the middle of the second quarter (May) was approximately 300,000 higher than one would have projected given the normal behavior of the economy; as of the middle of the third quarter (August), it was about 1.1 million higher; and as of the middle of the fourth quarter (November), it was about 2.1 million higher. As with the behavior of GDP, the portion of this difference that is attributable to the Recovery Act and other policies cannot be isolated from the portion resulting from other factors. But again, the difference could either understate or overstate the policies' contributions.

As with GDP, economic models can be used to focus specifically on the contributions of the Recovery Act. The results are shown in Figure 2-14. The CEA's multiplier estimates suggest that the Act raised employment relative to what it otherwise would have been by about 400,000 in the second quarter of 2009, 1.1 million in the third quarter, and 1.8 million in the fourth quarter. Again, these estimates are similar to other assessments. For example, CBO's November report estimated that the Act had raised





Note: The figure shows the estimated impact on employment relative to what otherwise would have happened. Source: CEA calculations. See Council of Economic Advisers (2010).

employment in the third quarter by between 0.6 million and 1.6 million, relative to what otherwise would have happened.

A more complete picture of the process of labor market healing can be obtained by looking at labor market indicators beyond employment. Table 2-1 shows some of the main margins along which labor market recovery occurs. The margins are listed from left to right in the rough order in which they tend to adjust coming out of a recession. One of the first margins to respond is productivity-when demand begins to recover or moderates relative to the previous rate of decline, firms initially produce more with the same number of workers. Another early margin is initial claims for unemployment insurance-fewer workers are laid off. A somewhat later margin is the average workweek-firms start increasing production by increasing hours. The usual next step is temporary help employment-when firms decide to hire, they often begin with temporary help. Eventually total employment responds. The unemployment rate usually lags employment slightly because employment growth brings some discouraged workers back into the labor force and because the labor force naturally grows over time. The last item to adjust is usually the duration of unemployment spells, as workers who have been unemployed for extended periods finally find jobs.

The table shows that recovery from this recession is following the typical pattern, with labor market repair evident along the margins that typically respond early in a recovery. Productivity growth has surged as GDP has begun to increase and employment has continued to fall.

First to move Last to move								
	Produc- tivity growth, annual rate (percent)			Average mo	nthly change			
		Initial UI claims (thou- sands/ week)	Work- week (hours)	Tempo- rary help employ- ment (thou- sands)	Total employ- ment (thou- sands)	Un- employ- ment rate (percent)	Average duration of unem- ployment (weeks)	
2008:Q4	0.8	22	-0.10	-70	-553	0.39	0.3	
2009:Q1	0.3	40	-0.07	-73	-691	0.42	0.4	
2009:Q2	6.9	-15	-0.03	-28	-428	0.29	1.2	
2009:Q3	8.1 ^p	-22	0.03	5	-199	0.11	0.7	
2009:Q4	7.5°	-30	0.03	49	-69	0.04	0.9	

Table 2-1				
Cyclically Sensitive Elements	of Labor Market Adjustment			

Notes: This table arranges the indicators according to the order in which they typically first move around business cycle turning points. Quarterly values for the average monthly change are measured from the last month in the previous quarter to the last month in the quarter. p is preliminary; e is estimate.

Sources: Department of Labor (Bureau of Labor Statistics), Series PRS85006092, and Employment Situation Tables A, A-9, and B-1; Department of Labor (Employment and Training Administration).

Initial unemployment insurance claims, which rose precipitously earlier in the recession, have begun to decline at an increasing rate. Likewise, the workweek has gone from shortening to lengthening, albeit slowly. Temporary help employment has changed from extreme declines to substantial increases. So far, total employment has shown a greatly moderating decline but has not yet risen. The pace of increase in the unemployment rate has slowed noticeably, but the unemployment rate has not yet fallen on a quarterly basis. Finally, increases in the duration of unemployment have not yet begun to moderate noticeably.

These data suggest that the labor market is beginning to move in the right direction, but much work remains to be done. The country is not yet seeing the substantial rises in total employment and declines in the unemployment rate that are the ultimate hallmark of robust labor market improvement. And, of course, even once all the indicators are moving solidly in the right direction, the labor market will still have a long way to go before it is fully recovered.

Signs of healing are also beginning to appear in the industrial composition of the stabilization of the labor market. Figure 2-15 shows the average monthly change in each of eight sectors in each of the four quarters of 2009. As one would expect of the beginnings of a recovery from a severe





Notes: Bars sum to average monthly change in quarter (-691,000 in Q1; -428,000 in Q2; -199,000 in Q3; -69,000 in Q4). Construct is construction; Mfg. is manufacturing; Trade is wholesale and retail trade, transportation, and utilities; Prof. & Bus. Serv. is professional and business services; Edu. & Health is education and health; Federal Gov't is Federal Government; S&L Gov't is state and local government.

Source: Department of Labor (Bureau of Labor Statistics), Employment Situation Table B-1.

recession, the moderation in job losses has been particularly pronounced in manufacturing and construction, two of the most cyclically sensitive sectors. There has also been a sharp turnaround in professional business services, driven largely by renewed employment growth in temporary help services.

One area where the Recovery Act appears to have had a direct impact on employment is in state and local government. Despite the enormous harm the recession has done to their budgets, employment in state and local governments has fallen relatively little. Indeed, employment in state and local government, particularly in public education, rose in the fourth quarter.

THE CHALLENGES AHEAD

The financial and economic rescue policies have helped avert an economic calamity and brought about a sharp change in the economy's direction. Output has begun growing again, and employment appears poised to do so as well. But even when the country has returned to a path of steadily growing output and employment, the economy will be far from fully recovered. Since the recession began in December 2007, 7.2 million jobs have been lost. It will take many months of robust job creation to erase that employment deficit. For this reason, it is important to explore policies to speed recovery and spur job creation.

Deteriorating Forecasts

This jobs deficit is much larger than the vast majority of observers anticipated at the end of 2008. This is not the result of a slow economic turnaround. On the contrary, as described above, the change in the economy's direction has been remarkably rapid given the economy's condition in the first quarter of 2009. Rather, the jobs deficit reflects two developments.

The first development is the unanticipated severity of the downturn in the real economy in 2008 and early 2009. Table 2-2 shows consensus forecasts from November 2008 through February 2009, along with preliminary and actual estimates of real GDP growth. The table shows that the magnitude of the fall in GDP in the fourth quarter of 2008 and the first quarter of 2009—driven in part by the unexpectedly strong spread of the crisis to the rest of the world—surprised most observers. The Blue Chip Consensus released in mid-December 2008 projected fourth quarter growth would be -4.1 percent and first quarter growth would be -2.4 percent. The actual values turned out to be -5.4 percent and -6.4 percent. The Blue Chip forecast released in mid-January also projected a substantially smaller decline in first quarter real GDP than actually occurred.

Real GDP Growth						
	2008:Q4	2009:Q1	2009:Q2	2009:Q3	2009:Q4	
Blue Chip (11/10/08)	-2.8	-1.5	0.2	1.5	2.1	
SPF (11/17/08)	-2.9	-1.1	0.8	0.9	2.3	
Blue Chip (12/10/08)	-4.1	-2.4	-0.4	1.2	1.9	
Blue Chip (1/10/09)	-5.2	-3.3	-0.8	1.2	2.2	
SPF (2/13/09)		-5.2	-1.8	1.0	1.8	
BEA Advance Estimate	-3.8	-6.1	-1.0	3.5	5.7	
BEA Preliminary (2nd) Estimate	-6.2	-5.7	-1.0	2.8		
Actual	-5.4	-6.4	-0.7	2.2		
	Unemployment Rate					
2008:Q4 2009:Q1 2009:Q2 2009:Q3 2009:Q4						
Blue Chip (11/10/08)	6.5	6.9	7.3	7.6	7.7	
SPF (11/17/08)	6.6	7.0	7.4	7.6	7.7	
Blue Chip (12/10/08)	6.7	7.3	7.7	8.0	8.1	
Blue Chip (1/10/09)	6.9	7.4	7.9	8.3	8.4	
SPF (2/13/09)		7.8	8.3	8.7	8.9	
Actual	6.9	8.2	9.3	9.7	10.0	

Table 2-2 Forecast and Actual Macroeconomic Outcomes

Notes: In the GDP panel, all numbers are in percent and are seasonally adjusted annual rates. In the unemployment panel, all numbers are in percent and are seasonally adjusted. SPF is the Survey of Professional Forecasters. Dashes indicate data are not available.

Sources: Blue Chip Economic Indicators; Survey of Professional Forecasters; Department of Commerce (Bureau of Economic Analysis), GDP news releases on 1/30/2009, 2/27/2009, 4/29/2009, 5/29/2009, 7/31/2009, 8/27/2009, 10/29/2009, 11/24/2009, 1/29/2010, and National Income and Product Accounts Table 1.1.1, line 1; Department of Labor (Bureau of Labor Statistics), Current Population Survey Series LNS14000000.

Part of the difficulty in forecasting resulted from large data revisions. The official GDP figures available at the end of January 2009 indicated that real GDP had fallen by just 0.2 percent over the four quarters of 2008; revised data now put the decline at 1.9 percent.

The Administration's economic forecast made in January 2009 and released with the fiscal 2010 budget, like the private forecasts, underestimated the speed of GDP decline in the first quarter. It also underestimated average growth over the remaining three quarters of 2009. For the four quarters of 2009, the Administration forecast overall growth of 0.3 percent; the actual value, according to the latest available data, is 0.1 percent.

The second development accounting for the unexpectedly large jobs deficit involves the behavior of the labor market given the behavior of GDP. Table 2-2 also shows consensus forecasts for the unemployment rate. These data indicate that as of December 2008, unemployment in the fourth quarter of 2009 was forecast to be 8.1 percent, dramatically less than the actual value of 10.0 percent. As of mid-January 2009, unemployment was forecast to be 8.4 percent in the fourth quarter. In its forecast made in January 2009, the Administration unemployment forecast was similar to the consensus forecast.

Some of the unanticipated rise in unemployment was the result of the worse-than-expected GDP growth in 2008 and the beginning of 2009. CEA analysis, however, also suggests that the normal relationship between GDP and unemployment has fit poorly in the current recession. This relationship, termed Okun's law after former CEA Chair Arthur Okun who first identified it, suggests that a fall in GDP of 1 percent relative to its normal trend path is associated with a rise in the unemployment rate of about 0.5 percentage point after four quarters. Figure 2-16 shows the scatter plot of the four-quarter change in real GDP and the four-quarter change in the unemployment rate. The figure shows that although the fit of Okun's law is usually good, the relationship has broken down somewhat during this recession. The error was concentrated in 2009, when the unemployment rate increased considerably faster than might have been expected given the change in real GDP. CEA calculations suggest that as of the fourth quarter of 2009, the unemployment rate was approximately 1.7 percentage points higher than would have been expected given the behavior of real GDP since the business cycle peak in the fourth quarter of 2007.

This unusual rise in the unemployment rate does not appear to result from unusual behavior of the labor force. If anything, the labor force



Figure 2-16 Okun's Law, 2000-2009

Sources: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.1, line 1; Department of Labor (Bureau of Labor Statistics), Current Population Survey Series LNS11000000 and LNS113000000; CEA calculations.

appears to have contracted somewhat more than usual given the path of the economy. Rather it reflects larger-than-typical falls in employment relative to the decline in GDP. This behavior is consistent with the tremendous increase in productivity during this episode, especially over the final three quarters of 2009. Indeed, labor productivity rose at a 6.9 percent annual rate in the second quarter and at an 8.1 percent rate in the third quarter; if productivity rose by a similar amount in the fourth quarter, as seems likely, the increase will have been one of the fastest over three quarters in postwar history.

The Administration Forecast

Looking forward, the Administration projects steady but moderate GDP growth over the near and medium term. Table 2-3 reports the Administration's forecast used in preparing the President's fiscal year 2011 budget. The table shows that GDP growth in 2010 is forecast to be 3 percent.

	Nominal GDP	Real GDP (chain- type)	GDP price index (chain- type)	Con- sumer price index (CPI-U)	Un- employ- ment rate (percent)	Interest rate, 91-day Treasury bills (percent)	Interest rate, 10-year Treasury notes (percent)	Nonfarm payroll employ- ment (average monthly change, Q4 to Q4, thou- sands)
	Pe	rcent chan	ige, Q4 to	Q4		Level, cale	endar year	
2008 (actual)	0.1	-1.9	1.9	1.5	5.8	1.4	3.7	-189
2009	0.4	-0.5	0.9	1.4	9.3	0.2	3.3	-419
2010	4.0	3.0	1.0	1.3	10.0	0.4	3.9	95
2011	5.7	4.3	1.4	1.7	9.2	1.6	4.5	190
2012	6.1	4.3	1.7	2.0	8.2	3.0	5.0	251
2013	6.0	4.2	1.7	2.0	7.3	4.0	5.3	274
2014	5.7	3.9	1.7	2.0	6.5	4.1	5.3	267
2015	5.2	3.4	1.7	2.0	5.9	4.1	5.3	222
2016	5.0	3.1	1.8	2.1	5.5	4.1	5.3	181
2017	4.5	2.7	1.8	2.1	5.3	4.1	5.3	139
2018	4.5	2.6	1.8	2.1	5.2	4.1	5.3	113
2019	4.4	2.5	1.8	2.1	5.2	4.1	5.3	98
2020	4.3	2.5	1.8	2.1	5.2	4.1	5.3	93

Table 2-3 Administration Economic Forecast

Notes: Based on data available as of November 18, 2009. Interest rate on 91-day Treasury bills is measured on a secondary market discount basis. The figures do not reflect the upcoming BLS benchmark revision, which is expected to reduce 2008 and 2009 job growth by a cumulative 824,000 jobs.

Sources: CEA calculations; Department of Commerce (Bureau of Economic Analysis and Economics and Statistics Administration); Department of Labor (Bureau of Labor Statistics); Department of the Treasury; Office of Management and Budget.

The Administration estimates that normal or potential GDP growth will be roughly 2½ percent per year (see Box 2-1). Because projected GDP growth is only slightly stronger than potential growth, relatively little decline is projected in the unemployment rate during 2010. Indeed, it is possible that the rate will rise for a while as some discouraged workers return to the labor force, before starting to generally decline. Consistent with this, employment growth is projected to be roughly equal to normal trend growth of about 100,000 per month.

Box 2-1: Potential Real GDP Growth

The Administration forecast is based on the idea that real GDP fluctuates around a potential level that trends upward at a relatively steady rate. Over the budget window, potential real GDP is projected to grow at a 2.5 percent annual rate. Potential real GDP growth is a measure of the sustainable rate of growth of productive capacity.

The growth rate of the economy over the long run is determined by its supply side components, which include population, labor force participation, the ratio of nonfarm business employment to household employment, the length of the workweek, and labor productivity. The Administration's forecast for the contribution of the growth rates of these supply side factors to potential real GDP growth is shown in the accompanying table.

Component	Contribution (Percentage points)
Civilian noninstitutional population aged 16+	1.0
Labor force participation rate	-0.3
Employment rate	0.0
Ratio of nonfarm business employment to	-0.0
household employment	
Average weekly hours (nonfarm business)	-0.1
Output per hour (productivity, nonfarm business)	2.3
Ratio of real GDP to nonfarm business output	-0.4
SUM: Real GDP	2.5

Components of Potential Real GDP Growth, 2009-2020

Note: All contributions are in percentage points at an annual rate.

Sources: CEA calculations; Department of the Treasury; Office of Management and Budget.

Over the next 11 years, the working-age population is projected to grow 1.0 percent per year, the rate projected by the Census Bureau.

Continued on next page

Box 2-1, continued

The normal or potential labor force participation rate, which fell at a 0.3 percent annual rate during the past 8 years, is expected to continue declining at that pace. The continued projected decline results from the aging baby boom generation entering their retirement years. The potential employment rate (that is, 1 minus the normal or potential unemployment rate) is not expected to contribute to potential GDP growth because no change is anticipated in the unemployment rate consistent with stable inflation. The potential ratio of nonfarm business employment to household employment is also expected to be flat during the forecast horizon-consistent with its average behavior in the long run. This would be a change, however, from its puzzling 0.5 percent annual rate of decline during the past business cycle. The potential workweek is projected to edge down slightly (0.1 percent per year). This is a slightly shallower pace of decline than over the past 50 years, when it declined 0.3 percent per year. Over the 11-year projection interval, some firming of the workweek would be a natural labor market accommodation to the anticipated decline in labor force participation.

Potential growth of labor productivity is projected at 2.3 percent per year, a conservative forecast relative to its measured product-side growth rate (2.8 percent) between the past two business cycle peaks, but close to an alternative income-side measure of productivity growth (2.2 percent) during the same period. The ratio of real GDP to nonfarm business output is expected to continue to subtract from overall growth as it has over most long periods, because the nonfarm business sector generally grows faster than other sectors, such as government, households, and nonprofit institutions. Together, the sum of all of the components is the growth rate of potential real GDP, which is 2.5 percent per year.

As Table 2-3 shows, actual real GDP is projected to grow more rapidly than potential real GDP over most of the forecast horizon. The most important reason for the difference is that the actual employment rate is projected to rise as millions of workers who are currently unemployed return to employment and so contribute to GDP growth.

Traditionally, the large amount of slack would be expected to put substantial downward pressure on wage and price inflation. For this reason, inflation is projected to remain low in 2010. However, because inflationary expectations remain well anchored, inflation is not likely to slow dramatically or become negative (that is, turn into deflation). In 2011, slightly higher GDP growth of approximately 4 percent is projected (again measured from fourth quarter to fourth quarter). Consistent with this, stronger employment growth and a more substantial decline in the unemployment rate are expected in 2011. However, because GDP growth is still not projected to be as robust as that following some other deep recessions, continued large output gaps are anticipated. This will limit the upward movement of the inflation rate toward a pace consistent with the Federal Reserve's long-term target inflation rate of about 2 percent. Moreover, employment growth is unlikely to be large enough to reduce the employment shortfall dramatically in 2011.

Responsible Policies to Spur Job Creation

This large employment gap and the prospects that it is likely to recede only slowly make a compelling case for additional measures to spur private sector job creation. The Administration is therefore exploring a range of possibilities and working with Congress to pass measures into law.

Several principles are guiding this process. First, at a time when the budget deficit is large and the country faces significant long-run fiscal challenges, measures must be cost-effective. Second, given that the employment consequences of the recession have been severe, measures must focus particularly on job creation. And third, measures must be tailored to the state of the economy: the policies that are appropriate when an economy is contracting rapidly may not be the same as those that are appropriate for an economy that is growing again but operating below capacity.

Guided by these principles, the Administration has identified three key priorities. One is a multifaceted program to jump-start job creation by small businesses, which are critical to growth and have been particularly harmed by the recession. Among the possible policies in this area are investment incentives, tax incentives for hiring, and additional steps to increase the availability of loans backed by the Small Business Administration. These policies may be particularly effective at a time when the economy is growing—so that the question for many firms is not whether to hire but when—and at a time when credit availability remains an important constraint.

Initiatives to encourage energy efficiency and clean energy are another priority. One proposal involves incentives for homeowners to retrofit their homes for energy efficiency. Because in many cases the effect of such incentives would be to lead homeowners to make cost-saving investments earlier than they otherwise would have, they might have an especially large impact. In addition, the employment effects would be concentrated in construction, an area that has been particularly hard-hit by the recession. The Administration has also supported extending tax credits through the Department of Energy that promote the manufacture of advanced energy products and providing incentives to increase the energy efficiency of public and nonprofit buildings.

A third priority is infrastructure investment. The experience of the Recovery Act suggests that spending on infrastructure is an effective way to put people back to work while creating lasting investments that raise future productivity. For this reason, the Administration is supporting an additional investment of up to \$50 billion in roads, bridges, airports, transit, rail, and water projects. Funneling some of these funds through programs such as the Transportation Investment Generating Economic Recovery (TIGER) program at the Department of Transportation, which is a competitive grant program, could offer a way to ensure that the projects with the highest returns receive top priority.

Finally, it is critical to maintain our support for the individuals and families most affected by the recession by extending the emergency funding for such programs as unemployment insurance and health insurance subsidies for the unemployed. This support not only cushions the worst effects of the downturn, but also boosts spending and so spurs job creation. Similarly, it is important to maintain support for state and local governments. The budgets of these governments remain under severe strain, and many are cutting back in anticipation of fiscal year 2011 deficits. Additional fiscal support could therefore have a rapid impact on spending, and would do so by maintaining crucial services and preventing harmful tax increases.

CONCLUSION

The recession that began at the end of 2007 became the "Great Recession" following the financial crisis in the fall of 2008. In the wake of the collapse of Lehman Brothers in September, American families faced devastating job losses, high unemployment, scarce credit, and lost wealth. Late 2008 and 2009 will be remembered as a time of great trial for American workers, businesses, and families.

But 2009 should also be remembered as a year when even more tragic losses and dislocation did not occur. As terrible as this recession has been, a second Great Depression would have been far worse. Had policymakers not responded as aggressively as they did to shore up the financial system, maintain demand, and provide relief to those directly harmed by the downturn, the outcome could have been much more dire.

As 2010 begins, there are strong signs that the American economy is starting to recover. Housing and financial markets appear to have stabilized and real GDP is growing again. The labor market also appears to be healing, showing the expected early pattern of response to output expansion.

With millions of Americans still unemployed, much work remains to restore the American economy to health. It will take a prolonged and robust GDP expansion to eliminate the large jobs deficit that has opened up over the course of the recession. Only when the unemployment rate has returned to normal levels and families are once again secure in their jobs, homes, and savings will this terrible recession truly be over.

CHAPTER 3

ster

CRISIS AND RECOVERY IN THE WORLD ECONOMY

The financial crisis and recession have affected economies around the globe. The impact on the U.S. economy has been severe, but many areas of the world have fared even worse. The average growth rate of real gross domestic product (GDP) around the world was -6.2 percent at an annual rate in the fourth quarter of 2008 and -7.5 percent in the first quarter of 2009. All told, the world economy is expected to have contracted 1.1 percent in 2009 from the year before—the first annual decline in world output in more than half a century.¹ Although economic dislocations have been severe in one region or another at various times over the past 50 years, never in that time span has the annual output of the entire global economy contracted. But, as bad as the outcome has been, the decline would likely have been far larger if policymakers in the world's key economies had not acted forcefully to limit the impact of the crisis.

The global economic crisis started as a financial crisis, generally beginning in housing-related asset markets, and accelerated in the fall of 2008. After September 2008, interbank interest rates spiked, exchange rates shifted quickly, and the flows of capital across borders slowed dramatically. Trade flows also plummeted, falling even more dramatically than GDP. As a result, trade flows became a key transmission mechanism in the crisis, spreading macroeconomic distress to countries that were not primarily exposed to the financial shocks.

Policymakers around the world responded quickly, sometimes taking coordinated action, sometimes acting independently. Many central banks

¹ Quarterly figures are calculations of the Council of Economic Advisers based on a 64-country sample that represents 93 percent of world GDP. Annual average projections are from the International Monetary Fund (2009a). These projections indicate that from the fourth quarter of 2007 to the fourth quarter of 2008, world GDP contracted 0.1 percent, and from the fourth quarter of 2008 to the fourth quarter of 2009, world GDP expanded 0.8 percent. The contraction was strongest from the middle of 2008 to the middle of 2009; hence the annual average growth from 2008 to 2009 (-1.1 percent) is lower than the fourth-quarter-to-fourth-quarter numbers.

cut interest rates nearly to zero and expanded their balance sheets to try to stimulate lending and keep their economies going. They also lent large sums to one another to prevent dislocations caused by a lack of foreign currency in some markets. Beyond the central bank actions, governments intervened more broadly in banks and financial markets as well. Governments also spent large sums in fiscal stimulus to avoid massive drop-offs in aggregate demand. In a welcome development, they did not, however, restrict trade in an attempt to turn away imports.

The global economy is now seeing the beginnings of recovery. Financial markets have rebounded, trade is recovering, and GDP growth rates are again positive. Recovery is far from complete or certain, and some risks remain: lending is still constrained, and unemployment is painfully high. But, at the start of 2010, the world economy is no longer at the edge of collapse, and the elements of a sound recovery seem to be coming into place.

INTERNATIONAL DIMENSIONS OF THE CRISIS

The worldwide contraction had roots in many financial phenomena, and its rapid spread can be seen in a number of financial indicators. Borrowing costs increased, U.S. dollars were scarce in foreign markets, and exchange rates moved rapidly. Yet, despite problems in U.S. financial markets, there was no U.S. dollar crisis, and while currency markets moved rapidly, many of the emerging-market currency depreciations were temporary and not accompanied by cascading defaults. Thus, the world economy was better positioned for recovery than it might have been.

Spread of the Financial Shock

One of the early indicators of the crisis was the large spike in the interest rate banks charge one another that took place as the value of assets held on bank balance sheets came into question. After the investment bank Lehman Brothers declared bankruptcy in September 2008, banks grew even warier about lending to each other. This fear of lending to one another can be seen by comparing the interbank lending rate with the risk-free overnight interest rate. Similar to the TED spread, the Libor-OIS spread (the London interbank offered rate minus the overnight indexed swap) gives such a comparison for dollar loans, and comparable spreads are available for loans in other currencies. As Figure 3-1 shows, the spike in spreads for dollar loans was larger earlier, but the increase in interbank lending rates was sharp in dollars, pounds, and euros alike. Banks simply refused to lend to one another at low rates in these major financial systems. Furthermore, concerns about which firms might go bankrupt sent the cost of insuring

Figure 3-1 Interbank Market Rates



Source: Bloomberg.

against a default on a bond soaring. Thus, costs of borrowing increased for even creditworthy borrowers, putting a strain on the ability of firms to finance themselves.

The Dollar Shortage. Beyond the difficulties of evaluating counterparty risk were the acute shortages of dollar liquidity outside the United States, which were reflected in a steep rise in the cost of exchanging foreign currency for dollars for a fixed period of time (a foreign currency swap). The reasons for the dollar shortage are complex but can be understood by looking at foreign banks' behavior before the crisis. During the boom years, non-U.S. banks acquired large amounts of dollar-denominated assets, often paying for these acquisitions with borrowed dollars rather than with their own currency, thus avoiding the currency mismatch risk of borrowing in one currency and having assets in another. Much of the dollar borrowing was short term and came from U.S. money-market funds. After investors began to pull their money out of these funds in the fall of 2008, that source of lending dried up, and banks were left trying to obtain dollars in other ways. This put pressure on the currency swap market.

Before the crisis, moreover, some banks funded purchases of U.S. assets directly through swaps. In a simplified version of the transaction, foreign banks borrow in their own currency (euros, for example), exchange that currency for dollars through a swap, and then use the dollars to buy U.S. assets. By using a swap market rather than simply purchasing currency, they

even out the currency risk (McGuire and von Peter 2009),² but they are left with a funding risk. If no one will lend them dollars when their swap is due, they may have to sell their dollar assets (some of which may have fallen in value) to pay back the dollars they owe. When banks became very nervous about taking on risk, demand greatly increased the price of currency swaps.

Unwinding Carry Trades. As concerns about the stability of the financial markets heightened over the course of 2008, investors responded by trying to deleverage and reduce some of their exposed risky positions. The desire to undo risky positions coupled with the dollar shortage led to swift movements in currency markets, especially an unwinding of the "carry trade." In the carry trade, an investor borrows money in a low-interest-rate currency (for example, the Japanese yen), sells that currency for a higher-interest-rate currency. If interest rates are 1 percent in Japan and 6 percent in Australia, the investor stands to collect a 5 percent profit if exchange rates do not move. Although economic theory suggests that currency movements should offset this expected profit, over short horizons, if the exchange rate does not move, investors can make a profit. This happened in the mid-2000s, and the carry trade became a favorite strategy for hedge funds and other investors.

The popularity of the trade became self-fulfilling as the continued flows of money into higher-interest-rate currencies helped them appreciate and made the trade even more profitable. But, as the crisis hit, investors tried to reduce their risk and leverage. This unwinding process meant rapid sales of high-interest-rate currencies and rapid purchases of low-interest-rate currencies. Currencies that had low interest rates and had been known as funding currencies (such as the Japanese yen) rose rapidly in value, and the currencies of a number of popular carry-trade destinations (such as Australia, Brazil, and Iceland) depreciated swiftly. Thus, as the crisis hit, borrowing became more expensive and currency markets were increasingly volatile.

The Dollar During the Crisis. Although in many ways the crisis was triggered within U.S. asset markets, the response was not a run on the U.S. dollar; instead the dollar strengthened notably. Some observers had argued that the high U.S. current account deficit and problems in the U.S. housing and other asset markets might lead to an unwillingness to hold U.S. assets more broadly, which could have triggered a depreciation of the dollar. But both the need for foreign banks to cover their dollar borrowing and the need for other investors to repay loans borrowed in dollars (including for carry trades) generated strong demand for dollars. Further, the desire to

 $^{^2}$ The swap means they have borrowed dollars and lent euros. In this way, they borrowed euros at home and lent them in the swap, and they owe dollars in the swap but also own dollar assets. Thus, their foreign currency position is balanced.

avoid risky investments at the height of the crisis led to a "flight to safety," with many investors buying dollars and U.S. Treasury bills. As seen in Figure 3-2, the trade-weighted value of the dollar increased 18 percent from July 2008 to its peak in March 2009. The movement of the dollar was broad-based, with sharp appreciations against most major trade partners; the main exceptions were Japan, where the yen appreciated even more against the world as the carry trade unwound, and China, which had reestablished its peg to the dollar in July of 2008 and therefore had a stable exchange rate against the dollar.

Figure 3-2



Note: The index is constructed such that an upward movement represents an appreciation of the dollar.

Source: Federal Reserve Board, G.5.

Currency Volatility in Emerging Markets. The deleveraging and fall in risk appetite contributed to large and in some cases sharp swings in the currencies of many emerging economies, but the impact of these large depreciations varied. Some of the sharpest depreciations, such as those in Brazil, Korea, and Mexico, were largely temporary. The currencies of all three countries depreciated more than 50 percent against the dollar between the end of July 2008 and February 2009, but by the end of November 2009 Korea's currency was down only 15 percent and Brazil's only 12 percent. Mexico was still 29 percent below its summer 2008 value.³

³ The starting point for comparison is important. Korea had been depreciating in early 2008 as well, while Brazil and Mexico were appreciating. Thus, by the end of November 2009, Brazil had appreciated slightly from the start of 2008 while Korea had depreciated 24 percent and Mexico 18 percent.

Some countries with large current account deficits faced more pressure. The region with the sharpest declines in the value of its currencies against the dollar was Eastern Europe, where the currencies of Hungary, Poland, and Ukraine all depreciated more than 50 percent between July 2008 and February 2009, and others depreciated nearly as much. These large depreciations resulted in part from the strengthening of the dollar against the euro, as many of these countries are closely tied with Europe, but some of these currencies remained weak even when other countries started to strengthen against the dollar.

A large depreciation can especially lead to broad damage in an economy if there are negative balance-sheet effects. In this setting, a country may have few foreign assets but extensive liabilities denominated in foreign currency. As the exchange rate depreciates, the foreign currency loans become more expensive in local currency. This was particularly a concern in Eastern Europe, where many countries borrowed substantially in foreign currency leading up to the crisis. In Hungary, for example, many individuals took out mortgages in foreign currency. The depreciation of the Hungarian forint thus put pressure on both individuals and bank balance sheets. There was widespread concern that the Western European banks, such as those in Austria, that had made loans in Eastern Europe would face substantial losses. Both the Organisation for Economic Co-operation and Development (OECD) and the International Monetary Fund (IMF) warned of potentially serious bank problems in Austria because of these concerns. By the end of 2009, however, those concerns had not materialized. Austria has had to shore up its banks, but there has not been widespread contagion from Eastern Europe.

During the peak of the crisis, the spreads on emerging-market bonds spiked, but they returned toward more standard levels over time, and outright financial collapse was avoided. There are a number of reasons for the more contained impact of the exchange-rate movements during the crisis. In the past decade, many developing countries have reduced the currency mismatch on their balance sheets by borrowing less, increasing their stocks of foreign exchange reserves, and shifting away from debt finance (Lane and Shambaugh forthcoming). The improved fiscal positions of some countries likely also helped, as did the strong policy response and coordination described later. Some vulnerable countries also benefited from the strengthening of the IMF's lending capabilities (discussed later). The failure of this shock to turn into a series of deep sustained financial collapses across the emerging world was a welcome development that left the world economy better positioned for a quick turnaround.

The Collapse of World Trade

Despite this crisis's origins in the financial sector, trade rapidly became a crucial source of transmission of the crisis around the world. Exports collapsed in nearly every major trading country, and total world trade fell faster than it did during the Great Depression or any time since. From a peak in July 2008 to the low in February 2009, the nominal value of world goods exports fell 36 percent; the nominal value of U.S. goods exports fell 28 percent (imports fell 38 percent) over the same period. Even countries such as Germany, which did not experience their own housing bubble, experienced substantial trade contractions, which helped spread the crisis. The collapse in net exports in Germany and Japan contributed substantially to their declines in GDP, helping drive these countries into recession. In the fourth quarter of 2008, Germany's drop in net exports contributed 8.1 percentage points to a 9.4 percent decline in GDP (at an annual rate); Japan's net exports contributed 9.0 percentage points to a 10.2 percent GDP decline. Real exports fell even faster in the first quarter of 2009.

Figure 3-3 shows that the drop in the trade-to-GDP ratio during this crisis, from 28 percent to 23 percent in OECD countries, is unprecedented. Trade as a share of GDP had not dropped by more than 2 percentage points from the year before since at least 1970 (the earliest available data), suggesting trade's drop relative to GDP has been larger than in the past. Economists have noted that the responsiveness of trade to GDP has been



Figure 3-3 OECD Exports-to-GDP Ratio

Source: Organisation for Economic Co-operation and Development, Quarterly National Accounts.

rising over time. Three main reasons for the exceptionally large fall in trade, even given the decline in GDP, have been suggested (Freund 2009; Levchenko, Lewis, and Tesar 2009; and Baldwin 2009).

The first reason is the use of global supply chains (or vertical specialization), where parts of production are manufactured or assembled in different countries and intermediate inputs are shipped from country to country, often from one branch of a firm to another, and then sent to a final destination for finishing. In this case, a reduction in output of one car may involve a decrease in shipments far larger than the final value of that single car. For example, a country that imports \$80 of inputs and adds \$20 of value added before exporting a \$100 good will see GDP fall by \$20 if demand for that good disappears, but trade (measured as the average of imports and exports) will fall \$90. If the decline in demand was concentrated in goods where global supply chains were particularly important, this could help account for the large fall in trade-to-GDP ratios. Estimates are that imported inputs account for, on average, 30 percent of the content of exports in OECD and major emerging market countries, although there is variation across countries within the OECD. Figure 3-4 shows that, with the exception of Ireland, the percentage by which trade declined for a country was



Figure 3-4 Vertical Specialization and the Collapse in Trade

Notes: See text for definition of the vertical specialization of trade. Merchandise exports measured in dollars. Alternate data from Johnson and Noguera (2009), which include the degree to which exports themselves are intermediate inputs, show a similar picture. Sources: Miroudot and Ragoussis (2009); country sources; CEA calculations.

strongly correlated with the extent of that country's vertical specialization (specifically defined as the degree of imported inputs used in exports).

Second, the disruption in global financial markets may have helped generate the trade collapse. Exporters typically require some form of financing to produce their export goods because importers will not pay for them before they arrive. Similarly, importers may need some sort of financing to bridge the gap between when they need to pay for goods and when they will be able to sell them on a domestic market. When liquidity tightened in world financial markets, the cost of trade finance increased. Little high-quality information is available for trade finance because it is typically arranged by banks or from one party to another, rather than through an organized exchange. The data that do exist show a drop in trade finance, but one that is not necessarily larger than the drop in overall trade. The drop in general financing available for producers and consumers, along with the impact of the recession on aggregate demand, may be factors as significant as the specifics of trade finance.⁴

Finally, the types of products that are traded may have been a critical factor in the trade collapse. Investment goods and consumer durables make up a substantial portion of merchandise trade, representing 57 percent of U.S. exports and 49 percent of U.S. imports in 2006. In a recession, investment spending by firms and purchases of durable goods by consumers often fall more sharply than other components of GDP. Because these investment and purchasing decisions are large and irreversible, they may be delayed until the economic situation is more clear. The drop in spending in these categories during this crisis has been far more severe than in previous recessions in the past 30 years in the United States. Paralleling the movements in overall demand, the collapse in the nominal value of trade was most severe in capital and durable goods. The combination of the concentration of the spending reduction in these sectors and the sectors' importance in overall trade appears to be one source of the sharp fall in trade in the crisis.

The Collapse in Financial Flows

Trade in goods was not the only international flow to collapse. Financial trade evaporated in a way never before seen. U.S. outflows and inflows of finance rose steadily for decades as increasingly integrated capital markets grew in size and scope. By 2007, the average monthly gross purchases and sales of foreign long-term assets by American investors were

⁴ See Mora and Powers (2009) for a discussion of trade finance in the recent crisis. Levchenko, Lewis, and Tesar (2009) find no support for the notion that trade credit played a role in the reduced trade flows for the United States during the crisis.

\$1.4 trillion, and foreigners' purchases and sales of U.S. long-term assets were \$4.9 trillion. Each group both bought and sold a considerable amount of their holdings, so that net purchases by Americans were \$19 billion a month and net purchases by foreign investors were \$84 billion a month.

When the crisis hit, there was a massive deglobalization of finance that was unprecedented and in many ways more extreme than the collapse in goods and services trade. Figure 3-5 shows that the scale of cross-border flows was cut in half after years of fairly steady climbing. Net purchases by both home and foreign investors actually became negative in the fall of 2008 (that is, there were more sales than purchases). Americans pulled funds home at such a fast pace that from July to November of 2008, Americans on net sold foreign assets worth \$143 billion. Foreign investors also liquidated their positions, selling a net \$92 billion in U.S. holdings. Hence, outflows from foreign investors returning to their home markets were offset in part by inflows from Americans bringing money back to the United States, likely reducing the impact of the outflows.



The Decline in Output Around the Globe

While the triggers of the crisis are generally considered financial in nature, these shocks were rapidly transmitted to the real economy. What had been a financial market shock or a trade collapse became a full-fledged recession in countries around the world. The financial disruption was so strong and swift in most countries that confidence fell as well. Confidence levels are measured in different ways across countries, but they were generally falling throughout 2008 and reached recent lows in the fall of 2008 and winter of 2009. In many countries, confidence had not been so low in more than a decade.

As noted, world GDP is estimated to have fallen roughly 1.1 percent in 2009 from the year before. The number for the annual average masks the shocking depth of the crisis in the winter of 2008–09, when GDP was contracting at an annual rate over 6 percent. In advanced economies, the crisis was even deeper; the IMF expects GDP to have contracted 3.4 percent in advanced economies for all of 2009. For OECD member countries, GDP fell at an annual rate of 7.2 percent in the fourth quarter of 2008 and 8.4 percent in the first quarter of 2009. Despite the historic nature of its collapse, the U.S. economy actually fared better than about half of OECD economies during those quarters. Figure 3-6 shows the decline in industrial production across major economies, with each of these economies in January 2009 more than 10 percent below its January 2008 level, and Japan faring far worse relative to the other major economies.



Some emerging market countries collapsed as well, with contractions at an annual rate of over 20 percent in Mexico, Russia, and Turkey, but the collapses were brief—lasting only a quarter or so. On average, the emerging and developing world was quite resilient to the crisis and is

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projected to have continued to expand in 2009 at a rate of 1.7 percent for the year (these countries contracted in the first quarter, but they began growing quickly in the second quarter). Some regions, such as developing Asia, continued to grow at a robust pace for the year as a whole (over 6 percent), but even that rate is considerably slower than their growth in the mid-2000s. Figure 3-7 shows that industrial production fell in Brazil and Mexico in a manner similar to that in industrial economies, but in China and India it merely stalled for a brief period and then accelerated again. This overall performance in the emerging world is a turnaround from previous crises, where recessions in the advanced countries were followed by sustained collapses in some emerging countries.



Figure 3-7 Industrial Production in Emerging Economies

The combination of weak aggregate demand and falling energy prices has meant that price pressure has been starkly absent in this crisis. In fact, lower oil prices have meant that year-over-year inflation numbers were negative in most major countries until toward the end of 2009 (Figure 3-8). Core inflation rates—which exclude volatile energy and food prices—have also been quite low over the year and even negative in Japan. This lack of price pressure has left the world's central banks with more flexibility than they had in the 1970s recessions because they do not have pressing inflation problems to consider. Inflation has also been muted in emerging and developing countries relative to their history; it is estimated to be 5.5 percent over 2009 and is projected to fall slightly in 2010. As economies and commodity markets strengthened toward the end of 2009, inflation pressure grew in a limited number of countries but was not in any way widespread.



Figure 3-8 Headline Inflation, 12-Month Change

POLICY RESPONSES AROUND THE GLOBE

Given the severity of the downturn, it is not surprising that policymakers responded with dramatic action. Central banks cut interest rates, governments spent considerable sums in the form of fiscal stimulus, and governments and central banks supported financial sectors with funds and guarantees. Many of these actions were coordinated as policymakers tried to prevent the financial market upheaval and recession from becoming a full-fledged depression.

Monetary Policy in the Crisis

The response of monetary authorities was both strong and swift across the globe. The major central banks coordinated a significant rate cut of 50 basis points on October 8, 2008, in an attempt to increase liquidity and to boost confidence by demonstrating that they were prepared to act decisively. During the crisis, every member of the Group of Twenty (G-20) major economies cut interest rates. By March 2009, the Federal Reserve, the Bank of Japan, and the Bank of England had all cut rates to 0.5 percent or less, with the Federal Reserve and the Bank of Japan approaching the zero nominal lower bound. The European Central Bank (ECB) responded slightly more slowly but still cut its policy rate more than 3 percentage points to 1 percent by May 2009 (Figure 3-9). Emerging market countries and major commodity exporters, whose economies were growing fast in the summer of 2008, moved as well, but not to the near-zero levels seen at the major central banks.



Figure 3-9 Policy Rates in Economies with Major Central Banks

Besides cutting interest rates, three of the largest central banks used nonstandard monetary policy as well. As Figure 3-10 shows, the Federal Reserve and the Bank of England more than doubled the size of their balance sheets in 2008 (see Chapter 2 for more details on the Federal Reserve's actions). The two banks bought large quantities of assets, substantially increasing the supply of reserves, and made loans against a variety of asset classes. The goal of these programs was to free up credit in markets that were being underserved through purchases of, or loans against, asset-backed securities and commercial paper. The ECB also expanded its balance sheet substantially (37 percent) in 2008 and made loans against a variety of assets, but it did not undertake the same level of quantitative easing as either the U.S. or U.K. central banks. The Bank of Japan did not expand its balance sheet on a similar scale.⁵ While it did expand some of its lending programs in corporate bond markets, its policies were more oriented to financial markets than to quantitative monetary policy. As noted earlier, Japan's inflation rate has been negative.





As Figure 3-10 shows, the rapid growth of central bank balance sheets halted during 2009, but the central banks have not withdrawn the liquidity they injected into the system. Similarly, policy interest rates have remained constant since December 2008 in the United States and Japan and since the spring of 2009 in the euro area and the United Kingdom. Some commodity producers and smaller advanced nations with strong growth have begun to withdraw some monetary accommodation. Australia, Israel, and Norway have all raised policy interest rates. Also, authorities in countries such as China and India had not raised main policy rates as of the end of 2009, but they have made administrative changes that tightened lending to slow the expansion of credit as their economies began to grow more quickly.

In addition to lending support, authorities directly intervened to support the banking sectors in a number of countries. Countries took many actions on their own, ranging from the policies pursued in the United States such as the Troubled Asset Relief Program (discussed in Chapter 2), to direct takeovers of some banks in the United Kingdom, to the creation of other

Sources: Country sources; CEA calculations.

⁵ On December 1, 2009, the Bank of Japan announced a roughly \$115 billion increase in lending, equivalent to a nearly 10 percent increase in its balance sheet. This increase was significant but still far below the actions taken by other major central banks.

entities to centralize some bad assets and clean the balance sheets of other banks in Switzerland and Ireland, to general support and guarantees in a wide range of countries.

Central Bank Liquidity Swaps

In addition to the coordination of rate cuts, one other important form of international coordination took place across central banks. As noted, a dollar funding shortage materialized abroad, as the normal channels for the transmission of dollar liquidity from U.S. markets to the global financial system broke down. This shortage presented a unique set of challenges to central banks. They could have simply provided domestic currency and left banks to sell it for dollars, but the foreign exchange swaps market in which such transactions are usually conducted was severely impaired. Alternatively, central banks could have used dollar reserves to provide foreign currency funds, but few advanced countries (outside of Japan) had sufficient foreign currency holdings to fully address the foreign currency funding needs of their banking systems.

Central banks whose currencies were in demand responded to the shortage by providing large amounts of liquidity to partner central banks through central bank liquidity swaps.⁶ In many of these arrangements, the Federal Reserve purchased foreign currency in exchange for U.S. dollars and at the same time agreed to return the foreign currency for the same quantity of dollars at a specific date in the future. When foreign central banks drew dollars in this way to fund their auctions of dollar liquidity in local markets, the Federal Reserve received interest equal to what the foreign central banks were receiving on the lending operations. The Federal Reserve first used these swaps in late 2007 on a relatively small scale. But, as shown in Figure 3-11, from August 2008 through December 2008 these swaps increased from \$67 billion to \$553 billion. This massive supply of liquidity was larger than the available lending facilities of the IMF. The United States extended this program to major emerging market countries as well on October 29, 2008, providing lines of up to \$30 billion each to Brazil, Mexico, Singapore, and Korea.

As the acute funding needs have subsided, nearly all of the central bank swaps have been unwound, and the Federal Reserve has announced that it anticipates that these swap arrangements will be closed by February 1, 2010. There was no long-term funding cost to the Federal Reserve from these swap lines; moreover, the Federal Reserve's counterparties in these transactions were the central banks of other countries, and the loans

⁶ See Fender and Gyntelberg (2008) for a more comprehensive discussion.

were fully collateralized with foreign currency, so very little credit risk was involved in these transactions.



Figure 3-11 Central Bank Liquidity Swaps of the Federal Reserve

Although the dollar funding shortages were unique, the Federal Reserve was not the only central bank to provide swap lines. Some of the more notable examples include the European Central Bank, which made euros available to a number of central banks in Europe, among them the central banks of Denmark, Hungary, and Poland, that felt pressure for funding in euros; the Swedish central bank, which provided support to central banks in the Baltics; and the Swiss National Bank, which provided Swiss francs to the European Central Bank and Poland. Across Asia there was renewed interest in the Chiang Mai Initiative, under which various Asian central banks set up swap lines that could be used in an emergency. Despite the increases in these cross-Asian country swap lines, together they totaled \$90 billion, far less than the available Federal Reserve swap lines, and they were not drawn on during the crisis. In sum, while existing institutional structures (IMF lending or reserves) appear to have been insufficient to meet this aspect of the crisis, the world's central banks innovated to take temporary actions that quelled market disruptions and avoided even sharper financial dislocation.

Source: Federal Reserve Board, Factors Affecting Reserve Balances of Depository Institutions and Condition Statements of Federal Reserve Banks, H.4.1 Table 1.

Fiscal Policy in the Crisis

In part because major central banks had pushed interest rates as low as they could go and in part because of the magnitude of the crisis, by the beginning of 2009, many countries decided to institute substantial fiscal stimulus. The hope was that government spending could step into the breach left by the collapse of private demand and provide the necessary lift to prevent a slide into a deep recession or worse.

Nearly every major country instituted stimulus, with the exception of some countries hampered by substantial public finance concerns, such as Hungary and Ireland. Every G-20 nation implemented substantial stimulus, with an unweighted average of 2.0 percent of GDP in 2009 (Table 3-1), and many other OECD nations also adopted stimulus plans. Among G-20 countries, China, Korea, Russia, and Saudi Arabia enacted the most extensive stimulus programs in 2009, all equivalent to more than 3 percent of GDP. The U.S. stimulus in 2009 (estimated at 2 percent of GDP) was greater than the OECD's estimate of its member country average (1.6 percent of GDP), but the same as the G-20 average and not quite as extensive as the four high-stimulus nations.

Argentina	1.5%	Japan	2.9%			
Australia	2.9%	Mexico	1.6%			
Brazil	0.6%	Russia	4.1%			
Canada	1.8%	Saudi Arabia	3.3%			
China	3.1%	South Africa	3.0%			
France	0.6%	South Korea	3.7%			
Germany	1.6%	Turkey	2.0%			
India	0.6%	United Kingdom	1.6%			
Indonesia	1.4%	United States	2.0%			
Italy	0.1%	All G-20 Nations	2.0%			

Table 3-12009 Fiscal Stimulus as Share of GDP, G-20 Members

Note: Values are average of International Monetary Fund and Organisation for Economic Co-operation and Development estimates for nations with expansionary fiscal policies. Sources: Horton, Kumar, and Mauro (2009); Organisation for Economic Co-operation and Development (2009a).

Discretionary fiscal action was not the only form of fiscal stimulus; automatic stabilizers (unemployment insurance, welfare, reduction in taxes collected due to lower payrolls) are triggered when an economy slows down. The size of automatic stabilizers present in an economy appears to be negatively correlated with the size of discretionary stimulus. As Figure 3-12 shows, those countries that already had large automatic stabilizers in place appear to have adopted less discretionary fiscal stimulus, but they were obviously still providing substantial fiscal relief during the crisis.⁷



Figure 3-12 Tax Share and Discretionary Stimulus

Notes: The regression line is stimulus = 3.8 - 0.06*(tax share). The coefficient on tax share is significant at the 90 percent confidence level. The R-squared is 0.23. Sources: Organisation for Economic Co-operation and Development, Tax Database Table 0.1; Organisation for Economic Co-operation and Development (2009a); Horton, Kumar, and Mauro (2009).

Stimulus is expected to fade slowly in 2010. Overall, the IMF estimates that advanced G-20 countries will spend 1.6 percent of GDP on discretionary stimulus in 2010, compared with 1.9 percent in 2009.⁸ Emerging and developing G-20 countries will also spend 1.6 percent of GDP in 2010, compared with 2.2 percent in 2009. The IMF projects that among the G-20 countries that adopted large stimulus programs, only Germany, Korea, and Saudi Arabia will increase those programs in 2010. In addition, substantial stimulus will continue into 2010 in Australia, Canada, China, and the United

⁷ The level of taxation in the economy is used as a proxy for automatic stabilizers. Countries with large levels of taxation see immediate automatic stabilizers because any lost income immediately reduces taxes. Those same countries often tend to have more generous social safety nets (funded by their higher taxes).

⁸ The averages are calculated by the IMF using PPP GDP weights. That is, the IMF uses the size of an economy—evaluated at purchasing power parity exchange rates, which take into account different prices for different types of goods and services—to weight the different countries in the averages.

States.⁹ Thus, substantial fiscal stimulus should continue to support the recovering world economy. The crucial question will be whether sufficient private demand has been rekindled by late 2010 to pick up the economic slack as stimulus unwinds.

Trade Policy in the Crisis

An extremely welcome development is the policy that was not called on during the crisis: trade protectionism. Frequently viewed as an accelerant of the Great Depression, protectionism has been largely absent during the current crisis. In the Great Depression, trade protectionism came into play after the crisis had started and was not a cause of the Depression itself (Eichengreen and Irwin 2009). But the extensive barriers that built up in the first few years of the Depression meant that as production rebounded, trade levels could not do so. In the current crisis, rather than respond to declining exports with increasing tariffs, countries left markets open, allowing for the possibility of a rebound in world trade. No major country has instituted dramatic trade restrictions. Furthermore, while antidumping and countervailing duty investigations have increased, the value of imports facing possible new import restrictions by G-20 countries stemming from new trade remedy investigations begun between 2008:Q1 and 2009:Q1 represents less than 0.5 percent of those countries' imports (Bown forthcoming).

THE ROLE OF INTERNATIONAL INSTITUTIONS

Rather than resort to beggar-thy-neighbor policies, this crisis has been characterized by international policy coordination. National policies did not take place in a vacuum; to the contrary, nations used a number of international institutions to coordinate and communicate their rescue efforts.

The G-20

The G-20, which includes 19 nations plus the European Union, was the locus of much of the coordination on trade policy, financial policy, and crisis response. Its membership is composed of most of the world's largest economies—both advanced and emerging—and makes up nearly 90 percent of world gross national product.

The first G-20 leaders' summit was held at the peak of the crisis in November 2008. At that point, G-20 countries committed to keep their markets open, adopt policies to support the global economy, and stabilize the financial sector. Leaders also began discussing financial reforms that would help prevent a repeat of the crisis.

⁹ Japan has announced additional stimulus since these estimates and will also be providing extensive stimulus in 2010.

The second G-20 leaders' summit took place in April 2009 at the height of concern about rapid falls in GDP and trade. Leaders of the world's largest economies pledged to "do everything necessary to ensure recovery, to repair our financial systems and to maintain the global flow of capital." Furthermore, they committed to work together on tax and financial policies. Perhaps the most notable act of world coordination was the decision to provide substantial new funding to the IMF. U.S. leadership helped secure a commitment by the G-20 leaders to provide over \$800 billion to fund multilateral banks broadly, with over \$500 billion of those funds allocated to the IMF in particular.

In September 2009, the G-20 leaders met in Pittsburgh. They noted that international cooperation and national action had been critical in arresting the crisis and putting the world's economies on the path toward recovery. They also recognized that continued action was necessary, pledged to "sustain our strong policy response until a durable recovery is secured," and committed to avoid premature withdrawal of stimulus. The leaders also focused on the policies, regulations, and reforms that would be needed to ensure a strong recovery while avoiding the practices and vulnerabilities that gave rise to boom-bust cycles and the current crisis. They launched a new Framework for Strong, Sustainable, and Balanced Growth that committed the G-20 countries to work together to assess how their policies fit together and evaluate whether they were "collectively consistent with more sustain-able and balanced growth." Further, the leaders committed to act together to improve the global financial system through financial regulatory reforms and actions to increase capital in the system.

Given the central role the G-20 had played in the response to the crisis, it is not surprising that the leaders agreed in Pittsburgh to make the G-20 the premier forum for their economic coordination. This shift reflects the growing importance of key emerging economies such as India and China—a shift that was reinforced by the agreement in Pittsburgh to realign quota shares and voting weights in the IMF and World Bank to better reflect shifts in the global economy.

The International Monetary Fund

The IMF's role has changed considerably over time, from being the shepherd of the world's Bretton Woods fixed exchange rate system to becoming a crisis manager. In a systemic bank run, a central bank sometimes steps in as the lender of last resort. The IMF is not a central bank and can neither print money nor regulate countries' behavior in advance of a crisis, but it has played a coordinating and funding role in many crises. As the scale of the current crisis became apparent, it was clear that the IMF's funds were insufficient to backstop a large systemic crisis, particularly in advanced nations. While it is still unlikely to be able to arrest a run on major advanced country financial systems, the increase in resources stemming from the G-20 summit has roughly tripled the resources available to the IMF and left it better suited to quell runs in individual countries.

As the IMF's resources were expanded, the institution took a number of concrete interventions. It set up emergency lines of credit (called Flexible Credit Lines) with Colombia, Mexico, and Poland, which in total are worth over \$80 billion. These lines were intended to provide immediate liquidity in the event of a run by investors, but also to signal to the markets that funds were available, making a run less likely. Now, rather than have to go to the IMF for funds during a crisis, these countries are "pre-approved" for loans. In each of these countries, markets responded positively to the announcement of the credit lines, with the cost of insuring the countries' bonds narrowing (International Monetary Fund 2009b). The IMF also negotiated a set of standby agreements with 15 countries, committing a total of \$75 billion to help them survive the economic crisis by smoothing current account adjustments and mitigating liquidity pressures. IMF analysis suggests that this program discouraged large exchange-rate swings in these countries (International Monetary Fund 2009b). These actions as well as the very existence of a better-funded global lender may have helped to keep the contraction short and to prevent sustained currency crises in many emerging nations.

The Beginning of Recovery Around the Globe

In contrast to the Great Depression, where poor policy actions monetary, fiscal, regulatory, and protectionist—helped turn a sharp global downturn into the worst worldwide collapse the modern economy has known, the recent massive policy response helped stop the spiraling of this Great Recession. Already financial markets have stabilized, GDP has begun to grow, and trade has begun to rebound. The crisis is far from over, however; most notably, employment in many countries is still distressingly weak. But the world economy appears to have avoided the outright collapse that was feared at one point and is now moving toward recovery.

The second quarter of 2009 saw the first hints of recovery in many countries. World average growth was 2.4 percent, and even OECD countries registered a positive 0.2 percent growth rate.¹⁰ The rebound caught many by surprise. The IMF and the OECD had revised projections steadily

¹⁰ World weighted average quarterly real GDP growth rates at a seasonally adjusted annual rate are from CEA calculations. The OECD growth rate is from the OECD quarterly national accounts database.

downward through the winter and spring, but by the middle of 2009 many economies had returned to growth. The one-quarter improvement in annualized growth of 5.7 percentage points (from -6.4 percent to -0.7 percent from the first to the second quarter of 2009) in the United States was one of the largest improvements in decades, but other countries that had deeper contractions rebounded even more. Annualized growth rates improved more than 14 percentage points in Germany and Japan, while growth rates rose more than 30 percentage points in Malaysia, Singapore, Taiwan, and Turkey. Other emerging markets, such as China, India, and Indonesia, which did not contract but faced lower growth during the crisis, rebounded to growth rates on par with their performance during the 2000s (if not the rapid booms of 2006–07).

Trade had collapsed quickly, and it has begun to rebound quickly as well. Beginning in March, when GDP was still falling rapidly, exports began to turn. From lows in February 2009, nominal world goods exports in dollar terms had grown 20 percent by October. U.S. nominal goods exports picked up later but had grown 17 percent from their April lows by October. As GDP began to rise, trade volume began to grow faster. Annualized growth for world real exports was 2.4 percent in the second quarter of 2009 and 16.8 percent in the third quarter. By comparison, world weighted average annualized real GDP growth in the second and third quarters of 2009 was 2.4 percent and 3.4 percent, respectively.

Financial markets are rebounding as well. Net cross-border financial flows are near their pre-crisis levels, and gross flows are increasing (although as of October 2009 they were still less than 80 percent of their average level in 2008). Libor-OIS spreads have fallen to more typical levels, and equivalent measures in other markets have subsided as well. Stock market indexes in the United States, Japan, the United Kingdom, and the European Union have all risen substantially. By October 2009, all were above their levels in October 2008, making up dramatic losses in early 2009. House prices have stabilized in most markets. Furthermore, the cost of insuring emergingmarket bonds, which had spiked in the fall of 2008, is now back roughly to its pre-crisis level. The value of the dollar, which rose dramatically during the crisis, has retreated toward its value before the crisis (see Figure 3-2). From the end of March 2009 through December, the dollar depreciated 10 percent against a basket of currencies. The trade-weighted value is roughly at the same level as in the fall of 2007 and above its lows in 2008.

Potential financial problems still exist. Banks around the world may not have recognized all the losses on their balance sheets. The shock waves from the threatened default by Dubai World in November 2009 showed that there are still concerns in the market about potential bad debts on various entities' balance sheets. There also are concerns in some countries that asset prices may be rising ahead of fundamentals. But the crush of near-bankruptcy across the system has clearly eased.

The Impact of Fiscal Policy

The broad financial rescues and the monetary policy responses played crucial roles in stabilizing financial markets. Fiscal policy also played an essential role in the macroeconomic turnaround. A simple examination of G-20 advanced economies shows that while they all had broadly similar GDP contractions during the crisis, the high-stimulus countries—despite having much smaller automatic stabilizers—grew faster after the crisis than countries that adopted smaller stimulus packages. Table 3-2 shows the 2009 discretionary fiscal stimulus as a share of GDP, the tax share of GDP (which is a rough estimate of automatic stabilizers), as well as the GDP growth during the two quarters of crisis (2008:Q4 and 2009:Q1) and the second quarter of 2009 when growth resumed in many countries. Growth reappeared first in the high-stimulus G-20 countries.

Stimulus and Growth in Advanced G-20 Countries						
	Stimulus	Stabilizers (% of GDP)	Growth during:			
	(% of GDP)		Crisis (%)	2009:Q2 (%)		
High stimulus	3.2	28.4	-7.1	5.4		
Mid stimulus	1.7	35.3	-8.3	-1.3		
Low stimulus	0.3	43.2	-7.4	-0.3		
United States	2.0	28.0	-5.9	-0.7		

Table 3-2 Stimulus and Growth in Advanced G-20 Countries

Notes: High countries are Australia, Japan, and Korea; middle countries are Canada, Germany, and the United Kingdom; low countries are France and Italy. Growth rates are annualized. Crisis refers to Q4:2008 and Q1:2009.

Sources: Organisation for Economic Co-operation and Development, Tax Database Table 0.1; Horton, Kumar, and Mauro (2009); Organisation for Economic Co-operation and Development (2009a); country sources.

Countries may have different typical growth patterns, however. Thus, to understand the impact of fiscal stimulus, one must estimate what would have happened had there been no stimulus—a counterfactual. Private sector expectations in November 2008—after the crisis had begun but before most stimulus packages were adopted—can serve as that counterfactual. Thus, one can compare actual growth minus predicted growth with the degree of stimulus to see whether those countries with large stimulus packages outperformed expectations once the stimulus policies were in place. The second quarter of 2009 is used as the test case. Figure 3-13 shows actual growth minus expected growth compared with 2009 discretionary fiscal
Figure 3-13 Outperforming Expectations and Stimulus



Notes: The regression line is (growth - forecast) = -2.1 + 1.65 * stimulus. The coefficient on stimulus is significant at the 95 percent confidence level. The R-squared is 0.31. Sources: J.P. Morgan Global Data Watch, Global Economic Outlook Summary Table, November 7, 2008; Horton, Kumar, and Mauro (2009); Organisation for Economic Co-operation and Development (2009a); country sources; CEA calculations.

stimulus for the OECD countries for which private sector forecasts were available on a consistent date.¹¹ Countries with larger stimulus on average exceeded expectations to a greater degree than those with smaller stimulus packages. The two countries in this exercise with the largest stimulus packages, Korea and Japan, outperformed expectations by dramatic amounts. Countries such as Italy that had virtually no stimulus performed worse than most. Among non-OECD countries, China had one of the largest fiscal stimulus packages, and in the second quarter of 2009 its growth was both rapid and far in excess of what had been expected in November 2008. Fiscal

¹¹ Stimulus is measured as in Table 3-1, using IMF and OECD estimates of 2009 fiscal stimulus. Forecasts are from J.P.Morgan. See Council of Economic Advisers (2009) for more details. That report examines more countries and a set of time series forecasts in addition to the private sector (J.P.Morgan) forecasts. The results are quite similar with a simple time series forecast. Results are slightly weaker with a broader sample, but that is not surprising because the swings in the economies in emerging markets were quite severe and difficult to predict, and the stimulus policies may operate somewhat differently in those nations. Council of Economic Advisers (2009) used Brookings estimates as well as OECD and IMF, but those ceased being updated in March, and thus this analysis uses only IMF and OECD estimates. Using the June estimates alone slightly weakens the results because stimulus announced late in the second quarter likely had little impact on growth in that quarter.

stimulus seems to have been important in restarting world economic growth in the second quarter of 2009.

After the second quarter of 2009, the relationship between stimulus and growth weakens somewhat. High-stimulus countries still exceed expectations relative to low-stimulus countries, but the relationship is not statistically significant. It may be that quarterly growth projections made nearly a year in advance are not precise enough a measure of a third-quarter growth counterfactual.

The World Economy in the Near Term

While the return to GDP and export growth is encouraging, exports are still far below their level in the summer of 2008, and GDP is now far below its prior trend level. The IMF currently forecasts annual world growth of 3.1 percent in 2010; the OECD projects 3.4 percent.¹² For advanced countries, the forecasts are even more restrained: the IMF projects 1.3 percent, the OECD 1.9 percent for OECD countries. The IMF forecasts world trade to grow 2.5 percent in 2010; the OECD, 6.0 percent. These forecasts may be conservative. The IMF forecast would leave trade at a much lower share of GDP than before the crisis, and even if trade growth met the OECD's more aggressive forecast, trade would not reach its previous level as a share of GDP for some time. Given that trade declined faster than GDP in the crisis, it is possible it will continue to bounce back faster as well, surpassing these estimates.

How Fast Will Countries Grow? There is an open question about how fast countries will grow following the crisis. After typical recessions, the magnitude of a recovery often matches the depth of the drop. In this way, GDP returns not only to its previous growth rate, but to its previous trend path as well. If, however, the world's advanced economies emerge from the crisis only slowly and simply return to stable growth rates, output will be on a permanently lower path. A financial crisis could lower the future level of output by generating lower levels of labor, capital, or the productivity of those factors. If the economy returns to full employment, and productivity growth remains on trend, though, capital should eventually return to its pre-crisis path because the incentives to invest will be high. Thus, as long as the economy eventually returns to full employment, the long-run impact of the crisis chiefly rests on productivity growth in the years ahead. Chapter 10 discusses the prospects and importance of productivity in more detail.

Some research suggests financial crises may result in a slow growth pattern (International Monetary Fund 2009a), with substantial average

¹² IMF estimates are from International Monetary Fund (2009a). OECD estimates are from Organisation for Economic Co-operation and Development (2009b).

losses in the level of output in the years following a financial crisis. The same research, however, shows a wide variety of experiences following crises, with a substantial number of countries returning to or exceeding the pre-crisis trend level path of GDP. It is far too early to project the likely outcome of this recession and recovery, but there is hope that the aggressive policy responses and the potential for a sharp uptick in world trade—bouncing back with responsiveness similar in magnitude to its downturn—will return the path of GDP to previous trend levels in many economies.

Concerns about Unemployment. One reason for the great concern about the pace of growth after the recession is the current employment situation. What was a financial crisis and then a real economy and trade crisis has rapidly become a jobs crisis in many advanced economies. The OECD projects the average unemployment rate in OECD countries will have risen 2.3 percentage points from 2008 to 2009, with an average jobless rate of 8.2 percent in 2009. More worryingly, the OECD projects the group average will continue rising in 2010, and in some areas (such as the euro area) the jobless rate is expected to be even higher in 2011.

The United States has been an outlier in the extent to which the GDP contraction has turned into an employment contraction. Figure 3-14 shows the change in GDP and in the unemployment rate from the first quarter of 2008 to the second quarter of 2009. Typically, one would expect a line running from the upper left to the lower right because countries with small declines in GDP (or even increases) would have small increases in unemployment (lower right) and those with larger declines in GDP would have larger increases in unemployment (upper left). Countries broadly fit this pattern during the current crisis and recovery, but there are a number of aberrations. Germany saw a large contraction in GDP, and while growth has resumed, its one-year contraction was still sizable. Still, Germany's unemployment rate barely increased. In contrast, the United States suffered a relatively mild output contraction (for an OECD country), and yet it has had the largest jump in the unemployment rate outside of Iceland, Ireland, Spain, and Turkey, all of which had larger GDP declines.

There are several partial explanations for the large variation in the GDP-unemployment relationship across countries. The more flexible labor markets in the United States make the usual response of unemployment to output movements larger than in most other OECD countries; and, as discussed in Chapter 2, the rise in U.S. unemployment in the current episode has been unusually large given the output decline. Another factor is a policy response in some countries aimed at keeping current employees in current jobs. The extreme example of such a policy has been Germany's *Kurzarbeit* (short-time work) program, which subsidizes companies that put workers

Figure 3-14 OECD Countries: GDP and Unemployment

Change in unemployment rate, percentage points



Sources: Organisation for Economic Co-Operation and Development, Quarterly National Accounts and Key Short-Term Economic Indicators; country sources.

on shorter shifts rather than firing them. The OECD estimates the German unemployment rate would be roughly 1 percentage point higher without the program. Because such programs benefit only those who already have jobs, they could hold down unemployment at the cost of a more rigid labor market. Labor market flexibility is generally seen as allowing lower unemployment on average over the course of the business cycle and as permitting a more efficient distribution of labor resources, thus enhancing productivity.

Global Imbalances in the Crisis

In addition to the unambiguous signs of problems in the U.S. economy going into the crisis, there were clear signals that the global economy was not well balanced. Global growth was strong from 2002 to 2007, but the growth was not well distributed around the world economy, with fast growth in some emerging markets and sluggish growth in some advanced economies. Further, that growth came with mounting imbalances in saving and borrowing across the world. U.S. saving was very low, which led to substantial borrowing from the rest of the world. Home price bubbles and overborrowing were not exclusive to the United States; the United Kingdom, Spain, and many other economies also borrowed extensively, helping inflate asset prices in those economies. This borrowing was paired with very high saving in some countries, particularly in emerging Asia.

The extent to which the global imbalances were a cause of the crisis or represented a symptom of poor policy choices in different countries is a question of active debate (see Obstfeld and Rogoff 2009 for discussion). The current account (net borrowing from or lending to the rest of the world) can be defined as a country's saving minus its investment. Thus, some argue that forces in the rest of the world cannot be deterministic of a country's current account balance. A country saves or borrows based on its own choices. In this formulation, the imbalances were merely a symptom. In fact, some argued the imbalances were beneficial because savings were channeled away from inefficient financial markets in poor countries toward what were thought to be more efficient markets in rich countries. Conversely, some argue that the influx of global savings into the United States distorted incentives by keeping interest rates too low and led to overborrowing and asset bubbles. In this view, the imbalances played a leading role in the crisis.

The truth almost certainly lies somewhere in between. The influx of global savings into the United States did lower borrowing rates and encouraged more spending and less saving within the U.S. economy. This may have allowed the credit expansion and related asset price bubbles to continue longer than they could have otherwise. At the same time, even if the global savings in some sense led to U.S. borrowing, the failure of the financial system to use that borrowing productively and the failure of regulation to make sure risk was being treated appropriately were surely partly to blame for the crisis.

As the U.S. economy seeks to find a more sure footing and a growth path less dependent on borrowing and bubbles, world demand needs to be redistributed so that it is less dependent on the U.S. consumer and does not cause global imbalances to reappear and contribute to distortions in the economy. Fixing the imbalances can help provide more demand for the U.S. economy. But these imbalances also need to be treated as symptoms of deeper regulatory and policy failures. Fixing the imbalances alone will not prevent another crisis.

Since the onset of the crisis, the imbalances have partially unwound (the likely future path of the U.S. current account is discussed in more detail in Chapter 4). The U.S. current account deficit, which had built to over 6 percent of GDP in 2006, was on a downward path before the crisis struck in full force, falling to under 5 percent of GDP at the start of 2008. After the crisis hit, it fell below 3 percent of GDP in the first quarter of 2009. Major surplus countries—China, Germany, and Japan—have all seen a reduction in their current account surpluses from the highs of 2007. In all three cases, the surpluses have stabilized at substantial levels (in the range of 3–5 percent of GDP), but they are notably down from their highs. One essential part of the response to the crisis has been the substantial fiscal stimulus implemented by these three countries, which has helped demand in these countries stay stronger than it otherwise would have been.

Figure 3-15, which shows current account imbalances scaled to world GDP, demonstrates how much of total world excess saving or borrowing is attributable to individual countries. As the figure makes clear, by 2005 and 2006, the United States was borrowing nearly 2 percent of world GDP, and by the end of 2008, China was lending nearly 1 percent of world GDP. During the crisis, the surpluses of OPEC (Organization of Petroleum Exporting Countries) countries, Japan, and Germany contracted, and the United States is now borrowing less than 1 percent of world GDP. China's surplus is also smaller than before the crisis, but China is still lending nearly 0.5 percent of world GDP, and OPEC surpluses may rise as well. But by the third quarter of 2009, the degree of imbalance was substantially lower than just a year earlier. There is hope that the short-run moves in these current account balances are not simply cyclical factors that will return quickly to



Figure 3-15 Current Account Deficits or Surpluses

2004 2005 2006 2007 08:Q1 08:Q2 08:Q3 08:Q4 09:Q1 09:Q2 09:Q3

Notes: Sample limited by data availability. In the figure, OPEC includes Ecuador, Iran, Kuwait, Saudi Arabia, and Venezuela; and Other Nations includes all other countries with quarterly current account data. Third quarter 2009 data for both OPEC and Other Nations were incomplete at the time of writing.

Sources: Country sources; CEA estimates.

former levels but rather that they represent a more sustained rebalancing of world demand.

Net export growth is often a key source of growth propelling a country out of a financial crisis. But in a global crisis, not every country can increase exports and decrease imports simultaneously. Someone must buy the products that are being sold, and the world's current accounts must balance out. Thus far, the crisis has come with a reduction in imbalances, with strong growth and smaller surpluses in many surplus countries. Whether these shifts become a permanent part of the world economy or policies and growth models revert to the pattern of the 2000s will be an important area for policy coordination.

Conclusion

The period from September 2008 to the end of 2009 will be remembered as a historic period in the world economy. The drops in GDP and trade may stand for many decades as the largest worldwide economic crisis since the Great Depression. In contrast to the Depression, however, the history of the period may also show how aggressive policy action and international coordination can help turn the world economy from the edge of disaster. The recovery is unsteady and, especially with regard to unemployment, incomplete, but compared with a year ago, the positive shift in trends in the world economy has been dramatic.



CHAPTER 4

Xe

SAVING AND INVESTMENT

The United States appears poised to begin its recovery from the most severe recession since the Great Depression. But as discussed in Chapter 2, the recession has been unusually deep, and the crisis has caused declines in credit availability as well as weak consumer and business confidence. As a result, achieving the private spending necessary to support a robust and full recovery has been, and will continue to be, challenging.

Moreover, as the President has repeatedly emphasized, it is not enough simply to return to the path the economy was on before the slump. The growth that preceded the recession saw high consumption spending, low private saving, excessive housing construction, unsustainable run-ups in asset prices (especially for assets related directly or indirectly to housing), and high budget and trade deficits. That path was unstable—as we have learned at enormous cost—and undermined long-run prosperity. Thus, as the economy recovers, a rebalancing will be necessary. The composition of spending needs to be reoriented in a way that will put us on a path to sustained, stable prosperity.

In thinking about the twin challenges of recovery and reorientation, it is useful to consider the division of demand into its components. Overall or aggregate demand can be classified into personal consumption expenditures, residential investment, business investment, net exports, and government purchases of goods and services. Government purchases, which consist of such items as Federal expenditures on national defense and state and local spending on education, are relatively stable. This is especially true when one recalls that government transfers, such as spending on Medicare or Social Security, are not part of government purchases but rather are elements of personal income. Thus, it is the behavior of the remaining components that will be central to addressing the challenges of generating enough demand for recovery and a better composition of demand for long-run growth and stability. This chapter lays out a picture of how the components of private demand behaved during the downturn and how they are likely to evolve as the economy recovers and once it returns to full employment. The chapter describes the transition that has already occurred away from low personal saving and high residential investment, as well as the transition that needs to occur toward greater business investment and net exports. It also describes the President's initiatives for encouraging the transitions necessary for longrun prosperity and stability.

The Path of Consumption Spending

Figure 4-1 shows the share of gross domestic product (GDP) that takes the form of production of goods and services directly purchased by consumers. The figure has two key messages. First, consumption represents a substantial majority of output. As a result, movements in consumption play a central role in macroeconomic outcomes. Second, the fraction of output devoted to consumption has been rising over time, leaving less room for components that contribute to future standards of living. The behavior of consumption will therefore be central to addressing both the shorter-run challenge of generating a strong recovery and the longer-run challenge of rebalancing the economy.





Source: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.10.

The Determinants of Saving

To understand the behavior of consumption, it is critical to consider how households divide their disposable income between consumption and saving. Figure 4-2 shows the personal saving rate (that is, the ratio of saving to disposable personal income) since 1960 (left axis), along with the ratio of household wealth to disposable personal income (right axis).



Figure 4-2 Personal Saving Rate Versus Wealth Ratio

Sources: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 2.1; Federal Reserve Board, Flow of Funds Table B.100.

The big swings in wealth reflect asset market booms and busts. Much of the drop in wealth in the early 1970s reflects the stock market decline associated with the first oil price shock. The stock market booms of the mid-1980s and the late 1990s are obvious, as is the decline in stock prices in the early 2000s. The wealth decline in 2008–09 was the largest such experience in the sample, reflecting large contributions from falling house prices as well as stock prices.

Paralleling the behavior of the consumption-output ratio, the saving rate showed no strong trend before roughly 1980. But it has shown a marked downward trend since then. Economic theory suggests a variety of factors that should influence saving, most notably changes in the demographic structure of the population, the growth rate of income, and the real after-tax interest rate. None of these three factors, however, provides a compelling explanation for the fluctuations in the saving rate evident in the figure. Indeed, some of the factors should probably have pushed saving up in recent decades, not down. A 1991 study, for example, predicted that the saving rate would rise as the baby boom generation entered its high-saving preretirement years (Auerbach, Cai, and Kotlikoff 1991). Instead, the saving rate fell steadily as the boomers approached retirement (the first boomers claimed early Social Security benefits in 2008).

Figure 4-2 suggests to the eye, and statistical analysis confirms, a strong negative association between the saving rate and the wealth-to-income ratio. This relationship has been interpreted as reflecting the effect of wealth on spending: a run-up in wealth leads to less need for saving. Such an interpretation is unsatisfying, however, because it leaves a key question unanswered: If wealth movements cause saving rate movements, what causes wealth movements? More broadly, it leaves open the possibility that both saving choices and asset price movements are a consequence of some deeper underlying force. For example, an increase in optimism about future economic conditions might lead both to a spending boom and to a general bidding up of asset prices. In that case, the true moving force would not be wealth changes per se; instead, both asset prices and saving would be responding to the increase in optimism.

Survey data measuring "consumer sentiment" or "consumer confidence" do, in fact, have substantial forecasting power for near-term spending growth, and are also associated with contemporaneous movements in asset prices (Carroll, Fuhrer, and Wilcox 1994). Such surveys are therefore a useful part of a macroeconomist's forecasting tool kit. But such surveys have not proven useful in explaining long-term trends like the secular decline in the saving rate.

Emerging economic research suggests another underlying explanation that may be more potent: movements in the availability of credit. A substantial academic literature has documented the expansion of credit since the era of financial liberalization that began in the early 1980s (Dynan 2009). Many factors have contributed to this expansion; perhaps the most prominent explanation (aside from the liberalization itself) is the telecommunications and computer revolutions, which together have permitted the construction of ever-more-detailed databases on consumer credit histories, giving creditors a far more precise ability to tailor credit offers to the personal characteristics of individual borrowers (Jappelli and Pagano 1993). A beneficial effect of this information revolution has been that many people who had previously been unable to obtain credit have for the first time been able to borrow to buy a home, to start a business, or to undertake many other useful activities (Edelberg 2006; Getter 2006). A reduction in saving, however, is almost the inevitable consequence of a general increase in the ability to borrow. If there is less need to save for a down payment for a home, for a child's education, for unforeseen emergencies, or for spending of any other kind, then the likelihood is that less saving will be done. Of course, eventually the saving rate should mostly recover from any dip caused by a one-time increase in the availability of credit, because whatever extra debt was incurred must be paid back over time (and paying back debt is another form of saving). This recovery in saving, however, may take a long time. If, in the meantime, credit availability increases again, the gradual small increase in saving that reflects debt repayment could easily be obscured by the new drop in saving occasioned by the continuing expansion in credit availability.

How much of the decline in the saving rate was due to a gradual, but cumulatively large, increase in credit availability is not easy to determine, partly because an aggregate measure of credit availability is difficult to construct. Recent research on commercial lending has argued that a good measure of the change in credit supply is provided by the Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices, in which managers at leading financial institutions are asked for their assessments of credit conditions for businesses (Lown and Morgan 2006). Building on that research, one study has proposed that a measure of the level of credit availability to consumers can be constructed simply by accumulating the sequence of readings from this survey's measure of credit availability to consumers (Muellbauer 2007).¹

Economic theory suggests that one further element may be important in understanding spending and saving choices around times of recession: the intensity of consumers' precautionary motive for saving. Because the risk of becoming unemployed is perhaps the greatest threat to most people's future financial stability, the unemployment rate has sometimes been used as a proxy for the intensity of the precautionary saving motive.

Implications for Recent and Future Saving Behavior

Figure 4-3 shows the relationship between the measured saving rate and a simple statistical model that relates the saving rate to the wealth-toincome ratio, a slightly modified version of Muellbauer's credit availability index, and the unemployment rate. The statistical model is estimated over the sample period 1966:Q3 to 2009:Q3. All three variables have statistically important predictive power, with the two most important measures being the measure of credit conditions and the wealth-to-income ratio.

¹ Specifically, each quarter the survey asks about banks' willingness to make consumer installment loans now as opposed to three months ago.

Figure 4-3 Personal Saving Rate: Actual Versus Model



Sources: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 2.1; CEA calculations.

Figure 4-4 uses this simple framework to ask what the path of the saving rate might have looked like if the increase in credit availability and the housing price boom had not occurred. (To be exact, the figure shows what the model says the saving rate would have been if the wealth-to-income ratio had remained constant from the first quarter of 2003 to the fourth quarter of 2007, and if credit conditions had neither expanded nor contracted; the first quarter of 2003 is chosen as the starting point because in that quarter the wealth-to-income ratio was close to its average historical value.) In this counterfactual history, the personal saving rate would have been, on average, about 2 percentage points higher over the 2003–07 period.

Of course, a far more important consequence than the higher saving rate might have been the avoidance of the financial and real disturbances caused by the housing price boom and subsequent crash. But taking the crash as given, Figure 4-3 shows that the model does a reasonably good job in tracking the dynamics of the saving rate over the period since the business cycle peak. All three elements of the model contribute to the model's predicted rise in the personal saving rate over the past couple of years: the increase in the unemployment rate, the sharp drop in asset values evident in Figure 4-2, and the steep drop in credit availability as measured by the Senior Loan Officer Opinion Survey.

Figure 4-4 Actual Personal Saving Versus Counterfactual Personal Saving



The saving model also has implications for the future path of spending. Because of the important role it finds for credit availability, the model suggests that the speed of the recovery in spending is likely to be closely tied to the pace at which the financial sector returns to health. This point underscores a chief motivation for the Administration's efforts to repair the damage to the financial system: a full economic recovery is unlikely until and unless the financial system is repaired. The vital role that a healthy financial sector plays in the functioning of the economy explains the urgency with which the Administration has been pressing Congress to pass a comprehensive and effective reform of the financial regulatory system (see Chapter 6 for a detailed discussion of the Administration's proposals).

Over a longer time frame, a resumption seems unlikely of the past pattern in which credit growth persistently outpaces income growth. Instead, credit might reasonably be expected to expand, in the long run, at a pace that roughly matches the rate of income growth. Similarly, in keeping with the long-run stability of the wealth-to-income ratio evident in Figure 4-2, wealth plausibly might grow at roughly the same pace as income—or perhaps a bit faster if investment can sustain an increase in capital per worker. Finally, although unemployment is likely to remain above its normal rate for some time, it too can be expected to return to historically normal values in the medium run. Under these conditions, the model suggests that the personal saving rate will eventually stabilize somewhere in the range of 4 to 7 percent, somewhat below its level in the 1960s and 1970s, but well above its level over the past decade.

The saving rate has already risen sharply over the past two years (which reflects an even steeper drop in consumption than in income). As credit conditions and the unemployment rate return to normal, it is plausible to expect a temporary partial reversal of the recent increase, even if asset values do not return to their pre-crisis levels. It would not be surprising, therefore, if the saving rate dipped a bit over the next year or two before heading toward a higher long-run equilibrium value. The prospect of temporary fallback in the saving rate is also plausible as a consequence of the expected withdrawal of some of the temporary income support policies that were part of the stimulus package. On balance, however, the United States seems now to be on a trajectory that will eventually result in a more "normal," and more sustainable, pattern of household saving and spending than the one that has prevailed in recent years.

While the underlying economic forces sketched here seem likely to lead eventually to a higher saving rate even in the absence of policy changes, the Administration has proposed a variety of saving-promoting policy changes to enhance that trend over the longer term. These include increasing the availability of 401(k)-type saving plans and encouraging employers to gradually increase default contribution rates (and to ensure that new employees' default saving choices reflect sound financial planning). Economic research suggests that people assume that if their employer offers a retirement saving plan, the default saving rate in that plan probably reflects a reasonably good choice for them, unless their circumstances are unusual (Benartzi and Thaler 2004).

The Future of the Housing Market and Construction

The boom in construction spending that characterized the middle years of the past decade made a substantial contribution to growth while it lasted. When the residential investment engine began to sputter around the middle of 2006, and then to stall, the ensuing correction in the sector was correspondingly steep. With the benefit of hindsight, it is now clear that much of the mid-decade's frenetic activity was based on unsound financial decisions rather than sustainable economic developments. As a consequence, construction has declined to below-normal levels as the excesses work off. For the future, construction activity is expected to pick up and contribute to the economic recovery, although this activity is likely to be well below the very high levels it reached in the mid-2000s.

The Housing Market

The residential investment boom can be measured in several ways. As Figure 4-5 shows, new construction of single-family housing units soared in the first half of the 2000s. Builders were constructing 30 percent more single-family housing units a year in the expansion of the 2000s than in the 1990s boom. Housing investment as a share of GDP averaged more than 5.5 percent over the 2002–06 period, compared with an average of only 4.7 percent from 1950 to 2001. Figure 4-6 shows that from 1995 to 2005 the homeownership rate rose from 65 percent to 69 percent as mortgage underwriting standards loosened, especially in the later part of the period.



Source: Department of Commerce (Census Bureau), New Residential Construction Table 3.

It is now apparent that the mid-2000s level of new construction was unsustainable. Analysis by the Congressional Budget Office (2008) and Macroeconomic Advisers (2009) suggests the mid-2000s pace of starts was well in excess of the underlying pace of expansion in demand for new housing units based on household formation and other demographic drivers.

Figure 4-6 Homeownership Rate



Homeownership Table 4.

The boom was followed by an equally dramatic bust. From their peak in the third quarter of 2005 to the first quarter of 2009, single-family housing starts fell by more than a factor of four. The homeownership rate reversed course, and by the second quarter of 2009 had returned to its 2000 level. The share of housing investment in GDP plummeted to 2.4 percent in the second quarter of 2009.

Just as the mid-decade's high levels of construction and housing market activity were not sustainable, the recent extremely low levels of construction will not persist indefinitely. In 2009, housing starts and the share of housing investment in GDP were well below their previous historical lows. In the long run, sounder underwriting standards will require more would-be homeowners to take time to save for a down payment before buying a home, suggesting that the homeownership rate will ultimately settle at a level lower than its recent peaks. Nonetheless, as the population grows and the housing stock depreciates, new residential construction will be required to meet demand. The analyses by the Congressional Budget Office (2008) and Macroeconomic Advisers (2009) suggest that the underlying demographic trend of household formation is consistent with growth in demand of between 1.1 million and 1.3 million new singlefamily housing units per year, more than double the pace of single-family housing starts in November 2009. Indeed, since the second quarter of 2009, housing construction has already rebounded a bit, making its first positive

contribution to GDP growth in the third quarter of 2009 since the end of 2005. But, as described in Chapter 2, the stocks of new homes and existing homes for sale, vacant homes that are not currently on the market, and homes that are in the process of foreclosure and that are likely to be put on the market at some point remain high. As a result, construction demand is likely to rise to its long-run level only gradually while some demand is met by the stock of existing units.

In short, as the housing market stabilizes and returns to a more normal condition, its role as a major drag on economic growth seems to be ending, and it is likely to contribute to the recovery. But residential construction cannot be expected to be the engine for GDP growth that it was during the housing boom of the mid-2000s.

Commercial Real Estate

The market for commercial real estate has also suffered in the recession. Commercial real estate encompasses a wide range of properties, from small businesses that occupy a single stand-alone structure to large shopping malls owned by a consortium of investors.

Problems in the commercial real estate sector are less obviously a result of overbuilding than those in the residential sector; instead, they reflect the sharp decline in demand for commercial space and the overall decline in the economy. The value of commercial real estate increased notably between 2005 to 2007, spurred by easy credit conditions, as measured for example in the Senior Loan Officer Opinion Survey. By the end of 2004, the net number of banks reporting they had eased lending standards for commercial real estate loans was persistently larger than at any point in the history of the series. Most banks did not begin tightening standards again until the end of 2006. The relative quantity of financing also increased over this period; the ratio of the change in the value of commercial real estate mortgages to new construction, which should increase when debt financing becomes relatively attractive, reached a 45-year high in 2003 and then continued to climb, peaking at the end of 2005 at more than three times the historical average.²

In the nonresidential sector, high prices did not translate into a dramatic increase in new construction (Figure 4-7). Rather, existing owners of nonresidential properties used the cheap financing and price increases to refinance or sell. Several factors appear to have played a role in limiting

² The numerator of the ratio is the seasonally adjusted change in commercial and multifamily residential mortgages (Federal Reserve, Flow of Funds Tables F219 and F220). The denominator is seasonally adjusted construction of commercial and health care structures, multifamily structures, and miscellaneous other nonresidential structures (Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts Table 5.3.5). The median of the ratio from 1958 to 2000 is 0.46, while the 2005:Q4 value is 1.50.

new investment in this sector. First, a close look at Figure 4-7 shows that nonresidential construction has historically exhibited much less volatility than residential construction, a pattern that also held true during the recent boom. Second, developers seem to have been wary of overbuilding because of unhappy experiences in previous expansions. A final dampening factor has been that construction resources were tied up in the residential construction sector. Indeed, only when residential construction slowed in 2006 did nonresidential construction begin to show larger gains.



Figure 4-7 Fixed Investment in Structures by Type

Commercial real estate values have declined dramatically since 2007. As Figure 4-8 shows, according to the Moody's/REAL Commercial Property Index, which tracks same-property price changes for commercial office, apartment, industrial, and retail buildings, commercial real estate prices fell 43 percent from their peak in October 2007 to September 2009. A steep increase in vacancy rates, stemming from weakness in the overall economy, has been one important reason for these declines in value: the commercial real estate services firm CB Richard Ellis reports that vacancy rates for offices increased from 12.6 percent in mid-2007 to 17.2 percent in the third quarter of 2009. Before the recession, vacancy rates were generally declining.

Note: Grey shading indicates recessions. Source: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 5.3.6.



Figure 4-8 Commercial Real Estate Prices and Loan Delinquencies

As commercial real estate values have declined, owners have found it difficult to refinance their debt because loan balances now appear large relative to the properties' value. Nearly half of the banks responding to the Senior Loan Officer Opinion Survey in the third quarter of 2009 reported that they continued to tighten standards on commercial real estate loans, whereas none of the respondents reported having eased standards. Since commercial real estate loans typically are relatively short term, an inability to refinance debt has led to a sharp rise in delinquencies and foreclosures. Figure 4-8 shows that the proportion of commercial real estate loans with payments at least 30 days past due rose from about 1 percent during most of the decade to almost 9 percent by the third quarter of 2009. Distress has made lenders reluctant to provide financing for new projects. Overall, the value of commercial and multifamily residential mortgages declined in each of the first three quarters of 2009 (Federal Reserve Flow of Funds Tables L.219 and L.220). Tight credit and the increase in sales of distressed properties have fed into further price declines, generating a negative feedback loop between property values and conditions in the sector.

As private sources of funding have dried up, the Federal Reserve has helped fill the gap through the Term Asset-Backed Securities Loan Facility (TALF). In June 2009, the TALF made lending available to private financial market participants against their holdings of existing commercial

Reserve Board.

mortgage-backed securities (CMBS), thereby increasing liquidity in the CMBS market. In November 2009, the TALF made its first loans against newly issued CMBS. The provision of TALF financing for these newly issued securities may prove particularly important in allowing borrowers to refinance.

The negative feedback loop between credit conditions, the sale of distressed commercial properties, and commercial property values may lead to further price declines. Eventually, however, a combination of economic recovery and an improvement in financing conditions should help prices stabilize. Still, as with the residential mortgage market, commercial real estate financing will likely not return any time soon to the easy terms that prevailed before the collapse. Experience in previous business cycles suggests that recovery of the sector will lag the economy as a whole.

BUSINESS INVESTMENT

If consumption and construction are not the drivers of growth going forward in the way they were in the early 2000s, two components of private demand are left to fill the gap: business investment excluding structures, and net exports.³ Nonstructures investment could well become again (as it was in the 1990s) a driving force in the expansion of aggregate demand and economic production. And in the long run, its share in GDP could reach levels higher than those of the first part of the decade.

Investment in the Recovery

Investment spending (other than structures) plummeted in late 2008 and early 2009. This investment spending fell so low that, after accounting for depreciation, estimates of the absolute stock of capital showed stagnation in 2008 and even a decline in the first quarter of 2009. Falling spending in this category reflected falling business confidence, as indicated, for example, in the Federal Reserve Bank of Philadelphia's Business Outlook Diffusion Index; this index was negative every month from October 2008 to July 2009, signaling that more businesses thought conditions were deteriorating than thought they were improving. Similarly, the National Federation of Independent Business Index of Small Business Optimism hit its lowest point since 1980 in March 2009.

³ In the National Income and Product Accounts, construction of commercial structures is classified as part of business investment. Given that the boom and bust were concentrated in residential and commercial construction, however, for discussing recent and prospective developments it is more useful to consider commercial construction investment together with residential investment, as was done in the previous section. Thus, the discussion that follows is largely concerned with nonstructures investment.

Investment of this kind firmed in the second half of 2009, coinciding with improvements in business confidence. Indeed, investment in equipment and software increased at a 13 percent annual rate in the fourth quarter. Nevertheless, the cumulative erosion has been so substantial that years of strong growth will be necessary to fully recover from the nadir. As a result, recovery of spending in this area is likely to make a substantial contribution to the recovery of the overall economy.

Investment in the Long Run

In the long run, the share of business investment is likely not just to return to its pre-recession levels, but to exceed them. During the boom of the 1990s, the share of business investment in equipment and software as a fraction of GDP rose from a post-Gulf-War recession low of 6.9 percent in 1991 to 9.6 percent in 2000. During that period, investment in information processing equipment and software made the largest contribution to the increase, as shown in Figure 4-9. Information technology (IT) investment grew an astounding 18 percent per year on average from 1991 to 2000. Other investment in equipment and software, which includes industrial, transportation, and construction equipment, accelerated as well, and grew as a share of GDP over this period. This high level of investment in the 1990s increased industrial capacity by an average of 4 percent per year.

As the figure shows, the boom came to an end at the beginning of the 2000s, when investment in every category of equipment and software fell sharply as a share of GDP. The recovery in business investment in equipment and software after the 2001 recession was weak. IT investment grew at a historically tepid pace of 6 percent per year from 2003 to 2007, far below pre-2000 growth rates. Non-IT investment growth was also muted, with spending on industrial equipment growing at an annual pace of only 3.7 percent from 2003 to 2007, down from an average of 5.4 percent in the 1990s. Investment in transportation equipment surpassed its 1999 peak only for one quarter in 2006. In the recovery following the 2001-02 recession, the peak value of non-IT equipment investment as a share of GDP was only 4.3 percent (in 2006), a level that does not even match the historical average value of that series in the period from 1980 to 2000. Production capacity in the sector grew an average of 0.6 percent per year from 2003 to 2007, substantially below the average pace of growth in the 1990s. Taken as a whole, these figures suggest that business investment may have been abnormally low over the course of the post-2001 expansion.

There arc strong reasons to expect investment's role in the economy will be larger in the future. In the long run, the real interest rate will adjust to bring the demand for the economy's output in line with the economy's

Figure 4-9 Nonstructures Investment as a Share of Nominal GDP



Product Accounts Table 5.3.5.

capacity. The increase in private saving described in the first part of the chapter, together with the policies to tackle the long-run budget deficit that are the subject of the next chapter, should help maintain low real interest rates. By keeping the cost of investing low, these low real interest rates should help to encourage investment.

At the same time, other forces should help increase investment at a given cost of borrowing. A number of promising technological developments offer the prospect that businesses will be able to find many productive purposes for new investments, ranging from new uses of wireless electromagnetic spectrum, to new applications of medical and biological discoveries opened up by DNA sequencing technologies, to environmentally friendly technologies like new forms of production and distribution of clean energy (see Chapter 10 for more on these subjects).

Another form of investment is business spending on research and development (R&D). Such spending can be interpreted as investment in the accumulation of "knowledge capital." Ideally, private investments in R&D will dovetail with complementary public investments in knowledge capital through basic research and scientific and technological infrastructure. The Administration's commitment to fostering the connections between public and private investments in knowledge production has been strongly signaled in both the Recovery Act and the President's fiscal year 2010 budget (Office of Management and Budget 2009). The Recovery Act included \$18.3 billion

of direct spending on research, one of the largest direct increases in such spending in the Nation's history. In addition, more than \$80 billion of Recovery Act funds were targeted toward technology and science infrastructure. The Administration's first budget proposed to double the research spending by three key science agencies: the National Science Foundation, the Department of Energy's Office of Science, and the Department of Commerce's National Institute of Standards and Technology. And to foster private sector innovation, the budget also included the full \$74 billion cost of making the research and experimentation tax credit permanent in order to give businesses the certainty they need to invest, innovate, and grow.

With reduced demand from consumption and housing tending to make the real interest rate lower than it otherwise would be, and increased investment demand from the many newly developing technologies and incentives for R&D, a larger portion of the economy's output is likely to be devoted to investment. And, because business investment contributes not only to aggregate demand but also to aggregate supply and productivity, a larger role for investment will create a stronger economy going forward.

THE CURRENT ACCOUNT

The picture of future growth in the United States described in the previous sections depends less on borrowing and consumption than did growth in the past decade. This view has important implications for our interactions with other countries and the current account.

Determinants of the Current Account

The current account is the trade balance plus net income on overseas assets and unilateral transfers like foreign aid and remittances. The trade balance, or net exports, represents the bulk of the current account and is responsible for a large majority of short-run movements in it. To a first approximation, a current account deficit implies that the trade balance is negative or, equivalently, that our exports are less than our imports. At the same time, the current account deficit must also be matched by the net borrowing of the United States from the rest of the world. If we spend more than we earn, we must borrow the money to do so. In the national income accounting sense, the definition of the current account can be reduced to national saving minus investment (plus some measurement error).

This accounting definition provides a description but not an explanation of the drivers of the current account. One important driver is the business cycle. As Box 4-1 explains, over the last 30 years, the U.S. current account deficit tended to be larger when the economy was booming

and unemployment was low. In a boom, investment tends to rise and saving tends to fall, generating a current account deficit. When the economy struggles, investment often falls and saving often rises, generating a surplus (or a smaller deficit). In countries that rely more on exports to drive their growth, an acceleration in growth can be associated with a rising current account surplus (or smaller deficit).

Current accounts do not need to be balanced in every country in every year. At any point in time, countries may offer more investment opportunities than their desired level of saving at a given interest rate can fund, making them net borrowers, resulting in a current account deficit. Other countries may have an excess of saving over desired investment, making them net lenders (a current account surplus). However, in the

Box 4-1: Unemployment and the Current Account

The relationship between the level of unemployment and the current account balance is complicated. People frequently argue that importsand specifically the current account deficit-displace U.S. workers and generate higher unemployment. However, the main determinant of unemployment in the short and medium runs is the state of the business cycle. The scatter plot of the current account and the unemployment rate since 1980, shown in the accompanying figure, displays a positive relationship. Historically, a smaller current account deficit has coincided with a higher unemployment rate. Both were being driven by cyclical economic factors: in a recession, the current account balance improved, and unemployment was high. In a boom, the current account balance deteriorated, and unemployment was low. This usual pattern has been at work in the current recession. The U.S. current account deficit narrowed from 6.4 percent of GDP in the third quarter of 2006 to 2.8 percent of GDP in the second quarter of 2009. At the same time, unemployment rose from 4.6 percent to 9.3 percent.

The relationship between unemployment and the current account balance can be different in countries that have relied more heavily on exports for growth. For example, in Germany, the unemployment rate fell from 11.7 percent in 2005 to 9.0 percent in 2007 while the current account surplus rose from 5.1 percent of GDP to 7.9 percent. Likewise, in Japan, unemployment fell from 2005 to 2007 as the current account surplus rose. Given the slack in the U.S. economy, a shift toward a current account surplus could increase aggregate demand and help lower the unemployment rate.

Continued on next page



long run, current accounts should tend toward balance, thereby allowing the net foreign investment position (total foreign assets minus total foreign liabilities) of borrowing nations to at least stabilize as a ratio to GDP and possibly to decline over time. Otherwise, creditor nations would be continually increasing the share of their wealth held as assets of debtor nations, and debtor nations would owe a larger and larger share of their production to foreign lenders and capital owners.

Thus, in the long run, one would expect the U.S. current account to move toward balance. As it does so, it will not cause the absolute level of our accumulated net foreign debt to decline unless the U.S. current account moves into surplus (which is of course possible). But, even if the longrun current account is merely in balance or a small deficit, the previous net foreign borrowing should still decline as a share of GDP as GDP rises. Further, so-called "valuation effects"—changes in asset values of foreign assets held by Americans or U.S. assets owned by foreign investors—also affect the ratio of foreign indebtedness to GDP.

The Current Account in the Recovery and in the Long Run

As the U.S. economy recovers from the current crisis, it is unlikely to return to current account deficits as large as those in the mid-2000s. Coming out of the 2001–02 recession, investment rose more quickly than saving, and the current account deficit widened to more than 6 percent of GDP (Figure 4-10). Investment had also declined slightly more than saving had before the current crisis hit, and the current account deficit moderated to less than 5 percent of GDP by the third quarter of 2007.⁴ The gap narrowed rapidly as investment fell sharply during the crisis. The increase in the personal saving rate since the onset of the crisis has partly offset the large Federal budget deficit (which is negative government saving), so the current account deficit shrank to under 3 percent of GDP.

The specific path of the current account as the economy exits the crisis will depend on whether government and private saving rise ahead of, or along with, a rebound in private investment. But in the long run, the current account deficit is likely to be smaller than it was before the crisis. The likely rise in private and public saving relative to their pre-crisis levels



Product Accounts Table 5.1.

⁴ There is also a statistical discrepancy between the saving-minus-investment gap and the current account. While this discrepancy is generally close to zero, it moved from slightly negative to slightly positive in this period, so that the measured current account moved more than the measured gap between saving and investment did.

implies an increase in national saving. Thus, saving is likely to more closely balance domestic investment, suggesting a transition to a smaller current account deficit than in the 2000s. Given that the current account deficit has already narrowed to roughly 3 percent of GDP—less than half its peak—the crucial challenge will be to avoid a reversion to a high-spending, low-saving economy. A successful shift toward a more balanced world growth model generated by increased consumption in nations with current account surpluses could improve net exports even more. This could bring the current account deficit toward its mid-1990s level of roughly 1 to 2 percent of U.S. GDP.

Exports can be expected to rise rapidly as the world economy recovers for a number of reasons. Just as trade typically falls faster than GDP in a recession (discussed in Chapter 3), it typically grows faster during a rebound. Trade-to-GDP ratios have fallen in the last year and can be expected to bounce back as the world economy recovers. This bounce-back alone will lead to rapid export growth. More generally, the crucial driver of exports is always the performance of the world economy. For U.S. goods and services to be bought abroad, demand in other countries must return robustly. This is one reason for the United States to strengthen its ties with fast-growing regions such as emerging East Asia. The faster our trade partners grow and the more we trade with fast-growing economies, the more demand for U.S. exports grows. Figure 4-11 shows the historical relationship between U.S. export growth and growth of non-U.S. world GDP.

The rebalancing of the U.S. economy is likely to be accompanied by a rebalancing of the world economy as well. It is reasonable to expect growth in East Asia to continue at a rapid rate but also to become more oriented toward domestic consumption and investment than it has been in the recent past. Some nations with large current account surpluses took steps to increase domestic demand during the crisis, and these efforts must be maintained and expanded if world growth is to rebalance. It is not a given that such a transition in world demand will take place. Concerted policy action will be needed, but if saving falls in countries with current account surpluses and spending rises, that should stimulate U.S. exports as well as take pressure off of the U.S. consumer as an engine of world growth.

Steps to Encourage Exports

The Administration is taking many concrete steps to encourage exports. The Trade Promotion Coordinating Committee brings government agencies together to help firms export. While the final decision of whether and how much to export is a market decision made by private businesses, the government can play a constructive role in many ways. The



Figure 4-11 Growth of U.S. Exports and Rest-of-World Income: 1960-2008

Notes: Rest-of-world GDP constructed as world GDP in constant dollars less U.S. GDP. Data are annual growth rates, 1960-2008. Best-fit linear regression equation is: export growth = 0.5 + 1.5 (GDP growth). Sources: World Bank, World Development Indicators; Department of Commerce (Bureau of

Economic Analysis), National Income and Product Accounts Table 1.1.6.

Export-Import Bank can help with financing; consular offices can provide contacts, information, and advocacy; Commerce Department officials can help firms negotiate hurdles; a combination of agencies can help small and mid-sized businesses explore overseas markets. Much of the academic literature in trade models a firm's decision to export as involving a substantial one-time fixed cost (Melitz 2003). The Administration is doing all that it can to lower that initial fixed cost to help expand exports.

In addition, the Administration is pursuing possible trade agreements and making the most of its current trade agreements to expand opportunities for American firms to export. Because U.S. trade barriers are relatively low, new trade agreements often lower barriers abroad more than in the United States, opening new paths for U.S. exports. As the Administration works to expand U.S. market access through a world trade agreement in the Doha round of multilateral trade talks, it continues to explore its options in bilateral free trade agreements and regional frameworks, such as the Trans-Pacific Partnership. The United States Trade Representative continues to work through previously negotiated trade agreements to lower nontariff trade barriers and facilitate customs issues to make it easier for U.S. businesses to export. Not all of these developments will necessarily increase net exports (or the current account) of the United States. Since the current account equals net lending to or borrowing from the world, moving the current account balance requires adjustments in saving and investment as well as more opportunities to export. In the long run, increases in demand for U.S. exports resulting from export promotion or reduced trade barriers will generate higher standards of living, but through improved terms of trade, not an increase in net exports. Further, the simple recovery of world trade volumes will increase exports and imports alike. As discussed in Chapter 10, this increase in trade can increase productivity and living standards, but it will not change the current account. However, rapid world growth and declining current account surpluses abroad should lead to an increase in U.S. exports. This can help increase U.S. net exports and hence contribute to the recovery.

As with higher investment, lower current account deficits have important long-run benefits. Lower foreign indebtedness than the country otherwise would have had means reduced interest payments to foreigners. Equivalently, it means that foreigners have on net smaller claims on the output produced in the United States. Thus, lower current account deficits will raise standards of living in the long run.

CONCLUSION

Economic policy should not aim to return the economy to the path of unstable, unsustainable, unhealthy growth it was on before the wrenching events of the past two years. We should—and can—achieve something better. Growth that is not fueled by unsustainable borrowing, and growth that is based on productive investments, is more stable than the growth of recent decades. And growth that is associated with higher saving will lead to greater accumulation of wealth, and so greater growth in our standards of living.



CHAPTER 5

x

ADDRESSING THE LONG-RUN FISCAL CHALLENGE

A fter several years of budget surpluses, the Federal Government began running consistent, substantial deficits in the 2002 fiscal year. Because the deficits absorbed a significant portion of private saving, they were one reason that the economic expansion of the 2000s was led by consumption and foreign borrowing rather than investment and net exports. More troubling than the deficits of the recent past, however, is the long-term fiscal outlook the Administration inherited. Even before the increased spending necessary to rescue and stabilize the economy, the policy choices of the previous eight years and projected increases in spending on health care and Social Security had already put the government on a path of rising deficits and debt. Thus, a key step in rebalancing the economy and restoring its long-run health must be putting fiscal policy on a sound, sustainable footing.

This chapter discusses the fiscal challenges the Administration inherited, the dangers posed by large and growing deficits, and the Administration's measures and plans for addressing these challenges. The Administration and Congress are already taking important steps, most notably through their efforts toward comprehensive health care reform. The legislation currently under consideration addresses rapidly rising health care costs, which are one of the central drivers of the long-run fiscal problem. The fiscal problem is multifaceted, however, and was decades in the making. As a result, no single step can fully address it. Much work remains, and bipartisan cooperation will be essential.

THE LONG-RUN FISCAL CHALLENGE

When President Obama took office in January 2009, fiscal policy was on a deteriorating course. Figure 5-1 shows the grim outlook for the budget projected by the Congressional Budget Office (CBO) under the assumption that the policies then in effect would be continued.¹ As the figure makes clear, the budget was on an unsustainable trajectory.



Note: CBO baseline surplus projection adjusted for CBO's estimates of costs of continued war spending, continuation of the 2001 and 2003 tax cuts, avoiding scheduled cuts in Medicare's physician payment rates, and holding other discretionary outlays constant as a share of GDP. Sources: Congressional Budget Office (2009a, 2009f).

The figure shows that CBO projected that the deficit would be severely affected in the short run by the economic crisis. The decline in output was projected to send tax revenues plummeting and spending for unemployment insurance, nutritional assistance, and other safety net programs soaring. As a result, the deficit was projected to spike to 9 percent of gross domestic product (GDP) in 2009 before falling as the economy recovered. It is natural for revenues to decline and government spending to rise during a recession. Indeed, these movements both mitigate the recession and cushion its impact on ordinary Americans.

¹ This figure presents the CBO January 2009 baseline budget outlook through 2019, adjusted to reflect CBO's estimates of the cost of extending expiring tax provisions including the 2001 and 2003 tax cuts and indexing the Alternative Minimum Tax (AMT) for inflation, reducing the number of troops in Iraq and Afghanistan to 75,000 by 2013, modifying Medicare's "sustainable growth rate" formula to avoid scheduled cuts in physician payment rates, holding other discretionary outlays constant as a share of gross domestic product, and the added interest costs resulting from these adjustments (Congressional Budget Office 2009a). After 2019, the figure presents CBO's June 2009 *Long-Term Budget Outlook* alternative fiscal scenario, which also reflects the costs of continuing these policies (Congressional Budget Office 2009f).

The key message of the figure, however, concerns the path of the deficit after the economy's projected recovery from the recession. The deficit was projected to fall to close to 4 percent of GDP in 2012 as the economy recovers, but then to reverse course, rising steadily by about 1 percent of GDP every two years. Figure 5-2 shows that if that path were followed, the ratio of the government's debt to GDP would surpass its level at the end of World War II within 20 years, and would continue growing rapidly thereafter. At some point along such a path, investors would no longer be willing to hold the government's debt at any reasonable interest rate. Thus, such a path is not feasible indefinitely.



Note: CBO baseline projection adjusted for CBO's estimates of costs of continued war spending, continuation of the 2001 and 2003 tax cuts, avoiding scheduled cuts in Medicare's physician payment rates, and holding other discretionary outlays constant as a share of GDP. Sources: Congressional Budget Office (2009a, 2009f).

Sources of the Long-Run Fiscal Challenge

The challenging long-run budget outlook the Administration inherited has two primary causes: the policy choices of the previous eight years and projected rising spending on Medicare, Medicaid, and Social Security. The policy choices under the previous administration contribute a substantial amount to the high projected deficits as a share of GDP, while rising spending for health care and Social Security is the main reason the deficits are projected to balloon over time. Both make large contributions to the difficult fiscal outlook.

The previous policy choices involved both spending and revenues. On the spending side, two decisions were particularly important. One was the failure to pay for the addition of a prescription drug benefit to Medicare, which is estimated to increase annual deficits over the next decade by an average of one-third of a percent of GDP, excluding interest, and more than that in the years thereafter (Congressional Budget Office 2009g; Council of Economic Advisers estimates). The other was the decision to fight two wars without taking any steps to pay for the costs—costs that so far have come close to \$1 trillion. On the revenue side, the most important decisions were those that lowered taxes without making offsetting spending cuts. In particular, the 2001 and 2003 tax cuts have helped push revenues to their lowest level as a fraction of GDP at any point since 1950 (Office of Management and Budget 2010).

Figure 5-3 shows the impact on the budget deficit of these three major policies of the previous eight years that were not paid for: the 2001 and 2003 tax cuts (including the increased cost of Alternative Minimum Tax relief as a result of those tax cuts), the prescription drug benefit, and the spending for the wars in Iraq and Afghanistan (which for this analysis are assumed to wind down by 2013), both with and without the interest expense of financing these policies.² At their peak in 2007 and 2008, these policies worsened the government's fiscal position by almost 4 percent of GDP, and their effect, including interest, rises above 4 percent of GDP into the indefinite future. The fiscal outlook would be far better if these policies had been paid for. Indeed, Auerbach and Gale (2009) conclude that roughly half of the long-run fiscal shortfall in the outlook described earlier results from policy decisions made from 2001 to 2008.

The other main source of the long-run fiscal challenge is rising spending on Medicare, Medicaid, and Social Security. These burdens stem primarily from the rapid escalation of health care costs, combined with the aging of the population. Annual age-adjusted health care costs per Medicare enrollee grew 2.3 percentage points faster than the increase in per capita GDP from 1975 to 2007. If this rate of increase were to continue, Federal spending on Medicare and Medicaid alone would approach 40 percent of the Nation's income in 2085, which is clearly not sustainable

 $^{^2}$ The figure shows the annual cost (as a percent of GDP) of supplemental military expenditures for operations in Iraq and Afghanistan through 2009 and CBO's estimate of the cost of reducing the number of troops in Iraq and Afghanistan to 75,000 by 2013 thereafter; the cost of the Medicare Part D program net of offsetting receipts and Medicaid savings; the cost of the 2001 and 2003 tax cuts plus the additional cost of AMT relief associated with those tax cuts, as estimated by CBO; and the interest expense of financing these policies.
Figure 5-3 Budgetary Cost of Previous Administration Policy



Note: Includes supplemental war spending, cost of 2001 and 2003 tax cuts, Medicare Part D net of offsetting receipts and Medicaid savings, and related interest expense. Sources: Belasco (2009); Congressional Budget Office (2009a, 2009g); CEA estimates.

(Congressional Budget Office 2009f). In addition, as a result of decreases in fertility and increases in longevity, the ratio of Social Security and Medicare beneficiaries to workers is rising, straining the financing of these programs.

Figure 5-4 projects the growth in spending in Medicare, Medicaid, and Social Security. Spending on the programs is projected to double as a share of GDP by 2050. Over the next 20 years, demographics—the retirement of the baby boom generation—is the larger cause of rising spending. But throughout, rising health care costs contribute to rising spending, and over the long term, they are by far the larger contributor to the deficit.

Other important factors have also contributed to the increase in entitlement spending. For example, the fraction of non-elderly adults receiving Social Security Disability Insurance (SSDI) benefits has approximately doubled since the mid-1980s, and the fraction of Social Security spending accounted for by SSDI benefits has increased from 10 to 17 percent. Beneficiaries of SSDI are also eligible for health insurance through Medicare. Total cash benefits paid to SSDI recipients were \$106 billion in 2008 and an additional \$63 billion was spent on their health care through Medicare. One contributor to the increase in disability enrollment was a 1984 change in the program's medical eligibility criteria, which allowed more applicants to qualify for benefits in subsequent years (Autor and Duggan 2006).

Figure 5-4 Causes of Rising Spending on Medicare, Medicaid, and Social Security



The potential challenges to the budget from these three entitlement programs have been clear for decades. Yet, policymakers in previous administrations did little to address them. For example, in October 2000, CBO warned that spending on Medicare, Medicaid, and Social Security would more than double, rising from 7.5 percent of GDP in 1999 to over 16.7 percent in 2040; nine years later, their forecast for spending on these programs remains virtually unchanged (Congressional Budget Office 2000, 2009f).

All told, the Obama Administration inherited a very different budget outlook from the one left to the previous administration. Figure 5-5 compares the budget forecast in January 2001 (Congressional Budget Office 2001) with the budget outlook in January 2009 described above.³ In 2001, CBO forecast a relatively bright fiscal future. After a decade of strong growth and responsible fiscal policy, the budget was substantially in surplus, and CBO analysts projected rising surpluses over the next decade, even under their more pessimistic policy alternatives. Rising health care costs would squeeze the budget only over the long term, and the retirement of the baby boom generation was still more than a decade away. The intervening time could have been used to pay off the national debt and accumulate

³ The 2001 forecast includes the January 2001 baseline forecast adjusted to reflect CBO's estimated cost of holding nondiscretionary outlays constant as a share of nominal GDP. Starting in 2012, the deficit evolves according to the intermediate projection in the October 2000 *Long-Term Budget Outlook* (Congressional Budget Office 2000).

substantial assets in preparation. But policymakers chose a different path. They enacted policies that added trillions to the national debt and doubled the size of the long-run problem. Combined with a deteriorating economic forecast and technical reestimates, the result was a much worse budget outlook in January 2009 than in January 2001.



Figure 5-5

Note: CBO 2001 baseline projection adjusted for the cost of holding nondiscretionary outlays constant as a share of nominal GDP; CBO 2009 baseline projection adjusted for costs of continued war spending, continuation of 2001 and 2003 tax cuts, avoiding scheduled cuts in Medicare's physician payment rates, and holding nondiscretionary outlays constant as a share of nominal GDP.

Sources: Congressional Budget Office (2000, 2001, 2009a, 2009f).

The Role of the Recovery Act and Other Rescue Operations

One development that has had an important effect on the shortterm budget outlook since January 2009 is the aggressive action the Administration and Congress have taken to combat the recession. By far the most important component of the response in terms of the budget is the American Recovery and Reinvestment Act of 2009. The Recovery Act cuts taxes and increases spending by about 2 percent of GDP in calendar year 2009 and by 2¼ percent of GDP in 2010.

Crucially, however, the budgetary impact of the Recovery Act will fade rapidly. As a result, it is at most a very small part of the long-run fiscal shortfall. By 2012, the tax cuts and spending under the Recovery Act will be less than one-third of 1 percent of GDP. Other rescue measures, such as extensions of programs providing additional support to those most directly affected by the recession, also contribute to the deficit in the short run. But these programs are much smaller than the Recovery Act. And like the Recovery Act, their budgetary impact will fade quickly.

Figure 5-6 shows the overall budgetary impact of the Recovery Act and other rescue measures, including interest on the additional debt from the higher short-run deficits resulting from the measures. The impact is substantial in 2009 and 2010 but then fades rapidly to about one-quarter of 1 percent of GDP. Moreover, because these estimates do not include the effects of the rescue measures in mitigating the downturn and speeding recovery—and thus raising incomes and tax revenues—they surely overstate the measures' impact on the budget outlook.



AN ANCHOR FOR FISCAL POLICY

The trajectory for fiscal policy that the Administration inherited, with budget deficits and government debt growing relative to the size of the economy, is clearly untenable. Change is essential. But there are many alternatives to the trajectory the Administration inherited. In thinking about what path fiscal policy should attempt to follow, it is therefore important to examine how deficits affect the economy and what policy paths are feasible.

The Effects of Budget Deficits

Two factors are critical in shaping the economic effects of budget deficits: the state of the economy, and the size and duration of the deficits. Consider first the state of the economy. A central lesson of macroeconomics is that in an economy operating below capacity, higher deficits raise output and employment. Transfer payments (such as unemployment benefits) and tax cuts encourage private consumption and investment spending. Government investments and other purchases contribute to higher output and employment directly and, by raising incomes, also encourage further private spending.

In the current situation, as discussed in Chapter 2, monetary policymakers are constrained because nominal interest rates cannot be lowered below zero, and so they are unlikely to raise interest rates quickly in response to fiscal expansion. As a result, the fiscal expansion attributable to the Recovery Act is likely to increase private investment as well as private consumption and government purchases. Finally, in a precarious environment like the one of the past year, expansionary fiscal policy may make the difference between an economy spiraling into depression and one embarking on a self-sustaining recovery, and so have a dramatic impact on outcomes. As described more fully in Chapter 2, these benefits of fiscal expansion were precisely the motivation for the Administration's pursuit of the Recovery Act and other stimulus policies over the past year.

When the economy is operating at normal capacity, the effects of higher budget deficits are very different. In such a setting, the stimulus from deficits leads not to higher output, but only (perhaps after a delay) to a change in the composition of output. To finance its deficits, the government must borrow money, competing against businesses and individuals seeking to finance new productive investments. As a result, deficits drive up interest rates, discouraging private investment. Hence, deficit spending diverts resources that would otherwise be invested in productive private capital—new business investments in plant, equipment, machinery, and software, or investments in human capital through education and training into government purchases or private consumption. To the extent that the private investments nonetheless occur but are financed by borrowing from abroad, the country has the benefit of the capital, but at the cost of increased foreign indebtedness. The result is that Americans' claims on future output are lower.

In sum, in normal times, higher budget deficits impede the rebalancing of output toward investment and net exports described in Chapter 4; lower deficits contribute to that rebalancing. In addition, budget deficits were one source of the "global imbalances" discussed in Chapter 3 that have been implicated by some analysts as part of the cause of the financial and economic crisis. Finally, higher budget deficits and the higher levels of debt they imply may reduce policymakers' ability to turn to expansionary fiscal policy in the event of a crisis.

Although determining the impact of large budget deficits on capital formation and interest rates is a difficult and contentious issue, the bulk of the evidence points to important effects. For example, several studies find that increases in projected deficits raise interest rates (Wachtel and Young 1987; Engen and Hubbard 2005; Laubach 2009). A careful review concludes that the weight of the evidence indicates that budget deficits raise interest rates moderately (Gale and Orszag 2003). Examining the international evidence, another study reaches a similar conclusion (Ardagna, Caselli, and Lane 2007).

The economic impact of budget deficits depends not only on the condition of the economy but also on their magnitude and persistence. A moderate period of large deficits in a weak economy will speed recovery in the short run and leave the government with only modestly higher debt in the long run. Even in an economy operating at capacity, a temporary period of high deficits is manageable, as the experience of World War II shows compellingly. Once full employment was reached, the high wartime spending surely crowded out investment and thus caused standards of living after the war to be lower than they otherwise would have been. But that cost aside, the enormous temporary deficits that reached 30 percent of GDP at the peak of the war created no long-run problems.

In contrast, the effects of large deficits and debt that grow indefinitely and without bound relative to the size of the economy are very different and potentially very dangerous. If a government tried to follow such a path, eventually its debt would exceed the amount investors were willing to hold at a reasonable interest rate. At that point, the situation would spiral out of control. Rising interest costs would worsen the fiscal situation; this would further reduce investors' willingness to hold the government's debt, raising interest costs further; and so on. Eventually, investors would be unwilling to hold the debt at any interest rate.

Feasible Long-Run Fiscal Policies

Investors have no qualms about holding some government debt. Indeed, many desire the safety of such an investment. And crucially, in an economy in which private incomes and wealth, as well as the government's tax base, are growing, the amount of debt investors are willing to hold also grows. Thus, the key to a sustainable deficit path is a fiscal policy that keeps the level of debt relative to the scale of the economy at levels where investors are willing to hold that debt at a reasonable interest rate. Most obviously, paths where the ratio of the deficit to GDP and the ratio of the debt to GDP grow without bound cannot be sustained. Equally, however, paths that would lead the debt-to-GDP ratio to stabilize, but at an extremely high level, are also not feasible.

Historical and international comparisons, as well as the very favorable terms on which investors are currently willing to lend to the United States, show that the Nation is not close to such problematic levels of indebtedness. In 2007, before the recession, the debt held by the public was 37 percent of nominal GDP. In 2015, because of the direct effects of the recession and, to a lesser extent, the fiscal stimulus, the President's budget projects the public debt (net of financial assets held by the government) will be 65 percent of GDP. By comparison, it was 113 percent of GDP at the end of World War II; in the United Kingdom, the ratio at the end of World War II was over 250 percent. Table 5-1 shows the projected 2010 government debt-to-GDP ratio (including state and local government debt) for a wide range of developed countries. Japan's debt-to-GDP ratio is 105 percent, Italy's is 101 percent, and Belgium's is 85 percent, and all of these are projected to rise. None of these countries enjoys the same depth and breadth of demand for its debt as the United States does, yet none has difficulty financing its debt. Thus, although it is hard to know the exact U.S. debt-to-GDP ratio that would begin to pose problems, it is clearly well above current levels.

Government Debt-to-GDP Ratio in Selected OECD Countries (percent)	
	2010
Belgium	85.4
Canada	32.6
France	60.7
Germany	54.7
Italy	100.8
Japan	104.6
Spain	41.6
Sweden	-13.1
United Kingdom	59.0
United States	65.2
Euro-area average	57.9
OECD average	57.6

Table 5-1

Note: Numbers include state and local as well as Federal net government debt. Source: Organisation for Economic Co-operation and Development (2009).

The Choice of a Fiscal Anchor

It is essential that the United States follow a fiscal policy that stabilizes the debt-to-GDP ratio at a feasible level. In thinking about the specific level of that ratio that policymakers should aim for, it is useful to think about the implications that different levels of the budget deficit have for the level of government debt in the long run. In particular, consider paths where the deficit as a percent of GDP stabilizes at some level. If the deficit-to-GDP ratio and the growth rate of nominal GDP are both steady. the debt-to-GDP ratio will settle down to the ratio of the deficit-to-GDP ratio to the growth rate of nominal GDP.⁴ For example, if the deficit is 1 percent of GDP and nominal GDP is growing at 5 percent per year, the debt-to-GDP ratio will stabilize at 20 percent. Similarly, if the deficit-to-GDP ratio and the growth rate of nominal GDP are both 4 percent, the debt-to-GDP ratio will stabilize at 100 percent. Instead of thinking about various possible longrun targets for the debt-to-GDP ratio, policymakers can consider possible targets for the deficit-to-GDP ratio and their accompanying implications for the long-run debt-to-GDP ratio.

The choice among different deficit-to-GDP ratios involves tradeoffs. Lower deficits, and thus lower debt in the long run, have obvious advantages: a higher capital stock, lower foreign indebtedness, smaller global imbalances, and more fiscal room to maneuver. But lower deficits have disadvantages as well. They require smaller government programs, higher taxes, or both. Because Medicare, Medicaid, and Social Security will grow faster than GDP in coming decades even after the best efforts to make those programs as efficient as possible, significant cuts in government spending would impose substantial costs. And higher taxes can reduce incentives to work, save, and invest.

Based on these considerations, the Administration believes that an appropriate medium-run goal is to balance the primary budget—the budget excluding interest payments on the debt. Including interest payments, this target will result in total deficits of approximately 3 percent of GDP. With real GDP growth of about 2.5 percent per year and inflation of about

⁴ To see this, consider the case where the deficit-to-GDP ratio equals the growth rate of GDP. Then the dollar amount of debt issued in a year (that is, the deficit) equals the dollar increase in GDP. If the debt-to-GDP ratio is 100 percent—the amount of debt outstanding equals GDP—then the percent increase in debt exactly equals the percent increase in GDP, and the debt-to-GDP ratio holds steady at 100 percent. If, however, the amount of debt outstanding is less than nominal GDP, then adding a dollar to the debt results in a larger percentage increase in the debt than does a dollar added to GDP. Hence, the debt-to-GDP ratio will rise. If the amount of debt outstanding is more than nominal GDP, then the percent increase in debt is smaller than the percent increase in GDP and the debt-to-GDP ratio falls. Thus, the debt-to-GDP ratio converges to the ratio of the deficit-to-GDP ratio to the growth rate of GDP, which in this case is 100 percent.

2 percent per year, nominal GDP growth will be about 4.5 percent per year in the long run. Thus a target for the total deficit-to-GDP ratio of 3 percent implies that the debt-to-GDP ratio will stabilize at less than 70 percent. Because the debt-to-GDP ratio is projected to rise to about 65 percent in a few years, such a target implies that the debt-to-GDP ratio will change little once the economy has recovered from the current recession. A debt-to-GDP ratio of around two-thirds is comfortably within the range of historical and international experience. It represents substantial fiscal discipline relative to the trajectory the Administration inherited. Stabilizing the ratio rather than continuing on a path where it is continually growing is imperative, and stabilizing it at around its post-crisis level has considerable benefits and is a natural focal point.

Reaching the Fiscal Target

Bringing the primary budget into balance and keeping it there will not be easy. Noninterest spending outstrips tax revenues by a large margin in the budget inherited by the Administration. More importantly, the trajectory of policy implied that spending would continue to exceed revenues even after the economy had recovered and that the deficit would rise steadily for decades to come. The economic developments and policy decisions that put fiscal policy on that course took place over many years. Thus, moving policy back onto a sound path will not happen all at once.

General Principles

In broad terms, the right way to tackle the long-run fiscal problem is not through a sharp, immediate fiscal contraction, but through policies that steadily address the underlying drivers of deficits over time. Large spending cuts or tax increases are exactly the wrong medicine for an economy with high unemployment and considerable unused capacity: just as fiscal stimulus raises income and employment in such an environment, mistimed attempts at fiscal discipline have the opposite effects. Any short-run fiscal contraction can best be tolerated at a time when the Federal Reserve is no longer constrained by the zero bound on nominal interest rates, and so has the tools to counteract any contractionary macroeconomic impacts.

The dangers of a large immediate contraction are powerfully illustrated by America's experience in the Great Depression. In 1937, after four years of very rapid growth but with the economy still far from fully recovered, both fiscal and monetary policy turned sharply contractionary: the veterans' bonus program of the previous year was discontinued, Social Security taxes were collected for the first time, and the Federal Reserve doubled reserve requirements. The consequences of this premature policy tightening were devastating: real GDP fell by 3 percent in 1938, unemployment spiked from 14 percent to 19 percent, and the strong recovery was cut short.

The impact of actions taken today to gradually bring the long-run sources of the deficit problem under control would be very different. Such policies do not involve a sharp short-run contraction that could derail a nascent recovery. Because the effects cumulate over time, however, they can have a large effect on the long-term fiscal outlook.

Policies that provide gradual but permanent and growing deficit reduction have another potential advantage. By improving the outlook for the long-term performance of the economy, they can improve business and consumer confidence today. As a result, deficit-improving policies whose effects are felt mainly in the future can actually boost the economy in the short run. There is considerable evidence that such "expansionary fiscal contractions" are not just a theoretical possibility (see, for example, Giavazzi and Pagano 1990; Alesina and Perotti 1997; Romer and Romer forthcoming).

In keeping with these general considerations, the Administration is taking actions in three important areas that will have a material impact on the deficit in the medium and long terms.

Comprehensive Health Care Reform

The first and single most important step toward improving the country's long-run fiscal prospects is the enactment of comprehensive health care reform that will slow the growth rate of costs. Beyond the obvious importance for Americans' well-being and economic security, the health reform legislation being considered by Congress would save money. The rapid growth of health care costs is a central source of the country's fiscal difficulties. CBO has estimated that both the bill passed by the House in November 2009 and the bill passed by the Senate in December 2009 would significantly reduce the deficit over the next decade (Congressional Budget Office 2009e, 2009d). But the more important factor for the long-run fiscal situation is that, as discussed in more detail in Chapter 7, the bills contain crucial measures that experts believe will lead to lower growth in costs while expanding access to coverage, increasing affordability, and improving quality. Given the central role of rising health costs in the long-run deficit projections, these measures would therefore lead to substantial improvements in the budget situation over time.

In November 2009, CBO's analysis of the Senate health care bill found that "Medicare spending under the bill would increase at an average annual

rate of roughly 6 percent during the next two decades—well below the roughly 8 percent annual growth rate of the past two decades" (Congressional Budget Office 2009c). In December, the Council of Economic Advisers estimated that the fundamental health care reform in the Senate bill would reduce the annual growth rate of Medicare and Medicaid costs by a full percentage point below what it would otherwise be in the coming decade, and by even more in the following decade (Council of Economic Advisers 2009b). These reductions reflect specific measures directed at identifiable sources of wasteful spending and fraud combined with institutional reforms that will help counter the forces leading to excessive cost growth.

Such a reduction in the growth rate of health care costs would have a more profound effect on the long-run fiscal situation of the country than virtually any other fiscal decision being contemplated today. Even if the slowdown in cost growth held steady at 1 percentage point annually rather than rising in the second decade, it would reduce the budget deficit in 2030 by about 2 percent of GDP relative to what it otherwise would be. In today's terms, this is equivalent to almost \$300 billion per year. Most of these savings reflect the direct impact of lower health care costs on Federal spending. To the extent that health care reform also slows the growth of private sector health insurance costs, which are tax preferred, employees in the private sector will benefit from higher wages and the Treasury from increased revenues; this becomes a second source of budget savings. And these direct savings are magnified by lower interest costs resulting from the reduced debt accumulation in the years preceding 2030 (Council of Economic Advisers 2009a). The need to expand coverage would reduce the overall impact of health care reform on the budget deficit somewhat. However, these costs of expansion would be more than offset even within the coming decade. Thereafter, reform will lower the deficit by increasing amounts over time.

Restoring Balance to the Tax Code

The second major step the Administration is taking to address the long-run fiscal challenge is restoring balance to the tax code that has been lost since 2001. The 2001 and 2003 tax cuts disproportionately favored wealthy taxpayers. According to estimates from the Urban-Brookings Tax Policy Center (2010), in 2010 the 2001 and 2003 tax cuts will increase the after-tax income of the poorest 20 percent of the population by 0.5 percent (about \$51), the middle 20 percent by 2.6 percent (\$1,023), and the top 1 percent by 6.7 percent (\$72,910). About 67 percent of the tax cuts went to the top 20 percent of taxpayers, and 26 percent to the top 1 percent.

These tax cuts for the wealthiest Americans took place when the incomes of ordinary Americans were stagnating and inequality was reaching almost unprecedented levels. In other words, the tax cuts exacerbated the broader trend rather than mitigated it.

The President has consistently maintained that the tax cuts went too far in cutting taxes for people making more than \$250,000 per year and that the country could not afford the tax breaks given to that group over the past eight years. That is why one important plank of his fiscal responsibility framework is to rebalance the tax code, so that it is similar to what existed in the late 1990s for those making more than \$250,000 per year. Specifically, the Administration has proposed letting the marginal tax rates on ordinary income and capital gains for people making more than \$250,000 per year return to the levels they were in 2000. It has also proposed setting the tax rate on dividends for high-income taxpayers to the same 20 percent rate that would apply to capital gains-which is lower than the rate in the 1990s-and letting all other features of the 2001 and 2003 tax cuts expire for these taxpayers. In addition, it has proposed limiting the rate of deductions for high-income taxpayers to 28 percent, so that the wealthy do not obtain proportionately larger benefits from their deductions than other Americans do. None of these changes would take effect until 2011, so they would not affect disposable incomes as the economy recovers in 2010. Nonetheless, they would raise nearly \$1 trillion over the next 10 years and even more over the longer run. Equivalently, they would reduce the budget deficit by more than 0.5 percent of GDP in the medium run and somewhat more over time.

As just discussed, most of these changes would merely bring the tax rates on high-income taxpayers back to their levels in the 1990s. To the extent that some go further, on balance they are more than offset by the fact that some common types of income—dividends, for example—will have rates significantly lower than in the 1990s. Looking at tax policy over U.S. postwar history more broadly shows even more clearly how moderate the proposed changes are. Figure 5-7 shows the top marginal tax rates on ordinary income and capital gains over time and their levels under the Administration's proposals. For ordinary income, a top rate of 39.6 percent, while higher than in the past eight years, is not high compared with the rates that prevailed during most of the past several decades and even during most of the Reagan administration. For capital gains, the 20 percent rate is lower than in many previous periods and is certainly not unusual. And for dividends, the 20 percent rate proposed by the Administration would be lower than under any other modern president save the last.





Note: The top rate on qualified dividends is equal to the top bracket rate until 2003; thereafter, it is equal to the top rate on long-term capital gains. Source: Department of the Treasury, Internal Revenue Service (2009); Department of the Treasury, Office of Tax Analysis (2010).

Statutory marginal tax rates, however, provide only a partial picture of how the progressivity of the tax system has changed over time. The number of tax brackets has declined and the thresholds at which statutory bracket rates apply have changed; different sources of income, such as capital gains and dividends, are now treated differently in the tax code and taxed at lower rates; and exemption amounts and standard deductions have been adjusted. Moreover, the distribution of income across taxpayers and the composition of taxpayers' sources of income have changed significantly over time, making it difficult to disentangle the effects of statutory changes in the tax system from economic changes. To illustrate the impact of historical statutory tax changes in isolation, Figure 5-8 applies the tax rates for each year from 1960 to 2008 to a sample of taxpayers who filed returns in 2005, after adjusting for average wage growth.⁵ The purpose is to show both how current taxpayers

⁵ Average tax rates are calculated for nondependent, nonseparated filers with positive adjusted gross income in tax year 2005. Dollar figures are adjusted to the appropriate tax year using the Social Security Administration national average wage index (Social Security Administration 2009), and the tax due is estimated using the National Bureau of Economic Research's TAXSIM tax model. This tax model incorporates the major tax provisions affecting the vast majority of taxpayers and taxable income, and provides estimates of tax liabilities that closely match the historical distribution of taxes actually paid. However, the tax calculation ignores certain small tax provisions and certain accounting changes that broadened the definition of taxable income over time.

Figure 5-8 Evolution of Average Tax Rates



Notes: Average tax rates calculated each year for a sample of 2005 taxpayers after adjusting for average wage growth. Dollar figures in 2009 dollars. Sources: Department of the Treasury, Internal Revenue Service, Statistics of Income Public Use File 2005; National Bureau of Economic Research TAXSIM (Feenburg and Coutts 1993); CEA calculations.

would have fared under the tax rates that applied historically and how the tax rates that applied to different income groups have changed over time.

This analysis suggests that the effective tax rates that applied to high-income taxpayers reached their lowest levels in at least half a century in 2008. Under the tax laws that applied from 1960 to the mid-1980s, today's taxpayers earning more than \$250,000 would have paid an average of around 30 percent of their income in Federal income and payroll taxes, with modest variations from year to year. Moreover, while the tax rates that applied to these "ordinary" rich have fallen considerably, tax rates for the very rich have declined much more. Figure 5-8 shows that taxpayers whose real incomes put them in the top 0.1 percent of taxpayers today—the one-in-a-thousand taxpayers with incomes above about \$2 million in 2009 dollars—would have paid more than 50 percent of their incomes in taxes in the early 1960s.

Average tax rates on high-income groups fell precipitously in the mid-1980s, with the sharp decline in statutory marginal rates. At the same time, the tax rates that would have applied to today's middle-income taxpayers (the middle 20 percent of taxpayers in 2005, those making between about \$29,500 and \$49,500 per year) increased, on balance, over the last half century. The result is a compression in the tax burdens applied to taxpayers

with different incomes—the difference between the average tax rates on high-income groups and those on middle-class households is narrower than at any other time in modern history. All told, because of legislative changes in the tax code, the after-tax income of the very-high-income group—their disposable income and purchasing power—is more than 50 percent higher than it would have been under historical tax rates and brackets, while that of the middle class is slightly lower.

Under the Administration's proposals, tax rates on taxpayers earning more than \$250,000 would be very close to the levels that prevailed in the 1990s, leaving statutory tax rates on higher-income taxpayers far below the levels that prevailed until the mid-1980s. The rebalancing of the tax code would not affect middle-class taxpayers—except, of course, to the extent that a better fiscal picture enhances medium- and long-term prospects for economic growth.

The need to restore balance is also evident in our corporate tax system, which encourages businesses to move jobs overseas and to transfer profits to tax havens abroad in order to avoid taxes at home. The Administration's plan to reform international tax laws would reduce these incentives.

Balance also requires that the largest and most highly levered financial firms reimburse taxpayers for the extraordinary assistance provided to them through the Troubled Asset Relief Program. The President has proposed a modest Financial Crisis Responsibility Fee to ensure that the cost of the financial rescue is not borne by taxpayers. Moreover, the fee would provide a deterrent against the excessive leverage that helped contribute to the crisis.

Eliminating Wasteful Spending

The third step the Administration is taking to confront the long-term deficit is cutting unnecessary spending. The President pledged to eliminate programs that are not working. Last year, the Administration either proposed or enacted cuts to 121 specific programs; these proposed cuts totaled \$17 billion in the first year and hundreds of billions of dollars over the 10-year budget window. They include billions of dollars in terminations of defense programs such as the F-22 fighter aircraft and the new Presidential helicopter, cuts in subsidies for large, high-income agribusinesses, and more than \$40 billion in savings over the next 10 years from eliminating unnecessary subsidies to financial institutions in the private student loan market.

In its fiscal 2011 budget, the Administration is proposing another important measure for spending restraint: a three-year freeze in all nonsecurity discretionary spending starting in 2011. The freeze would be a tough measure of shared sacrifice. By 2013, it would reduce overall nonsecurity funding by \$30 billion per year relative to current inflation-adjusted funding levels.

The President also strongly supports restoring the pay-as-you-go requirement (PAYGO) that was in place in the 1990s. This law, which requires that lawmakers make the tough choices needed to offset the costs of new nonemergency spending or tax changes, helped move the government budget from deficit to surplus a decade ago. PAYGO is an important tool to force the government to live within its means and move the budget toward fiscal sustainability.

These measures mean that once the temporary rise in government spending necessitated by the economic crisis has ended, spending will be on a lower path than it otherwise would have been. Moreover, both the multiyear freeze and steps to identify additional unnecessary spending each year make the reduction gradual rather than sudden. As a result, the cumulative reduction is substantial, yet there is never a sudden, potentially disruptive drop in spending.

CONCLUSION: THE DISTANCE STILL TO GO

The actions the Administration has taken and is proposing would reduce deficits by more than \$1 trillion over the next 10 years and by even more after that. These actions are significantly bolder steps toward deficit reduction than any taken in decades, and they will face serious opposition by those with vested interests. Even with these actions, however, the primary budget is forecast to remain in deficit in 2015. And the longer-run fiscal problem facing the country still centers on the growth of health care costs and the aging of the population. Thus, barring a substantial and sustained quickening of economic growth above its usual trend rate, further steps will be needed to get the deficit down to the target in the medium and long run.

Regardless of the form they take, these additional steps to reduce the deficit will involve sacrifices by a broad range of groups and significant compromise. Thus, a bipartisan effort will be essential. That is why the President is issuing an executive order creating a bipartisan fiscal commission to report back with a package of measures for additional deficit reduction. The charge to the commission is to propose both medium-term actions to close the gap between noninterest expenditures and tax revenues and additional steps to address the longer-term issues associated with rising health care costs, the aging of the population, and the persistent deficit. The commission's recommendations will form an important foundation on which to base policy decisions moving forward. The Administration understands that addressing the long-run fiscal challenge will be a long and difficult task requiring commitment and shared sacrifice. But the President also believes that Americans deserve for and expect policymakers to deal with the ever-rising deficit. The changes eventually enacted will be central to the long-run preservation of both America's financial strength and the standards of living of ordinary Americans.



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CHAPTER 6

BUILDING A SAFER FINANCIAL SYSTEM

From the ashes of the Great Depression, our leaders built a national system of financial regulation. Before 1933, there was no national regulator for stock and bond markets, no required disclosure by public firms, no national oversight of mutual funds or investment advisors, no insurance for bank depositors, and few restrictions on the activities of banks or other financial institutions. By 1940, landmark legislation had created the Securities and Exchange Commission, the Federal Deposit Insurance Corporation, new and important powers for the Federal Reserve, and disclosure requirements for virtually every major player in financial markets. The pieces of this regulatory structure fit together in a relatively cohesive whole, and the United States enjoyed a long period of relative financial calm. In the 60 years before the Great Depression, our Nation experienced seven episodes of financial panic, in which many banks were forced to shut their windows and declined to redeem deposit accounts. In the nearly 80 years since the Depression, not a single financial crisis has risen to that level.

Although the system of regulation put together during the Depression served us well for many years, warning signs appeared periodically. The savings and loan crisis of the late 1980s and early 1990s showed how banking regulation itself can have unintended consequences. At that time, deregulation coupled with generous deposit insurance combined to create a dangerous pattern of risk-taking that eventually led to a large Federal bailout of the financial system. In 1998, the collapse of Long-Term Capital Management highlighted gaps in the regulatory structure and induced the Federal Reserve Bank of New York to organize an unprecedented private rescue of an unregulated hedge fund. In 2001, the collapse of Enron laid bare the complexity of the financial operations at seemingly nonfinancial corporations and posed new challenges for accountants, policymakers, and analysts. Regulatory changes in the past 30 years responded to the specific weaknesses demonstrated by these crises, but these changes were incremental and lacked a strategic plan. Throughout this period, the architecture created after the Great Depression was becoming increasingly inadequate to handle ongoing financial innovation. It was in this vacuum that financial innovation accelerated during the first decade of the 21st century.

The weaknesses in our outdated regulatory system nearly drove our economy into a second Great Depression. After the bankruptcy of Lehman Brothers in September 2008, credit markets froze and the Federal Government was forced to embark on increasingly aggressive intervention in financial markets. But as bad as the situation was, it could have been much worse. Courage and creativity during the depths of the crisis, and forceful stewardship by the Administration in the aftermath, have enabled our Nation to escape a second Great Depression. Chapter 2 of this report discusses the major elements of the Administration's recovery plan. This chapter focuses on the long-term changes necessary to prevent future crises.

WHAT IS FINANCIAL INTERMEDIATION?

Suppose that the world woke up tomorrow to find all the banks gone, along with insurance companies, investment banks, mutual funds, and all the other institutions where ordinary people put their savings. What would happen? In the short run, people could keep their savings in mattresses and piggy banks, and the only apparent losses would be the forgone interest and dividends. But with no easy way to get the savings from piggy banks into productive investment, the economy would face bigger problems very quickly. Entrepreneurs with ideas would find it difficult to get capital. Large companies in need of money to restructure their operations would have no way to borrow against their future earnings. Young families would have no way to buy a house until they had personally saved enough to afford the whole thing. Our system of financial intermediation makes possible all those activities, and the infrastructure to perform that function is necessarily complex and costly.

The Economics of Financial Intermediation

Figure 6-1 is a simplified diagram of the main function of financial intermediation: transforming savings into investment. The ultimate source of funds is shown on the left: individuals and institutions that have the final claim on wealth and wish to save some of it for the future. The ultimate use of funds is shown on the right: the productive activities that need funds for investment. The middle of the diagram can be classified as "financial intermediation." Financial intermediation uses either markets (like the stock market) or institutions (like a bank) to channel savings into investment.

In each of these cases, financial intermediaries provide three important services: information production, liquidity transformation, and diversification. The paragraphs that follow use a concrete investment example to explain these services and define the terms used in the figure.



Suppose that an entrepreneur has an idea for a new company (right side of figure) to develop a new cancer treatment. The science behind this business is specialized and complicated. He could directly approach a wealthy individual with savings (left side of figure) and ask for an investment in his company. The potential investor would immediately face two difficult problems. The first is that she does not know the quality of the entrepreneur's idea. The entrepreneur is likely to know much more about the science than does the potential investor. Maybe the entrepreneur has already asked more than 100 potential investors and been turned down by all of them. Maybe he knows that the idea has little chance of commercial success but wants to try anyway for humanitarian reasons. The investor knows none of these things and cannot learn about them without putting in real effort. In this case, there would be asymmetric information between the investor and the entrepreneur at the time of the potential investment: economists call this a problem of adverse selection.

The second problem faced by the investor is that, after she makes the investment, she needs some way to monitor the entrepreneur and make sure he is using the money in the most efficient way. Perhaps the entrepreneur

will decide to use the money for some other business or research purpose. How will the investor know? Even worse, what is to prevent the entrepreneur from using the funds for his personal benefit or taking the money without putting in any effort? In this case, there would be additional asymmetric information introduced after the investment was made: economists call this a problem of moral hazard.

To solve these adverse selection and moral hazard problems, the investor will need to expend some resources. She will need to study the technology, evaluate its chances for scientific and commercial success, and then carefully watch over the entrepreneur after the investment is made. These activities are difficult and costly, and there is no reason to believe that a typical source of funds (whose main qualification is that she has money to invest) would also be the best person to solve these problems. One important service of financial intermediation is to efficiently solve the adverse selection and moral hazard problems that come with the transformation of savings into investment. This chapter refers to this service as information production.

The second main service of financial intermediation is liquidity transformation. Consider how long it takes to develop a cancer treatment. In the United States, all new drug treatments must pass through a complex regulatory review stretched over many years. Even if a drug is eventually approved, the path to commercial success can take many more years. Most investors do not want to wait that long to see any return on their money. Individual investors have uncertain liquidity needs—jobs can be lost, family members can get sick—and even institutional investors are subject to performance evaluation over short periods. Overall, investment projects tend to have long production times, while investment sources prefer to have easy access to their money. Somebody, somewhere, must be willing to absorb the liquidity needs of the economy. In practice, these needs are provided by liquidity transformation: financial institutions and markets transform longterm (illiquid) investment projects into short-term (liquid) claims.

Liquidity transformation is also important for another, more worrisome, reason: it is the main source of the fragility that can lead to a financial crisis. Because most intermediaries have illiquid assets and liquid liabilities, any broad-based attempt by creditors to call liabilities at the same time creates an impossible situation for the intermediary. The classic example is a bank run, where holders of deposits (liquid liabilities) all "run" at the same time to withdraw their funds, leaving banks unable to sell the illiquid business loans and mortgages quickly enough to meet these demands. The same process can occur in a wide variety of nonbank institutions, as is discussed at length later in this chapter. The third main service of financial intermediation is diversification. A single investment project can be very risky. In the case of the drug company, no investor would want her entire net worth riding on the success of just one technological project. Individual investors can minimize their risk by purchasing a diversified portfolio of investments. If, for example, an investor could pay 1 percent of the costs for 100 different drug-development projects, then her overall portfolio risk would be greatly reduced. Further diversification is achieved by dedicating only a small share of a portfolio to any given industry or country. Such diversification is a main service of most financial institutions, which take funds from many small sources and then invest across a wide variety of projects.

Types of Financial Intermediaries

Figure 6-2 plots nominal gross domestic product (GDP) in the United States against the total assets in the financial sector and a long list of institutional types, including banks, securities firms, mutual funds, money-market funds, mortgage pools, asset-backed-securities (ABS) issuers, insurance companies, and pension funds. Figure 6-3 plots the same set of intermediaries, this time as a percentage of the total assets held by the entire financial



Figure 6-2 Financial Sector Assets

Sources: Federal Reserve Board, Flow of Funds; Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.5.

Figure 6-3 Share of Financial Sector Assets by Type



Source: Federal Reserve Board, Flow of Funds.

sector. All of these financial data are from the Federal Reserve's Flow of Funds.

These figures show several important trends. First, assets in the financial sector have grown much faster than GDP: from 1952 to 2009, nominal GDP grew by 4,000 percent and financial sector assets grew by 16,000 percent. This trend is important to remember in considering the regulation of finance. It would be helpful to know if the ratio of financial assets to GDP is "too big" or "too small," but no good evidence permits such a conclusion. Furthermore, modern developments in the financial system have allowed each dollar of underlying assets to multiply many times across an increasing chain of financial intermediation, so that any measurement of gross assets (as in Figure 6-2) is misleading as a measure of the "importance" of the financial sector. The concept of increasing intermediation chains is discussed later for specific institutional types.

A second important trend is that the assets held by banks grew at approximately the same rate as GDP. Nevertheless, because the overall size of the financial sector has increased, the percentage of financial sector assets held by banks has fallen over time. Third, Figure 6-3 shows the rising share of assets held by mutual funds, government sponsored enterprises (GSEs) and federally related mortgage pools, and issuers of asset-backed securities. Some of this growth can be attributed to the lengthening of the financial intermediation chain, as pension funds delegate asset management to mutual funds, banks sell mortgages to mortgage pools, and money-market funds purchase securities from these pools.

Three long-standing institutional types are banks, securities firms, and insurance companies. Banks, including commercial banks, bank holding companies, savings institutions (thrifts), and credit unions, are still the largest component of the financial sector, with \$16.5 trillion in assets as of June 2009. Although bank assets represent 26.7 percent of the financial sector, their share has fallen precipitously since 1952, when it was 53.2 percent. Securities firms, also known as investment banks or broker-dealers, had \$2.0 trillion in assets, comprising 3.2 percent of the sector in June 2009. This percentage was down considerably from an average of 5.1 percent in 2007, because most of the largest securities firms went bankrupt, were acquired by banks, or formally converted to banks during the crisis. Insurance companies have \$5.9 trillion in assets, comprising 9.5 percent of the sector as of June 2009.

Mutual funds and pension funds are a second layer of intermediation, often standing in between investors and another institution or market. Mutual funds had \$9.7 trillion in assets, comprising 15.7 percent of the sector, in June 2009, up from only 1.6 percent in 1952 and 3.1 percent in 1980. Mutual funds take money from retail investors and invest in public securities. An important subgroup of mutual funds are money-market funds (MMFs), which are broken out separately in these figures and in the underlying Federal Reserve data. In 1990, MMFs held less than \$500 billion in assets; by June 2009, their total assets were \$3.6 trillion, comprising 5.8 percent of total financial assets. MMFs invest only in relatively safe, short-term assets. Pension funds are a large and growing share of the sector, with assets of \$8.3 trillion making up 13.5 percent of total financial assets in June 2009. Many pension assets are reinvested in mutual funds, so they show up twice in the overall totals. Thus, some of the growth in overall sector assets is driven by this extra step of intermediation.

The next category in Figure 6-2 is GSEs and federally related mortgage pools, with \$8.4 trillion in assets in June 2009. Beginning in the 1930s, various nonbank sources emerged to buy mortgages on the secondary market. By the end of the 1970s, federally related mortgage pools—which include those established by GSEs known as Fannie Mae and Freddie Mac had almost \$100 billion in assets. The growth of GSEs added an extra layer to the financial intermediation of mortgages. Here, the bank provides a loan to a borrower but then resells this loan to a GSE. The bank may hold debt securities issued by the GSE, and the GSE creates a pool that holds the mortgage.

In addition to those created by GSEs, private mortgage pools, focusing on "subprime" borrowers, have grown substantially in the past 10 years. These private mortgage pools issue securities backed by the mortgages; these securities, known as mortgage-backed securities (MBSs), are purchased and held by mutual funds or other financial intermediaries. They are one type of an asset-backed security managed by an ABS issuer. ABS issuers do not confine themselves to mortgages; they also pool and securitize auto loans, student loans, credit card debt, and many other types of debt. Twenty years ago, few ABS issuers existed, but by June 2009 they held \$3.8 trillion in assets and comprised 6.2 percent of total financial sector assets.

The remaining categories in Figures 6-2 and 6-3 are the monetary authority (the Federal Reserve) and "other." As discussed in Chapter 2, the assets of the monetary authority increased rapidly during the crisis, but the increase is expected to be reversed as the Federal Reserve exits from its emergency programs and begins reducing the large stock of long-term securities it had purchased. The "other" category includes special purpose vehicles created to manage the emergency lending programs and various other minor groups of intermediaries.

Hedge funds are an increasingly important financial intermediary, but they are not included in Figures 6-2 and 6-3. Because of a lack of data on domestic hedge funds, the Federal Reserve classifies such funds as part of the household sector and computes the assets of this sector as a residual after everything else is added together and subtracted from total assets. The Federal Reserve is unable to get a clean number for hedge funds because they are largely unregulated private investment pools that are not required to report their holdings to any official source. Unofficial sources estimate the amount of assets held by hedge funds to have been \$1.7 trillion in 2008, but in the absence of regulatory oversight, this estimate is less reliable than the other totals shown in Figure 6-2 (Hedge Fund Research 2009).

The Regulation of Financial Intermediation in the United States

Private institutions and markets should clearly play the central role in financial intermediation. But government also has a role. Economists generally favor government regulation of markets that exhibit a market failure of some kind. This chapter has already discussed two types of market failure: adverse selection and moral hazard. Both can be classified as special cases of asymmetric information, where different parties to a contract do not have the same information. The financial intermediation system alleviates asymmetric-information problems between savers and investors, but information can also be asymmetric between buyers and sellers of financial services. Just as physicians almost always know more than patients about medicine, and lawyers more than their clients about law, banks and financial advisors should be expected to know more than their investors about investment opportunities. For this reason, there will always be a consumer protection basis for some government regulation of financial services.

Consumer protection was an important motivation for several important pieces of Depression-era legislation. The first two, the Securities Act of 1933 and the Securities Exchange Act of 1934, set forth a long list of requirements for issuing and trading public securities. The list included many types of public disclosure that persist to this day, including information about executive compensation, stockholdings, balance sheets, and income statements. The 1934 Act also created the Securities and Exchange Commission (SEC), the agency responsible for enforcing the new rules. These securities laws were the first Federal laws to regulate organized financial exchanges.

With regulated markets came the growth of intermediaries to service them. These intermediaries gained Federal oversight with the Investment Advisers Act of 1940 (for publicly available investment advisory services) and the Investment Company Act of 1940 (for mutual funds). In total, these four pieces of legislation enacted between 1933 and 1940 represented a huge change in the regulatory structure of financial markets and in most cases can be considered attempts to lessen adverse selection and moral hazard problems between investors, intermediaries, and investments.

Depression-era laws also strengthened the national system of bank regulation, adding new elements to a long pre-Depression history of Federal regulation. Beginning with the National Bank Act of 1864, federally chartered banks have been examined regularly for capital adequacy. Statechartered banks received similar examinations from both state and Federal banking agencies. Such examinations are a form of microprudential regulation, with a focus on the safety and soundness of individual institutions in isolation and with the aim of reducing asymmetric-information problems. Few bank depositors have the time or incentive to conduct detailed reviews of their banks. When regulators conduct periodic reviews and publicize the results, they create a public good of information about the safety and soundness of individual banks. Furthermore, examinations and regulations can constrain excessive risk-taking by federally insured institutions, a moral hazard problem faced by the government, rather than by bank depositors, in part because of deposit insurance.

The microprudential approach, however, is not well suited to handle risks to the entire financial system. The next section of this chapter discusses in detail the spread of crises. For now, it is sufficient to think of a crisis as an occasion when there is a sudden increase in the asymmetric-information problem in the financial system, as can happen after a large economic shock or the failure of a major bank. The microprudential system of bank examination can alleviate asymmetric-information problems in normal times, but because the government relies on careful periodic examinations, staggered across banks, it does not have the capacity to examine all banks quickly after a shock or to evaluate the risk that a single bank failure will have on other institutions. Faced with a large economic shock, bank customers can rationally fear for the safety of their deposits. Since the upside of leaving one's money at a bank in such a situation is relatively small, but the downside losing all one's money—is large, it is individually rational for depositors to withdraw their money when uncertainty increases. What is rational for individual depositors, however, puts an impossible strain on the whole banking system, since the liquidity transformation performed by banks cannot be quickly reversed; the illiquid loans and mortgages held by banks cannot immediately be returned to all depositors as cash.

One partial solution to the liquidity problem during banking crises is to create a "lender of last resort." This lender stands ready to make cash loans to banks that are backed by illiquid collateral: essentially, this lender serves as a new layer of liquidity transformation above the banks. This form of macroprudential policy was the traditional solution to banking crises in Europe in the 19th century but did not come to the United States until the Federal Reserve Act of 1913 created the first version of the Federal Reserve System as a lender of last resort.

But a lender of last resort, by itself, is unable to prevent bank runs across the entire system. Even illiquid collateral must be given a value by the lender-by law the Federal Reserve can only make secured loans-and if the entire system is failing at the same time, there may be no way for a central bank to estimate reasonable valuations quickly enough. A lender of last resort is designed to solve liquidity problems, not solvency problems, but in a severe crisis, these two problems can become inextricably tied together. (This problem arose during the current crisis, when Lehman Brothers was unable to provide enough collateral to qualify for sufficient Federal Reserve loans.) During the Great Depression, some 9,000 bank failures occurred between 1930 and 1933, well above the number of failures in earlier panics. Shortly after taking office in 1933, President Franklin Roosevelt gave his first "fireside chat" and implied a government guarantee for all bank deposits. The Banking Act of 1933 made the guarantee explicit by creating deposit insurance through a new agency, the Federal Deposit Insurance Corporation (FDIC). In the 75 years that followed, the United States averaged fewer than 30 commercial bank failures a year. The FDIC is a crucial piece of macroprudential regulation in that it provides a guarantee to all insured banks, regardless of the condition of any specific bank. Within the account limits

of FDIC insurance, no depositor needs to worry about the soundness of her bank; thus, the FDIC guarantee eliminates most asymmetric-information problems that could lead to bank runs.

A constant tension in macroprudential regulation is that the attempt to prevent bank runs can itself lead to new forms of moral hazard. Because they have deposit insurance, small depositors no longer need to monitor the safety of their banks; therefore, unless regulators are watching carefully, the banks may take excessive risks with no fear of losing deposits. This latent problem was exacerbated during the 1980s by deregulation in the thrift industry. Following this deregulation, thrift institutions began aggressively seeking out deposits by paying ever-higher interest rates and then intermediating these deposits into speculative investments. This strategy allowed thrifts to use FDIC insurance to gamble for solvency, and when the investments failed, a wave of thrift failures swept through Texas, the Midwest, and New England in the 1980s and early 1990s. This wave, now known as the savings and loan crisis, represented the first significant increase in bank failures since the Great Depression. The failures, it should be noted, were not caused by bank runs-they were not driven by a liquidity mismatch between deposits and loans. Deposit insurance remained intact, and no insured deposit lost any money. Rather, the bank failures were caused by the insolvency of the banks, as they gambled and lost with (effectively) government money. Nevertheless, even in the absence of bank runs, many economists believe that the savings and loan crisis contributed to the "credit crunch" and recession of 1990-91.

There has been no fundamental restructuring of the Nation's financial regulatory system since the Great Depression. All changes since that time have been piecemeal responses to specific events, added individually onto the original superstructure. That regulatory stasis has led to four major gaps in the current system. First, many of the newer financial institutionshedge funds, mortgage pools, asset-backed-securities issuers-have grown rapidly while being subject to only minimal Federal regulation. These new institutions suffer from many of the asymmetric-information problems that banks faced before the Depression-era reforms. Second, overlapping jurisdictions and mandates have led to regulatory competition between agencies and regulatory "shopping" by institutions. Such competition is yet another form of moral hazard-now centered on the regulators themselves. Third, regulators operate separately in functional silos of banking, insurance, and securities. Many of the largest institutions perform all these activities at once but are not subject to robust consolidated regulation and supervision. And finally, most of the regulatory system is microprudential and focused on the safety and soundness of specific institutions. No regulator is tasked with taking a macroprudential approach, which attempts to monitor, recognize, and alleviate risks to the financial system as a whole. Such macroprudential regulation would require explicit rules for the orderly resolution of all large financial institutions, not just the banks currently resolved by the FDIC. In short, because of these four gaps, the failure of one institution imposes negative externalities on others, and there is no coherent system for fixing these externalities.

Of the four gaps, the last requires the most urgent reform and the biggest change in regulatory thinking. The financial crisis made clear how rapidly failures can spread across institutions and affect the whole system. A primary challenge of macroprudential regulation is to recognize such "contagion" and categorize and counteract all the different ways it can manifest. The next section of the chapter turns to this task.

FINANCIAL CRISES:

THE COLLAPSE OF FINANCIAL INTERMEDIATION

A financial crisis is a collapse of financial intermediation. In a crisis, the ability of the financial system to move savings into investment is severely impaired. In an extreme crisis, banks close their doors, financial markets shut down, businesses are unable to finance their operations, and households are challenged to find credit. A financial crisis can be triggered by events that are completely external to the financial system. If a large macroeconomic shock hits all banks at the same time, regulators can do little to control the damage. Some crises, however, are triggered or exacerbated by shocks to a small group of institutions that then spread to others. This spread, known as contagion, is a form of negative externality imposed by distressed institutions. The recent financial crisis involved three different types of contagion, referred to in this chapter as confidence contagion, counterparty contagion, and coordination contagion. A macroprudential regulator must have the tools to handle all three.

Confidence Contagion

The classic example of a "run on the bank" is shown in Figure 6-4. Banks are mostly financed by deposits, which are then lent out as loans to businesses and mortgages for homeowners. A bank's balance sheet has a maturity mismatch between assets (the loans) and liabilities (the deposits): the loans are long term, with payments coming over many years, while the deposits are short term and can be withdrawn at any time. The liquidity transformation service of the bank works in ordinary times but breaks down if all the depositors ask for their money back at the same time.

Figure 6-4 Confidence Contagion



Suppose, for example, a depositor in Bank A hears a rumor that other depositors in Bank A are withdrawing their funds. He does not know the explanation. It might be that Bank A has a problem with solvency, that a fair accounting would show that its liabilities exceed its assets. Typically, a depositor does not have the necessary information to form an accurate judgment about solvency. So what does he do? The safe thing, in the absence of deposit insurance, is to go to the bank and take out his money. Perhaps these other depositors know something that he does not. If he waits too long, the bank will be out of cash and unable to redeem his account.

It is easy to see how the run at Bank A could lead to runs at other banks. The public spectacle of long lines of depositors waiting outside a bank is enough to make other banks' customers nervous—the negative externality on confidence. Perhaps Bank A had many real estate loans in some trouble area, and Bank B has an unknown number of similar loans. The issue here is that bank depositors do not want to take the risk of leaving their money in a failing bank. Unlike stock market investors, who expect to take risks and face complicated problems in forecasting the future path of company profits, bank depositors want their money to be safe and do not want to spend an enormous amount of time making sure that it is. The information production service of banks cannot quickly be replaced if the bank is in trouble. Banks, therefore, have historically been subject to runs, and the runs have spread quickly across banks, a phenomenon called confidence contagion. Classic bank runs were commonplace in the United States before (and during) the Great Depression. In the post-FDIC world, bank failure has become a problem of insolvency, not illiquidity. FDIC insurance works almost perfectly up to a current limit of \$250,000 for each account. What happens above this limit? What of the many corporations and investors who want a safe place to put their million-dollar and billion-dollar deposits? In the absence of insured accounts at this level, they choose such alternatives as money-market funds, collateralized short-term loans to financial institutions, and complex derivative transactions. In each of these cases, the effort to find safe, liquid investments can lead to situations that look identical to a classic bank run, but with different players. When a single investment bank (Bear Stearns in March 2008) or money-market fund (the Reserve Fund in September 2008) gets into solvency trouble, confidence can quickly erode at similar institutions. Macroprudential regulation must stop this confidence contagion or, at least, contain it to one segment of the financial system.

Counterparty Contagion

Counterparty contagion is illustrated in Figure 6-5. Here, Bank A owes \$1 billion to Bank B, which owes \$1 billion to Bank C, with this same debt going through the alphabet to Bank E. When Bank A goes out of business owing money to Bank B, then Bank B cannot pay Bank C. To the extent that Bank C lacks the information or the ability to insure against the failure of Bank A, that failure imposes an externality. One failure could lead to defaults all the way to Bank E. Such contagion seems particularly wasteful, because most of it could be averted by getting rid of all the steps in the middle: the only banks here with net exposure are Banks A and E; once the middle is eliminated, all that is left is a \$1 billion debt of A to E.

Derivatives are an important modern vehicle for counterparty chains. A derivative is any security whose value is based completely on the value of one or more reference assets, rates, or indexes. For example, a simple derivative could be constructed as the promise by Party B to pay \$1 to Party A if and only if the stock price of Company XYZ is above \$200 a share on December 31, 2012. This contract is a derivative because its payoff is completely "derived" from the value of XYZ stock; the contract has no meaning that is independent of XYZ stock. Things begin to grow more complicated when Party A and Party B begin to make offsetting trades with other parties, creating counterparty exposures among the group of market participants. For example, Party B, having taken on the risk that XYZ will climb above \$200 a share, may at some point decide to offset this risk by purchasing a similar option from Party C. Eventually, Party C makes the reverse trade with Party D, and soon the chain can extend across the alphabet.



Coordination Contagion

Coordination contagion is illustrated in Figure 6-6. Here, Bank A owns many assets of Type I and Type II; Bank B owns many assets of Type II and Type III; and Bank C owns many assets of Type III and Type IV. Suppose that a negative shock to the value of Type I assets threatens the solvency of Bank A. In an effort to remain in business, Bank A begins to liquidate its portfolio by selling Type I and Type II assets. As is typical for banks, these underlying assets are relatively illiquid, so it is difficult for Bank A to sell substantial quantities without depressing the price of the assets. As the prices of Type II assets fall, Bank B is in a quandary. The market value of its assets is falling, and the regulators of Bank B may insist that it reduce its leverage or raise more capital. Bank B may then sell Type II and Type III assets to achieve this goal. Again, it is easy to see how this process could flow through the alphabet. Here the process is called coordination contagion because it is driven by the coordinated holdings of the banks, rather than by confidence of investors (in any particular bank) or the chains of contractual relationships (among banks) that lead to counterparty contagion. The externality occurs here only because the underlying assets are illiquid. With this illiquidity, the transactions of each player can significantly affect the price, and the forced sale by one bank harms all the others that own these assets.

Coordination contagion is exacerbated if failing institutions are forced to liquidate their positions quickly. In the fall of 2008, many large financial institutions had significant holdings of subprime housing and other

Figure 6-6 Coordination Contagion



structured instruments on their balance sheets. With capital scarce and uncertainty about the value of these assets high, distressed institutions faced pressure to sell these assets. If the most desperate institutions sold first, then the depressed prices of these sales would then place pressure on other institutions to mark down the values of these assets on their balance sheets, further exacerbating the problem. One partial solution to this coordination contagion would be to allow the most distressed institutions to exit their positions slowly, so as not to further destabilize the illiquid market for these assets. Such slow exits can be enabled by taking failing institutions into a form of receivership or conservatorship, an enhanced "resolution authority" for nonbank financial institutions that would be analogous to the FDIC process for failing depository institutions.

PREVENTING FUTURE CRISES: REGULATORY REFORM

The Financial Stability Plan and other policies to address the current crisis described in Chapter 2 have had a positive short-run effect on the financial system. To prevent future crises and achieve long-term stability, however, it will be necessary to fill the gaps in the current regulatory system. The Administration is working closely with Congress to build a regulatory system for the 21st century.¹ The plan for regulatory reform has five key parts, each covering a different aspect of the financial intermediation system illustrated by Figure 6-1. The parts of the plan are discussed below, with references back to the relevant sections of Figure 6-1.

Promote Robust Supervision and Regulation of Financial Firms

If the recent financial crisis has proven anything, it is that we have outgrown our Depression-era financial regulatory system. Although most of the largest, most interconnected, and most highly leveraged financial firms were subject to some form of supervision and regulation before the crisis, those forms of oversight proved inadequate and inconsistent. The financial institutions at the top of Figure 6-1 are a varied group that is no longer dominated by traditional commercial banks. A modern regulatory system must account for the entire group.

Three primary weaknesses inherent in the current system led to the crisis. First, capital and liquidity requirements for institutions were simply not high enough. Regulation failed because firms were not required to hold sufficient capital to cover trading assets, high-risk loans, and off-balance-sheet commitments, or to hold increased capital during good times in preparation for bad times. Nor were firms required to plan for liquidity shortages.

Second, various agencies shared responsibility for supervising the consolidated operations of large financial firms. This fragmentation of supervisory responsibility, in addition to loopholes in the legal definition of a "bank," made it possible for owners of banks and other insured depository institutions to shop for the most lenient regulator.

Finally, other types of financial institutions were subject to insufficient government oversight. Money-market funds were vulnerable to runs, but unlike their banking cousins, they lacked both regulators and insurers. Major investment banks were subject to a regulatory regime through the SEC that is now moot, since large independent investment banks no longer exist. Meanwhile, hedge funds and other private pools of capital operated completely outside the existing supervisory framework.

In combination, these three sets of weaknesses increased the likelihood that some firms would fail and made it less likely that problems at these firms would be detected early. This was a breakdown in the supervision under current authority over individual institutions. But glaring problems were also created by a lack of focus on large, interconnected, and highly leveraged institutions that could inflict harm both on the financial system and on the

¹ This section is based heavily on the Administration's white paper on financial reform (Department of the Treasury 2009).

economy if they failed. No regulators were tasked with responsibility for contagion, whether from confidence, counterparties, or coordination.

To solve these problems and ensure the long-term health of the financial system, the government must create a new foundation for the regulation of financial institutions. To do that, the Administration will promote more robust and consistent regulatory standards for all financial institutions. Not only should similar financial institutions face the same supervisory and regulatory standards, but the system can contain no gaps, loopholes, or opportunities for arbitrage.

The Administration has also proposed creating a Financial Services Oversight Council (FSOC). This body, chaired by the Secretary of the Treasury, would facilitate coordination of policy and resolution of disputes and identify emerging risks and gaps in supervision in firms and market activities. The heads of the principal Federal financial regulators would be members of the Council, which would benefit from a permanent staff at the Department of the Treasury.

Finally, the Federal Reserve's current supervisory authority for bank holding companies must evolve along with the financial system. Regardless of whether they own an insured depository institution, all large, interconnected firms whose failure may threaten the stability of the entire system should be subject to consolidated supervision by the Federal Reserve. To that end, the Administration proposes creating a single point of accountability for the consolidated supervision of all companies that own a bank. These firms should not be allowed or able to escape oversight of their risky activities by manipulating their legal structures.

Taken together, these proposals will help reduce the weaknesses in the financial regulatory system by more stringently regulating the largest, most interconnected, and most highly leveraged institutions. In effect, the Administration's proposals would operate on the simple principle that firms that could pose higher risks should be subject to higher standards. Furthermore, both the Federal Reserve and the FSOC would operate through a macroprudential prism and be wary of contagion in all its forms.

Establish Comprehensive Regulation of Financial Markets

The financial crisis followed a long and remarkable period of growth and innovation in the Nation's financial markets. These new financial markets, found in the bottom part of Figure 6-1, still rely on regulation put together in response to the Great Depression, when stocks and bonds were the main financial products for which there were significant markets. But over time, new financial instruments allowed credit risks to be spread widely, enabling investors to diversify their portfolios in new ways and
allowing banks to shed exposures that once would have had to remain on their balance sheets. As discussed earlier, securitization allowed mortgages and other loans to be aggregated with similar loans, segmented, and sold in tranches to a large and diverse pool of new investors with varied risk preferences. Credit derivatives created a way for banks to transfer much of their credit exposure to third parties without the outright selling of the underlying assets. At the time, this innovation in the distribution of risk was perceived to increase financial stability, promote efficiency, and contribute to a better allocation of resources.

Far from transparently distributing risk, however, the innovations often resulted in opaque and complex risk concentrations. Furthermore, the innovations arose too rapidly for the market's infrastructure, which consists of payment, clearing, and settlement systems, to accommodate them, and for the Nation's financial supervisors to keep up with them. Furthermore, many individual financial institutions' risk management systems failed to keep up. The result was a disastrous buildup of risk in the over-the-counter (OTC) derivatives markets. In the run-up to the crisis, many believed these markets would distribute risk to those most able to bear it. Instead, these markets became a major source of counterparty contagion during the crisis.

In response to these problems, the Administration proposes creating a more coherent and coordinated regulatory framework for the markets for OTC derivatives and asset-backed securities. The Administration's proposal, which aims to improve both transparency and market discipline, would impose record-keeping and reporting requirements on all OTC derivatives. The Administration further proposes strengthening the prudential regulation of all dealers in the OTC derivative markets and requiring all standardized OTC derivative transactions to be executed in regulated and transparent venues and cleared through regulated central counterparties. The primary goal of these regulatory changes is to reduce the possibility of the sort of counterparty contagion seen in the recent crisis. Moving activity to a centralized clearinghouse can effectively break the chain of failures by netting out middleman parties. A successful clearinghouse can reduce the counterparty contagion illustrated in Figure 6-5 to a single debt owned by Bank A to Bank E, thus sparing Banks B, C, and D from the problems.

The Administration has also proposed enhancing the Federal Reserve's authority over market infrastructure to reduce the potential for contagion among financial firms and markets. After all, even a clearinghouse can fail, and regulators must be alert to this danger. Finally, the Administration proposes harmonizing the statutory and regulatory regimes between the futures and securities markets. Although important distinctions exist between the two, many differences in regulation between them are no longer justifiable. In particular, the growth and innovation in derivatives and derivatives markets have highlighted the need to address gaps and inconsistencies in the regulation of these products by the Commodity Futures Trading Commission (CFTC) and the SEC. In October 2009, the SEC and the CFTC issued a joint report identifying major areas necessary to reconcile their regulatory approaches and outlining a series of regulatory and statutory recommendations to narrow or where possible eliminate those differences.

Provide the Government with the Tools It Needs to Manage Financial Crises

During the recent crisis, the financial system was strained by the failure or near-failure of some of the largest and most interconnected financial firms. Thanks to lessons learned from past crises, the current system already has strong procedures for handling bank failure. However, when a bank holding company or other nonbank financial firm is in severe distress, it has only two options: obtain outside capital or file for bankruptcy. In a normal economic climate, these options would be suitable and would pose no consequences for broader financial stability. However, during a crisis, distressed institutions may be hard-pressed to raise sufficient private capital. Thus, if a large, interconnected bank holding company or other nonbank financial firm nears failure during a financial crisis, its only two options are untenable: to obtain emergency funding from the U.S. Government, as in the case of AIG; or to file for bankruptcy, as in the case of Lehman Brothers. Neither option manages the resolution of the firm in a manner that limits damage to the broader economy at minimal cost to the taxpayer.

This situation is unacceptable. A way must be found to address the potential failure of a bank holding company or other nonbank financial firm when the stability of the financial system is at risk. To solve this issue, the Administration proposes creating a new authority modeled on the existing authority of the FDIC. The Administration has also proposed that the Federal Reserve Board receive prior written approval from the Secretary of the Treasury for emergency lending under its "unusual and exigent circumstances" authority to improve accountability in the use of other crisis tools. The goal of these proposals is to allow for an orderly resolution of all large institutions—not just banks—so that the coordination contagion depicted in Figure 6-6 does not again threaten the entire financial system. Taking nonbank financial institutions into receivership or conservatorship would make it possible to sell assets slowly and with minimal disruption to the values of similar assets at otherwise healthy institutions.

Raise International Regulatory Standards and Improve International Cooperation

The system in Figure 6-1 cannot be managed by one country alone, because its interconnections are global. As the recent crisis has illustrated, financial stress can spread quickly and easily across borders. Yet regulation is still set largely in a national context and has failed to effectively adapt. Without consistent supervision and regulation, rational financial institutions will see opportunity in this situation and move their activities to jurisdictions with looser standards. This can create a "race to the bottom" situation.

The United States is addressing this issue by playing a strong leadership role in efforts to coordinate international financial policy through the Group of Twenty (G-20), the G-20's newly established Financial Stability Board, and the Basel Committee on Banking Supervision. The goal is to promote international initiatives compatible with the domestic regulatory reforms described in this report. These efforts have already borne fruit. In September, the G-20 met in Pittsburgh and agreed in principle to this goal. And while those processes are ongoing, significant progress has been made in agreements strengthening prudential requirements, including capital and liquidity standards; expanding the scope of regulation to nonbank financial institutions, hedge funds, and over-the-counter derivatives markets; and reinforcing international cooperation on the supervision of globally active firms.

Protect Consumers and Investors from Financial Abuse

Before the financial crisis, numerous Federal and state regulations protected consumers against fraud and promoted understanding of financial products like credit cards and mortgages. But as abusive practices spread, particularly in the subprime and nontraditional mortgage markets, the Nation's outdated regulatory framework proved inadequate in crucial ways. Although multiple agencies now have authority over consumer protection in financial products, the supervisory framework for enforcing those regulations has significant shortcomings rooted in history. State and Federal banking regulators have a primary mission to promote safe and sound banking practices—placing consumer protection in a subordinate position—while other agencies have a clear mission but limited tools and jurisdiction. In the run-up to the financial crisis, mortgage companies and other firms outside of the purview of bank regulation exploited the lack of clear accountability by selling subprime mortgages that were overly complicated and unsuited to borrowers' particular financial situations. Banks and thrifts eventually followed suit, with disastrous results for consumers and the financial system at large.

In 2009, Congress, the Administration, and numerous financial regulators took significant measures to address some of the most obvious inadequacies in the consumer protection framework. One notable achievement was the Credit Card Accountability, Responsibility, and Disclosure Act, signed into law by the President on May 22, 2009. This Act outlaws some of the most unfair and deceptive practices in the credit card industry. For example, it requires that payments be applied to the balances with the highest interest rate first; bans retroactive increases in interest rates for reasons having nothing to do with the cardholder's record with the credit card; prohibits a variety of gimmicks with due dates and "double-cycle fees"; and requires clearer disclosure and ensures consumer choice.

However, given the weaknesses that the recent financial crisis highlighted, it is clear that the consumer protection system needs comprehensive reform across all markets. For that reason the Administration has proposed creating a single regulatory agency, a Consumer Financial Protection Agency (CFPA), with the authority and accountability to make sure that consumer protection regulations are written fairly and enforced vigorously. The CFPA should reduce gaps in Federal supervision and enforcement, improve coordination with the states, set higher standards for financial intermediaries, and promote consistent regulation of similar products.

CONCLUSION

Our Nation's system of financial intermediation is a powerful engine for economic growth. Productive investment projects are risky, complex to evaluate and monitor, and require long periods of waiting with no returns and illiquid capital. Investors who provide the funds for these projects would be far less willing to do so if they had to absorb all these risks and costs. Bridging the gap between savings and investment requires the efforts of millions of talented professionals collectively performing the services of information production, liquidity transformation, and diversification. In the recent financial crisis this complex system broke down.

To prevent another such crisis from paralyzing our economy, the Administration has embarked on an ambitious plan to modernize the framework of financial regulation. The keystone of the new framework is an emphasis on macroprudential regulation. The regulatory system's past focus on individual institutions served the Nation well for many decades but is now outdated. A modern system that can meet the needs of the 21st century must have the tools to monitor and regulate the interconnections that cause financial crises.

CHAPTER 7

vxc.

REFORMING HEALTH CARE

In recent years, rising health care costs in the United States have imposed tremendous economic burdens on families, employers, and governments at every level. The number of people without health insurance has also risen steadily, with recent estimates from the Census Bureau indicating that more than 46 million were uninsured in 2008.

With the severe recession exacerbating these problems, Congress and the President worked together during the past year to enact several health care policies to cushion the impact of the economic downturn on individuals and families. For example, just two weeks after taking office, the President signed into law an expansion of the Children's Health Insurance Program (CHIP), which will extend health insurance to nearly 4 million low- and middle-income uninsured children by 2013. Additionally, legislation that increased funding for COBRA (Consolidated Omnibus Budget Reconciliation Act) health insurance coverage allowed many working Americans who lost their jobs to receive subsidized health insurance for themselves and their families, helping to reduce the number of uninsured below what it otherwise would have been.

In late 2009, both the House and the Senate passed major health reform bills, bringing the United States closer to comprehensive health insurance reform than ever before. The legislation would expand insurance coverage to more than 30 million Americans, improve the quality of care and the security of insurance coverage for individuals with insurance, and reduce the growth rate of costs in both the private and public sectors. These reforms would improve the health and economic well-being of tens of millions of Americans, allow employers to pay higher wages to their employees and to hire more workers, and reduce the burden of rising health care costs on Federal, state, and local governments.

THE CURRENT STATE OF THE U.S. HEALTH CARE SECTOR

Although health outcomes in the United States have improved steadily in recent decades, the U.S. health care sector is beset by rising spending, declining rates of health insurance coverage, and inefficiencies in the delivery of care. In the United States, as in most other developed countries, advances in medical care have contributed to increases in life expectancy and reductions in infant mortality. Yet the unrelenting rise in health care costs in both the private and public sectors has placed a steadily increasing burden on American families, businesses, and governments at all levels.

Rising Health Spending in the United States

For the past several decades, health care spending in the United States has consistently risen more rapidly than gross domestic product (GDP). Recent projections suggest that total spending in the U.S. health care sector exceeded \$2.5 trillion in 2009, representing 17.6 percent of GDP (Sisko et al. 2009)—approximately twice its share in 1980 and a substantially greater portion of GDP than that of any other member of the Organisation for Economic Co-Operation and Development (OECD). As shown in Figure 7-1, estimates from the Congressional Budget Office (CBO) in June 2009 projected that this trend would continue in the absence of significant health insurance reform. More specifically, CBO estimated that health care spending would account for one-fourth of GDP by 2025 and one-third by 2040 (Congressional Budget Office 2009d).

The steady growth in health care spending has placed an increasingly heavy financial burden on individuals and families, with a steadily growing share of workers' total compensation going to health care costs. According to the most recent data from the U.S. Census Bureau, inflation-adjusted median household income in the United States declined 4.3 percent from 1999 to 2008 (from \$52,587 to \$50,303), and real weekly median earnings for full-time workers increased just 1.8 percent. During that same period, the real average total cost of employer-sponsored health insurance for a family policy rose by more than 69 percent (Kaiser Family Foundation and Health Research and Educational Trust 2009).

Because firms choose to compensate workers with either wages or benefits such as employer-sponsored health insurance, increasing health care costs tend to "crowd out" increases in wages. Therefore, these rapid

Figure 7-1 National Health Expenditures as a Share of GDP



increases in employer-sponsored health insurance premiums have resulted in much lower wage growth for workers.

When considering these divergent trends, it is also important to remember that workers typically pay a significant share of their health insurance premiums out of earnings. According to data from the Kaiser Family Foundation, the average employee share for an employer-sponsored family policy was 27 percent in both 1999 and 2008. In real dollars, the average total family premium increased by \$5,200 during this nine-year period. Thus, the amount paid by the typical worker with employer-sponsored health insurance increased by more than \$1,400 from 1999 to 2008. Subtracting these average employee contributions from median household income in each year gives a rough measure of "post-premium" median household income. By that measure, the decline in household income swells from 4.3 percent to 7.3 percent (that is, post-premium income fell from \$50,566 to \$46,879).

This point is further reinforced when one considers the implications of rapidly rising health care costs for the wage growth of workers in the years ahead. As Figure 7-2 shows, compensation net of health insurance premiums is projected to grow much less rapidly than total compensation, with the growth eventually turning negative by 2037.¹ Put simply, if health care costs continue to increase at the rate that they have in recent years, workers' take-home wages are likely to grow slowly and eventually decline.



Figure 7-2 Total Compensation Including and Excluding Health Insurance

Note: Health insurance premiums include the employee- and employer-paid portions. Sources: Actual data from Department of Labor (Bureau of Labor Statistics); Kaiser Family Foundation and Health Research and Educational Trust (2009); Department of Health and Human Services (Agency for Healthcare Research and Quality, Center for Financing, Access, and Cost Trends), 2008 Medical Expenditure Panel Survey-Insurance Component. Projections based on CEA calculations.

Rising health care spending has placed similar burdens on the 45 million aged and disabled beneficiaries of the Medicare program, whose inflation-adjusted premiums for Medicare Part B coverage—which covers outpatient costs including physician fees—rose 64 percent (from \$1,411 to \$2,314 per couple per year) between 1999 and 2008. During that same period, average inflation-adjusted Social Security benefits for retired workers grew less than 10 percent. Rising health insurance premiums are thus consuming larger shares of workers' total compensation and Medicare recipients' Social Security benefits alike.

¹ The upper curve of Figure 7-2 displays historical annual compensation per worker in the nonfarm business sector in constant 2008 dollars from 1999 through 2009, deflated with the CPI-U-RS. Real compensation per worker is projected using the Administration's forecast from 2009 through 2020 and at a 1.8 percent annual rate in the subsequent years. The lower curve plots historical real annual compensation per person net of average total premiums for employer-sponsored health insurance during the same period. The assumed growth rate of employer-sponsored premiums is 5 percent, which is slightly lower than the average annual rate as reported by the Kaiser Family Foundation during the 1999 to 2009 period.

The corrosive effects of rising health insurance premiums have not been limited to businesses and individuals. Increases in outlays for programs such as Medicare and Medicaid and rising expenditures for uncompensated care caused by increasing numbers of uninsured Americans have also strained the budgets of Federal, state, and local governments. The fraction of Federal spending devoted to health care rose from 11.1 percent in 1980 to 25.2 percent in 2008. In the absence of reform, this trend is projected to continue, resulting in lower spending on other programs, higher taxes, or increases in the Federal deficit.

The upward trend in health care spending has also posed problems for state governments, with spending on the means-tested Medicaid program now the second largest category of outlays in their budgets, just behind elementary and secondary education. Because virtually all state governments must balance their budgets each year, the rapid increases in Medicaid spending have forced lawmakers to decide whether to cut spending in areas such as public safety and education or to increase taxes.

If health care costs continue rising, the consequences for government budgets at the local, state, and Federal level could be dire. And as discussed in Chapter 5, projected increases in the costs of the Medicare and Medicaid programs are a key source of the Federal Government's long-term fiscal challenges.

Market Failures in the Current U.S. Health Care System: Theoretical Background

As described by Nobel Laureate Kenneth Arrow in a seminal 1963 paper, an individual's choice to purchase health insurance is rooted in the economics of risk and uncertainty. Over their lifetimes, people face substantial risks from events that are largely beyond their control. When possible, those who are risk-averse prefer to hedge against these risks by purchasing insurance (Arrow 1963).

Health care is no exception. When people become sick, they face potentially debilitating medical bills and often must stop working and forgo earnings. Moreover, medical expenses are not equally distributed: annual medical costs for most people are relatively small, but some people face ruinously large costs. Although total health care costs for the median respondent in the 2007 Medical Expenditure Panel Survey were less than \$1,100, costs for those at the 90th percentile of the distribution were almost 14 times higher (Department of Health and Human Services 2009). As a result, risk-averse people prefer to trade an uncertain stream of expenses for medical care for the certainty of a regular insurance payment, which buys a policy that pays for the high cost of treatment during illness or injury. Economic theory and common sense suggest that purchasing health insurance to hedge the risk associated with the economic costs of poor health makes people better off.

Health insurance markets, however, do not function perfectly. The economics literature documents four primary impediments: adverse selection, moral hazard, the Samaritan's dilemma, and problems arising from incomplete insurance contracts. In a health insurance market characterized by these and other sources of inefficiency, well-designed government policy has the potential to reduce costs, improve efficiency, and benefit patients by stabilizing risk pools for insurance coverage and providing needed coverage to those who otherwise could not afford it.

Adverse Selection. In the case of adverse selection, buyers and sellers have asymmetric information about the characteristics of market participants. People with larger health risks want to buy more generous insurance, while those with smaller health risks want lower premiums for coverage. Insurers cannot perfectly determine whether a potential purchaser is a large or small health risk.

To understand how adverse selection can harm insurance markets, suppose that a group of individuals is given a choice to buy health insurance or pay for medical costs out-of-pocket. The insurance rates for the group will depend on the average cost of health care for those who elect to purchase insurance. The healthiest members of the group may decide that the insurance is too expensive, given their expected costs. If they choose not to get insurance, the average cost of care for those who purchase insurance will increase. As premiums increase, more and more healthy individuals may choose to leave the insurance market, further increasing average health care costs for those who purchase insurance. Over time, this winnowing process can lead to declining insurance rates and even an unraveling of health insurance markets. Without changes to the structure of insurance markets, the markets can break down, and fewer people can receive insurance than would be optimal. Subsidies to encourage individuals to purchase health insurance can help combat adverse selection, as can regulations requiring that individuals purchase insurance, because both ensure that healthier people enter the risk pool along with their less healthy counterparts.

Under current institutional arrangements, adverse selection is likely to be an especially large problem for small businesses and for people purchasing insurance in the individual market. In large firms, where employees are generally hired for reasons unrelated to their health, highand low-risk employees are automatically pooled together, reducing the probability of low-risk employees opting out of coverage or high-risk workers facing extremely high premiums. In contrast, small employers cannot pool risk across a large group of workers, and thus the average risk of a given small firm's employee pool can be significantly above or below the population average. As such, similar to the market for individual insurance described above, firms with low-risk worker pools will tend to opt out of insurance coverage, leaving firms with high-risk pools to pay much higher premiums.

Moral Hazard. A second problem with health insurance is moral hazard: the tendency for some people to use more health care because they are insulated from its price. When individuals purchase insurance, they no longer pay the full cost of their medical care. As a result, insurance may induce some people to consume health care on which they place much less value than the actual cost of this care or discourage patients and their doctors from choosing the most efficient treatment. This extra consumption could increase average medical costs and, ultimately, insurance premiums. The presence of moral hazard suggests that research into which treatments deliver the greatest health benefits could encourage doctors and patients to adopt best practices.

Samaritan's Dilemma. A third source of inefficiency in the insurance market is that society's desire to treat all patients, even those who do not have insurance and cannot pay for their care, gives rise to the Samaritan's dilemma. Because governments and their citizens naturally wish to provide care for those who need it, people who lack insurance and cannot pay for medical care can still receive some care when they fall ill. Some people may even choose not to purchase insurance because they understand that emergency care may still be available to them. In the context of adverse selection, a low insurance rate is a *symptom* of underlying inefficiencies. Viewed through the lens of the Samaritan's dilemma, in contrast, the millions of uninsured Americans are one *source* of health care inefficiencies.

The burden of paying for some of this uncompensated care is passed on to people who do purchase insurance. The result is a "hidden tax" on health insurance premiums, which in turn exacerbates adverse selection by raising premiums for individuals who do not opt out of coverage. One estimate suggests that the total amount of uncompensated care for the uninsured was approximately \$56 billion in 2008 (Hadley et al. 2008).

Incomplete Insurance Contracts. Many economic transactions involve a single, straightforward interaction between a buyer and a seller. In many purchases of goods, for example, the prospective buyer can look the good over carefully, decide whether or not to purchase it, and never interact with the seller again. Health insurance, in contrast, involves a complex relationship between an insurance company and a patient that can last years or even decades. It is not possible to foresee and spell out in detail every contingency that may arise and what is and is not covered.

When individuals are healthy, their medical costs are typically lower than their premiums, and these patients are profitable for insurance companies. When patients become ill, however, they may no longer be profitable. Insurance companies therefore have a financial incentive to find ways to deny care or drop coverage when individuals become sick, undermining the central purpose of insurance. For example, in most states, insurance companies can rescind coverage if individuals fail to list any medical conditions—even those they know nothing about—on their initial health status questionnaire. Entire families can lose vital health insurance coverage in this manner. A House committee investigation found that three large insurers rescinded nearly 20,000 policies over a five-year period, saving these companies \$300 million that would otherwise have been paid out as claims (Waxman and Barton 2009).

A closely related problem is that insurance companies are reluctant to accept patients who may have high costs in the future. As a result, individuals with preexisting conditions find obtaining health insurance extremely expensive, regardless of whether the conditions are costly today. This is a major problem in the individual market for health insurance. Forty-four states now permit insurance companies to deny coverage, charge inflated premiums, or refuse to cover whole categories of illnesses because of preexisting medical conditions. A recent survey found that 36 percent of non-elderly adults attempting to purchase insurance in the individual market in the previous three years faced higher premiums or denial of coverage because of preexisting conditions (Doty et al. 2009). In another survey, 1 in 10 people with cancer said they could not obtain health coverage, and 6 percent said they lost their coverage because of being diagnosed with the disease (USA Today, Kaiser Family Foundation, and Harvard School of Public Health 2006). And the problem affects not only people with serious medical conditions, but also young and healthy people with relatively minor conditions such as allergies or asthma.

System-Wide Evidence of Inefficient Spending

While an extensive literature in economic theory makes the case for market failure in the provision of health insurance, a substantial body of evidence documents the pervasiveness of inefficient allocation of spending and resources throughout the health care system. Evidence that health care spending may be inefficient comes from analyses of the relationship between health care spending and health outcomes, both across states in our own Nation and across countries around the world.

Within the United States, research suggests that the substantially higher rates of health care utilization in some geographic areas are not associated with better health outcomes, even after accounting for differences in medical care prices, patient demographics, and regional rates of illness (Wennberg, Fisher, and Skinner 2002). Evidence from Medicare reveals that spending per enrollee varies widely across regions, without being clearly linked to differences in either medical needs or outcomes. One comparison of composite quality scores for medical centers and average spending per Medicare beneficiary found that facilities in states with low average costs are as likely or even more likely to provide recommended care for some common health problems than are similar facilities in states with high costs (Congressional Budget Office 2008). One study suggests that nearly 30 percent of Medicare's costs could be saved if Medicare per capita spending in all regions were equal to that in the lowest-cost areas (Wennberg, Fisher, and Skinner 2002).

Variations in spending tend to be more dramatic in cases where medical experts are uncertain about the best kind of treatment to administer. For instance, in the absence of medical consensus over the best use of imaging and diagnostic testing for heart attacks, use rates vary widely geographically, leading to corresponding variation in health spending. Research that helps medical providers understand and use the most effective treatment can help reduce this uncertainty, lower costs, and improve health outcomes.

Overuse of "supply-sensitive services," such as specialist care, diagnostic tests, and admissions to intensive care facilities among patients with chronic illnesses, as well as differences in social norms among local physicians, seems to drive up per capita spending in high-cost areas (Congressional Budget Office 2008). Moral hazard may help to explain some of the overuse of services that do not improve people's health status.

Health care spending also differs as a share of GDP across countries, without corresponding systematic differences in outcomes. For example, according to the United Nations, the estimated U.S. infant mortality rate of 6.3 per 1,000 infants for the 2005 to 2010 period is projected to be substantially higher than that in any other Group of Seven (G-7) country, as is the mortality rate among children under the age of five, as shown in Figure 7-3 (United Nations 2007). This variation is especially striking when one considers that the United States has the highest GDP per capita of any G-7 country. Although drawing direct conclusions from cross-country comparisons is difficult because of underlying health differences, this comparison further suggests that the United States could lower health care spending without sacrificing quality. Similarly, life expectancy is much lower in the United States than in other advanced economies. The OECD estimated life expectancy at birth in 2006 to be 78.1 years in the United States

compared with an average of 80.7 in other G-7 countries (Organisation for Economic Co-operation and Development 2009).



Figure 7-3 Child and Infant Mortality Across G-7 Countries

Recent research suggests that differences in health care systems account for at least part of these cross-country differences in life expectancy. For example, one study (Nolte and McKee 2008) analyzed mortality from causes that could be prevented by effective health care, which the authors term "amenable mortality." They found that the amenable mortality rate among men in the United States in 1997-98 was 8 percent higher than the average rate in 18 other industrialized countries. The corresponding rate among U.S. women was 17 percent higher than the average among these other 18 countries. Moreover, of all 19 countries considered, the United States had the smallest decline during the subsequent five years, with a decline of just 4 percent compared with an average decline of 16 percent across the remaining 18. The authors further estimated that if the U.S. improvement had been equal to the average improvement for the other countries, the number of preventable deaths in the United States would have been 75,000 lower in 2002. This finding suggests that the U.S. health care system has been improving much less rapidly than the systems in other industrialized countries in recent years.

Source: United Nations (2007).

A further indication that our health care system is in need of reform is that satisfaction with care has, if anything, been declining despite the substantial increases in spending. Not surprisingly, this decline in satisfaction has been concentrated among people without health insurance, whose ranks have swelled considerably during the past decade. For example, from 2000 to 2009, the fraction of uninsured U.S. residents reporting that they were satisfied with their health care fell from 36 to 26 percent. And not only has dissatisfaction with our health care system increased over time, it is also noticeably greater than dissatisfaction with systems in many other developed nations (Commonwealth Fund 2008).

Declining Coverage and Strains on Particular Groups and Sectors

The preceding analysis shows that at an aggregate level, there are major inefficiencies in the current health care system. But, because of the nature of the market failures in health care, the current system works particularly poorly in certain parts of the economy and places disproportionate burdens on certain groups. Moreover, because of rising costs, many of the strains are increasing over time.

Declining Coverage among Non-Elderly Adults. The rapid increase in health insurance premiums in recent years has caused many firms to stop offering health insurance to their workers, forcing employees either to pay higher prices for coverage in the individual market (which is often much less generous than coverage in the group market) or to go without health insurance entirely. According to the Kaiser Family Foundation, between 2000 and 2009, the share of firms offering health insurance to their workers fell from 69 to 60 percent. Furthermore, 8 percent of firms offering coverage in 2009 reported that they were somewhat or very likely to drop coverage in 2010.

Largely because of these falling offer rates, private health insurance coverage declined substantially during this same period. As shown in Figure 7-4, the fraction of non-elderly adults in the United States with private health insurance coverage fell from 75.5 percent in 2000 to 69.5 percent in 2008.

These numbers, however, provide just a snapshot of health insurance coverage in the United States because they measure the fraction of people who are uninsured at a point in time and thus obscure the fact that a large fraction of the population has been uninsured at some point in the past. According to recent research, at least 48 percent of non-elderly Americans were uninsured at some point between 1996 and 2006 (Department of the Treasury 2009).

Figure 7-4 Insurance Rates of Non-Elderly Adults



Although roughly half of the 2000–2008 decline in private coverage displayed in Figure 7-4 has been offset by an increase in public health insurance, the share of non-elderly adults without health insurance nevertheless rose from 17.2 to 20.3 percent. In other words, approximately 5.9 million more adults were uninsured in 2008 than would have been had the fraction uninsured remained constant since 2000. The decline in private health insurance coverage was similarly large among children, although it was more than offset by increases in public health insurance (most notably Medicaid and CHIP), so that less than 10 percent of children were uninsured by 2008 (DeNavas-Walt, Proctor, and Smith 2009).

The generosity of private health insurance coverage has also been declining in recent years. For example, from 2006 to 2009, the fraction of covered workers enrolled in an employer-sponsored plan with a deductible of \$1,000 or greater for single coverage more than doubled, from 10 to 22 percent. The increase in deductibles was also striking among covered workers with family coverage. For example, during this same three-year period, the fraction of enrollees in preferred provider organizations with a deductible of \$2,000 or more increased from 8 to 17 percent. Similar increases in cost-sharing were apparent for visits with primary care physicians. The fraction of covered workers with a copayment of \$25 or more for an office visit with a primary care physician increased from 12 to 31 percent from 2004 to 2009. These rising costs in the private market fall disproportionately on the near-elderly, who have higher medical costs but are not eligible for Medicare. A recent study found that the average family premium in the individual market in 2009 for those aged 60–64 was 93 percent higher than the average family premium for individuals aged 35–39 (America's Health Insurance Plans 2009).

Low Insurance Coverage among Young Adults and Low-Income Individuals. Figure 7-5 shows the relationship between age and the fraction of people without health insurance in 2008. One striking pattern is the sharp and substantial rise in this fraction as individuals enter adulthood. For example, the share of 20-year-olds without health insurance is more than twice that of 17-year-olds (28 percent compared with 12 percent).



Source: Department of Commerce (Census Bureau), Current Population Survey, Annual Social and Economic Supplement.

Adverse selection is clearly a key source of this change. Many teenagers obtain insurance through their parents' employer-provided family policies, and so are in large pools. Many young adults, in contrast, do not have this coverage and are either jobless or work at jobs that do not offer health insurance; thus, they must either buy insurance on the individual market or go uninsured. As described above, health insurance coverage in the individual market can be very expensive because of adverse selection. Many young adults also have very low incomes, making the cost of coverage prohibitively high for them. Furthermore, because they are, on average, in very good health, young adults may be more tolerant than other groups of the risks associated with being uninsured.

The burden of rising costs also falls differentially on low-income individuals, who find it more difficult each year to afford coverage through employer plans or the individual market. Indeed, as shown in Figure 7-6, low-income individuals are substantially more likely to be uninsured than their higher-income counterparts. As the figure shows, non-elderly individuals below the Federal poverty line (\$10,830 a year in income for an individual and \$22,050 for a family of four in 2009) were five times as likely to be uninsured as their counterparts above 400 percent of the poverty line in 2008. These low rates of insurance coverage increase insurance premiums for other Americans because of the "hidden tax" that arises from the financing of uncompensated care.



Figure 7-6 Share of Non-Elderly Individuals Uninsured by Poverty Status

Source: Department of Commerce (Census Bureau), Current Population Survey, Annual Social and Economic Supplement.

The Elderly. Even those over the age of 65 are not protected from high costs, despite almost universal coverage through Medicare. Consider prescription drug expenses, for which the majority of Medicare recipients have coverage through Medicare Part D. As shown in Figure 7-7, after the initial deductible of \$310, a standard Part D plan in 2010 covers 75 percent

of the cost of drugs only up to \$2,830 in annual prescription drug spending. After that, enrollees are responsible for all expenditures on prescriptions up to \$6,440 in total drug spending (where out-of-pocket costs would be \$4,550), at which point they qualify for catastrophic coverage with a modest copayment. Millions of beneficiaries fall into this coverage gap—termed the "donut hole"—every year, and as a result many may not be able to afford to fill needed prescriptions.



Figure 7-7 Medicare Part D Out-of-Pocket Costs by Total Prescription Drug Spending

In 2007, one-quarter of Part D enrollees who filled one or more prescriptions but did not receive low-income subsidies had prescription drug expenses that were high enough to reach the coverage gap. For that reason, 3.8 million Medicare recipients reached the initial coverage limit and were required to pay the full cost of additional pharmaceutical treatments received while in the coverage gap, despite having insurance for prescription drug costs. One study found that in 2007, 15 percent of Part D enrollees in the coverage gap using pharmaceuticals in one or more of eight major drug classes stopped taking their medication (Hoadley et al. 2008).

Note: Calculations based on a standard 2010 benefit design. Source: Medicare Payment Advisory Commission, Part D Payment System, October 2009.

Small Businesses. As described earlier, adverse selection is a serious problem for small businesses, which do not have large numbers of workers to pool risks. This problem manifests itself in two forms. The first is high costs. Because of high broker fees and administrative costs as well as adverse selection, small firms pay up to 18 percent more per worker for the same policy than do large firms (Gabel et al. 2006). The second is low coverage. Employees at small businesses are almost three times as likely as their counterparts at large firms to be uninsured (29 percent versus 11 percent, according to the March 2009 Current Population Survey). And among small businesses that do offer insurance, only 22 percent of covered workers are offered a choice of more than one type of plan (Kaiser Family Foundation and Health Research and Educational Trust 2009).

In recent years, small businesses and their employees have had an especially difficult time managing the rapidly rising cost of health care. Consistent with this, the share of firms with three to nine employees offering health insurance to their workers fell from 57 to 46 percent between 2000 and 2009.

As discussed in a Council of Economic Advisers report issued in July 2009, high insurance costs in the small-group market discourage entrepreneurs from launching their own companies, and the low availability of insurance discourages many people from working at small firms (Council of Economic Advisers 2009c). As a result, the current system discourages entrepreneurship and hurts the competitiveness of existing small businesses. Given the key role of small businesses in job creation and growth, this harms the entire economy.

Taken together, the trends summarized in this section demonstrate that in recent years the rapid rise in health insurance premiums has reduced the take-home pay of American workers and eaten into increases in Medicare recipients' Social Security benefits. Fewer firms are electing to offer health insurance to their workers, and those that do are reducing the generosity of that coverage through increased cost-sharing. Fewer individuals each year can afford to purchase health insurance coverage. The current system places small businesses at a competitive disadvantage. And finally, the steady increases in health care spending strain the budgets of families, businesses, and governments at every level, and demonstrate the need for health insurance reform that slows the growth rate of costs.

HEALTH POLICIES ENACTED IN 2009

Since taking office, the President has signed into law a series of provisions aimed at expanding health insurance coverage, improving the quality of care, and reducing the growth rate of health care spending. The American Recovery and Reinvestment Act of 2009 provided vital support to those hit hardest by the economic downturn while helping to ensure access to doctors, nurses, and hospitals for Americans who lost jobs and income. At the same time, legislation extended health insurance coverage to millions of children, and improvements in health system quality and efficiency benefited the entire health care system. These necessary first steps have set the stage for a more fundamental reform of the U.S. health care system, one that will ensure access to affordable, high-quality coverage and that genuinely slows the growth rate of health care spending.

Expansion of the CHIP Program

Just two weeks after taking office, the President signed into law the Children's Health Insurance Program Reauthorization Act, which provides funding that expands access to nearly 4 million additional children by 2013. This guarantee of coverage also kept millions of children from losing insurance in the midst of the recession, when many workers lost employer-sponsored coverage for themselves and their dependents. An examination of data from recent surveys by the Centers for Disease Control and Prevention found that private coverage among children fell by 2.5 percentage points from the first six months of 2008 to the first six months of 2009. Despite the fall in private coverage, however, fewer children were uninsured during that six-month period in 2009, in large part because public coverage increased by 3 percentage points (Martinez and Cohen 2008, 2009).

Approximately 7 million children (1 in every 10) were uninsured in 2008 (DeNavas-Walt, Proctor, and Smith 2009). Once fully phased in, the CHIP reauthorization legislation signed by the President will lower that number by as much as half from the 2008 baseline. In the future, this new legislation will enhance the quality of medical care for children and improve their health. Research has convincingly shown that expanding health insurance to children is very cost-effective, because it not only increases access to care but also substantially lowers mortality (Currie and Gruber 1996a, 1996b).

Subsidized COBRA Coverage

In part because of the difficulty of purchasing health insurance on the individual market (owing to adverse selection), most Americans get health insurance through their own or a family member's job. And what is true for dependent children is true for their parents: when economic conditions deteriorate, the number of people with employer-sponsored health insurance tends to fall. However, unlike the case with children, during the current recession public coverage has only offset part of the reduction in private health insurance coverage among adults. Thus, the fraction of adults without health insurance has increased. Figure 7-8 uses survey data from Gallup to show that from the third quarter of 2008 to the first quarter of 2009, the share of U.S. adults without health insurance rose by 1.7 percentage points, from 14.4 to 16.1 percent, representing an estimated increase of 4.0 million uninsured individuals.



Figure 7-8 Share Uninsured among Adults Aged 18 and Over

When workers at large firms lose their jobs, COBRA provisions give them the right to continue existing coverage for themselves and their families. However, they are often required to pay the full premium cost with no assistance from former employers and without favorable tax treatment of their insurance benefits. Thus, although a large fraction of workers who lose their jobs can still purchase health insurance through COBRA at group rates, many elect not to do so, likely because the coverage is not affordable to a family with a newly laid-off wage earner.

One provision of the American Recovery and Reinvestment Act addressed the recession-induced drop in employer-sponsored health insurance by subsidizing COBRA coverage so that individuals pay only 35 percent of their premium, with the Federal Government covering the remaining 65 percent. This large subsidy may partially explain why the growth in the share of American adults without health insurance slowed dramatically from the first to the fourth quarter of 2009, even while the unemployment rate continued to rise. While the average rate of uninsurance in 2009 was still 1.4 percentage points higher than the average in 2008, the rate was fairly constant throughout 2009. Thus, while the CHIP expansion was providing stable coverage to millions of children who would otherwise have lost it, the COBRA subsidy was further reinforcing access to coverage for working parents and families who faced unemployment.

Temporary Federal Medical Assistance Percentage (FMAP) Increase

Historically, declines in employer-sponsored health insurance have led to increases in the number of people who qualify for public health insurance through programs such as Medicaid, which insured 45.8 million U.S. residents in December 2007. Because almost half of all Medicaid spending is typically financed by state governments, state Medicaid spending tends to rise substantially when economic conditions deteriorate. Coupled with the recession-induced drop in state tax revenues, these increases in Medicaid enrollment place a considerable strain on state budgets. And because virtually every state is required to balance its budget each year, increases in Medicaid enrollment often leave states with little choice but to raise taxes, lay off employees, reduce spending on public safety, education, and other important priorities, or reduce Medicaid benefits, provider payments, or eligibility. These policies are especially problematic when the economy is in severe recession, because they can stifle economic recovery.

Figure 7-9 uses administrative data from all 50 states and the District of Columbia to contrast the growth in Medicaid enrollment in the months leading up to the start of the recession in December 2007 with the corresponding growth during the recession.² An examination of the data displayed in the figure reveals that, after growing from 45.2 million in September 2006 to 45.8 million in December 2007, the number of Medicaid recipients increased much more rapidly in the subsequent 21 months, and stood at 51.1 million in September 2009. This represents an increase of 253,000 Medicaid recipients per month during the recession, versus an average increase of just 36,000 per month in the preceding 15 months.

 $^{^2}$ Data on state Medicaid enrollment were derived from direct communication between the Council of Economic Advisers and state health departments in 50 states and the District of Columbia. Monthly enrollment from September 2006 through September 2009 was reported by all states with the exception of Vermont in the first 10 months considered. For each month from September 2006 through June 2007 in Vermont, the state's July 2007 Medicaid enrollment was used.

Figure 7-9 Monthly Medicaid Enrollment Across the States





To help states pay for an expanding Medicaid program without raising taxes or cutting key services, one important component of the Recovery Act was a temporary increase in each state's Federal Medical Assistance Percentage (FMAP), the share of Medicaid spending paid by the Federal Government. This fiscal relief allowed states to avoid cutbacks to their Medicaid programs or other adjustments that would have exacerbated the effects of the recession. The increased FMAPs were larger for states where unemployment increased the most, because their financial strains were greatest. To qualify for the increased FMAPs, states were required to maintain Medicaid eligibility at pre-recession levels.

A recent report by the Kaiser Family Foundation confirms that support from the Recovery Act—as well as the expansion of coverage for children enacted several weeks earlier in February 2009—was essential to preserving the ability of states to offer health insurance coverage to those most in need. In fact, more than half the states expanded access to health insurance coverage for low-income children, parents, and pregnant women in Medicaid and CHIP in 2009 (Ross and Jarlenski 2009).

Recovery Act Measures to Improve the Quality and Efficiency of Health Care

Beyond supporting jobless workers and their families in the midst of the recession, the Recovery Act addressed structural weaknesses in the health care system by investing in its infrastructure and its workforce. These investments will help to build a health care system with lower costs and better health outcomes for the long term.

For example, the Recovery Act invested \$2 billion in health centers for new construction, renovation of existing facilities, and expansion of coverage. An additional \$500 million was allocated to bolster the primary care workforce to improve access to primary care in underserved areas. The Act provided a further \$1 billion in funding for public health activities to improve prevention and to incentivize wellness initiatives for those with chronic illness; both measures are aimed at improving the quality of care and ultimately bringing down costs. The Act also increased spending on comparative effectiveness research by \$1.1 billion, to give doctors and patients access to the most credible and up-to-date information about which treatments are likely to work best.

One final component of the Recovery Act was the Health Information Technology for Economic and Clinical Health Act, which expanded the adoption and use of health information technology through infrastructure formation, information security improvements, and incentives for adoption and meaningful use of certified health information technology. This investment in developing computerized medical records will reduce health care spending and improve quality while securing patients' confidential information.

These investments build a foundation for comprehensive health insurance reform by adding to the ranks of doctors, nurses, and other health care providers, especially in critical fields like primary care, and in areas of the country with the greatest need for a more robust medical workforce. Moreover, the investments in comparative effectiveness research and health information technology will make it much easier for information and quality improvements to spread rapidly between doctors, medical practices, and hospitals across the public and private sectors. When combined with the wide range of delivery system changes included in health insurance reform legislation, these investments are expected to contain costs and improve quality over the long run.

In summary, legislation passed in 2009 helped extend or continue health insurance coverage for the workers, families, and children affected by the current recession. Rather than focusing solely on today's crisis, the legislation lays the groundwork for a reformed health care system that addresses the weaknesses, flaws, and inefficiencies of the status quo.

2009 Health Reform Legislation

As this *Report* goes to press, Congress has come closer to passing comprehensive health insurance reform than ever before, with major bills having passed both the House and the Senate. As of this writing, whether those bills will lead to enactment of final legislation in the near future is uncertain. Nonetheless, the bills contain important features that would expand coverage, slow the growth rate of costs while improving the quality of care, and benefit individuals, businesses, and governments at every level. This section discusses the major features of the two bills—the House's Affordable Health Care for America Act and the Senate's Patient Protection and Affordable Care Act.

Insurance Market Reforms: Strengthening and Securing Coverage

Both the House and the Senate bills contain important features that would immediately expand coverage and increase access to preventive care. The legislation would also strengthen regulation of the health insurance market, improve consumer protections, and secure coverage for more than 30 million Americans. These regulations would correct insurance market failures by preventing health insurers from responding to adverse selection by raising rates and denying coverage, thus stabilizing risk pools to secure access to affordable coverage.

Both versions of the legislation provide immediate Federal support for a new program to provide coverage to uninsured Americans with preexisting conditions. Combined with strong new consumer protections, these measures would ensure that millions of Americans can immediately purchase coverage at more affordable prices despite their personal medical history or health risks. Health insurance reform also makes immediate investments in community health centers, which would improve access to coverage among the most vulnerable populations. Both the House and Senate versions of reform immediately create reinsurance programs for employer health plans, providing coverage for early retirees to prevent them from becoming uninsured before they are covered by Medicare. Additionally, reform legislation would immediately begin to reform delivery systems for health care and improve transparency and choice for consumers. For example, the Senate proposal would create a website that would help consumers compare coverage options by summarizing important aspects of each insurance contract in a consistent and easy-to-understand format.

New laws would help cover millions of young adults as they transition into the workforce by requiring insurers to allow extended family coverage for dependents through their mid-20s. The CBO and the Joint Committee on Taxation estimate that this requirement would lower average premiums per person in the large-group market by increasing the number of relatively healthy low-cost people in large-group pools (Congressional Budget Office 2009a).

In the years following reform, legislation would put into place strong new consumer protections to prevent denials of coverage or excessive costs for the less healthy. Insurers would be required to renew any policy for which the premium has been paid in full. Insurers could not refuse to renew because someone became sick, nor could they drop or water down insurance coverage for those who are or become ill. To prevent insurers from charging excessively high rates to the less healthy, reform legislation would also enact adjusted community rating rules for premiums.

Banning such treatment of individuals with preexisting conditions would not only allow insurance markets to better help individuals hedge against the risk of health care costs, but may also make the U.S. labor market more efficient. Without such protections, adults with preexisting conditions may be reluctant to change insurance providers and expose themselves to increased premiums. Workers who receive health insurance through their employers may therefore be less willing to change jobs, creating "job lock" that discourages desirable adjustments in the labor market.

In both versions of reform legislation, these provisions are linked with incentives for individuals to obtain coverage and for firms to insure their workers. While preventing insurance companies from discriminating based on preexisting conditions will help some of the neediest members of our society, in isolation these reforms could increase costs for individuals without preexisting conditions, potentially aggravating adverse selection. Without a responsibility to maintain health insurance coverage, individuals could forgo purchasing coverage until they fell ill, and thus not contribute to a shared insurance risk pool until their expected costs rose sharply. However, with restrictions on exclusions for preexisting conditions in place, high-cost individuals who sign up after falling ill could obtain coverage at low premiums. Thus, individuals who had contributed toward coverage would be faced with higher costs, potentially driving even more individuals out of coverage. To prevent a spiral of increasing costs and decreasing insurance rates resulting from adverse selection, both the House and the Senate bills establish a principle of joint individual and employer responsibility to

obtain and provide insurance, and would provide subsidies and tax credits that would assist in this process.

The bills would address other features of many health plans that limit their ability to help individuals insure against financial risk. Currently, insurers can put yearly and lifetime limits on coverage. For people with diseases such as cancer, life-saving treatment is often very costly, and exceeding annual and lifetime benefit limits can lead to bankruptcy. This problem is especially severe in the individual and small-group markets, where insurers have more discretion in designing policies. Insurance plans that allow individuals to bankrupt themselves may be socially inefficient because of the Samaritan's dilemma: medical bills that are unpaid when a patient becomes bankrupt impose a hidden tax on other participants in the health care market.

In addition to these insurance market reforms, legislation passed by Congress would require coverage of preventive care and exempt preventive care benefits from deductibles and other cost-sharing requirements in Medicare and private insurance. Evidence suggests that not only are certain preventive care measures cost-effective, but they can also help to prevent diseases that are responsible for roughly half of yearly mortality in the United States (Mokdad et al. 2004). Some measures, such as smoking cessation programs, discussing aspirin use with high-risk adults, and childhood immunizations, may even lower total health care spending (Maciosek et al. 2006). Because many people change insurance companies several times over the course of their lives, insurance companies may underinvest in preventive care that is cost-effective but does not reduce medical costs until far in the future. By encouraging all insurance companies to invest in preventive care, health insurance reform would increase the efficiency of the health care sector.

Finally, reform legislation takes steps to make prescription drug coverage more affordable and secure for senior citizens. The legislation would increase the initial coverage limit under Medicare Part D by \$500 in 2010 and also provide 50 percent price discounts for brand-name drugs in the "donut hole" discussed earlier. This discount would allow many Medicare Part D recipients to reduce their out-of-pocket spending on prescription drugs. Not only would fewer beneficiaries have to pay the full cost of their prescription drugs while in the donut hole, but those who do reach this coverage gap would also benefit from increased coverage before reaching that point.

In summary, within the first few years after passage, reform legislation in Congress would guarantee coverage for those with preexisting conditions, reform private insurance markets with strong consumer protections that would stabilize risk pools and mitigate adverse selection, and strengthen public coverage under Medicare.

Expansions in Health Insurance Coverage Through the Exchange

Central to both the House and the Senate bills is the health insurance exchange, which would allow individuals and employees of small businesses to choose among many different insurance plans. The exchange would provide a centralized marketplace to allow individuals, families, and small firms to pool together and purchase coverage much like larger firms do today, improving consumer choice and increasing pressure on insurers to offer lower prices and more generous benefits to attract customers. In its first year of operation, the exchange would be open to qualified individuals and small businesses.

Individuals and small businesses, which might otherwise purchase health insurance in the individual or small-group markets, would benefit from the economies of scale and greater buying leverage in the exchange, which could result in much lower premiums. The exchange would also provide transparent information on plan quality, out-of-pocket costs, covered benefits, and premiums for each offered plan, enabling individuals to select the plan that best fits their and their family's needs. The availability of easy-to-compare premium information would provide a powerful incentive for health insurers to price competitively, thus making coverage more affordable for participants in the exchange.

The new exchange would be especially beneficial for small business employees, who, as described earlier, face particularly severe challenges in the health insurance market. The bills would enable small businesses that meet certain criteria to purchase insurance through the exchange, allowing them and their workers to buy better coverage at lower costs. Moreover, many small businesses that provide health insurance for their employees would receive a tax credit to alleviate their disproportionately higher costs and to encourage coverage. The tax credit would lower the cost of coverage by as much as 50 percent. Reform would make it easier for small businesses to recruit talented workers and would also increase workers' incentives to start their own small businesses. A recent analysis of the Senate bill by the CBO found that premiums for a given amount of coverage for the same set of people or small businesses would fall in the individual and small-group markets as a result of reductions in administrative costs and increased competition in a centralized marketplace (Congressional Budget Office 2009a).

Most individuals who select a plan in the exchange would be eligible for subsidies that reduce the cost of their coverage. In both the House and Senate bills, subsidies would be available to certain individuals and families with incomes below 400 percent of the Federal poverty line. The premium and out-of-pocket spending subsidies for plans purchased in the exchange would be larger for lower-income families, many of whom cannot afford the cost of a private plan. In addition, individuals with incomes below about 133 to 150 percent of the poverty line would be eligible for health insurance through the Medicaid program.

In the exchange, Federal subsidies would be tied to premiums for relatively lower-cost "reference" plans. Beneficiaries would, however, be able to buy more extensive coverage at an additional, unsubsidized cost.

Economic and Health Benefits of Expanding Health Insurance Coverage

CBO analyses of both the House and Senate bills indicate that, in part because of the creation of the exchanges and the expansion in Medicaid, more than 30 million Americans who would otherwise be uninsured would obtain coverage as a result of reform. These coverage expansions would improve not only the health and the economic well-being of affected individuals and families, but also the broader economy.

A comprehensive body of literature demonstrates that being uninsured leads to poorer medical treatment, worse health status, and higher mortality rates. Across a range of acute conditions and chronic diseases, uninsured Americans have worse outcomes, higher rates of preventable death, and lower-quality care. Additionally, being uninsured imposes on families a significant financial risk of bankruptcy caused by medical expenses.

Evidence from the state of Massachusetts—which expanded health insurance to all but 2.6 percent of its population in a 2006 reform effort finds that expanding coverage increased regular medical care and lowered financial burdens for residents who gained coverage. Only 17.4 percent of adults with family incomes of less than 300 percent of the Federal poverty line reported forgoing care because of costs in 2008, compared with 27.3 percent in the pre-reform baseline in 2006 (Long and Masi 2009).

Taken together, this evidence strongly suggests that expanding coverage for Americans through health insurance reform would directly benefit millions of families by giving them access to the care they need to maintain their health without substantial financial burdens and risks. Moreover, because of the fixed costs of developing health care infrastructure such as trauma centers, increasing the share of people with health insurance can improve health outcomes for people with insurance as well. Beyond the improvements for individuals and families, coverage expansions would produce benefits that extend throughout the entire economy. A CEA report in June 2009 estimated that economic gains from reduced financial risk for the uninsured totaled \$40 billion per year (Council of Economic Advisers 2009a). Moreover, the CEA report found an economic value of more than \$180 billion per year from averting preventable deaths caused by a lack of insurance. Taken together, these gains would far exceed the cost of extending coverage to the currently uninsured population.

The economic benefits of expanding coverage would extend to labor markets in the form of reduced absenteeism and greater productivity. According to the 2009 March Current Population Survey, 18.7 million nonelderly adults report having one or more disabilities that prevent or limit the work they can perform; of that total, 3.1 million lack health insurance. Approximately 50 percent of non-elderly adults who work report having at least one serious medical condition. Previous research has documented the indirect costs to employers of health-related productivity losses. Some of the costliest conditions—depression, migraines, and asthma—can often be effectively managed with prescription medications made more affordable by health insurance. This suggests that expanding access to coverage would improve productivity and labor supply by creating a healthier workforce that would lose fewer hours to preventable illnesses or disabilities.

Reducing the Growth Rate of Health Care Costs in the Public and Private Sectors

The House and Senate bills contain a number of provisions that would reduce the growth rate of health care spending in both the public and private sectors. Both bills create pilot programs in Medicare to bundle provider payments for an episode of care rather than for individual procedures. Under bundled payments, Medicare would provide a single reimbursement for an entire episode of care rather than multiple reimbursements for individual treatments. This payment strategy would give providers, organized around a hospital or group of physicians, a stronger incentive to coordinate and provide quality care efficiently rather than carry out lowvalue or unnecessary treatments and procedures. Recent research in the *New England Journal of Medicine* suggests that bundled payments could improve quality and substantially reduce health care spending (Hussey et al. 2009). The Department of Health and Human Services would be given authority to expand or extend successful pilot programs without additional legislative action. Both bills also include measures that directly reduce waste in the current health care system. One example of such waste is the substantial overpayment to Medicare Advantage plans, which are currently paid an average of 14 percent more per recipient than traditional Medicare. The reform bills would reduce these overpayments, saving more than \$100 billion between 2010 and 2019 (Congressional Budget Office 2009b). Reducing the overpayments would also lower Medicare recipients' Part B premiums below what they otherwise would be and would extend the solvency of the Medicare Trust Fund.

Another component of the legislation that has the potential to slow the growth rate of health care spending is the Independent Payment Advisory Board included in the Senate bill. This board would have the authority to propose changes to the Medicare program both to improve the quality of care and to reduce the growth rate of program spending. Absent Congressional action, these recommendations would be automatically implemented.

Using the the CEA analysis of the House and Senate bills along with projections from CBO about the level of Federal spending on Medicare, Medicaid, and CHIP, it is possible to estimate the effect of reform on the growth rate of Federal health care spending. Recent CEA analyses of the House and Senate bills find that reform would lower total Federal spending on Medicare, Medicaid, and CHIP by 2019 below what it otherwise would have been (Council of Economic Advisers 2009b). Moreover, between 2016 and 2019, both bills would lower the annual growth rate of Federal spending on these programs by approximately 1.0 percentage point. State and local governments would also benefit financially from health insurance reform, as described in Box 7-1.

Box 7-1: The Impact of Health Reform on State and Local Governments Although slowing the growth in health care costs will help the longrun fiscal situation of the Rederal Government, some observers worry about how reform will affect state and local governments. To help ensure that virtually all Americans receive health insurance, both the Senate and the House bills call for expanding Medicaid eligibility. Because Medicaid is parily funded by states, some state officies four that the state fiscal situation will deteriorate as a consequence of reform.

As documented by a CEA report published in September (Council of Beonomic Advisers 2009d), however, health insurance reform would

Continued on next page

Box 7-1, continued

improve the fiscal health of state and local governments in at least three important ways. First, state and local governments are already spending billions of dollars each year providing coverage to the uninsured; these costs would fall significantly as a consequence of health reform. Second, encouraging all individuals to become insured would reduce the hidden tax paid by providers of health insurance. Because state and local goveraments employ more than 19 million people, the total savings from removing the hidden tax is likely to be substantial. Third, an excise tax on high-cost plans would boost workers' wages by billions of dollars each year and thus increase state income tax revenues.

To understand the net consequences of reform for the fiscal health of state and local governments, the CEA studied the impact of reform for 16 states that are diverse along many important dimensions: geographic, economic, and demographic. For every state studied, health reform would result in substantial savings for state and local governments.

In addition to these public savings, the reform proposals would reduce the growth of health care costs in the private sector. One important mechanism through which reform could reduce these costs is the excise tax on high-cost insurance plans included in the Senate bill. Under current tax law, employer compensation in the form of wages is subject to the income tax, while compensation in the form of employer-provided health care benefits is not. Individuals may therefore have an incentive to obtain more generous health insurance than they would if wages and health insurance faced more equal tax treatment. Absent other incentives for individuals to obtain insurance, the preferential tax treatment of health insurance may be beneficial, because it encourages firms to provide health insurance to their workers and facilitates pooling. Nonetheless, placing no limit on this subsidy likely leads to health insurance that is more generous than would be efficient in some cases.

To help contain the growth in the cost of these plans without jeopardizing the risk-pooling benefits, the Senate bill would impose a tax on only the most expensive employer-sponsored plans. Although only a small share of plans would be affected, CEA estimates based on data from the CBO suggest that the excise tax on high-cost insurance plans would reduce the growth rate of annual health care costs in the private sector by 0.5 percentage point per year from 2012 to 2018. The excise tax would encourage workers and their firms' human resources departments to be more watchful consumers and would give insurers a powerful incentive to price competitively. And to the extent that bundling, accountable care organizations, and other delivery system reforms in both the House and Senate bills would spill over to the private sector, it is likely that the rate of growth of health care spending in the private sector would fall by considerably more than 0.5 percentage point per year. Lower increases in private health insurance premiums would lead to substantially higher take-home earnings for workers.

Reform would also reduce private spending on health care in other important ways. As noted, encouraging all individuals to obtain health insurance would likely reduce average costs for people who are insured. Reducing the hidden tax on health insurance premiums imposed by uncompensated care for the uninsured, for example, would reduce the financial burden not only on state and local governments, but also on individuals. CBO estimates of the Senate legislation find that reform has the power to reduce small-group premiums by up to 2 percent and even large-group premiums by up to 3 percent. And according to research by the Business Roundtable, reforms similar to those included in both the House and Senate bills could reduce employer-sponsored health insurance costs for family coverage by as much as \$3,000 per worker by 2019 relative to what those costs otherwise would have been.

The Economic Benefits of Slowing the Growth Rate of Health Care Costs

Reform as envisioned in both the House and Senate bills passed in late 2009 would substantially lower the growth rate of health care spending. Of course, spending would increase in the very short run as coverage was extended to more than 30 million Americans who would otherwise be uninsured. But, according to the CBO, these temporary increases would soon be more than offset by the slowdown in the growth rate of spending, with the net savings increasing over time (Congressional Budget Office 2009b, 2009c).

A report released by the CEA in June 2009 demonstrated that slowing the growth rate of health care costs would raise U.S. standards of living by freeing up resources that could be used to produce other goods and services. An examination of the cost reduction measures contained in the Senate bill suggests that the typical family would see its income increase by thousands of dollars per year by 2030. Total GDP would be substantially higher as well, driven upward by both increased efficiency and increased national saving.

Slowing the growth rate of health care costs would also lower the Federal budget deficit. Projections by the CBO of both the House and the Senate legislation suggest that the bills would lower the deficit substantially in the upcoming decade, and even more in the next decade. These savings would obviate large tax increases or cuts in other important priority areas. As discussed in Chapter 5, it would be the single most important step toward addressing the Nation's long-run fiscal challenges.

Finally, reform that genuinely slows the growth of health care costs could increase employment for a period of time by lowering the unemployment rate that is consistent with steady inflation. These effects could be important, with CEA estimates suggesting an increase of more than 300,000 jobs for a period of time if health care costs grew by 1 percentage point less each year.

Conclusion

In recent years, health care costs in the Nation's private and public sectors have been rising at an unsustainable rate, and the fraction of Americans who are uninsured has steadily increased. These trends have imposed tremendous burdens on individuals, employers, and governments at every level, and the problems have grown yet more severe during the past two years with the onset of the worst recession since the Great Depression.

Last year, the President signed into law several policies that have cushioned the worst of the economic downturn, including an expansion in the Children's Health Insurance Program and an extension of COBRA coverage for displaced workers and their families. Other policies, such as increased funding for health information technology, will improve the long-run efficiency and quality of the health care sector.

Legislation passed by both the House and the Senate in late 2009 would expand health insurance coverage to tens of millions of Americans while slowing the growth rate of health care costs. These reforms would improve the health and the economic well-being of individuals and families, help small businesses, stimulate job creation, and ease strains on Federal, state, and local governments imposed by rapidly rising health care costs.


CHAPTER 8

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STRENGTHENING THE AMERICAN LABOR FORCE

The recession has been extremely difficult for American workers and families. One in ten workers is now unemployed, wages and hours worked have fallen, and many families are struggling to make ends meet. Making matters worse, the recession followed a sustained period of rising inequality and stagnation in the living standards of typical American workers. A central challenge in coming years will be to smooth the transition to a sustainable growth path with more widely shared prosperity.

As we begin to recover from the recession, we will see a new and much-changed labor market. Some industries that grew unsustainably large in recent years, such as construction and finance, will recover but will not immediately return to past employment levels. The same may be true for traditional manufacturing, which has been shrinking as a share of the economy for decades. The pace of employment decline will surely moderate after the recession, but many former workers in traditional manufacturing will need to transition into new, growing sectors.

In the place of the declining industries will come new opportunities for American workers. Health care will remain an important source of growth in the labor market, as will high-technology sectors including clean energy industries and advanced manufacturing. Well-trained and highly skilled workers will be best positioned to secure good jobs in these new and growing sectors. The best way to prepare our workforce for the challenges and opportunities that lie ahead is by strengthening our education system, creating a seamless, efficient path for every American from childhood to entry into the labor market as a skilled worker ready to meet the needs of the new labor market.

Both individuals and the economy as a whole benefit from increased educational attainment and improved school quality. A focus on access, equity, and quality for all American students, from early childhood through high school and into postsecondary education and training throughout workers' careers, will help ensure that the benefits of economic growth are widely shared.

CHALLENGES FACING AMERICAN WORKERS

The last few years have been a challenging time for American workers, with the high unemployment of the current recession compounding longer-run trends toward increased insecurity and inequality.

Unemployment

As of December 2009, the unemployment rate was 10.0 percent, a rate that has been exceeded only once since the Great Depression. As high as it is, however, this rate understates just how weak the labor market is. Many Americans who would like to work have given up hope of finding a job and have dropped out of the labor force; others who would like full-time jobs have settled for part-time work. Figure 8-1 shows both the conventional unemployment rate and a broader measure of labor underutilization that includes not just unemployed workers but also those who would like jobs



Figure 8-1 Unemployment and Underemployment Rates

Notes: Grey shading indicates recessions. The overall unemployment rate represents the share of the labor force that is unemployed (those actively looking for work). The broad unemployment rate is a variant of the overall unemployment rate that adds marginally attached workers (those not actively looking for a job, but want one and have looked for one recently) as well as workers employed part-time for economic reasons to the numerator (the "unemployed"), and adds marginally attached workers to the denominator (the "labor force").

Source: Department of Labor (Bureau of Labor Statistics), Employment Situation Table A-12, Series U-3 and U-6.

but have given up looking for work and those who are employed part-time for economic reasons. This measure indicates that more than one in six potential workers are unemployed or underemployed. Another measure of labor market conditions that accounts for those who have given up looking for work is the employment-to-population ratio. In December, fewer than six in ten adults were employed, the lowest ratio since 1983. A final useful labor market indicator is the number of long-term unemployed—those without jobs for 27 weeks or more. More than one-third of unemployed Americans have been seeking work for more than 26 weeks, the highest share since the series began in 1948.

The employment situation is even worse for members of racial and ethnic minorities. Figure 8-2 shows the unemployment rate for whites, blacks, Hispanics, and Asians. While the unemployment rate for whites topped out at 9.4 percent in October 2009 and has declined slightly since then, the rate for blacks exceeds 16 percent and has continued to rise, while that for Hispanics is nearly 13 percent. The disproportionate impact of the current recession on blacks and Hispanics mirrors that seen in past business cycles. It is critical that all Americans be able to participate fully and equally in our economic recovery.



Figure 8-2 Unemployment Rates by Race

Notes: Grey shading indicates recessions. Hispanics may be of any race. Respondents with multiple races are excluded from the white, black, and Asian categories. Series for whites, blacks, and Hispanics are seasonally adjusted. Asian series is not seasonally adjusted and is not available before 2000.

Source: Department of Labor (Bureau of Labor Statistics), Employment Situation Table A-2.

Even a quick return to job growth will not immediately eliminate employment problems, as it will take time to create the millions of new jobs needed to return to normal employment levels. Many workers will have difficulty finding work for some time to come. Extended periods of high unemployment and low job creation rates mean that many displaced workers will exhaust their unemployment insurance benefits before jobs become available in large numbers. After months or even years of unemployment, most who exhaust their benefits will likely have used up whatever savings they had when they lost their jobs. Many will be forced to turn to public assistance—Temporary Assistance for Needy Families, Supplemental Nutritional Assistance (formerly known as food stamps), or other similar programs—to make ends meet.

Sustained periods of low labor demand also have negative repercussions for the long-run health of the economy. Mounting evidence indicates that displacement during bad economic times leads to long-run reductions in workers' productivity (Jacobson, LaLonde, and Sullivan 1993), likely because the displaced workers lose job skills, fall out of habits needed for successful employment, and have trouble convincing employers that they will be good employees. The resulting loss of "human capital" reduces workers' earning power, even after the economy recovers.

Deep downturns have particularly large effects on young Americans. The unemployment rate for teenagers in December was 27.1 percent. Research shows that teens who first enter the labor market during a recession can have trouble getting their feet onto the first rung of the career ladder, leaving them a step or more behind throughout their lives (Kahn forthcoming; Oreopoulos, von Wachter, and Heisz 2006; Oyer 2006). There is also evidence that when parents lose their jobs, their children's long-run economic opportunities suffer (Oreopoulos, Page, and Stevens 2008).

Sectoral Change

The Great Recession has aggravated an already challenging trend: sectoral shifts that are changing the nature of work. While most American workers were once engaged in producing food and manufactured goods, often through physical labor that did not require a great deal of training, the United States is increasingly a knowledge-based society where workers produce services using analytical skills. The changing economy offers tremendous opportunities for American workers in high technology, in the new clean energy economy, in health care, and in other high-skill fields.

Accompanying these shifts in the composition of employment have been changes in the institutions that govern the labor market. The prototypical American career once involved working for a single employer for many years, backed by a union that bargained for steady wage increases and for a pension that promised a stable, guaranteed income in retirement. The labor market has changed. Fewer than one in seven workers belongs to a union, and most people can count on changing employers several times over their careers. Moreover, the vast majority of retirement plans are now "defined contribution," meaning that workers' retirement incomes depend on the success of their individual investment decisions and on the performance of asset markets as a whole. This shift has meant added risk for workers, particularly those whose planned retirements coincide with downturns in asset prices.

Stagnating Incomes for Middle-Class Families

A final major challenge facing American workers is the decades-long stagnation in living standards for typical families and the related increase in inequality. Figure 8-3 offers two looks at income trends over the past half century. First, it shows real median family income—the level at which half of families have higher income and half have lower income—over time. The median rose steadily until 1970, but then the rate of growth slowed substantially, and since 2000, the median has actually fallen.

One determinant of family income is the number of individuals working outside of the home. Female labor force participation has risen dramatically: in 1960, just over 40 percent of adult women (aged 18–54) participated in the labor force; by 2000, approximately three-quarters did. This increase in female labor force participation contributed to the rise in family incomes. However, the female labor force participation rate has been roughly stable since 2000, and there are not likely to be future increases in participation as dramatic as those seen in the past. Further increases in family incomes will likely rely on growth in individual earnings.

The other two series in Figure 8-3 show the median earnings for men and women working full-time, year-round jobs. Real median female year-round earnings have grown steadily by about 1.1 percent per year on average since 1960, reflecting in part the gradual leveling of labor market barriers to women's career advancement. But real male earnings have been essentially flat since the early 1970s. One source of the stagnation of median male earnings and the reduced growth rate of median female earnings is that productivity growth slowed betwen 1973 and 1995 (Chapter 10). But this is not a complete explanation. Even at a reduced growth rate, American workers' productivity has more than doubled in the last 40 years.

A partial explanation for the divergence between productivity and earnings is the rapid rise in health care costs in recent years: an ever-greater share of the compensation paid by employers has gone toward health

Figure 8-3 Real Median Family Income and Median Individual Earnings



Notes: Family income measure is total money income excluding capital gains and before taxes. Median earnings series are for full-time, year-round workers; prior to 1989, only civilian workers are included. All series are deflated using CPI-U-RS. Sources: Department of Commerce (Census Bureau), Income, Poverty, and Health Insurance Coverage in the United States Table A-2; Current Population Survey, Annual Social and Economic Supplement, Historical Income Table F-12.

insurance premiums, which have risen much faster than inflation. This makes health reform an urgent priority. As discussed in Chapter 7, the proposals under consideration in Congress will slow the growth in health care costs, allowing American workers to realize more of the benefits of their hard work through increased take-home pay.

A second explanation is that per capita earnings are distributed in an increasingly unequal way, with ever-smaller shares going to workers in the middle and bottom of the distribution (Kopczuk, Saez, and Song forthcoming). Earnings inequality is compounded by inequality in nonlabor income, including dividends, interest, and capital gains. Figure 8-4 shows that in recent years nearly half of all income—including both wages and salaries and nonlabor income—has gone to 10 percent of families. The top 1 percent of families now receive nearly 25 percent of income, up from less than 10 percent in the 1970s (Piketty and Saez 2003). Today's income concentration is of a form not seen since the 1920s. Although there is nothing inherently wrong with high incomes at the top of the distribution, they are problematic if they come at the expense of the rest of workers. A major challenge for American public policy is to ensure that prosperity is again broadly shared.

Figure 8-4 Share of Pre-Tax Income Going to the Top 10 Percent of Families



Note: Includes capital gains. Sources: Piketty and Saez (2003); recent data from http://elsa.berkeley.edu/~saez/TabFig2007.xls.

POLICIES TO SUPPORT WORKERS

The Administration's first priority upon taking office was to strengthen the economy and the labor market, helping to provide jobs for those who need them. According to Council of Economic Advisers estimates, the American Recovery and Reinvestment Act of 2009 had created or saved between 1.5 million and 2 million jobs as of the fourth quarter of 2009 (Council of Economic Advisers 2010).

At the same time, the Administration has worked to strengthen the safety net for those who remain unemployed. The Recovery Act provided unprecedented support for the jobless, with increased benefits for every unemployment insurance recipient, the longest extension of unemployment benefits in history, an expansion of the Supplemental Nutrition Assistance Program, and assistance with health insurance premiums for those who have lost their jobs. These provisions have directly helped millions of outof-work Americans pay for housing, put food on the table, and maintain access to medical care. Moreover, because the unemployed are likely to spend any benefits they receive, these provisions have supported increased economic activity, strengthening the labor market and helping to create the job openings that will be needed to move people back into work. The safety net provisions in the Recovery Act are scheduled to expire at the end of February 2010, but because of the ongoing weakness in the labor market, the Administration is working with Congress to extend them further.

The Recovery Act also included provisions to reform the unemployment insurance system, making it work more effectively in today's economy. These provisions extend unemployment insurance eligibility to many low-wage and part-time workers who were not previously eligible. These and other recent initiatives will also make it possible for many unemployed workers to draw out-of-work benefits while participating in training that prepares them to enter new fields.

Even after the labor market recovers, the dynamic American economy will continue to pose challenges—while also creating opportunities—for workers. Rapid technological change will cause shifts in the labor market, forcing some workers into unanticipated mid-life career changes. Policy can help to ease these transitions. Most important, it can ensure that workers who may switch careers several times during their lifetimes are able to maintain health insurance and to support themselves in retirement. As discussed in Chapter 7, comprehensive health care reform will eliminate preexisting conditions restrictions in health insurance and improve access to insurance in the individual market. These changes will make it much easier for people to maintain insurance when they change jobs or pursue entrepreneurial opportunities.

Declines in stock prices and home values have put serious pressure on many Americans' retirement plans and have highlighted the importance of improved retirement security. The Administration has proposed several measures to increase saving by low- and middle-income workers. Efforts include expanded access to retirement plans along with rule changes to streamline enrollment in 401(k) and IRA programs, facilitate simple saving strategies, and reorient program default options to emphasize saving. And, most important, the Administration is committed to protecting Social Security, thus ensuring that it can provide a reliable source of income for future retirees, as it has for their parents and grandparents.

Health and retirement security need to be accompanied by labor market institutions that support and protect workers. Labor unions have long been a force helping to raise standards of living for middle-class families. They remain important, and we need to reinforce the principle that workers who wish to join a union should have the right to do so.

Another set of institutions in need of attention is our immigration system. The current framework absorbs considerable resources but does not serve anyone—native workers, employers, taxpayers, or potential immigrants—well. Particular problems are posed by the presence of large numbers of unauthorized immigrants and the lengthy queues—some over 20 years—for legal residency. Reform of the immigration system can strengthen our economy and labor market. Reform should provide a path for those who are currently here illegally to come out of the shadows. It should include strengthened border controls and better enforcement of laws against employing undocumented workers, along with programs to help immigrants and their children quickly integrate into their communities and American society. Future immigration policy should be more responsive to our economy's changing needs. Reform of the employment-based visa and permanent residency programs will also help reduce the incentives to immigrate illegally by giving potential immigrants a more viable legal path into the United States.

Education and Training: The Groundwork for Long-Term Prosperity

Rebuilding our economy on a more sustainable basis, investing in future productivity, fostering technological and other forms of innovation, and reforming our health care system to deliver better outcomes at lower costs are all crucial to long-run increases in living standards, and all are discussed elsewhere in this report. But one fundamental component of a strategy to ensure balanced, sustained, and widely shared growth is a robust system of education and training. The positive link between education and worker productivity—the cornerstone of economic prosperity—is well established. In fact, research has credited education with up to one-third of the productivity growth in the United States from the 1950s to the 1990s (Jones 2002).

Benefits of Education

At the individual level, there is a strong relationship between educational attainment and earnings (Card 1999). The earnings premium shows up at all levels of education. Those who complete one year of postsecondary education earn more than those who stop after high school, while those who complete two years or finish degrees earn more still. And job training for the unemployed has been shown by rigorous studies to raise participants' future earnings (Manpower Demonstration Research Corporation 1983; Jacobson, LaLonde, and Sullivan 2005).

The earnings premium associated with education is far larger than the cost—in tuition and forgone earnings—of remaining in school (Barrow and Rouse 2005), and it has grown in recent decades. Figure 8-5 shows the trends in the average annual earnings of individuals with high school diplomas but no college and of those with bachelor's degrees. In the mid-1960s, college graduates earned roughly 50 percent more than high school graduates, on average; by 2008, the premium had more than doubled.

Figure 8-5 Total Wage and Salary Income by Educational Group



Notes: Figures for full-time workers aged 25-65 who worked 50-52 weeks in the calendar year. Before 1991, education groups are defined based on the highest grade of school or year of college completed. Beginning in 1991, groups are defined based on the highest degree or diploma earned. Incomes are deflated using the CPI-U. Source: Department of Labor (Bureau of Labor Statistics), March Current Population Survey, 1964-2009.

Education has other important benefits besides increased earnings. For example, recent studies have found that education improves people's health (Cutler and Lleras-Muney 2006; Grossman 2005). The explanation may be that better educated people make better health-related decisions, such as exercising or not smoking, or that education allows for easier navigation of a complex health care system. Education's benefits also extend beyond the individual. More educated people commit fewer crimes, vote more, and are more likely to support free speech (Dee 2004; Lochner and Moretti 2004). They also make their neighbors and coworkers more productive (Moretti 2004).

Trends in U.S. Educational Attainment

The United States has historically had the world's best education system. Although most European countries once limited advanced education to the economic elite, the United States has historically made it broadly available. U.S secondary schools have been free and generally accessible since early in the 20th century. By the 1950s, nearly 80 percent of older teens (aged 15–19) in the United States were enrolled in secondary school, compared with fewer than 40 percent in Western Europe. The widespread expansion of state colleges and universities, begun under the Morrill Land Grant Act of 1862, led to even further advances in American education. Average educational attainment of people born in 1975 was over five years higher than that of those born in 1895. About 50 percent of the gain was attributable to increases in high school education, about 30 percent to increases in college and postcollege education, and the remainder to continued increases in elementary education (Goldin and Katz 2008). During the second half of the 20th century, as educational attainment rose worldwide, the United States became a clear leader in graduate education, attracting the brightest students from around the world. Some remained in the United States, adding importantly to the Nation's human capital stock and its diversity, while others returned to their home countries and used the education they got here to help increase prosperity there.

Harvard economists Claudia Goldin and Lawrence Katz contend that America's strong educational system helped make the United States the richest nation in the world (Goldin and Katz 2008). Over the past several decades, however, U.S. leadership in education has slipped. Although the Nation remains preeminent in postgraduate education, we can no longer claim to be home to the most educated people in the world.

For decades, the number of educated American workers grew faster than did the demand for them. But beginning with the cohort that completed its schooling in the early 1970s, the growth rate in the supply of educated Americans slowed significantly. This can be seen in Figure 8-6, which shows the mean years of schooling of Americans by year of birth. High school and college graduation rates, which grew steadily for many decades, began to stagnate, and younger generations no longer graduate at significantly higher rates than did previous generations. This slowdown in the growth of educational attainment has contributed to rising income inequality, as the shortage of college-educated workers has meant rising wages for high-skill work and falling wages for work requiring less education. The current recession may provide an opportunity to reverse this slowdown but only if our education system can keep up with increased demand (Box 8-1).

Meanwhile, other developed countries have continued to improve their educational outcomes, and the United States has slipped behind several other advanced countries at both the high school and postsecondary levels. Among the cohort born between 1943 and 1952—a group that largely completed its education by the late 1970s—the United States leads the world in the share with at least a bachelor's degree or the equivalent. In more recent cohorts, the percentage completing college has been roughly stable in the United States while increasing substantially in several peer countries. Figure 8-7 shows that only 40 percent of Americans born between 1973 and

Figure 8-6 Mean Years of Schooling by Birth Cohort



Notes: Years of schooling at 30 years of age. Methodology described in Goldin and Katz (2007). Graph shows estimates of the average years of schooling at 30 years of age for each birth cohort, obtained from regressions of the log of mean years of schooling by birth cohort-year cell on a full set of birth cohort dummies and a quartic in age. Sample includes all native-born residents aged 25 to 64 in the 1940-2000 decennial census IPUMS samples and the 2005 CPS MORG. For further details on the method and data processing, see Goldin and Katz (2008, Figure 1.4) and DeLong, Goldin, and Katz (2003, Figure 2.1). Sources: Department of Commerce (Bureau of the Census), 1940-2000 Census IPUMS, 2005 CPS MORG: Goldin and Katz (2007).

Box 8-1: The Recession's Impact on the Education System

Today's weak labor market is likely to lead to short- and mediumrun increases in school enrollments, as high unemployment pushes many young people to increase their job skills through further education. Indeed, college enrollments rose substantially in 2008 relative to 2007, and preliminary reports suggest further increases in 2009. The resulting increase in educational attainment will offer long-run benefits for the economy, because today's students will be more productive workers when labor demand returns to full strength.

In the short run, however, elevated enrollments are placing strains on colleges, particularly the two-year colleges that are seeing most of the enrollment increase, as colleges' costs are rising at the same time state *Continued on next page*

Box 8-1, continued

funding is being cut. Elementary and secondary schools are under similar strains. In part because of reduced state funding, schools employed roughly 70,000 fewer teachers and teachers' assistants in October 2009 than a year earlier, even though student enrollments were up. The reduction in per-pupil resources at both levels is an unfortunate budgetary response. At this time of high unemployment, it is desirable to encourage human capital formation, not make it more difficult. The State Fiscal Stabilization Fund, part of the Recovery Act, is helping in this regard, and recipients credit the Act with creating or saving at least 325,000 education jobs through the third quarter of 2009.



Figure 8-7 Educational Attainment by Birth Cohort, 2007

Notes: Postsecondary degrees or credentials include only those of normal duration of two years or more and correspond to the Organisation for Economic Co-operation and Development (OECD) tertiary (types A and B) and advanced research qualifications. U.S. data reflect associate's, bachelor's, and more advanced degrees. Sources: Organisation for Economic Co-operation and Development (2009); OECD Indicators Table A 1.3a.

1982 have completed associate's degrees or better. Equivalent attainment rates are higher in nine other countries, led by Canada and Korea, where 56 percent completed some postsecondary degree or extended certificate program. High school graduation rates show a similar pattern, with the United States slipping from the top rank to the middle in recent decades.

U.S. Student Achievement

U.S. student achievement, as measured by assessments that capture how much students know at particular ages or grades, has improved notably in recent years, even as attainment has stagnated. The most reliable barometer is the National Assessment of Education Progress (NAEP), which has been administered consistently for more than three decades. Figure 8-8 shows average NAEP math scores for students at three different ages from 1978 through 2008. The performance of 9-year-olds (who are typically enrolled in 4th grade) and 13-year-olds (typically 8th grade) has improved over the past 35 years. The size of the achievement gains is impressive. Nearly three-quarters of 13-year-olds in 2008 scored above the 1978 median, with similar gains throughout the distribution. The performance of 17-year-olds (typically 12th graders) has also improved, although the gain was smaller.

Despite recent progress, American students are not doing as well as they should. In addition to average performance, the NAEP program measures the fraction of students who attain target achievement levels defined based on the skills that children at each age and grade should have mastered. A student is judged "proficient" if he or she demonstrates age- or grade-appropriate competency over challenging subject matter and shows an ability to apply knowledge to real-world situations. In the most recent tests, only 31 percent of 8th graders were proficient in reading and only 34 percent in math. Proficiency rates are similar in 4th grade.

For some subgroups, proficiency rates were much lower. Only 12 percent of black students and 17 percent of Hispanics were proficient in math in 8th grade. The low achievement in these subgroups is also reflected in low attainment. In 2000, only 81 percent of black young adults (aged 30–34) had graduated from high school, and only 15 percent had bachelor's degrees. Although racial and ethnic gaps have narrowed importantly in recent decades—the black-white and Hispanic-white mathematics gaps at age 13 in the NAEP long-term trend data are each only two-thirds as large as in 1978—the low attainment and achievement of black and Hispanic students remain disturbing evidence of educational inequality in our society. Our future prosperity depends on ensuring that American children from all backgrounds have the opportunity to become productive workers.

Nowhere does low performance more acutely affect the health of the U.S. economy than in the areas of science, technology, engineering, and mathematics (known commonly by the acronym STEM). Employers frequently report that they have difficulty finding Americans with the qualifications needed for technical jobs and are forced to look abroad for suitably skilled workers. Indeed, international comparisons show that other countries achieve higher outcomes in STEM skills than we do. In

Figure 8-8 Long-Term Trend Math Performance



Notes: In 2004 and thereafter, accommodations were made available for students with disabilities and for English language learners, and other changes in test administration conditions were introduced. Dashed lines represent data from tests given under the new conditions.

Source: Department of Education (Institute of Education Sciences, National Center for Education Statistics), National Assessment of Educational Progress (NAEP), Long-Term Trend Mathematics Assessments.

2006, U.S. 15-year-olds scored well below the Organisation for Economic Co-operation and Development (OECD) average for science literacy on the Programme for International Student Assessment, and behind most other OECD nations on critical skills and competencies, such as explaining scientific phenomena and using scientific evidence.

A PATH TOWARD IMPROVED Educational Performance

Concerned about the impact of stagnating educational outcomes on U.S. economic growth, the President has pledged to return our Nation to the path of increasing educational attainment. He has challenged every young American to commit to at least one year of higher education or career training. He also has set ambitious goals: by 2020, America should "once again have the highest proportion of college graduates in the world" (Obama 2009a), and U.S. students should move "from the middle to the top of the pack in science and math" (Obama 2009b). Meeting these challenges will require substantial commitment and reform, not just at the postsecondary level but also in elementary and high schools and even in early childhood programs.

Postsecondary Education

The Nation's postsecondary education system encompasses a diverse group of institutions, including public, nonprofit, and for-profit organizations offering education ranging from short-term skill refresher programs up to doctoral degrees.

In many of our peer countries, postsecondary education is entirely or largely state funded, with little direct cost to the student. U.S. postsecondary students, however, are generally charged tuition and fees, which have risen substantially in real terms over the past three decades. It is important to keep in mind that most of our students do not pay full tuition, as more than 60 percent of full-time students receive grant aid, and millions more also benefit from Federal tax credits and deductions for tuition. But increases in financial aid and Federal assistance have not kept up with rising costs, and the net price of attendance at four-year public colleges has risen nearly 20 percent over the past decade (College Board 2009).

Young people may have trouble financing expensive investments in college education even when these investments will pay off through increased long-term earnings. Thus, rising college costs represent an important barrier to enrollment. One study indicates that a \$1,000 reduction in net college costs increases the probability of attending college by 5 percentage points and leads students to complete about one-fifth of a year more college (Dynarski 2003). Thus the dramatic increase in the price of college has likely had an adverse impact on college attendance and completion. Moreover, the impact of cost increases is not evenly distributed: while students from high-income families can relatively easily absorb the increases, students from lower-income families are disproportionately deterred.

The rising cost of college is affecting educational attainment and will continue to do so unless we find ways to make college more affordable. To this end, the Administration has secured historic investments in student aid, including more than \$100 billion over the next 10 years for more generous Pell Grants, much of it financed through the elimination of wasteful subsidies to private lenders in the student loan program. This will ensure that virtually all students eligible for Pell Grants will receive larger awards. In addition, the Administration is taking steps to dramatically simplify the student aid application process, the complexity of which deters many aid-eligible students from even applying. This simplification will help millions more students benefit from the Federal investments in college accessibility and affordability.

Tuition is not the only barrier to college completion. A great many students, including nearly half of those at two-year institutions, begin college but fail to graduate. Completion rates are particularly low for low-income students. One way to raise completion rates is through better design of the institutional environment. Recent rigorous studies have shown that improvements such as enhanced student services, changes in how classes are organized, innovations in how remedial education is structured, and basing some portion of financial aid on student performance can all contribute to improved persistence (Scrivener et al. 2008; Scrivener, Sommo, and Collado 2009; Richburg-Hayes et al. 2009).

Training and Adult Education

An often-overlooked component of the Nation's education system, one in which the government makes a major investment, is job training and adult education. In 2009, the Federal Government devoted more than \$17 billion to job training and employment services and spent substantial additional funds on Pell Grants for vocational and adult education students. Training is provided by a diverse set of institutions, including proprietary (for-profit) schools, four-year colleges, community-based organizations, and public vocational and technical schools. Box 8-2 discusses a particularly important type of training provider, community colleges.

Studies have documented that training and adult education programs improve participants' labor market outcomes. For example, a recent study found that Workforce Investment Act training programs for adults boosted employment and earnings, on average, although results varied substantially across states (Heinrich, Mueser, and Troske 2008). Evidence is also growing that state training programs for adults can have large positive impacts on long-term earnings (Hotz, Imbens, and Klerman 2006; Dyke et al. 2006).

Education and training for adults play critical roles in helping displaced workers regain employment in the short term and in helping them obtain and refresh their skills in the face of an ever-changing workplace. For example, one study of displaced workers in Washington State suggests that attending a community college after displacement during the 1990s increased long-term earnings about 9 percent for men and about 13 percent for women (Jacobson, LaLonde, and Sullivan 2005). The benefits were greatest for academic courses in math and science, as well as for courses related to the health professions, technical trades (such as air conditioner repair), and technical professions (such as software development). Although research demonstrates the value of training programs, there is no doubt that the current system could be more effective. Five strategies that could improve effectiveness are: aligning goals across different elements of the education and training system and constructing a cumulative curriculum; collaborating with employers to ensure that curricula are aligned with workforce needs and regional economies; making sure that scheduling is flexible and that curricula meet the needs of older and nontraditional students; providing incentives and flexibility for institutions and programs to continually improve and innovate; and establishing a stronger accountability system that measures the right things, makes performance data available in an easily understood format, and does not create perverse incentives to avoid serving populations that most need assistance. Reauthorization of the Workforce Investment Act will provide an opportunity to implement these strategies.

Box 8-2: Community Colleges: A Crucial Component of Our Higher Education System

Community colleges are an important but often overlooked component of the Nation's postsecondary education system. These colleges may offer academic programs preparing students to transfer to four-year colleges to complete bachelor's degrees, academic and vocational programs leading to terminal associate's degrees or certificates, remedial education for those who want to attend college but who left high school insufficiently prepared, and short-term job training or other educational experiences. Most also offer contract training in which they work directly with the public sector, employers, and other clients (such as prisons) to develop and provide training for specific occupations or purposes.

Community colleges are public institutions that typically charge very low tuition and primarily serve commuters, which makes them accessible to people who do not have the resources for a four-year college. They generally have "open door" admissions policies, requiring only a high school diploma or an ability to benefit from the educational experience. This makes them a good choice for older and nontraditional students, as well as for potential students who want to pursue additional education and build their human capital but want or need to do so at relatively low cost.

More than 35 percent of first-time college freshmen enroll at community colleges. These colleges also serve about 35 percent of individuals receiving job training through the Workforce Investment Act, along with a notable proportion of adults attending adult basic education, English as a second language, and General Educational Development

Continued on next page

Box 8-2, continued

(GED) preparation classes. Researchers have estimated that attending a community college significantly raises earnings, even for individuals who do not complete degrees (Kane and Rouse 1999; Marcotte et al. 2005).

Community colleges will form the linchpin of efforts to increase college attendance and graduation rates. The Administration has proposed a new program of competitive grants for implementing college completion initiatives, with a focus on community colleges. Along with the sorts of strategies mentioned above for training programs more generally, community college initiatives could include building better partnerships between colleges, businesses, the workforce investment system, and other workforce partners to create career pathways for workers; expanding course offerings including those built on partnerships between colleges and high schools; and stronger accountability for results. These strategies will help both to strengthen colleges and to raise completion rates. The proposed program also recognizes the need to learn from such investment and therefore supports record levels of funding for research to evaluate the initiatives' effectiveness.

Elementary and Secondary Education

Students who leave high school with inadequate academic preparation face greater challenges to success in postsecondary training. In 2001, nearly one-third of first-year college students in the United States needed to take remedial classes in reading, writing, or mathematics, at an estimated cost of more than \$1 billion (Bettinger and Long 2007). The need for remediation is a clear warning sign that a student may later drop out. In one study, students who needed the most remediation were only about half as likely to complete college as their peers who were better prepared (Adelman 1998). Of course, students who leave high school well prepared are more successful in the labor market as well as in college.

The task of improving college and labor market preparedness begins in elementary and secondary school, if not earlier. Among the most important contributors to enhanced student outcomes is effective teaching. Common sense and research both recognize the importance of high-quality teachers, and yet too few teachers reach that standard. Improvements are needed in teacher training, recruitment, evaluation, and in-service professional development.

Not only is the supply of high-quality teachers insufficient but their distribution across schools is inequitable. Frequently, schools with high

concentrations of minority and low-income students, the very schools that need quality teachers the most, cannot recruit and retain skilled educators. In New York State, 21 percent of black students had teachers who failed their general knowledge certification exam on the first attempt, compared with 7 percent of white students (Lankford, Loeb, and Wyckoff 2002). A particular problem is high teacher turnover: high-poverty and high-minority schools have much higher turnover than do schools with more advantaged students. Some districts have begun experimenting with financial incentives for teaching in high-need schools; these efforts need to be rigorously evaluated and, if they are found to be successful, disseminated widely.

Improving teacher quality, however, is not the only promising strategy for change. Others include extending both the school day and the school year. Many successful strategies have emerged from schools that were given freedom to explore new and creative approaches to long-standing problems. Although traditional public schools can be agents for change, the public charter school model is tailor-made for such innovation. The Nation's experience with charter schools has been fairly brief, but evidence to date suggests that some of these schools have found successful strategies for raising student achievement. An important future challenge will be to take these strategies and other innovative school models to scale, even as schools continue to search for ever-better approaches.

Although most reforms in recent years have focused on elementary schools, high school reform is now rising to the top of the education policy agenda. Promising approaches to improving secondary education include programs that offer opportunities for accelerated instruction and individualized learning, programs to expand access to early college coursework before finishing high school, residential schools for disadvantaged students, and specialty career-focused academies.

An environment that supports innovation must be coupled with strong accountability. Some innovations are bound to be unsuccessful, and indeed there is substantial variation in the quality of both public and charter schools. Strong accountability systems that promote effective instructional approaches can provide incentives for all school stakeholders to perform at their best and help to identify struggling schools in need of intervention. Systems are needed to identify failing schools, based on high-quality student assessments as well as other metrics. At the same time, accountability strategies must be carefully crafted to discourage "teaching to the test" and other approaches that aim at the measures used for evaluating schools rather than at true student learning. Accountability strategies must also recognize that student achievement reflects family, community, and peer influences as well as that of the school. Providing incentives for schools identified as failing to improve can significantly improve student outcomes. Several states have done just that. Sixteen years ago, Massachusetts began setting curriculum frameworks and holding schools accountable for student performance. Massachusetts students have historically scored above the national average on various academic achievement measures, but since passing school accountability reform, Massachusetts has moved even farther ahead. In Florida, too, a strong school accountability plan, implemented in 1999, has shown positive results (Figlio and Rouse 2006; Rouse et al. 2007).

The Recovery Act included an unprecedented Federal investment in elementary and secondary education. The Race to the Top Fund provides competitive grants to reward and encourage states that have taken strong measures to improve teacher quality, develop meaningful incentives, incorporate data into decisionmaking, and raise student achievement in low-achieving schools. The upcoming reauthorization of the Elementary and Secondary Education Act provides an opportunity to make further progress.

Early Childhood Education

High-quality elementary and secondary schools are necessary, but they are not enough. In recent years, researchers and educators have learned a great deal about how important the school readiness of entering kindergarteners is to later academic and labor market success. School readiness involves both academic skills, as measured by vocabulary size, complexity of spoken language, and basic counting, and social and emotional skills such as the ability to follow directions and self-regulate. Children who arrive at school without these skills lack the foundation on which later learning will build.

Recent research indicates that as many as 45 percent of entering kindergarteners are ill-prepared to succeed in school (Hair et al. 2006). Reducing the share of at-risk preschoolers is critical to strengthening America's educational system and its labor market in the long run. High-quality early childhood interventions can significantly improve school readiness, especially for low-income children. Intensive programs that combine high-quality preschool with home visits and parenting support have been shown to raise children's later test scores and educational attainment and also to reduce teen pregnancy rates and criminality (Karoly et al. 1998; Schweinhart et al. 1985).

The programs on which the most compelling research is based include small classes, highly educated teachers with training in early childhood education, and stimulating curricula. They feature parent training components that help parents reinforce what the teachers do in the classroom. The programs also assist teachers in identifying health and behavior problems that can inhibit children's intellectual and emotional development. Importantly, even intensive, expensive programs are cost-effective. For example, one particularly intensive program was found to produce \$2.50 in long-run savings for taxpayers for every dollar spent, because in adulthood the participating children earned higher incomes, used fewer educational and government resources, and had lower health care costs (Barnett and Masse 2007).

Less intensive programs can be effective as well. The Head Start program provides an academically enriching preschool environment for 3- and 4-year-olds, at a cost in 2008 of only about \$7,000 per child per year. Although the quality of Head Start centers varies widely, studies have found that attendance at a well-run center improves children's later-life outcomes (Currie and Thomas 1995).

Ensuring that all families have access to the services and support they need to help prepare their children for kindergarten will require a strong system of high-quality preschools and other early-learning centers. Providers must be held to high standards and given the resources—including qualified staff and teachers—needed for success. And when children leave their preschool and prekindergarten programs, they must have access to quality kindergartens that ease the transition to elementary school.

CONCLUSION

The recession has taken a severe toll on American workers and many will continue to suffer from its effects for some time to come. A strong safety net will be essential to helping working families through this trying time. As the economy strengthens, we must rebuild our labor market institutions in ways that ensure that prosperity and economic security are more widely shared.

Going forward, workers who have strong analytic and interactive skills will be best able to secure good jobs and to contribute to continued U.S. prosperity. Education must begin in preschool, because children's long-run success depends on arriving in kindergarten ready to learn, and be available throughout adulthood, because our increasingly dynamic economy requires lifelong learning. The Administration's education agenda will strengthen our education and training institutions at all levels.

CHAPTER 9

Xc

TRANSFORMING THE ENERGY SECTOR AND ADDRESSING CLIMATE CHANGE

The President has called climate change "one of the defining challenges of our time." If steps are not taken to reduce atmospheric concentrations of carbon dioxide (CO_2) and other greenhouse gases, scientists project that the world could face a significant increase in the global average surface temperature. Projections indicate that CO_2 concentrations may double from pre-industrial levels as early as 2050, and that the higher concentrations are associated with a likely long-run temperature increase of 2 to 4.5 °C (3.6 to 8.1 °F). With temperatures at that level, climate change will lead to a range of negative impacts, including increased mortality rates, reduced agricultural yields in many parts of the world, and rising sea levels that could inundate low-lying coastal areas.

The planet has not experienced such rapid warming on a global scale in many thousands of years, and never as a result of emissions from human activity. By far the largest contribution to this warming comes from carbonintensive fossil fuels, which the world depends on for cooking, heating and cooling homes and offices, transportation, generating electricity, and manufacturing products such as cement and steel.

The potential for significant damages if emissions from these activities are not curbed makes it crucial for the world to transform the energy sector. This transformation will entail developing entirely new industries and making major changes in the way energy is produced, distributed, and used. New technologies will be developed and new jobs created. The United States can play a leadership role in these efforts and become a world leader in clean energy technologies. The transformation to a clean energy economy will also reduce our Nation's dependence on oil and improve national security, and could reduce other pollutants in addition to greenhouse gases.

As this transformation unfolds, two market failures provide a motivation for government policy. First, greenhouse gas emissions are a

classic example of a negative externality. As emitters of greenhouse gases contribute to climate change, they impose costs on others that are not taken into account when making decisions about how to produce and consume energy-intensive goods. Second, the development of new technologies has positive externalities. As discussed in Chapter 10, the developers of new technologies generally capture much less than the full benefit of their ideas to consumers, firms, and future innovators, and thus underinvest in research and development.

This diagnosis of the market failures underlying climate change provides clear guidance about the role of policy in the area. First, policy should take steps to ensure that the market provides the correct signals to greenhouse gas emitters about the full cost of their emissions. Second, policy should actively promote the development of new technologies. One way to accomplish these goals is through a market-based approach to reducing greenhouse gases combined with government incentives to promote research and development of new clean energy technologies. Once policy has ensured that markets are providing the correct signals and incentives, the operation of market forces can find the most effective and efficient paths to the clean energy economy. The Administration's policies in this area are guided by these principles.

GREENHOUSE GAS EMISSIONS, CLIMATE, AND ECONOMIC WELL-BEING

The world's dependence on carbon-intensive fuels is projected to continue to increase global average temperature as greenhouse gas emissions build in the atmosphere. These emissions are particularly problematic because many are long-lived: for instance, it will take a century for slightly more than half of the carbon dioxide now in the atmosphere to be naturally removed. The atmospheric buildup of greenhouse gases since the start of the industrial revolution has already raised average global temperature by roughly 0.8 °C (1.4 °F). If the concentrations of all greenhouse gases and aerosols resulting from human activity could somehow be kept constant at current levels, the temperature would still go up about another 0.4 °C (0.7 °F) by the end of the century. It is important to note that the overall impact of today's emissions would be even higher were it not for the offsetting net cooling effect of increases in atmospheric aerosols such as particulate matter caused by the incomplete combustion of fossil fuels in coal-fired power plants.

But keeping atmospheric concentrations constant at today's level is virtually impossible. Any additional greenhouse gas emissions contribute to atmospheric concentrations. And because of projected economic growth, particularly in developing countries, greenhouse gas emissions will continue to grow. Moreover, the sources of atmospheric aerosols that have partly offset the greenhouse warming experienced so far are not likely to grow apace because governments around the world are taking actions to curb these emissions to improve public health and control acid rain.

Greenhouse Gases

The principal long-lived greenhouse gases whose concentrations have been affected by human activity are carbon dioxide, methane, nitrous oxide, and halocarbons. Sulfur hexafluoride, though emitted in smaller quantities, is also a very potent greenhouse gas. All have increased significantly from pre-industrial levels. Carbon dioxide is emitted when fossil fuel is burned to heat and cool homes, fuel vehicles, and manufacture products such as cement and steel. Deforestation also releases carbon dioxide stored in trees and soil. The primary sources of methane and nitrous oxide are agricultural practices, natural gas use, and landfills. Halocarbons originate from refrigeration and industrial processes, while sulfur hexafluoride emissions mainly stem from electrical and industrial applications.

The pre-industrial atmospheric concentration of carbon dioxide was about 280 parts per million (ppm), meaning that 280 out of every million molecules of gas in the atmosphere were carbon dioxide. As of December 2009, its concentration had increased to about 387 ppm. Taking into account other long-lived greenhouse gases would result in a higher warming potential, but the net cooling effect of aerosols that have been added by humans to the atmosphere nearly cancels the effect of those other gases. Thus, the overall effect of human activity on the atmosphere to date is (coincidentally) about the same as that of the carbon dioxide increase alone.

A variety of models project that, absent climate policy, atmospheric concentrations of carbon dioxide will continue to grow, reaching levels ranging from 610 to 1030 ppm by 2100 (Figure 9-1). When the warming effects of other long-lived greenhouse gases are included, this range is equivalent to 830 to 1530 ppm. The breadth of the range reflects uncertainty about future energy supply, energy demand, and the future behavior of the carbon cycle.¹

¹ Underlying uncertainty about future energy supply is uncertainty regarding the costs and penetration rates of technology, and resource availability. Uncertainty about future energy demand is driven by uncertainty regarding growth in population, gross domestic product, and energy efficiency.

Figure 9-1 Projected Global Carbon Dioxide Concentrations with No Additional Action



Note: The figure shows baseline projections from 10 different models, with the models that produce the highest, middle, and lowest atmospheric concentration of carbon dioxide in 2100 noted.

Source: Stanford Energy Modeling Forum, EMF 22 International Scenarios, 2009.

Temperature Change

The implications of large increases in greenhouse gas concentrations for temperature change are quite serious. There is a consensus among scientists that a doubling of CO_2 concentrations (or any equivalent combination of greenhouse gases) above the pre-industrial level of 280 ppm is likely to increase global average surface temperature by 2 to 4.5 °C (3.6 to 8.1 °F), with a best estimate of about 3 °C (5.4 °F).² Given much higher projections of greenhouse gas concentrations by the end of the century, a recent study projects that the global average temperature in 2100 is likely to be 4.2 to 8.1 °C (7.6 to 14.6 °F) above pre-industrial levels, absent effective policies to reduce emissions (Webster et al. 2009).

Increases in global average temperature mask variability by region. For instance, absent effective policy to reduce greenhouse gas emissions, mid-continent temperature increases are likely to be about 30 to 60 percent higher than the global average, while increases in parts of the far North (for instance, parts of Alaska, northern Canada, and Russia) are expected to be double the global average. The power of the strongest hurricanes and

² These values express what is likely to happen in equilibrium. Average surface temperature does not reach a new equilibrium for some decades after any given increase in the concentration of heat-trapping gases because of the large thermal inertia of the oceans.

typhoons is likely to grow, as are the frequency and intensity of extreme weather events such as heat waves, heavy precipitation, floods, and droughts. One study, for example, estimates that the number of days that mean temperature (calculated as the average of the daily minimum and daily maximum) in the United States will exceed 90 °F will increase from about one day a year between 1968 and 2002 to over 20 days a year by the end of the century (Deschênes and Greenstone 2008).

As the increase in global average temperature warms seawater and expands its volume, sea levels are projected to rise. Melting glaciers also contribute to sea-level rise. Sea level has already risen about 0.6 feet since 1900; it is projected to rise another 0.6 to 1.9 feet because of volume expansion and glacial melt by the end of the century. These estimates exclude possible rapid ice loss from the Greenland and Antarctic ice sheets, events that are highly uncertain but that could cause another 2 feet or more of sea level rise by 2100. Without expensive adaptation, low-lying land in coastal areas around the world could become permanently flooded as a result.

Impact on Economic Well-Being

Although predicting future economic impacts associated with increases in global average temperature involves a large degree of uncertainty, these economic effects are likely to be significant and largely negative, and to vary substantially by region. Even for countries that may be less vulnerable, large negative economic impacts in other regions will inevitably jeopardize their security and well-being. For instance, the temperature extremes and other changes in climate patterns associated with global average temperature increases of 2 °C (3.6 °F) or more are projected to increase mortality rates and reduce agricultural productivity in many regions, threaten the health and sustainability of many ecosystems, and necessitate expensive measures to adapt to these changes. Box 9-1 discusses recent research on projected physical and economic impacts in the United States.

Some regions of the world are expected to be particularly hardhit. For example, low-lying and island countries are especially vulnerable to sea-level rise. Further, developing countries, especially those outside moderate temperature zones, may be especially poorly equipped to confront temperature changes. Recent research, for example, suggests that India may experience substantial declines in agricultural yields and increases in mortality rates (Guiteras 2009; Burgess et al. 2009).

These projected changes are predicated on likely increases in global mean temperature. Particularly worrisome is the possibility of much greater temperature change, should more extreme projections prove accurate. Although more drastic increases are less likely, their consequences could be devastating. For example, the costs of climate change are expected to grow nonlinearly (that is, more rapidly) as temperatures rise (Box 9-2).

In the United States, continued reliance on petroleum-based fuels poses challenges that go beyond climate change. It makes the economy susceptible to potentially costly spikes in crude oil prices and imposes significant national security costs. A panel of retired senior military officers and national security experts concluded that unabated climate change may act as a "threat multiplier" to foment further instability in some of the world's most unstable regions (CNA Corporation 2007). Fossil fuel consumption is also associated with other forms of pollution that harm human health, such as particulate, sulfur dioxide, and mercury emissions from coal-powered electricity generation.

Box 9-1: Climate Change in the United States and Potential Impacts

The average temperature in the United States has risen more than 1 °C (2 °F) over the past 50 years. However, this increase masks considerable regional variation. For instance, the temperature increase in Alaska has been more than twice the U.S. average. By the end of the century, the United Nations Intergovernmental Panel on Climate Change projects that average continental U.S. temperatures will increase by another 1.5 to 4.5 °C (about 2.7 to 8.1 °F) absent climate policy (Intergovernmental Panel on Climate Change 2007). Greater increases are possible, depending in part on how fast emissions rise over time. Climate change will likely bring substantial changes to water resources, energy supply, transportation, agriculture, ecosystems, and public health. Potential effects on U.S. water availability and agriculture are described below (Karl, Melillo, and Peterson 2009).

Precipitation already has increased an average of 5 percent over the past 50 years, with increases of up to 25 percent in parts of the Northeast and Midwest and decreases of up to 20 percent in parts of the Southeast. In the future, these trends will likely be amplified. The amount of rain falling in the heaviest downpours has increased an average of 20 percent over the past century, a trend that is expected to continue. In addition, Atlantic hurricanes and the strongest cold-season storms in the North are likely to become more powerful. In recent decades, the West has seen more droughts, greater wildfire frequency, and a longer fire season. Increases in temperature and reductions in rainfall frequency will likely exacerbate future droughts and wildfires.

Continued on next page

Box 9-1, continued

Although warmer temperatures may extend the growing season in the United States for many crops, large increases in temperature also may harm growth and yields. One study finds that yields are relatively unaffected by changes in mean temperature, but that they are vulnerable to an increase in the number of very hot days (Schlenker and Roberts 2009). That said, another study finds that expected changes in temperature in the United States will have a relatively small impact on overall agricultural profits (Deschenes and Greenstone 2007). Neither study accounts for the possible increase in yields from elevated carbon dioxide levels or the possible decrease in yields from increased pests, weeds, and disease.

Climate change is also likely to bring increased weather uncertainty. Extreme weather events—droughts and downpours—may have catastrophic effects on crops in some years. Growing crops in warmer climates requires more water, which will be particularly challenging in regions such as the Southeast that will likely face decreased water availability.

American farmers have substantial capacity for innovation and are already taking steps to adapt to climate change. For instance, they are changing planting dates and adopting crop varieties with greater resistance to heat or drought. They can also undertake more elaborate change. In areas projected to become hotter and drier, some farmers have returned to dryland farming (instead of irrigation) to help the soil absorb more moisture from the rain. How well the private sector can adapt to the effects of climate change and at what cost is still an open question.

Box 9-2: Expected Consumption Loss Associated with Temperature Increase

One major uncertainty regarding climate change is the relationship between temperature change and living standards, usually measured as total consumption. The highly respected PAGE model produces an estimate of this relationship (see Box 9-2 figure). Specifically, it reports the expected decline in consumption as a fraction of GDP in the year 2100. The range of these estimates is represented by the dotted lines that represent the 5th and 95th percentile of the damage estimates. The range reflects uncertainty about the sensitivity of the climate system to increased greenhouse gas concentrations, the probability of catastrophic events, and several other factors.

Continued on next page

Box 9-2, continued

The figure reveals that the projected losses for the most likely range of temperature changes are relatively modest. For example, at the Intergovernmental Panel on Climate Change's most likely temperature increase of 3 °C for a doubling of CO_2 concentration (concentrations in 2100 are likely to be higher), the projected decline is 1.5 percent of GDP.

The projected relationship between temperature changes and consumption losses is nonlinear—that is, the projected losses grow more rapidly as temperature increases. For example, while the projected loss for the first 3 °C is 1.5 percent, the loss at 6 °C is five times higher. And the estimated loss associated with an increase of 9 °C is about 20 percent with a 90 percent confidence interval of 8 to 38 percent. These large losses at higher temperatures reflect the increased probability of especially harmful events, such as large-scale changes in ice sheets or vegetation, or releases of methane from thawing permafrost and warming oceans. Overall, it is evident that policy based on the most likely outcomes may not adequately protect society because such estimates fail to reflect the harms at higher temperatures.



Consumption Loss as a Function of Global Temperature Change

Loss, global damages as percent of global GDP

Notes: In the PAGE model, the climate damages as a fraction of global GDP depend on the temperature change and the distribution of GDP across regions, which may change over time. The damage function also includes the probability of a catastrophic event. This graph shows the distribution of damages as a fraction of GDP in year 2100 using the default scenario from PAGE 2002. Source: Hope (2006).

JUMP-STARTING THE TRANSITION TO CLEAN ENERGY

To make the transition to a clean energy economy, the United States and the rest of the world need to reduce their reliance on carbon-intensive fossil fuels. The American Reinvestment and Recovery Act of 2009 provides a jump-start to this transition by providing about \$60 billion in direct spending and \$30 billion in tax credits (Council of Economic Advisers 2010). These Recovery Act investments were carefully chosen and provide a soupto-nuts approach across a spectrum of energy-related activities, ranging from taking advantage of existing opportunities to improve energy efficiency to investing in innovative high-technology solutions that are currently little more than ideas. These investments will help create a new generation of jobs, reduce dependence on oil, enhance national security, and protect the world from the dangers of climate change. Ultimately, the investments will put the United States on a path to becoming a global leader in clean energy.

Recovery Act Investments in Clean Energy

A market-based approach to reducing greenhouse gases (discussed in detail later) will provide incentives for research and development (R&D) into new clean energy technologies as firms search for ever cheaper ways to address the negative externality associated with their emissions. However, as already described, there is a separate externality in the area of R&D. Because it is difficult for the person or firm doing research to capture all of the returns, the private market supplies too little R&D—particularly for more basic forms of R&D, less so as ideas move toward demonstration and deployment. In this case, government R&D policies can complement the use of a market-based approach to reducing greenhouse gas emissions and yield large benefits to society. A policy that broadly incentivizes energy R&D is more likely to maximize social returns than a narrow one targeted at a specific technology because it allows the market, rather than the government, to pick winners. Likewise, funding efforts in support of basic R&D are less likely to crowd out private investment because differences between private and social returns to innovation are largest for basic R&D.

In its 2011 proposed budget, the Administration has stated a commitment to fund R&D as part of its comprehensive approach to transform the way we use and produce energy while addressing climate change. The Recovery Act investments begun in 2009 are a first step in this clean energy transformation. They fall into eight categories that are briefly described here. **Energy Efficiency.** The Recovery Act promotes energy efficiency through investments that reduce energy consumption in many sectors of the economy. For instance, the Act appropriates \$5 billion to the Weatherization Assistance Program to pay up to \$6,500 per dwelling unit for energy efficiency retrofits in low-income homes. The Recovery Act also appropriates \$3.2 billion to the Energy Efficiency and Conservation Block Grant program, most of which will go to U.S. states, territories, local governments, and Indian tribes to fund projects that improve energy efficiency, reduce energy use, and lower fossil fuel emissions.

Renewable Generation. The Recovery Act investments in renewable energy generation also are leading to the installation of wind turbines, solar panels, and other renewable energy sources. The Energy Information Administration projects that the fraction of the Nation's electricity generated from renewable energy, excluding conventional hydroelectric power, will grow from 3 percent in 2008 to almost 7 percent in 2012 in large part because of the renewal of Federal tax credits and the funding of new loan guarantees for renewable energy through the Recovery Act (Department of Energy 2009a).

Grid Modernization. As the United States transitions to greater use of intermittent renewable energy sources such as wind and solar, the Recovery Act is financing the construction of new transmission lines that can support electricity generated by renewable energy. The Act is also investing in new technologies that will improve electricity storage capabilities and the monitoring of electricity use through "smart grid" devices, such as sophisticated electric meters. These investments will improve the reliability, flexibility, and efficiency of the Nation's electricity grid.

Advanced Vehicles and Fuels Technologies. The Recovery Act is funding research on and deployment of the next generation of automobile batteries, advanced biofuels, plug-in hybrids, and all-electric vehicles, as well as the necessary support infrastructure. These efforts are expected to reduce the Nation's dependence on oil in the transportation sector.

Traditional Transit and High-Speed Rail. Grants from the Recovery Act also will help upgrade the reliability and service of public transit and conventional intercity railroad systems. For example, \$8 billion is going to improve existing, or build new, high-speed rail in 100- to 600-mile intercity corridors. Investments in high-speed rail and public transit will increase energy efficiency by improving both access and reliability, thus making it possible for more people to switch to rail or public transit from autos or other less energy-efficient forms of transportation.

Carbon Capture and Storage. One approach to limiting greenhouse gas emissions is to capture and store carbon from fossil-fuel combustion to

keep it from entering the atmosphere. The abundance of coal reserves in the United States makes developing such technologies and overcoming barriers to their use a particular priority. For instance, technology to capture carbon dioxide emissions has been used in industrial applications but has not been used on a commercial scale to capture emissions from power generation. Likewise, although some carbon has been stored deep in the ocean or underground in depleted oil reservoirs, questions remain about the permanence of these and other types of storage. The Recovery Act is funding crucial research, development, and demonstration of these technologies.

Innovation and Job Training. The Recovery Act is also investing in the science and technology needed to build the foundation for the clean energy economy. For instance, a total of \$400 million has been allocated to the Advanced Research Projects Agency-Energy (ARPA-E) program, which funds creative new research ideas aimed at accelerating the pace of innovation in advanced energy technologies that would not be funded by industry because of technical or financial uncertainty. The Recovery Act also helps fund the training of workers for jobs in the energy efficiency and clean energy industries of the future.

Clean Energy Equipment Manufacturing. The Recovery Act investments are increasing the Nation's capacity to manufacture wind turbines, solar panels, electric vehicles, batteries, and other clean energy components domestically. As the United States transitions away from fossil fuels, demand for advanced energy products will grow, and these investments in clean energy will help American manufacturers participate in supplying the needed goods.

Total Recovery Act Energy Investments. The Recovery Act is investing in 56 projects and activities that are related to transitioning the economy to clean energy. Forty-five are spending provisions with a total appropriation of \$60.7 billion, and another 11 are tax incentives that the Office of Tax Analysis estimates will cost \$29.5 billion through fiscal year 2019, for a total investment of over \$90 billion. In some cases, a relatively small amount of Federal investment leverages a larger amount of non-Federal support. Throughout this section, only the expected subsidy cost of the Federal investment is counted toward the appropriation.³

The largest clean energy investments from the Recovery Act go to renewable energy generation and transmission, energy efficiency, and transit. Figure 9-2 illustrates how this \$90 billion investment is distributed across the eight categories of projects described above, along with a ninth "other" category containing programs that do not fit elsewhere.

³ Because of the public nature of the Bonneville and Western Area Power Administrations, the accounting of clean energy investments described here measures the projected drawdown of the borrowing authority to these agencies as the Recovery Act appropriation.



Figure 9-2 Recovery Act Clean Energy Appropriations by Category

Because most of the clean energy investments involve grants and contracts that require that proposals be reviewed before funds are expended, not all of the money appropriated for these investments could be spent immediately. Thus, as with the Recovery Act more generally, only a portion of the appropriation has been spent. Over \$31 billion has been obligated and

Short-Run Macroeconomic Effects of the Clean Energy Investments

over \$5 billion has been outlayed through the end of 2009.4

Using a macroeconomic model, the Council of Economic Advisers (CEA) estimates that the approximately \$90 billion of Recovery Act investments will save or create about 720,000 job-years by the end of 2012 (a job-year is one job for one year). Projects in the renewable energy generation and transmission, energy efficiency, and transit categories create the most job-years. Approximately two-thirds of the job-years represent work on clean energy projects, either by workers employed directly on the projects or by workers at suppliers to the projects. These macroeconomic benefits make it clear that the Administration has made a tremendous down payment on the clean energy transformation.

⁴ Obligated means that the money is available to recipients once they make expenditures, and *outlayed* means the government has reimbursed recipients for their expenditures. Energy-related tax reductions to date are included in the totals obligated and outlayed by the end of 2009.

OTHER DOMESTIC ACTIONS TO MITIGATE CLIMATE CHANGE

In his first year in office, the President took several other significant and concrete steps to transform the energy sector and address climate change. Significantly, the Environmental Protection Agency (EPA) issued two findings in December 2009. The first finding was that six greenhouse gases endanger public health and welfare. The second finding was that the emissions of these greenhouse gases from motor vehicles cause or contribute to pollution that threatens public health and welfare. These findings do not in and of themselves trigger any requirements for emitters, but they lay the foundation for regulating greenhouse gas emissions.

Following up on these findings, the Administration has proposed the first mandatory greenhouse gas emission standards for new passenger vehicles. The standards are expected to be finalized in the spring of 2010. By model year 2016, new cars and light trucks sold in the United States will be required to meet a fleet-wide tailpipe emissions limit equivalent to a standard of about 35.5 miles per gallon if met entirely through fuel economy improvements. The EPA estimates that these standards will save about 36 billion gallons of fuel and reduce vehicle greenhouse gas emissions by about 760 million metric tons in CO_2 -equivalent terms over the lifetime of the vehicles.

The Administration also proposed renewable fuel standards consistent with the Energy Independence and Security Act (EISA), which requires that a minimum volume of renewable fuel be added to gasoline sold in the United States. Renewable fuels are derived from bio-based feedstocks such as corn, soy, sugar cane, or cellulose that have fewer life-cycle greenhouse gas emissions than the gasoline or diesel they replace. When fully implemented, the standards will increase the volume of renewable fuel blended into gasoline from 9 billion gallons in 2008 to 36 billion gallons by 2022.

The Administration also has been proactive in establishing minimum energy efficiency standards for a wide variety of consumer products and commercial equipment. For instance, standards were proposed or finalized in 2009 for microwave ovens, dishwashers, small electric motors, lighting, vending machines, residential water heaters, and commercial clothes washers, among others. Overall, these actions will reduce energy consumption and, in turn, greenhouse gas emissions. The Energy Information Administration's 2009 Annual Energy Outlook projected that by 2030, higher fuel economy and lighting efficiency standards will contribute to lowering energy use per capita by 10 percent, compared with fairly stable energy use per capita between 1980 and 2008 (Department of Energy 2009b). The 2010 Annual Energy Outlook highlights appliance and building efficiency standards as one reason for lower projected carbon dioxide emissions growth, underscoring the benefits of these regulations (Department of Energy 2009a).

Beginning in 2010, the United States will begin collecting comprehensive high-quality data on greenhouse gases from large emitters in many sectors of the economy (for instance, electricity generators and cement producers). When fully implemented, this program will cover about 85 percent of U.S. emissions. The information supplied will provide a basis for formulating policy on how best to reduce emissions in the future. It will also be a valuable tool to allow industry to track emissions over time. Specifically, these data will make it possible for industry and government to identify the cheapest ways to reduce greenhouse gas emissions.

Finally, the President issued an Executive Order requiring Federal agencies to set and meet aggressive goals for greenhouse gas emission reductions. Importantly, agencies are instructed to pursue reductions that lower energy expenses and save taxpayers money.

Market-Based Approaches to Advance the Clean Energy Transformation and Address Climate Change

Greenhouse gas emissions, as noted, are a classic example of a negative externality. Emitters of greenhouse gases contribute to climate change, thus imposing a cost on others that is not accounted for when making decisions about how to produce and consume energy-intensive goods. For this reason, policymakers should ensure that the market provides the correct signals to greenhouse-gas emitters about the full cost of their emissions. Once policy has ensured that markets are providing the correct signals and incentives, the operation of market forces can find the most effective and efficient paths to the clean energy economy. The President has included a market-based cap-and-trade approach in his 2010 and 2011 budgets as a way to accomplish this goal. This section describes the basics of this approach, including several potential ways to minimize compliance costs. It then discusses a specific proposal consistent with the President's goals for reducing greenhouse gas emissions.

Cap-and-Trade Program Basics

A cap-and-trade approach sets a limit on, or caps, total annual aggregate greenhouse gas emissions and then divides the cap into
emission allowances. These allowances are allocated to firms through some combination of an auction and free allocation.⁵ Firms may trade the allowances among themselves but are required to hold an allowance for each ton of greenhouse gas they emit. The aggregate cap limits the number of allowances available, ensuring their scarcity and thus establishing a price in the market for allowances. In this way, a cap-and-trade approach provides certainty in the quantity of emission reductions but allows the price of allowances to fluctuate with changes in the demand and supply.

Creating a market for greenhouse gas emissions gives firms flexibility in how they reduce emissions. Absent other regulatory requirements, a firm subject to the cap can choose to comply by changing its input mix (for instance, switching from coal to natural gas), modifying the underlying technology used in production (using more energy-efficient equipment, for example), or purchasing allowances from other entities with lower abatement costs. Such flexibility reaps rewards. A cap-and-trade program induces firms to seek out and exploit the lowest-cost ways of cutting emissions. It takes advantage of the profit motive and leverages private sector imagination and ingenuity to find ways to lower emissions.

Cap-and-trade programs already have proven successful. The United States has been using a cap-and-trade approach to reduce sulfur dioxide (SO_2) emissions since 1995. One study found that using a cap-and-trade approach instead of a performance standard to reduce sulfur dioxide emissions caused some firms to move away from putting scrubbers on their smokestacks to cheaper ways of meeting the cap, such as by blending different fuels (Burtraw and Palmer 2004). As a result, compliance costs of the SO₂ cap-and-trade program have been dramatically lower than predicted.

Finally, a cap-and-trade approach promotes innovation. A carbon price will give firms the certainty they need to make riskier long-term investments that could identify novel and substantially cheaper ways to reduce emissions. Evidence shows that pricing sulfur dioxide emissions through a cap-and-trade approach has produced patentable innovations as firms search for ever cheaper ways to abate (Burtraw and Szambelan 2009).

In the case of greenhouse gases, possible innovations range from new techniques to capture and store carbon generated by coal-burning electricity plants, to carbon-eating trees and algae, to the development of new types of renewable fuels. Indeed, such innovation—and the opportunity it provides

⁵ In his fiscal year 2011 proposed budget, the President supports using allowance revenue to compensate vulnerable families, communities, and businesses during the transition to the clean energy economy, as well as in support of clean energy technologies and adapting to the impacts of climate change.

to make the United States a world leader in clean energy technologies—is a key motivation for the Administration's energy and climate policies.

Ways to Contain Costs in an Effective Cap-and-Trade System

There are a wide variety of ways to contain costs within a cap-andtrade framework. For instance, cap-and-trade programs may incorporate banking and borrowing of emission allowances over time, set ceilings or floors on allowance prices, or permit the use of offsets as ways to smooth the costs of compliance over time. A brief review of these mechanisms follows.

Banking and Borrowing. A cap-and-trade approach can be designed to give polluters flexibility in the timing of emission reductions through banking and borrowing. To limit allowance price volatility, sources can make greater reductions early if it is cheaper to do so and bank their allowances for future use. Likewise, firms can manage costs by borrowing against future reductions, allowing them to emit more today in return for more drastic reductions later.

Evidence shows that banking has played a particularly powerful role in helping firms to hedge uncertainty in the costs of the SO_2 cap-and-trade program over time. Anticipating that the cap originally set in 1995 would become more stringent in 2000, firms began to bank allowances for future use soon after the system was put in place. By 1999, almost 70 percent of available allowances in the market had been banked. Once the more stringent cap was in place, the banked allowances were drawn down to meet the cap, with about a 40 percent decrease in the size of the allowance bank between 2000 and 2005 (Environmental Protection Agency 2006).

In contrast, the inability of firms to bank or borrow in Southern California's nitrous oxide market played a significant role in increased price volatility during the State's electricity crisis in 2000 when firms met soaring demand for electricity by running old, dirty generators. One study found that the absence of banking and borrowing was an important contributing factor to the roughly tenfold increase in the price of nitrous oxide allowances, resulting in power plants subject to the cap eventually seeking exemption from the program (Ellerman, Joskow, and Harrison 2003).

Price Ceilings or Floors. While banking and borrowing allow firms to smooth costs over time, they may not guard against unexpected and potentially longer-lasting changes in allowance prices caused by such factors as a recession or economic boom, fuel price fluctuations, or unexpected variation in the pace of technological development. Consequently, cap-and-trade systems often include protections against prices that are deemed too high. For example, in the Northeast's greenhouse gas trading system, allowance

prices above certain thresholds trigger additional flexibilities that reduce compliance costs.⁶

Another way for a cap-and-trade program to mitigate the effects of unexpected changes would be to specify an upper or lower limit, or both, on allowance prices. An upper limit protects firms and consumers from unexpectedly high prices. When the price reaches the upper limit, additional allowances are sold to prevent further escalation. A lower limit on allowance prices ensures that cheap abatement opportunities continue to be pursued. For example, cap-and-trade legislation recently passed by the U.S. House of Representatives reserves a small share of allowances to be auctioned if the price rises above a predetermined threshold and also sets a minimum price for allowances that are auctioned. One study finds that, for a given cumulative emissions reduction, a combined price ceiling and floor can reduce costs by almost 20 percent compared with a cap-and-trade program without any cost-containment mechanisms (Fell and Morgenstern 2009). On the other hand, it is possible that a floor or ceiling can cause total emissions to differ from the legislated cap.

Offsets. Offsets also can be an important cost-containment feature of a cap-and-trade program. Offsets are credits generated by reducing emissions in a sector outside the program; they can be purchased by a firm subject to the cap to meet its compliance obligations. Because greenhouse gases are global pollutants—they cause the same damage no matter where they are emitted—offsets offer the appealing prospect of achieving specified emissions reductions at a lower cost.

The purchase of offsets from the forestry and agricultural sectors could play a potentially important role in reducing the compliance costs of firms subject to the cap (Kinderman et al. 2008; Environmental Protection Agency 2009). And under some cap-and-trade programs, domestic firms may purchase international offsets to meet their compliance obligations. This possibility may encourage a foreign country to build a solar power plant rather than a coal plant so that it can sell the offsets in the U.S. market.

Despite these important advantages, however, it is crucial that the claimed reductions from offsets be real—otherwise the system will effectively provide payments without actually reducing emissions. Indeed, Europe's experience with a project-based approach to international offsets suggests that concerns about the environmental integrity of claimed

⁶ Above \$7 per ton (in 2005 dollars), a firm can cover up to 5 percent of its emissions with domestic offsets, up from 3.3 percent. At \$10 per ton (in 2005 dollars plus a 2 percent increase per year), this amount increases to 10 percent of emissions and may include international offsets.

emissions reductions are well founded (Box 9-3).⁷ If offsets are going to be included as part of a cap-and-trade program, substantial investments in rigorous monitoring methods, such as combining remote sensing with on-the-ground monitoring, to verify greenhouse gas reductions are crucial.

Box 9-3: The European Union's Experience with Emissions Trading

One of the pillars of the President's proposed response to climate change is a cap-and-trade system to reduce U.S. emissions of greenhouse gases. The European Union's Emission Trading Scheme (ETS), the world's first mandatory cap-and-trade program for carbon dioxide emissions, was launched in 2005 to meet emission reduction targets agreed to under the Kyoto Protocol. The first phase of the ETS-from 2005 to 2007-applied to several high-emitting industrial sectors, including power generation, in 25 countries and covered just over 40 percent of all European Union (EU) emissions. Although data limitations and uncertainty over baseline emissions preclude researchers from assessing the precise magnitude of the reductions, one estimate suggests that the ETS reduced EU emissions by about 4 percent in 2005 and 2006 relative to what the level would have been in its absence. Because of the flexibility offered under the cap-and-trade program, these reductions occurred where it was cheapest to achieve them. That said, the ETS offers three important cautionary lessons as the United States explores how best to implement its own cap-and-trade system.

One lesson is the importance of carefully establishing a baseline for current and future emissions, so that the price sends an accurate signal to firms regarding how much to abate and innovate based on the expected future value of reductions. During the first phase of the ETS, EU countries allocated allowances based on firms' estimates of their historic emissions. In April 2006, when monitoring data became available, the data showed that actual emissions were already below the cap. Allowance prices immediately fell from about \in 30 (\$38) per metric ton to less than \in 10 (\$13) before settling at \in 15– \in 20 (\$19–\$25) for the next few months.

The EU experience also demonstrates that distributing nearly all allowances to industry at no cost can lead to large windfall profits. The European Union distributed nearly 100 percent of allowances free to

Continued on next page

⁷ Cap-and-trade programs that allow project-level offsets are particularly susceptible to crediting activity that would have occurred anyway or that is replaced by high-carbon activities elsewhere (leakage). One way to reduce the potential for leakage is a sector- or country-based framework, in which sectors or governments receive credit in exchange for implementing policies to reduce emissions. The legislation passed by the U.S. House of Representatives includes a sector-based approach to international offsets.

Box 9-3, continued

firms subject to the cap in Phase 1 and only auctioned a small portion of allowances for Phase 2 (2008-12). One estimate (Point Carbon Advisory Services 2008) suggests that during Phase 2, electricity generators in Germany will reap the highest windfall profits of all participating EU countries, on the order of ϵ 14 billion to ϵ 34 billion (\$20 billion to \$49 billion). In countries with low-greenhouse-gas emitters, electricity generators are expected to benefit less. For instance, in Spain, windfall profits are estimated to be about ϵ 1 billion to ϵ 4 billion (\$1 billion to \$6 billion). In Phase 3 (2013-20), the European Union plans to auction the majority of allowances.

Finally, it is important to ensure that any offsets from domestic and international sources reflect real reductions. Otherwise, they may endanger the environmental integrity of the cap. The ETS allows limited use of project-based international offsets from the United Nations' Clean Development Mechanism (CDM) in place of domestic emission reductions. A review of a random sample of offset project proposals in the CDM program from 2004 to 2007 estimated that "additionality" was unlikely or questionable for roughly 40 percent of registered projects, representing 20 percent of emissions reductions, meaning they would have occurred anyway (Schneider 2007). Although the CDM has worked to improve its accounting procedures over time, the EU's experience demonstrates the importance of designing an offsets program carefully.

Coverage of Gases and Industries

Although carbon dioxide made up about 83 percent of U.S. greenhouse emissions in 2008, a cap-and-trade approach that gives firms flexibility in where they reduce emissions, both in terms of the greenhouse gas and the economic sector, can lower firms' compliance costs. One study found that achieving an emission goal by cutting both methane and carbon dioxide emissions rather than carbon dioxide alone could reduce firms' abatement costs in the United States by over 25 percent in the medium run (Hayhoe et al. 1999).

Costs are also affected by the number of industries covered by the cap, with the general principle being that greater coverage lowers the marginal cost of emissions reductions. A recent study comparing alternative ways to achieve a 5 percent reduction in emissions found that the cap-and-trade program's costs to the economy were twice as large when manufacturing was excluded as they were under an economy-wide approach (Pizer et al. 2006).

The American Clean Energy and Security Act

In June 2009, the U.S. House of Representatives passed legislation—the American Clean Energy and Security Act (ACES)—that includes a cap-and-trade program consistent with the President's goal of reducing greenhouse gas emissions by more than 80 percent by 2050, and the Senate is currently engaged in a bipartisan effort to develop a bill.

Projected Climate Benefits. Based on two analyses of the ACES legislation, U.S. actions would reduce cumulative greenhouse gas emissions by approximately 110 billion to 150 billion metric tons in CO_2 -equivalents by 2050 (Paltsev et al. 2009; Environmental Protection Agency 2009). The EPA estimates that emission reductions of this magnitude, when combined with comparable action by other countries consistent with reducing world emissions by 50 percent in 2050, is expected to limit warming in 2100 to less than 2 °C (3.6 °F) relative to the pre-industrial global average temperature, with a likely range of about 1.0 to 2.5 °C (1.8 to 4.5 °F).

To derive the possible benefits associated with the U.S. contribution to these emission reductions, the CEA calculates that the ACES will result in approximately \$1.6 trillion to \$2.0 trillion of avoided global damages in present value terms between 2012 and 2050 (in 2005 dollars).⁸ The value of avoided damages includes such benefits as lower mortality rates, higher agricultural yields, money saved on adaptation measures, and the reduced likelihood of small-probability but high-impact catastrophic events. Further, the benefits will be significantly larger if U.S. policy induces other countries to undertake reductions in greenhouse gas emissions.

Projected Economic Costs. The estimated cost of meeting the caps outlined in the ACES legislation is relatively small. Recent research suggests that the ACES will result in a loss of consumption on the order of 1 to 2 percent in 2050 (Environmental Protection Agency 2009; Paltsev et al. 2009). On a per household basis, the average annual consumption loss would be between \$80 and \$400 a year between 2012 and 2050 (in 2005 dollars).

⁸ The CEA uses estimates of the projected decline in emissions between 2012 and 2050 based on the President's proposed reductions in emissions and uses the central estimate of \$20 a ton for a unit of carbon dioxide emitted in 2007 (in 2007 dollars) that was recently developed as an interim value for regulatory analyses (Department of Energy 2009c). Additionally, it assumes that the benefit of reducing one additional ton of carbon dioxide grows at 3 percent over time and that future damages from current emissions are discounted using an average of 5 percent. Several Federal agencies have used these values in recent proposed rulemakings but have requested comment prior to the final rulemaking, so these estimates may be revised.

INTERNATIONAL ACTION ON CLIMATE CHANGE Is Needed

Greenhouse gas emissions impose global risks. As a result, just as U.S. efforts to reduce emissions benefit other countries, actions that other countries take to mitigate emissions benefit the United States. Given the global nature of the problem and the declining U.S. share of greenhouse gas emissions, U.S. actions alone to reduce those emissions are insufficient to mitigate the most serious risks from climate change.

Developing countries such as China and India are responsible for a growing proportion of emissions because of their heavy reliance on carbonintensive fuels, such as coal (Figure 9-3). In 1992, China's carbon dioxide emissions from fossil fuel combustion were half those of the United States and represented 12 percent of global emissions. By 2008, China's carbon dioxide emissions represented 22 percent of global emissions from fossil fuels, exceeding the U.S. share of 19 percent and the European share of 15 percent. China's share of global emissions is projected to grow to about 29 percent by 2030 absent new emission mitigation policies. By contrast, the U.S. share of global emissions is projected to fall to about 15 percent by 2030 even absent new emission mitigation policy. Thus, cooperation by both





Notes: The figure includes carbon dioxide emissions from fossil fuel consumption, cement manufacturing, and natural gas flaring. Notably, this figure does not include changes in carbon dioxide emissions from land-use change.

Source: World Resources Institute, Climate Analysis Indicators Tool.

past and future contributors to emissions will be required to stabilize the atmospheric concentrations of greenhouse gases.

In keeping with this goal, the Administration has actively pursued partnerships with major developed and emerging economies to advance efforts to reduce greenhouse gas emissions and promote economic development that lowers emission intensity.

Partnerships with Major Developed and Emerging Economies

The President has worked to further a series of international agreements to address climate change. For example, he launched the Major Economies Forum on Energy and Climate to engage 17 developed and emerging economies in a dialogue on climate change. In July, the leaders of these countries agreed that greenhouse gas emissions should peak in developed and developing countries alike, and recognized the scientific view that the increase in global average temperature above pre-industrial levels ought not to exceed 2 $^{\circ}$ C (3.6 $^{\circ}$ F). They also agreed to coordinate and dramatically increase investment in research, development, and deployment of low-carbon energy technologies with a goal of doubling such investment by 2015. Finally, the leaders agreed to mobilize financial resources in support of mitigation and adaptation activities, recognizing that the group should be responsive to developing-country needs in this area.

Also in July, leaders from the Group of Eight (G-8) countries agreed to undertake robust aggregate and individual medium-term emission reductions consistent with the objective of cutting global emissions by at least 50 percent by 2050. Additionally, under the Montreal Protocol, the United States jointly proposed with Canada and Mexico to phase down emissions of hydrofluorocarbons, a potent greenhouse gas used in refrigeration, fire suppression, and other industrial activities. This action alone would achieve about 10 percent of the greenhouse gas emission reductions needed to meet the agreed G-8 goal of a 50 percent reduction by 2050.

In December, the Administration worked with major emerging economies, including Brazil, China, India, and South Africa, developed countries, and other regions around the world to secure agreement on the Copenhagen Accord. For the first time, the international community established a long-term goal to limit warming of global average temperature to no more than 2 °C (3.6 °F). Also for the first time, all major economies agreed to take action to address climate change. Under the Accord, both developed and major emerging economies are in the process of submitting their emission mitigation commitments and actions to reduce greenhouse gas emissions. Every two years, developing countries will report on emission mitigation efforts, which will be subject to international consultation and analysis under clearly defined guidelines. Establishing transparent review of developed and developing country mitigation activities will help ensure that countries stand behind their commitments.

Furthermore, under the Accord, in the context of meaningful mitigation actions and transparency, developed countries committed to a goal of jointly mobilizing \$100 billion a year in funding from a variety of private and public sources for developing countries by 2020. This funding will build on an immediate effort by developed countries to support forestry, adaptation, and emissions mitigation with funding approaching \$30 billion sometime in the 2010 to 2012 timeframe. There will be a special focus on directing this funding to the poorest and most vulnerable developing countries.

Phasing Out Fossil Fuel Subsidies

The United States also spearheaded an agreement in September to phase out fossil fuel subsidies among G-20 countries, a goal seconded by countries in the Asian-Pacific Economic Cooperation (APEC) in November. The G-20 also called on all nations to phase out such subsidies worldwide. Fossil fuel subsidies are particularly large in non-OECD countries, such as India and Russia. Twenty of the largest non-OECD governments spent about \$300 billion on fossil fuel subsidies in 2007. Together, this coordinated action to reduce subsidies can free up resources, especially in developing countries, to target other social needs such as public health and education. One model estimates that eliminating fossil fuel subsidies in the major non-OECD countries alone would reduce greenhouse gas emissions by more than 7 billion metric tons of CO_2 -equivalent, enough to fulfill almost 15 percent of the agreed-upon G-8 goal of reducing global emissions by 50 percent by 2050 (Organisation for Economic Co-operation and Development 2009).

In the United States, these subsidies—including tax credits, deductions, expensing practices, and exemptions—are worth about \$44 billion in tax revenues between 2010 and 2019. Their elimination will help put cleaner fuels, such as those derived from renewable sources, on a more equal footing and reduce wasteful consumption of fossil-fuel based energy caused by underpricing. Proper pricing of fossil fuels will also help reduce reliance on petroleum, thus enhancing energy security and aiding in the achievement of climate mitigation goals.

CONCLUSION

Today's economy is dependent on carbon-intensive fuels that are directly linked to an increase in global average temperature. Continued reliance on these fuels will have a range of negative impacts, including increased mortality rates, reduced agricultural productivity in many locations, higher sea levels, and the need for costly adaptation efforts. For these reasons, a clean energy transformation is essential.

Through his comprehensive plan, the President has set the country on course to achieve this goal. He has taken several significant and concrete steps to transform the energy sector and address climate change through the American Reinvestment and Recovery Act and through targeted regulation. To address externalities associated with greenhouse gas emissions, the President has proposed a market-based cap-and-trade approach. These combined efforts will stimulate the research and development necessary to advance new clean energy technologies. Because of the global nature of the climate change problem, the Administration is also actively pursuing partnerships with other countries to advance efforts to transition the world to clean energy and reduce greenhouse gas emissions.

C H A P T E R 1 0

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FOSTERING PRODUCTIVITY GROWTH THROUGH INNOVATION AND TRADE

A mericans have always believed in building a better future. Each generation has strived to pass on higher standards of living to their children than they themselves experienced. And for most of American history, this goal has been realized. Per capita income has risen strongly for most of the past two centuries.

Such economic growth stems from a number of factors. Investment in skills and education, or human capital, is a key determinant. The United States has a long history of investing in people, and this has enabled American workers to be among the most productive in the world. Investment in physical capital is also important. The tremendous accumulation of machines, buildings, and infrastructure has been a source of America's prosperity, and times of particularly great investment, such as the 1950s and 1960s, have been times of particularly rapid advances in standards of living.

Because investing in people and capital is important to the maintenance and growth of standards of living, the President has fashioned an ambitious agenda of improvements in education, incentives for investment, and financial regulatory reform to ensure that we have the financial system needed to support such investment. These initiatives have been described in detail in earlier chapters.

But as important as investments in labor and capital have been and will continue to be, they are not the only sources of growth. A third, more amorphous factor has also played a central role in American economic growth: advances in the overall productivity of that labor and capital. One need only think of a few of the technological changes of the past century the airplane, antibiotics, computers, fiber-optic cables, and the Internet—to see that technological discovery and innovation are central to improved standards of living. Such innovations not only make us richer as a country, they have the potential to fundamentally alter the very way we live our lives and interact with one another. As discussed throughout this *Report*, in the past decade American economic growth has slowed in important ways. American families saw their median income actually fall from 2000 to 2006. An important part of restoring growth and increases in standards of living is spurring innovation and increases in productivity. American firms and universities will naturally play the leading role in this endeavor. But that does not mean government has no role to play. Indeed, overwhelming evidence shows that innovation creates positive "externalities"—benefits for others beyond the individuals or firms who originally produce new ideas. Since inventors do not reap the full rewards, on its own the market will produce less innovation than is optimal. Public policy therefore has a powerful role to play in fostering pursuit of the myriad possibilities for scientific, technical, and analytical advances.

At its best, trade between regions of the country and across borders can also be an engine of growth. Trade has the potential to allow the U.S. economy to expand output in areas where it is more productive and to enable higher-productivity firms to expand. Access to a world market encourages American firms to invest in the research needed to become technological leaders. Through these routes, a free and fair trade regime can play an important part in lifting living standards in the long run.

Based on an understanding that progress springs from achieving the proper balance between generous rewards for the creation of new ideas and encouraging the best of those ideas to spread widely, the Administration has formulated a comprehensive "innovation agenda" that reaches far beyond the traditional scope of science and technology policy. This agenda touches everything from improvements in the Patent and Trademark Office, to increased government investments in research and development (R&D), to engaging the world economy in ways that ensure that the United States achieves the maximum benefits from trade's productivity-enhancing potential. This chapter discusses the key components of the agenda in detail.

All advances in productivity, whether from scientific breakthroughs, changes in the organization of firms, or increased international trade, involve losers as well as winners. Because productivity growth is the critical source of improved standards of living, the most effective way to address the painful impacts for those harmed by progress is not to stifle new ideas or trade. Rather, it is to build a robust system of support that can help ease the transition from employment in declining firms and industries to jobs in new, higher-paying, higher-productivity areas. Even more important are broad-based policies that ensure that the gains from rising productivity are widely shared: progressive taxation, a health care system that provides security and stability, a strong educational system, and a secure social safety net.

For too many years, our Nation has ignored necessary reforms in these broad-based policies and underinvested in areas such as health care and education, which are essential to ensuring that middle-class families will benefit from productivity advances. That is why the Obama Administration has set as a central economic priority rebuilding our economy on a firmer foundation. The Administration's innovation agenda must go hand in hand with progress in those areas as well.

The Role of Productivity Growth in Driving Living Standards

In the long run, the critical determinant of living standards is labor productivity—the amount of goods and services produced by an average worker in a fixed period of time, such as an hour or a 40-hour week. Figure 10-1 provides striking visual confirmation of this hypothesis. It shows that over U.S. history since the early 20th century, sustained increases in labor productivity have translated nearly one-for-one into increases in income per person.



Figure 10-1 Non-Farm Labor Productivity and Per Capita Income

Note: Productivity represents total output per unit of labor, 1901-1946, and non-farm business sector only, 1947-2008.

Sources: Department of Commerce (1973); Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 7.1; Department of Labor (Bureau of Labor Statistics), Productivity and Costs Table A.

The importance of labor productivity to living standards may seem obvious, or even tautological, but it is not. In principle, increases in income per person could come not from more output per unit of labor input, but from more labor input per person-that is, from increases in the fraction of the population that is working or increases in each worker's hours. But both the historical evidence from the United States and the evidence from across a wide range of countries show that differences in labor input per person account for at most a small fraction of income differences.

Recent Trends in Productivity in the United States

Since labor productivity is the key driver of standards of living in the long run, it is important to discern the underlying trends in productivity. This task is complicated by the fact that in the short run, productivity depends on more than those underlying trends. It is powerfully influenced by the state of the business cycle, as well as by other factors (including simple measurement error) that leave no lasting mark on productivity.

Figure 10-2 shows the growth rate of labor productivity from four quarters earlier over the last 62 years. One immediate message is that although the overall pattern of productivity is strongly upward (as shown clearly by Figure 10-1), there is enormous short-run variation in productivity growth.



Figure 10-2

Note: Grey lines represent NBER business cycle troughs. Source: Department of Labor (Bureau of Labor Statistics), Productivity and Costs Table A.

A more subtle message is that the average or trend rate of productivity growth is not constant but changes substantially over extended periods. It is conventional to divide the era from the beginning of the sample until about 1995 into two periods: the "immediate postwar" period from 1947 through 1972, and the "productivity growth slowdown" period from 1973 through 1995. In the immediate postwar period, the average rate of productivity growth was 2.8 percent per year. During the productivity growth slowdown, it was only 1.4 percent.

This division into different periods lets one see the cumulative importance of even seemingly modest changes in productivity growth. For example, if the high productivity growth of the immediate postwar period had continued through 1995 instead of slowing, the level of productivity in 1995—and hence standards of living—would have been more than one-third higher than they actually were.

The pattern of productivity growth since 1995 is somewhat complicated. From 1996:Q1 to the last available observation (2009:Q3), it averaged 2.7 percent per year, almost equal to its rate over the immediate postwar period. But that rapid growth was concentrated in the first part of the period. In the first eight years (1996:Q1 to 2003:Q4), productivity growth averaged 3.3 percent; in the four years before the business cycle peak (2004:Q1 to 2007:Q4), it averaged only 1.7 percent. A four-year period is too short to confidently determine underlying trends. But productivity growth in the years leading up to the recession was not strong enough to generate robust increases in standards of living.

A final pattern revealed by Figure 10-2 is a relationship between productivity growth and the business cycle. Productivity growth tends to fall during recessions and surge near their ends (marked by the vertical lines in Figure 10-2). This pattern has been operating strongly in the current recession. Productivity growth averaged less than 1 percent at an annual rate over the first five quarters of the recession, but then surged in 2009:Q2 and 2009:Q3, and appears to have remained high in 2009:Q4.

This recent experience highlights the importance of distinguishing between cyclical movements in productivity and longer-term movements: the pattern in productivity growth in 2009 largely reflects the fact that employment moves more slowly than production over the business cycle. The sluggishness of employment growth has meant that even as output reached its low point and began to recover, employment continued to decline. This cyclical improvement in productivity is obviously of a different character than the secular improvements that are the source of long-run increases in standards of living. Over the course of 2009, standards of living clearly did not follow productivity closely. But once the cyclical dynamics play themselves out, the usual long-term role of productivity growth in driving income growth is bound to reassert itself. An important goal of policy is to make the long-term path of productivity as favorable as possible.

Sources of Productivity Growth

Productivity growth is the overwhelming determinant of the progress of economic well-being over extended periods. It is therefore imperative to understand what determines productivity growth. Three sources have been identified as key.

The first source is the accumulation of physical capital—the machines, tools, computers, factories, infrastructure, and so on that workers use to produce output. Each year, some of our Nation's economic output takes the form of these capital goods. When workers have more or better capital to work with, they are more productive.

The second source is the accumulation of human capital—workers' education, skills, and training. The accumulation of human capital is just as much an investment as the accumulation of physical capital is. When some of the economy's output takes the form of physical capital goods rather than consumption, we are forgoing some consumption today in exchange for the ability to produce more in the future. Likewise, when students and teachers are in a classroom, or when an experienced worker is taking time to train a new hire, resources that could be used to produce goods for current consumption are being used instead for activities that increase future productive capacity. And just as a worker with better equipment is more productive, so too is a worker with more skills.

The third source of productivity growth is increases in the amount that can be produced from given amounts of physical and human capital. This factor goes by various names, such as "total factor productivity growth" or "the Solow residual." It encompasses all the forces that cause changes in how much an economy produces from its stocks of physical and human capital. Most obviously, it encompasses advances in knowledge and technology. These advances in knowledge and technology allow factory workers to build better automobiles and electronics from the same raw materials; they allow doctors to provide more accurate diagnoses and prescribe better treatments in the same office visit; and much more.

But total factor productivity growth includes more than advances in knowledge and technology. For example, if an economy faces an increase in crime, individuals may devote more of their skills and physical capital to protecting the goods they have rather than producing more goods, and so total factor productivity growth may be low or even negative. If a country switches from central planning to a market-based economy, then workers and capital are likely to be allocated more effectively, and so output given the economy's stocks of physical and human capital may increase greatly. Changes in these types of "organizational capital" (or "institutional" or "social" capital) are potentially critical determinants of total factor productivity growth.

Research has not just identified changes in these three factors (physical capital, human capital, and total factor productivity) as critical determinants of productivity growth; it has also come to a fairly clear view about their relative importance. Perhaps surprisingly, the ranking of the three factors appears to be the same whether one is trying to understand the enormous growth in productivity over extended periods in the United States (for example, Jones 2002), or the vast differences in the level of productivity across countries (for example, Hall and Jones 1999).¹

The factor that is most obvious and easiest to quantify physical capital accumulation—turns out to be only moderately important. Differences in the fraction of output devoted to physical capital investment account for some portion of both long-run productivity growth and crosscountry productivity differences, and increases in investment can have a significant impact on productivity growth, and hence on standards of living. At the same time, the evidence suggests that the other factors are even more important.²

One of those more important factors is human capital accumulation. Increases in the education and skills of the workforce play a substantial role in the long-term growth of labor productivity, and cross-country differences in human capital per worker are important to cross-country differences in labor productivity. Thus, increases in human capital investment through a stronger educational system and greater educational attainment at all levels, together with lifetime learning, provide another powerful route to raising productivity growth and standards of living.

The most important determinant is not physical or human capital accumulation, but changes in how much can be produced with them—that is, total factor productivity growth. Again, this finding applies to both longterm growth and cross-country differences. At an intuitive level, this result is not surprising. It seems very plausible that the most important reason we are so much more productive than our forebears is that, for reasons ranging

¹ See also Klenow and Rodríguez-Clare 1997; Hendricks 2002; Caselli 2005; and Hsieh and Klenow 2007.

 $^{^2}$ There is a subtlety here. When total factor productivity or human capital improves, the result is higher output, which then leads to more physical capital investment if the fraction of the economy's output that is invested does not change. The decompositions that find a moderate role for physical capital assign these indirect effects of total factor productivity and human capital investment to those factors, and not to physical capital. If those effects are instead assigned to physical capital, its importance increases greatly.

from advances in basic scientific knowledge to improved ways of organizing the workplace, we have found vastly better ways of producing output from a given set of inputs. Likewise, it is likely that a key reason the United States outperformed the Soviet Union economically in the postwar period was not that the United States was better at channeling its productive capacity into producing capital goods and its children into education (both of which the Soviet Union did on a very large scale), but that the United States' freemarket institutions led it to produce more from its inputs, and led to myriad innovations that widened the productivity gap over time.

This discussion implies that in order to foster improvements in standards of living, policy should foster investment in physical capital, investment in human capital, and crucially, improvements in total factor productivity. Physical and human capital investment are discussed in earlier chapters—most notably Chapter 4 (as well as Chapters 5 and 6) in the case of physical capital investment, and Chapter 8 in the case of human capital. The remainder of this chapter turns to measures to improve total factor productivity. Such improvements in total factor productivity can be described broadly as "innovations."

Fostering Productivity Growth Through Innovation

Because total factor productivity reflects all determinants of labor productivity other than physical and human capital, it has a wide range of elements. As a result, there are many avenues along which well-designed policies can work to improve total factor productivity. It is for this reason that the Administration has proposed a comprehensive innovation agenda (Box 10-1).

Box 10-1: Overview of the Administration's Innovation Agenda

On a September 21 visit to New York's Hudson Valley Community College, President Obama presented the first comprehensive description of the Administration's Innovation Agenda, the conceptual framework underpinning the wide range of initiatives that the Administration has undertaken that share a common aim of fostering innovation.

The Agenda has three elements. The first is a commitment to invest in the building blocks of innovation, including basic scientific research and infrastructure, as articulated in detail in the body of this chapter.

Continued on next page

Box 10-1, continued

The second is a recognition of the vital role that competitive markets and a healthy environment for entrepreneurial risk-taking play in spurring innovation; reform of the Patent Office, improving the accessibility and usefulness of government statistics, and increasing the predictability and transparency of government policy are all parts of this effort. The final part of the agenda is a particular focus on innovation targeted toward specific national priorities, including the development of alternative energy sources, reducing costs and improving medical care through the use of health information technology, the creation of a "smart grid" that will allow more efficient use of existing energy generation capacity, and initiatives aimed at inventing cleaner and more fuel-efficient transportation technologies.

The Agenda builds on over \$100 billion of funds appropriated in the American Recovery and Reinvestment Act of 2009 for the support of innovation, education, and technological and scientific infrastructure. It also encompasses directives to regulatory and executive branch agencies designed to help them refocus their missions to support the Agenda in whatever ways are most appropriate to their usual activities. A final key tool is the commitment to science-based, data-driven policymaking that brings to bear all the intellectual, statistical, informational, and analytical resources necessary to make sure that government policies achieve their stated aims as efficiently and effectively as possible.

The Importance of Basic Research

One uncontroversial conclusion of work on the determinants of productivity growth is that the payoff to investment in basic scientific and technological research has been vast, at least in some fields and over the long run. Breakthroughs on fundamental questions of physics, chemistry, biology, and other sciences have powered the transformations of economic production that underlie much of the productivity growth measured (however imperfectly) in economic statistics (Nordhaus 1997; Nelson and Romer 1996).

The Administration has taken that lesson to heart in its support for basic research in science and technology, especially in two areas where the need for progress is pressing: energy and biomedical research. The Department of Energy has created a new Advanced Research Projects Agency-Energy (ARPA-E), with the objective of pursuing breakthroughs that could fundamentally change the way we use and produce energy. In the medical and biological sciences, the Administration has ended restrictions on Federal funding for embryonic stem cell research, and in September 2009 it announced \$5 billion in grants under the American Recovery and Reinvestment Act to fund cutting-edge medical research.

Across all areas, the Recovery Act included \$18.3 billion for research funding. Because the Administration's commitment to evidence-based policymaking will require substantial improvements in the ability to reliably measure economic outcomes, the Act committed \$1 billion to the 2010 Census as a first step in a longer-term effort to revamp the Nation's statistical infrastructure—a process that will not only improve policymaking but will also help private businesses make better decisions (for example, about where to locate new production or sales facilities).

In addition, the fiscal year 2011 budget enhances research funding in numerous ways. First, it continues to work to fulfill the President's pledge to double the budgets of three key science agencies (the National Science Foundation, the Department of Energy's Office of Science, and the Department of Commerce's National Institute of Standards and Technology). Second, it boosts funding for biomedical research at the National Institutes of Health by \$1 billion to \$32.1 billion. Third, it reinvigorates climate change research through increased investments in earth observations and climate science in agencies such as the U.S. Geological Survey and the National Oceanic and Atmospheric Administration, Fourth, it funds potentially groundbreaking discoveries with a boost to Department of Defense basic research and \$300 million for the Department of Energy's ARPA-E program. Finally, it supports world-class agricultural research for national needs such as food safety and bioenergy with \$429 million for the competitive research grants program in the Department of Agriculture's new National Institute of Food and Agriculture.

As part of the innovation agenda, and to ensure that the increased research funds are spent well, the Administration has also instructed agencies to work on constructing a set of systematic tools to track the long-term results of federally sponsored research, such as journal articles published and cited, patents obtained, medical advances achieved, or other measurable consequences (particularly in areas of national importance such as health or energy). Although the fruits of this effort will not be available for a number of years, the project is one of the most promising in the Administration's efforts at turning the evaluation of scientific research into a "science of science."

Private Research and Experimentation

Scientific breakthroughs are only the first step in producing improvements in total factor productivity and hence living standards. Benjamin Franklin's discovery that lightning was a form of electricity did not produce an immediate reduction in damage from electrical storms; much further research and development was necessary to turn that discovery into the lightning rod (though by late in his life Franklin was able to observe a flourishing industry that had been built upon his insight).

Measuring the returns to the economy as a whole from private research and experimentation is almost as formidable a challenge as measuring the returns to basic research. But most studies find that aggregate returns to such spending are much higher than the returns to ordinary investments in physical capital. Some work estimates the aggregate returns at 50 percent or higher (Hall, Mairesse, and Mohnen 2009).

These returns are mostly not received by the firms or individuals who pay for the work, because the ideas ultimately benefit others in many ways whose value is not captured through markets. Economic theory provides a clear prescription for policy toward activities that have measurable positive externalities: the activities should be subsidized.

This is the logic behind the research and experimentation (R&E) tax credit that has been an off-and-on part of the tax code for many years. But the credit's effectiveness has been hampered by chronic uncertainty about how long it will remain in force. Partly for budgetary accounting reasons, the R&E tax credit has been treated for many years as a temporary provision that was scheduled to expire at some point in the near future. Yet each year (except for 1995), Congress and the President have agreed (sometimes at the last minute) to extend the credit. The effect has been to substantially increase the uncertainty that firms face about the costs that they will end up paying for their research and experimentation projects; this uncertainty can have a serious negative effect on research, which is already a highly uncertain investment. The problem is particularly acute for the kinds of projects that might be expected to have the highest returns: long-term projects that require continuing expenditures over many years. For such projects, uncertainty about whether the R&E tax credit will be in place through the duration of the project can make the difference between pursuing or abandoning the research. The Administration therefore supports efforts in Congress to make the R&E tax credit permanent, so that the highest-return long-run projects can be confidently started without uncertainty about whether the credit will be there for the duration.

The importance of both public and private R&D spending for innovation and improvements in standards of living forms the basis for a key Administration goal. In a speech in May 2009 to the National Academy of Sciences, the President articulated the ambition of boosting total national investment in research and development to 3 percent of gross domestic product. As can be seen from Figure 10-3, this is a rate that would exceed even the peak rates reached in the 1960s. As described earlier, the American Recovery and Reinvestment Act began the Federal contribution with a historic increase in direct funding for scientific and technological research, as well as major investments in technological and scientific infrastructure detailed below. But reaching the President's goal will require not just an increase in the Federal Government's role; equally important is the need for a resurgence of entrepreneurial and corporate investment in research. The Administration's consequent focus on creating the best possible environment for private sector innovation is one of the many novel aspects of its innovation agenda.



Figure 10-3 R&D Spending as a Percent of GDP

Note: Data for 2008 are preliminary.

Protection of Intellectual Property Rights

A subsidy like the R&E credit is one way to address underinvestment caused by the fact that the inventor of a new technology does not reap all the benefits of that invention. An older approach is embodied in the American

Sources: National Science Foundation, Science and Engineering Indicators 2010 Tables 4-1 and 4-7.

system of patents and copyrights that had its origins in the Constitution (and before that, in the English legal system).

One leading scholar (Jones 2001) has argued that the invention of ways to protect intellectual property may have been a trigger for the industrial revolution that led to the modern era of economic growth. In this interpretation of history, the creation of a legal system that could protect intellectual property may have been one of the most important "technological" developments in human history. Though this interpretation can be debated, the practical implication is surely correct: achieving the proper balance between the private and the societal rewards from innovation is a critical element in creating and sustaining long-run economic growth.

The existing U.S. patent system developed over many years in response to the needs of an industrial economy. That system has been under considerable strain in the past couple of decades as the United States and the world have moved increasingly toward a "knowledge-based" economy. The Patent and Trademark Office (PTO) has been required to answer many questions that could not have been imagined in 1952 when the current patent statute was written, such as how and whether to grant patents for human genes or for Internet advertising tools. Further, the sheer volume of information necessary to evaluate a patent application, which might now arrive from any country in the world and might rely on ideas that even an expert might be unfamiliar with, has made the PTO's job increasingly daunting. As a result of these challenges, the agency currently faces a backlog of over 700,000 unexamined applications. Waiting times on a patent application can extend to four years or more. The costs that such waiting times impose on firms are substantial; and delays impose a particularly large burden on startup firms that rely on patents to attract venture capital funding—precisely the kind of firms that the Administration's innovation agenda is particularly designed to help.

While the PTO has made progress in responding to these problems, most notably by developing a "peer review" system modeled on academic publishing, observers agree that the patent system is in need of an overhaul. The Administration has endorsed the aims of bills pending in Congress that would address many of these problems, particularly by giving the PTO authority to set fees that cover the cost of application processing, and also by barring diversion of fees to projects unrelated to PTO activities. The PTO is also in the process of creating an Office of the Chief Economist, which will provide a mechanism for better integration into patent policy of economic research on how to properly reward innovation without stifling the widespread use of good ideas.

In recognition of the role of innovation and intellectual property in advancing continued U.S. leadership in the global economy, in 2008 Congress created the Office of the United States Intellectual Property Enforcement Coordinator. This office is charged with creating and implementing a strategy to coordinate and enhance enforcement of intellectual property rights in the United States and overseas. By ensuring that the Administration has a coordinated strategy, this office will work to ensure that the effort of American workers and businesses to produce creative and innovative products and services is valued fairly around the world.

Spurring Progress in National Priority Areas

Much of the Administration's innovation agenda is aimed at creating a general economic environment that encourages innovation across the board. But the Administration has also focused special attention on certain areas where particular national needs are urgent. These include investments in building a "smart grid" to enhance the reliability, flexibility, and efficiency of the electricity transmission grid; research on renewable energy technologies like wind, solar, and biofuels; and support for research into advanced vehicle technologies. These investments are motivated not only by the perception that technological breakthroughs are possible and would be highly valuable, but also by the enormous potential benefits that such breakthroughs could have in terms of enhancing national security, mitigating pollution, and stemming climate change. These are also investments that have a direct impact on creating high-paying, durable jobs-something that is particularly valuable at a time of high unemployment. Thus, as noted in Chapter 9, investments in the clean energy transformation involve two layers of externalities: innovators fail to receive the full economic benefits of their breakthroughs as measured by market valuation, and the market valuation itself understates the true social benefits of the breakthroughs.

Another priority, given the looming threat that health care spending poses to the Federal budget, is developing technologies for measuring and monitoring health more efficiently. Through the Recovery Act, the Administration has allocated substantial funds to development of a 21st-century system of medical recordkeeping that should jump-start work in this area.

Increasing Openness and Transparency

To noneconomists, the idea that the legal system or the Patent Office is a form of technology seems a bit of a stretch. Even more challenging is the idea that a society's overall degree of openness and transparency may be a key determinant of economic progress. Yet a substantial body of economic research has found that measures of openness and transparency in governmental policymaking processes have a strong association with growth outcomes.

There are several reasons why this may be so. One fairly simple one is that openness and transparency make it more difficult for special interests to achieve their aims at the expense of the public. Another view, which is not in conflict with the first, is that the process of requiring policies to be explained and encouraging wide discussion about them yields new ideas and improvements of existing ideas that might not otherwise have occurred even to the cleverest and most well-motivated public servant.

A more speculative proposition is that a commitment to openness and transparency on the part of the government is a form of investment in the kind of "organizational capital" described earlier. Economic research has found a strong correlation between measures of governmental transparency or openness and private sector productivity. Interpretations of this relationship are a matter of debate; some scholars argue that higher levels of productivity and income cause citizens to demand better government; others argue that both governmental openness and private productivity are a reflection of deeper unmeasured forces; and some advocate the straightforward view that open and transparent government has a direct effect in producing greater private sector efficiency.

The Administration's commitment in this area has been on full display in the unprecedented openness and transparency surrounding implementation of the Recovery Act. The most obvious manifestation of this transparency is the creation of the independent Recovery Accountability and Transparency Board charged with monitoring and reporting on the government spending under the Act. Likewise, the requirement that recipients report on job creation and retention each quarter provides a new source of information on the employment impact of the Act. The knowledge generated by the data collection and measurement under the Recovery Act will be valuable in assessing economic policymaking for years to come.

The principles of openness, accountability, and public input are far broader than just the Recovery Act, however. The Administration's "open government" initiative aims to harness the power of the Internet to bring the same commitment to transparency and accountability to every part of the Federal Government. New tools for this purpose are being developed not only by government agencies but by the private sector, by open source software programmers, and by citizens around the country. It seems plausible that eventually the new kinds of openness and transparency made possible by new forms of technology will have the same kinds of positive effects on growth that openness and transparency seem to have had across countries in the past.

TRADE AS AN ENGINE OF PRODUCTIVITY GROWTH AND HIGHER LIVING STANDARDS

Specialization has long been understood to be an important source of productivity growth. In his *Wealth of Nations*, Adam Smith (1776) extolled the virtues of specialization in the pin factory where many different specialized laborers were involved in producing a simple pin. Perhaps the most important form of specialization is a transition from a subsistence society, where people produce all their consumption goods themselves, to a market economy, where people focus on particular skills and occupations and depend on purchases for their daily needs. Another significant transition, though, is one from a country that must produce everything its inhabitants want to consume toward one that specializes in particular goods and services and sells them on global markets for other goods and services.

Increases in trade and increases in GDP tend to go hand in hand, but untangling whether economic growth is generating more trade or whether trade is lifting growth is a difficult task. Creative research, however, has been able to demonstrate the causal role trade plays in increasing the amount a society can produce. One study demonstrated that countries that were geographically better suited for trade (because of their proximity to trading partners, access to ports, and the like) have higher levels of GDP (Frankel and Romer 1999). Another demonstrated that the same relationship can be seen across time (Feyrer 2009).³

Initially, trade was about introducing products (such as spices) from one market to another, providing consumers with choices they previously did not have. Still today, trade can offer consumers different goods and different varieties of products already available to them and bring new technology from other countries. By allowing countries to specialize based on skills or endowments, trade can also allow countries to improve their standards of living. Trade can also help a country increase its overall output by allowing firms or industries to take advantage of economies of scale or by encouraging the growth of more productive firms. Thus, trade has the potential to increase the overall quantity of goods and services that a given economy can produce with its resources—and hence increase the overall standard of living—making global commerce a cooperative, not a competitive venture. A clear rules-based system with enforcement of those rules can help ensure that trade is mutually beneficial.

³ The transition from sea to air traffic for much of the world's trade has meant more of a collapsing of distance for some nations than others. Because some sea-based trading routes are inconvenient, a shift to air transport has increased trade more for some nations than others. Controlling for other features, countries whose trade has increased due to this transition have grown faster than other countries.

While the act of specializing should lift living standards over time, it requires shifting resources from one sector to another, and so can generate short-run dislocations. As a result, it is essential to strengthen both targeted and more general policies that seek to ensure all can benefit from increases in trade. For this reason, after this section describes the productivityenhancing benefits trade can generate for the U.S. economy, the following section discusses how progressive taxation and a strong social safety net are crucial counterparts to productivity change of all types.

The United States and International Trade

Because of its massive size, the United States can engage in a considerable amount of specialization and trade within its own economy. Historically, foreign trade as a share of GDP has been smaller in the United States than in most other countries. In 1970, exports as a share of GDP for the average member of the Organisation for Economic Co-operation and Development (OECD) was 25 percent, while in the United States, the share was just 6 percent. By 2008, exports had increased to 13 percent of the U.S. economy (see Figure 10-4). Although that share is still relatively small, the increase in trade over the past four decades has meant that even in a large country like the United States, global commerce is an important part of the economy and—as discussed below—can be an important source of productivity growth.



Figure 10-4 Exports as a Share of GDP

Source: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.10.

Millions of American workers contribute to the production of goods and services that are exported to foreign markets, and their jobs, on average, pay higher wages than a typical job. The Commerce Department estimates that in 2008 U.S. exports represented the work of roughly 10 million American workers. The majority of these export-supported jobs were related to the export of goods; millions more were related to services exports and nearly a million were related to agricultural exports. The manufacturing sector is particularly connected to exports; 20 to 30 percent of manufacturing employment in the United States in 2008 was supported by exports. These estimates represent the number of job-equivalents based on total hours needed to produce the volume of exports. Because few workers produce exclusively exports or inputs for exports, the number of workers who are involved with exports is likely much larger than 10 million.

Currently, the U.S. economy is far from full employment, and any increased production could generate an increase in jobs. Chapter 4 discusses how an increase in exports may be an important part of GDP growth in the medium term. In the long run, though, the principal contribution of an increase in the trade share will be the increase in productivity and living standards it can generate. Thus, the rise in the export share of the economy from 6 percent in 1970 to 13 percent today represents specialization, as some workers who produced goods for domestic use have moved into export sectors. The following sections describe the ways in which trade can increase productivity.

Sources of Productivity Growth from International Trade

Productivity growth can come from a number of channels. Trade can allow increased specialization; it can allow increased scale of production; and it can allow more productive firms to grow rapidly, increasing their share of the economy.

Specialization. In the United States, a primary source of trade-related productivity growth is specialization. The concept of Ricardian comparative advantage—that nations specialize in producing the goods that they can produce cheaply relative to other goods—can be seen in a number of aspects of U.S. trade. America makes far more aircraft, grain, plastics, and equipment (optical, photographic, and medical) than it consumes. In these product areas, the United States has a substantial trade surplus, totaling over \$100 billion in 2008. Conversely, the United States produces less electrical equipment, clothing, furniture, and toys than it consumes, and therefore imports more of these goods than it exports. If America cut its production of aircraft, where it has a comparative advantage, by the \$50 billion it

currently exports on net and instead tried to produce more of the goods we currently import, productivity would likely be lower.

Specialization also takes place within industries. For example, within the broad category of "electrical machinery and equipment," America imports telephones (including cell phones) and computer monitors, but exports electronic integrated circuits. Specialization can even take place within more narrow product classifications (for example, computer memory). Advanced countries with higher wages tend to produce and export more high-quality products even as they import lower-cost, lowerquality products from abroad in the same product type. Economists refer to this within-product differentiation as the "quality ladder," and extensive research in recent years has noted this pattern of specialization within products (Schott 2004). Over time, high-skill countries climb the quality ladder, making higher-quality products and increasingly importing low-skill products.

For example, consider the category "electrically erasable programmable read-only memory." The United States both imports and exports billions of dollars worth of products in this category every year, but the average unit price of the exports is roughly three times the average unit price of the imports. The U.S. products may have bigger memories with more complex production processes or be of higher quality than the cheaper imports. In any event, the imports and exports do not appear to be overlapping. Again, such a division of labor allows for higher standards of living across the world.

Intra-Industry Trade. Beyond specialization, trade can generate productivity advances in a number of ways. One important channel is that trade can allow companies to achieve a scale of production that they could not attain by selling just to the local market, thus increasing their productivity. Within any given economy, there is a limit to the quantity of a specific good that the domestic market will want to consume. The ability to manufacture more of a product than domestic consumption supports and exchange it for other products—even ones that are extremely similar to the exported good—can be quite beneficial. It results in economies of scale that can be internal to a firm, where one company grows quite large and productive at making one good, or to a region, where a particular good tends to be made in a given physical location as a substantial amount of expertise builds up there.

Trade in which different quality or simply different brand products are traded in both directions, known as intra-industry trade, represents between 40 and 50 percent of trade in the world economy. For the manufacturing industry of the United States, that figure is even higher. As Figure 10-5 shows, intra-industry foreign trade moved from roughly 65 percent of U.S.

manufacturing trade in the 1980s to roughly 75 percent in 2001. Frequently, this means two very similar countries engaging in trade with each other. Five of the seven largest U.S. trading partners are advanced economies; in fact, despite some observers' focus on low-wage country imports, roughly 50 percent of U.S. imports come from other advanced economies. These countries often have similar endowments of labor and are generally able to use the same technology, but narrow specialization within product classes, different brands, or differences in resource allocations allows for productive exchange.



Figure 10-5 Intra-Industry Trade, U.S. Manufacturing

Firm Productivity. Trade can also allow productive firms to grow relative to less productive firms as they increase their scale. A new literature on "heterogeneous firms" has focused less on differences in endowments or comparative advantage across countries and more on how firms within an economy respond to trade. A crucial insight in this literature is that most firms do not engage in trade, but those that do are on average more productive and pay higher wages. This literature shows that when a country opens to trade, more productive firms grow relative to less productive firms, thus shifting labor and other resources to the better organized firms and increasing overall productivity. Even if workers do not switch industries, they move from firms that are either poorly managed or that

Source: Organisation for Economic Co-operation and Development, Structural Analysis (STAN) database.

use less advanced technology and production processes toward the more productive firms. Thus, firm-level evidence demonstrates that trade allows not only economy-wide advances through resource allocation, but also allows within-industry productivity advances through reallocation of resources across firms. This shift has clear welfare-enhancing impacts; see Bernard et al. (2007) for a general overview of this literature.

Vertical Specialization. Thus far, the discussion regarding sources of productivity growth in international trade has assumed that finished goods are being bought and sold across borders. The world of trade, though, has changed substantially. Today, multinational corporations (U.S. or foreignbased) are involved in 64 percent of U.S. goods trade (imports and exports), and fully 19 percent of U.S. goods exports are sales from a U.S. multinational firm to its affiliates abroad. An increase in international vertical specialization, where firms have production in multiple countries and break up the production of a particular good into stages across different countries, has contributed significantly to growth in world trade. The process can be within a large firm or intermediate inputs can be bought and sold on the market. Decreased trade costs have made it easier to break up the value chain of production as various parts of production can be done in different places and an in-process good can be shipped many times before final assembly. One study estimates that roughly one-third of the growth in world trade from 1970 to 1990 was attributable to the growth in vertical-specialization exports (Hummels, Ishii, and Yi 2001). Calculations about the extent of vertical specialization vary from estimates that 30 percent of OECD exports contain imported inputs to estimates that intermediate inputs account for up to 60 percent of world trade.4

A trade system in which the same firms are both importers and exporters complicates considerations of the impacts of trade on different groups, as comparative advantage may not matter as much for a particular good as for a particular task or piece of the production process. Specialization by process should allow the United States to focus on jobs oriented toward the processes that match the human capital, physical capital, and technology in the United States, again increasing productivity. But it has also raised fears that the process of adjustment could be disruptive, as a broader range of jobs could be exposed to international competition. The crucial policy goal is to harness the benefits of trade and ensure that its benefits are shared broadly by all Americans.

⁴ The 30 percent figure refers specifically to the share of exports that is made from imported inputs—sometimes called the vertical specialization of exports. The larger figure includes the volume of trade that is imports of intermediate goods used in the production of goods for either exports or the home market.

Encouraging Trade and Enforcing Trade Agreements

All of these aspects of trade highlight its potential to contribute to the long-run expansion of productivity in the United States. Many of the advantages of increased trade come from opening foreign markets to the products of U.S. workers. The best way to guarantee reliable access is through negotiated trade agreements and consistent enforcement of existing trade rules. As noted in Chapter 3, one positive development in the recent crisis is that, for the most part, countries did not resort to protectionism; that is, they did not close their markets to imports. Had they done so, the dislocation in U.S. employment would likely have been much worse. As it was, U.S. imports of goods and services fell 34 percent and exports dropped 26 percent from July 2008 to April 2009. From their peak in the third quarter of 2008 until the trough in the second quarter of 2009, the nominal value of exports of goods and services fell more than \$400 billion at an annual rate, a drop of almost 3 percent of GDP. Imports also dropped substantially. In the long run, such a decline in world trade would be harmful for the U.S. economy. If trade had stayed at that depressed level, with lower trade surpluses in the United States' main export goods and smaller trade deficits in our import goods, the long-run dislocations from the crisis would have been worse than now expected. But U.S. exports are rebounding, opening the possibility that many workers who lost jobs in the crisis may find employment in the same productive industries where they were before the crisis.

Several explanations have been offered for this avoidance of protectionism during the crisis. One is the availability of macroeconomic policy tools such as fiscal and monetary policy (Eichengreen and Irwin 2009); another is the public commitments made by leaders at the Group of Twenty summits to avoid protectionist strategies. But the clear and concrete rules-based trade system was helpful as well. That rules-based system, embodied by the World Trade Organization (WTO) and by other trade commitments, allows the United States to take steps to ensure that other countries will abide by their obligations. It is also designed to give U.S. workers and firms confidence about the economic environment they will be facing and confidence that commitments made when trade agreements are negotiated will be kept. In addition, creating predictable and enforceable markets for innovative and creative works grounded in intellectual property rights is essential to spurring and protecting U.S. investments in technology and innovation.

The Administration recognizes that simply negotiating trade frameworks is not enough; robust enforcement of trade rules is an important part of our engagement in the world economy. The Administration has taken many trade enforcement actions recently. For example, the Administration has continued pressing a WTO case that challenged China's treatment of U.S. auto parts exports. The ruling in this case resulted in China having to change its policies and increase its openness to U.S. exports. The United States (joined by Mexico and the European Union) has also initiated an action challenging China's use of subsidies and taxes to keep input costs low for firms in China, which lowers the cost of final goods from China relative to the world. Further, the Administration takes very seriously the "Special 301" process under which it monitors the protection and enforcement of intellectual property rights. In 2009, it added Canada to the priority watch list because Canada has not implemented key proposals to improve enforcement and protection of intellectual property rights. Actions like these represent the Administration's intent (made explicit, for example, in United States Trade Representative Ronald Kirk's speeches⁵) to enforce trade rules and aggressively pursue actions to open markets to U.S. exports.

As noted in Chapter 4, the Administration is currently pursuing these and other options to expand American exports, recognizing that increasing exports will be a key part of the U.S. growth model. Increases in our exports in the short run can help to return the economy to full employment. Over the longer run, increases in trade provide avenues for the United States to increase productivity through specialization, scale, and firm effects, and in turn, increase standards of living for American families.

Currently, a number of other trade expansion opportunities exist for the United States. The Administration supports a strong market-opening agreement for both goods and services in the WTO Doha Round negotiations and is continuing to work with U.S. trade partners on potential free trade agreements. Because the United States is a relatively open economy, negotiated trade deals often involve substantial improvements in access for U.S. exports to other countries relative to the market opening made by the United States.

It is also important that these trade frameworks protect productivityenhancing innovation through adequate provisions for intellectual property rights and that they reflect our values regarding workers and the environment. An example of the Administration's actions to improve the world's trading regime is seen in the way the Administration is working to engage our trading partners across the Pacific region in a new regional agreement (the Trans-Pacific Partnership). It will be a high-standards agreement that expands trade in a way that is beneficial to the economy, workers, small businesses, and farmers, and is consistent with the values of the United States.

In addition to benefits to the United States, trade benefits our trade partners. This is of direct benefit to Americans in the sense that as these

⁵ See for example his speech at Mon Valley Works—Edgar Thomson Plant on July 16, 2009.

economies grow, they can grow as a destination for U.S. exports. Trade can also have large benefits for the poorest countries. In particular, multilateral agreements that open trade flows between developing countries can have substantial impacts on poorer countries, and trade relations with the United States can be a crucial part of the path to development for the poorest countries. For example, the African Growth and Opportunity Act seeks to increase two-way trade with poor nations in sub-Saharan Africa, help integrate these countries into the global economy, and do so in a way that improves their institutions and reduces poverty. As development in the poorest nations of the world is in our national interest strategically, economically, and morally, trade presents win-win opportunities to advance development.

Ensuring the Gains from Productivity Growth Are Widely Shared

Any productivity advance—be it from technological change, trade, or other factors—will have different impacts across the economy. As discussed earlier, productivity advances are crucial to an increase in living standards. Still, those firms that do not make a specific advance will likely contract or fail, and some workers in the affected industry may face losses. Likewise, international trade can have disparate effects across industries, firms, and workers. In both cases, society on average will be better off because the economy is able to generate a higher standard of living. But the recent stagnation in median real wages despite positive productivity growth (discussed in Chapter 8) highlights the challenge of ensuring that the gains from productivity growth are widely spread.

The potential for productivity advances to generate disparities in outcomes suggests the need for strong social policy to support those who do not immediately benefit and to ensure that gains from trade and productivity advances are shared by all. Because identifying directly impacted individuals is difficult, the logical response to productivity advances is a strong social safety net that ensures that all benefit from the rise in living standards. Trade theory suggests that trade liberalization can generate gains that are large enough that they can be shared in a way that every member of society is made better off. In the past, however, the gains from our trade policies have not been shared sufficiently, and technological change and globalization have left many behind.

Trade adjustment assistance, worker retraining, and temporary relief programs are ways the Federal Government can and does support those who do not benefit from these advances. The Administration has supported trade adjustment assistance, which provides additional unemployment funds, retraining, and health coverage assistance, and has made trade adjustment assistance available to a wider set of employees through the Trade and Globalization Adjustment Assistance Act of 2009.

These specific institutions, though, are not enough. More broad-based policy must ensure that as the economy grows in the long run, it enhances living standards for all citizens. Progressive taxation—which can be justified in many ways—is supported by the uneven outcomes from productivity advances and globalization. Those whose incomes rise can pay a larger share of total taxes and still be better off than before the gains. By doing so, they support lower taxes for others whose incomes may have declined. This process makes everyone better off and thus supports innovation and open borders by minimizing the number of people who feel threatened by productivity advances and therefore oppose them.

For example, the ability to sell books across borders certainly enhanced the income J.K. Rowling was able to collect from writing the famous Harry Potter books. Had she been able to sell her books only in the United Kingdom, her audience and income would have been much smaller. In addition, millions of American readers benefited from the increased consumer choice and the ability to purchase her books. Similarly, more Americans can work as well-paid aircraft engineers or manufacturing employees for Boeing or as technology specialists for Apple because those firms are able to sell on a world market. At the same time, it is distinctly possible that some American authors who would have captured a larger share of the "magic-oriented book" market had there been no trade in literature were crowded out by Rowling's success, or that some handheld music device engineer in the United Kingdom has had to find another career because of Apple's success.

A progressive tax rate combined with trade allows those who realize substantial income gains from globalization to still prosper a great deal relative to the state where there is no trade and incomes are taxed at a flat rate. And it does so while making sure that those who face lower incomes from globalization also obtain benefits—not just through the lower prices and expanded choices associated with trade, but also through lower taxation.

Beyond a progressive tax rate, a strong social safety net can cushion the disruption generated by a dynamic economy. Unemployment insurance can provide temporary income. A robust health care system can ensure that temporary dislocations do not generate drastic consequences. And a vibrant education system can prepare workers for changing economic needs.

CONCLUSION

Advances in productivity are crucial to increasing the living standards of all Americans-to building a better future. Innovation initiatives, such as increased research and development, targeted investments, stronger intellectual property rights, and harnessing trade's productivity-enhancing potential, are all essential parts of lifting living standards in the long run. But to ensure living standards are rising for all, a dynamic open economy depends on a robust social infrastructure. Education improvements described in Chapter 8 are crucial to creating a well-trained labor force able to thrive in a flexible economy where innovation and trade may reshape industries over time. A sound health care system is needed to provide the certainty that changing jobs will not mean a loss of health services. And a productive, well-regulated financial system is essential to allocate capital to growing sectors. Thus, the initiatives being taken today as part of the Administration's rescue-and-rebuild programs are not meant only to correct the problems of today, but to set the stage for strong growth over decades to come.
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A P P E N D I X A

X

REPORT TO THE PRESIDENT ON THE ACTIVITIES OF THE COUNCIL OF ECONOMIC ADVISERS DURING 2009



LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS Washington, D.C., December 31, 2009

Mr. President:

The Council of Economic Advisers submits this report on its activities during calendar year 2009 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,

Christina D. Romer, *Chair* Austan Goolsbee, *Member* Cecilia Elena Rouse, *Member*

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

COUNCIL MEMBERS AND THEIR DATES OF SERVICE

Name	Position	Oath of office date	Separation date
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
Laura D'Andrea Tyson	Chair	February 5, 1993	April 22, 1995
Alan S. Blinder	Member	July 27, 1993	June 26, 1994
Joseph E. Stiglitz	Member	July 27, 1993	
	Chairman	June 28, 1995	February 10, 1997
Martin N. Baily	Member	June 30, 1995	August 30, 1996
Alicia H. Munnell	Member	January 29, 1996	August 1, 1997
Janet L. Yellen	Chair	February 18, 1997	August 3, 1999
Jeffrey A. Frankel	Member	April 23, 1997	March 2, 1999
Rebecca M. Blank	Member	October 22, 1998	July 9, 1999
Martin N. Baily	Chairman	August 12, 1999	January 19, 2001
Robert Z. Lawrence	Member	August 12, 1999	January 12, 2001
Kathryn L. Shaw	Member	May 31, 2000	January 19, 2001
R. Glenn Hubbard	Chairman	May 11, 2001	February 28, 2003
Mark B. McClellan	Member	July 25, 2001	November 13, 2002
Randall S. Kroszner	Member	November 30, 2001	July 1, 2003
N. Gregory Mankiw	Chairman	May 29, 2003	February 18, 2005
Kristin J. Forbes	Member	November 21, 2003	June 3, 2005
Harvey S. Rosen	Member	November 21, 2003	
	Chairman	February 23, 2005	June 10, 2005
Ben S. Bernanke	Chairman	June 21, 2005	January 31, 2006
Katherine Baicker	Member	November 18, 2005	July 11, 2007
Matthew J. Slaughter	Member	November 18, 2005	March 1, 2007
Edward P. Lazear	Chairman	February 27, 2006	January 20, 2009
Donald B. Marron	Member	July 17, 2008	January 20, 2009
Christina D. Romer	Chair	January 29, 2009	, ·
Austan Goolsbee	Member	March 11, 2009	
Cecilia E. Rouse	Member	March 11, 2009	

COUNCIL MEMBERS AND THEIR DATES OF SERVICE



Report to the President on the Activities of the Council of Economic Advisers During 2009

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 CHAIR OF THE COUNCIL

Christina D. Romer was nominated as Chair of the Council by the President on January 20, 2009. She was confirmed by the Senate on January 28, and took the oath of office on January 29. Dr. Romer is on a leave of absence from the University of California, Berkeley, where she is the Class of 1957-Garff B. Wilson Professor of Economics.

The Chair is a member of the President's Cabinet and is responsible for communicating the Council's views on economic matters directly to the President through personal discussions and written reports. Dr. Romer represents the Council at the daily Presidential economics briefing, daily White House senior staff meetings, budget meetings, Cabinet meetings, a variety of inter-agency meetings, and other formal and informal meetings with the President, the Vice President, and other senior government officials. She also meets frequently with members of Congress in both formal hearings and informal meetings to discuss economic issues and Administration priorities. She travels within the United States and overseas to present the Administration's views on the economy. Dr. Romer is the Council's chief public spokesperson. She directs the work of the Council and exercises ultimate responsibility for the work of the professional staff.

Dr. Romer succeeded Edward P. Lazear, whose tenure ended with the inauguration of the new President. Dr. Lazear returned to Stanford University, where he is the Jack Steele Parker Professor of Human Resources Management and Economics in the Graduate School of Business and the Morris Arnold Cox Senior Fellow at the Hoover Institution.

THE MEMBERS OF THE COUNCIL

The other Members of the Council are Austan Goolsbee and Cecilia Rouse. They were nominated by the President on January 20, 2009, confirmed by the Senate on March 10, and took their oaths of office on March 11. Dr. Goolsbee also serves as the Staff Director and Chief Economist of the President's Economic Recovery Advisory Board. Dr. Goolsbee is on a leave of absence from the University of Chicago, where he is the Robert P. Gwinn Professor of Economics in the Booth School of Business. Dr. Rouse is on a leave of absence from Princeton University, where she is the Theodore A. Wells '29 Professor of Economics and Public Affairs. The Members represent the Council at a wide variety of meetings and frequently attend meetings with the President and the Vice President.

The Chair and the Members work as a team on most economic policy issues. The Chair works on the whole range of issues under the Council's purview, with a particular focus on macroeconomics and health care. Dr. Goolsbee focuses especially on issues related to housing, financial markets, and tax policy. Dr. Rouse focuses especially on issues related to labor markets, education, and international trade.

The term of Donald B. Marron as a Member of the Council ended with the inauguration of the new President. He is currently president of Marron Economics, LLC.

AREAS OF ACTIVITY

Macroeconomic Policies

A central function of the Council is to advise the President on all major macroeconomic issues and developments. The Council is actively involved in all aspects of macroeconomic policy. In 2009, the central macroeconomic issues included monitoring the financial and economic crisis; formulating the policy response, including the American Recovery and Reinvestment Act of 2009, the Financial Stability Plan, and additional measures targeted to spur job creation and deal with problems in specific sectors; evaluating the effects of the policies and the economy's response; health insurance reform; and setting priorities for the budget. In this process, the Council works closely with the Department of the Treasury, the Office of Management and Budget, the National Economic Council, White House senior staff, and other agencies and officials.

The Council prepares for the President, the Vice President, and the White House senior staff a daily economic briefing memo analyzing current economic developments, and almost-daily memos on key economic data releases. The Chair also makes more in-depth presentations on the state of the economy to these officials and to the Cabinet.

The Council, the Department of 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 initiates the forecasting process twice each year, consulting with a wide variety of outside sources, including leading private sector forecasters and other government agencies.

The Council issued a series of reports in 2009. Among those most directly related to macroeconomic policy were a report issued in May on estimation methodology for the jobs impact of specific programs of the Recovery Act; a report in June on the economic effects of comprehensive health insurance reform; a report in September on the macroeconomic effects of the Recovery Act; and three shorter reports accompanying that report focusing on the effects of state fiscal relief, the effects of the "Cash for Clunkers" program, and the cross-country experience with fiscal policy in the crisis.

The Council continued its efforts to improve the public's understanding of economic developments and of the Administration's economic policies through briefings with the economic and financial press, discussions with outside economists, and presentations to outside organizations. The Chair and Members also regularly met to exchange views on the macroeconomy with the Chairman and Members of the Board of Governors of the Federal Reserve System.

Microeconomic Policies

Throughout the year, the Council was an active participant in the analysis and consideration of a broad range of microeconomic policy issues. The Council was actively engaged in policy discussions on health insurance reform, financial regulatory reform, clean energy, the environment, education, and numerous labor market issues. As with macroeconomic policy, the Council works closely with other economic agencies, White House senior staff, and other agencies on these issues. Among the specific microeconomic issues that received particular attention in 2009 were small business lending; foreclosure mitigation and prevention; unemployment insurance; the condition and prospects of the American automobile industry; the role of cost-benefit analysis in regulatory policy; estimating the social benefits of reduced carbon emissions; reform of K-12 education; student financial aid; community colleges; potential developments in the U.S. labor market over the next five to ten years; and key indicators of family well-being in the recession and accompanying policy responses.

Many of the reports issued by the Council in 2009 were primarily concerned with microeconomic issues. In addition to its major health care report in June, the Council issued three other reports on health insurance reform over the course of the year—one on its impact on small businesses and their employees in July, one on its impact on state and local governments in September, and an update of the June report in December. The Council also issued an extensive report on the "jobs of tomorrow" in July and a report on simplifying student aid in September.

International Economic Policies

The Council was involved in a range of international trade and finance issues, with a particular emphasis on the consequences of the international financial crisis and the related global economic slowdown. The Council was an active participant in discussions at global and bilateral levels. Council Members and staff regularly met with economists, policy officials, and government officials of other countries to discuss issues relating to the global economy and participated in the first Strategic and Economic Dialogue with China in July 2009.

The Council was particularly active in examining policies that could help speed the global economy out of the current crisis. It carefully tracked developments in the global economy and considered the potential mediumrun impacts of the current crisis. It was also an active participant in the Presidential Study Directive examining the development policies of the United States Government, providing analysis and support to the effort to review the interactions between the United States and countries in the developing world.

On the international trade front, the Council was an active participant in the trade policy process, occupying a position on the Trade Policy Staff Committee and the Trade Policy Review Group. The Council provided analysis and recommendations on a range of trade-related issues involving the enforcement of existing trade agreements, reviews of current U.S. trade policies, and consideration of future policies. The Council was also an active participant on the Trade Promotion Coordinating Committee, helping to examine the ways in which exports may support economic growth in the years to come. In the area of investment and security, the Council participated on the Committee on Foreign Investment in the United States (CFIUS), discussing individual cases before CFIUS.

The Council is a leading participant in the Organisation for Economic Co-operation and Development (OECD), an important forum for economic cooperation among high-income industrial economies. Dr. Romer is chair of the OECD's Economic Policy Committee, and Council staff participate actively in working-party meetings on macroeconomic policy and coordination.

PUBLIC INFORMATION

The Council's annual *Economic Report of the President* is an important vehicle for presenting the Administration's domestic and international economic policies. It is available for purchase through the Government Printing Office, and is viewable on-line at www.gpoaccess.gov/eop.

The Council prepared numerous reports in 2009, and the Chair and Members gave numerous public speeches and testified to Congress. The reports, texts of speeches, and written statements accompanying testimony are available at the Council's website, www.whitehouse.gov/cea.

Finally, the Council publishes the monthly *Economic Indicators*, which is available on-line at www.gpoaccess.gov/indicators.

The Staff of the Council of Economic Advisers

The staff of the Council consists of the senior staff, senior economists, staff economists, research assistants, analysts, and the administrative and support staff. The staff at the end of 2009 were:

Senior Staff

Senior staff play key managerial and analytical roles at the Council. They direct operations, perform central Council functions, and represent the Council in meetings with other agencies and White House offices.

Senior Economists

Senior economists are Ph.D. economists on leave from academic institutions, government agencies, or private research institutions. They participate actively in the policy process, represent the Council in interagency meetings, and have primary responsibility for the economic analysis and reports prepared by the Council. Each senior economist is typically a primary author of one of the chapters in this *Report*.

Christopher D. Carroll	Macroeconomics
Mark G. Duggan	Health
W. Adam Looney	Public Finance, Tax Policy
Andrew Metrick	Finance
Jesse M. Rothstein	Labor, Education, Welfare
Jay C. Shambaugh	International Macroeconomics and Trade
Ann Wolverton	Energy, Environment, Natural Resources

Staff Economists

Staff economists are typically graduate students on leave from their Ph.D. training in economics. They conduct advanced statistical analysis, contribute to reports, and generally support the research and analysis mission of the Council.

Sharon E. Boyd	Health
Gabriel Chodorow-Reich	International Macroeconomics and Trade
Laura J. Feiveson	Macroeconomics, Finance
Joshua K. Goldman	Energy, Environment, Infrastructure
Sarena F. Goodman	Education, Labor, Public Finance
Joshua K. Hausman	Macroeconomics
Zachary D. Liscow	Public Finance, Labor, Environment
William G. Woolston	Health, Education

Research Assistants

Research assistants are typically college graduates with significant coursework in economics. They conduct statistical analysis and data collection, and generally support the research and analysis mission of the Council. Both staff economists and research assistants contribute to this *Report* and play a crucial role in ensuring the accuracy of all Council documents.

Peter N. Ganong	Labor, Public Finance, Environment
Clare M. Hove	Macroeconomics
Michael P. Shapiro	Health, International Economics

Statistical Office

The Statistical Office gathers, administers, and produces statistical information for the Council. Duties include preparing the statistical appendix to the *Economic Report of the President* and the monthly publication *Economic Indicators*. The staff also creates background materials for economic analysis and verifies statistical content in Presidential memoranda. The Office serves as the Council's liaison to the statistical community.

Brian A. Amorosi	Program	Analyst
Dagmara A. Mocala	Program	Analyst

Administrative Office

The Administrative Office provides general support for the Council's activities. This includes financial management, ethics, human resource management, travel, operations of facilities, security, information technology, and telecommunications management support.

Rosemary M. Rogers	Administrative Officer
Archana A. Snyder	Financial Officer
Doris T. Searles	Information Management Specialist

Office of the Chair

Julie B. Si	egel	Special Assistant to the Chair
Lisa D. Br	anch	Executive Assistant to the Members and
		Assistant to the Chief Economist

Staff Support

Sharon K. Thomas Administrative Support Assistant

Other Staff

Brenda Szittya and Martha Gottron provided editorial assistance in the preparation of the 2010 *Economic Report of the President*.

C. Bennett Blau and Gabrielle A. Elul served as staff assistants. Mr. Blau also served as editor of the Morning Economic Bulletin.

Student interns provide invaluable help with research projects, dayto-day operations, and fact-checking. Interns during the year were: Michael D. Arena; Jana Curry; Samantha G. Ellner; Brett B. Flagg; Karen R. Li; Devin K. Mattson; Allison L. Moore; Seth H. Werfel; Carl C. Wheeler; Kie C. Riedel; Rebecca A. Wilson; Yuelan L. Wu; and Allen Yang.

DEPARTURES

Jane E. Ihrig left her position as Chief Economist of the Council in January to return to the Federal Reserve Board. Pierce E. Scranton left his position as Chief of Staff in January. He was succeeded by Karen Anderson, who left the Council in November for maternity leave.

The senior economists who resigned during the year (with their institutions after leaving the Council in parentheses) were: Jean M. Abraham (University of Minnesota); Scott J. Adams (University of Wisconsin); Benjamin N. Dennis (Department of the Treasury); Erik W. Durbin (Sullivan and Cromwell, LLP); Wendy M. Edelberg (Financial Crisis Inquiry Commission); Elizabeth A. Kopits (Environmental Protection Agency); Michael S. Piwowar (Senate Banking Committee); William M. Powers (International Trade Commission); and Robert P. Rebelein (Vassar College).

The staff economists who resigned during 2009 were Kristopher J. Dawsey, Elizabeth Schultz, and Brian Waters. Those who served as research assistants at the Council and resigned during 2009 were Michael Love and Aditi P. Sen.

There were three retirements at the Council in 2009: Alice Williams, Sandy Daigle and Mary Jones. Ms. Williams devoted 39 years and Ms. Daigle 23 years to the Council. Their untiring commitment, dedication, and loyalty in serving the Council, the Chairs, and the people of the United States over the years was extraordinary and will be greatly missed. Ms. Jones's 23 years of dedication to the senior economists and Council Members was a testament to her commitment to the Council and was greatly appreciated.

A P P E N D I X B

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General Notes

Detail in these tables may not add to totals because of rounding.

Because of the formula used for calculating real gross domestic product (GDP), the chained (2005) dollar estimates for the detailed components do not add to the chained-dollar value of GDP or to any intermediate aggregate. The Department of Commerce (Bureau of Economic Analysis) no longer publishes chained-dollar estimates prior to 1995, except for selected series.

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 through January 29, 2010. In particular, tables containing national income and product accounts (NIPA) estimates reflect revisions released by the Department of Commerce in July 2009.

NATIONAL INCOME OR EXPENDITURE

 TABLE B-1. Gross domestic product, 1960-2009

		Personal co	nsumption e	xpenditures			Gross priva	ate domestic	investment		
							Fi	xed investme	nt		
Year or quarter	domestic	TAL	<u> </u>	. .	T . 1		١	Nonresidentia	i		Change
	product	lotai	600 0 S	Services	lotai	Total	Total	Structures	Equip- ment and software	Resi- dential	private inven- tories
1960 1961 1962 1963 1964 1965 1966 1966 1967 1968	526.4 544.8 585.7 617.8 663.6 719.1 787.7 832.4 909.8 984.4	331 8 342 2 363 3 382 7 411 5 443 8 480.9 507 8 558 0 605 1	177.0 178.8 189.0 198.2 212.3 229.7 249.6 259.0 284.6 304.7	154.8 163.4 174.4 184.6 199.2 214.1 231.3 248.8 273.4 300.4	78.9 78.2 88.1 93.8 102.1 118.2 131.3 128.6 141.2 156.4	75.7 75.2 82.0 88.1 97.2 109.0 117.7 118.7 132.1 147.3	49.4 48.8 53.1 56.0 63.0 74.8 85.4 86.4 93.4 104.7	19.6 19.7 20.8 21.2 23.7 28.3 31.3 31.5 33.6 37.7	298 291 323 348 392 465 540 549 599 670	26.3 26.4 29.0 32.1 34.3 34.2 32.3 32.3 32.4 38.7 42.6	3.2 3.0 6.1 5.6 4.8 9.2 13.6 9.9 9.9 9.1 9.2
1970 1971 1972 1973 1973 1974 1975 1976 1977 1978 1978 1979	1.038.3 1,126.8 1,237.9 1,382.3 1,499.5 1,637.7 1,824.6 2,030.1 2,293.8 2,562.2	648.3 701.6 770.2 852.0 932.9 1,033.8 1,151.3 1,277.8 1,427.6 1,591.2	318.8 342.1 373.8 416.6 451.5 491.3 546.3 600.4 663.6 737.9	329.5 359.5 396.4 435.4 481.4 542.5 604.9 677.4 764.1 853.2	152 4 178 2 207 6 244 5 249 4 230 2 292 0 361 3 438 0 492 9	150.4 169.9 198.5 228.6 235.4 236.5 274.8 339.0 412.2 474.9	109.0 114.1 128.8 153.3 169.5 173.7 192.4 228.7 280.6 333.9	40.3 42.7 47.2 55.0 61.2 61.4 65.9 74.6 93.6 117.7	68.7 71.5 81.7 98.3 108.2 112.4 126.4 154.1 187.0 216.2	41 4 55 8 69 7 75 3 66 0 62 7 82 5 110 3 131 6 141 0	2.0 8.3 9.1 15.9 14.0 -6.3 17.1 22.3 25.8 18.0
1980	2,788 1 3,126 8 3,253 2 3,534 6 3,930 9 4,217 5 4,460 1 4,736 4 5,100 4 5,482 1	1,755.8 1,939.5 2,075.5 2,288.6 2,501.1 2,717.6 2,896.7 3,097.0 3,350.1 3,594.5	799.8 869.4 899.3 973.8 1,063.7 1,137.6 1,195.6 1,256.3 1,337.3 1,423.8	956.0 1,070.1 1,176.2 1,314.8 1,437.4 1,580.0 1,701.1 1,840.7 2,012.7 2,170.7	479.3 572.4 517.2 564.3 735.6 736.2 746.5 785.0 821.6 874.9	485.6 542.6 532.1 570.1 670.2 714.4 739.9 757.8 803.1 847.3	362.4 420.0 426.5 417.2 489.6 526.2 519.8 524.1 563.8 607.7	136.2 167.3 177.6 154.3 177.4 194.5 176.5 176.5 174.2 182.8 193.7	226 2 252.7 248.9 262.9 312.2 331.7 343.3 349.9 381.0 414.0	123 2 122 6 105 7 152 9 180 6 188 2 220 1 233 7 239 3 239 5	6 3 29 8 14 9 5 8 65.4 21 8 6 6 27 1 18 5 27.7
1990 1991 1992 1993 1994 1994 1995 1996 1997 1998 1998	5,800.5 5,992.1 6,342.3 6,667.4 7,085.2 7,414.7 7,838.5 8,332.4 8,793.5 9,353.5	3,835.5 3,980.1 4,236.9 4,483.6 4,750.8 4,987.3 5,273.6 5,570.6 5,570.6 5,918.5 6,342.8	1,491.3 1,497.4 1,563.3 1,642.3 1,746.6 1,815.5 1,917.7 2,006.8 2,110.0 2,290.0	2,344.2 2,482.6 2,673.6 2,841.2 3,004.3 3,171.7 3,355.9 3,355.9 3,563.9 3,808.5 4,052.8	861.0 802 9 864.8 953 3 1,097 3 1,144.0 1,240.2 1,388.7 1,510.8 1,641.5	846 4 803 3 848 5 932 5 1,033 5 1,112 9 1,209 4 1,317 7 1,447 1 1,580 7	622.4 598.2 612.1 666.6 731.4 810.0 875.4 968.6 1,061.1 1,154.9	202.9 183.6 172.6 177.2 186.8 207.3 224.6 250.3 275.1 283.9	419.5 414.6 439.6 489.4 544.6 602.8 650.8 718.3 786.0 871.0	224 0 205.1 236.3 266.0 302.1 302.9 334.1 349.1 385.9 425.8	14 5 - 4 16.3 20.8 63.8 31.2 30.8 71.0 63.7 60.8
2000 2001 2002 2003 2004 2005 2005 2006 2007 2008 2008 2008 2008	9,951.5 10,286 2 10,642.3 11,142.1 11,867.8 12,638.4 13,398.9 14,077.6 14,441.4 14,258.7	6,830.4 7,148.8 7,439.2 7,804.0 8,285.1 8,819.0 9,322.7 9,826.4 10,129.9 10,092.6	2,459.1 2,534.0 2,610.0 2,727.4 2,892.3 3,073.9 3,221.7 3,365.0 3,403.2 3,257.6	4.371.2 4.614.8 4.829.2 5.076.6 5.392.8 5.745.1 6,100.9 6.461.4 6,726.8 6.835.0	1,772.2 1,661.9 1,647.0 1,729.7 1,968.6 2,172.2 2,327.2 2,327.2 2,388.5 2,136.1 1,622.9	1,717.7 1,700.2 1,634.9 1,713.3 1,903.6 2,122.3 2,267.2 2,269.1 2,170.8 1,747.9	1,268.7 1,227.8 1,125.4 1,135.7 1,223.0 1,347.3 1,505.3 1,640.2 1,693.6 1,386.6	318.1 329.7 282.8 281.9 306.7 351.8 433.7 535.4 609.5 480.7	950.5 898.1 842.7 853.8 916.4 995.6 1,071.7 1,104.8 1,084.1 906.0	449.0 472 4 509 5 577 6 680 6 775.0 761 9 629 0 477 2 361 3	54.5 -38.3 12 0 16.4 64.9 50 0 60.0 19 4 -34.8 -125 0
2006: 1 II III IV	13,183,5 13,347,8 13,452,9 13,611,5	9,148.2 9,266.6 9,391.8 9,484.1	3,180.8 3,206.5 3,250.5 3,249.1	5,967.4 6,060.1 6,141.3 6,235.0	2.336.5 2,352.1 2,333.5 2,286.5	2,270.6 2,279.7 2,264.4 2,254.2	1,457.2 1,495.3 1,522.7 1,546.1	396.8 428.6 447.6 461.7	1,060.5 1,066.7 1,075.1 1,084.4	813.3 784.4 741.7 708.1	66.0 72.4 69.1 32.3
2007: I II III IV	13,795.6 13,997.2 14,179.9 14,337.9	9,658.5 9,762.5 9,865.6 10,019.2	3,306.3 3,338.2 3,366.6 3,448.9	6,352.2 6,424.3 6,499.0 6,570.3	2,267.2 2,302.0 2,311.9 2,272.9	2,254.1 2,278.6 2,280.8 2,263.0	1,574.1 1,623.5 1,665.2 1,697.9	489.5 519.9 556.1 575.9	1,084.6 1,103.5 1,109.1 1,122.0	680.0 655.1 615.6 565.2	13.1 23.5 31.0 9.8
2008: I II III IV	14,373,9 14,497,8 14,546,7 14,347,3	10,095.1 10,194.7 10,220.1 10,009.8	3,447,2 3,474,9 3,463,0 3,227,5	6,647.9 6,719.8 6,757.1 6,782.3	2,214.8 2,164.6 2,142.7 2,022.1	2,223.0 2,214.0 2,179.7 2,066.6	1,705.0 1,719.7 1,711.0 1,638.7	586.3 610.6 620.4 620.7	1,118.7 1,109.2 1,090.6 1,018.0	518.1 494.2 468.6 427.8	8.2 49.3 37.0 44.5
2009: I II III IV P	14,178.0 14,151.2 14,242.1 14,463.4	9,987.7 9,999.3 10,132.9 10,250.5	3,197.7 3,193.8 3,292.3 3,346.8	6,790.0 6,805.6 6,840.6 6,903.7	1,689.9 1,561.5 1,556.1 1,684.0	1,817 2 1,737 7 1,712 6 1,724 0	1,442.6 1,391.8 1,353.9 1,358.2	533.1 494.8 457.9 436.8	909.5 897.0 895.9 921.5	374.6 345.9 358.8 365.7	-127.4 -176.2 -156.5 -40.0

	N good	let exports ds and sen	of vices	Gov	vernment o and i	onsumptio gross inves	n expenditi tment	ures	Final	Gross	Adden- dum:	Percent from pr pe	t change eceding riod
Year or quarter	Net exports	Exports	Imports	Total	Total	Federal National defense	Non- defense	State and local	domes- tic product	tic pur- chases ¹	Gross national prod- uct ²	Gross domes- tic product	Gross domes- tic pur- chases 1
1960 1961 1962 1962 1963 1964 1965 1966 1966 1967 1968	42 49 41 49 56 39 36 14	27.0 27.6 29.1 31.1 35.0 37.1 40.9 43.5 47.9 51.9	22.8 22.7 25.0 26.1 28.1 31.5 37.1 39.9 46.6 50.5	111 5 119.5 130.1 136.4 143.2 151.4 171.6 192.5 209.3 221.4	64 1 67.9 75.2 76.9 78.4 80.4 92.4 104.6 111.3 111.3	53 3 56 5 61 1 61 0 60 2 60 6 71 7 83 4 89 2 99 5	10.7 11.4 14.1 15.9 18.2 19.8 20.8 21.2 22.0 22.0	47 5 51.6 54.9 59.5 64.8 71.0 79.2 87.9 98.0 98.0	523 2 541 8 579 6 612 1 658 8 709 9 774 1 822 6 900 8 075 2	522.2 539.8 581.6 612.8 656.7 713.5 783.8 828.9 908.5 908.5	529 6 548 3 589 7 622 2 668 6 724 4 792 8 837 8 915 9 900 5	3.9 3.5 7.5 5.5 7.4 8.4 9.5 5.7 9.3	3.2 3.4 7.7 5.4 7.2 8.6 9.9 5.8 9.9
1970 1971 1972 1972 1973 1974 1975 1976 1976 1977 1978	40 -34 4.1 -8 16.0 -1.6 -23.1 -25.4 -27.5	51.9 59.7 63.0 70.8 95.3 126.7 138.7 138.7 149.5 159.4 186.9 230.1	50.5 55.8 62.3 74.2 91.2 127.5 122.7 151.1 182.4 212.3 252.7	221.4 233.7 246.4 263.4 281.7 317.9 357.7 357.7 353.0 414.1 453.6 500.7	113.3 113.4 113.6 119.6 122.5 134.5 149.0 159.7 175.4 190.9 210.6	89.5 87.6 84.6 86.9 88.1 95.6 103.9 111.1 120.9 130.5 145.2	23.8 25.8 29.1 32.7 34.3 39.0 45.1 48.6 54.5 60.4 65.4	108.2 120.3 132.8 143.8 159.2 183.4 208.7 223.3 238.7 262.7 260.2	975.3 1,036.3 1,118.6 1,228.8 1,366.4 1,485.5 1,644.0 1,807.5 2,007.8 2,268.0 7,544.2	983.0 1,034.4 1,126.2 1,241.3 1,378.2 1,500.3 1,621.7 1,826.2 2,053.2 2,319.1 2,594.9	990.5 1,044.7 1,134.4 1,246.4 1,394.9 1,515.0 1,650.7 1,841.4 2,050.4 2,506.4 2,506.4	8.2 5.5 9.9 11.7 8.5 9.2 11.4 11.3 13.0 11.7	82 52 89 102 11.0 8.9 81 12.6 12.4 13.0 11.6
1960	-22.3 -13.1 -12.5 -20.0 -51.7 -102.7 -115.2 -132.5 -145.0 -110.1 -87.9	280.8 305.2 283.2 277.0 302.4 302.0 320.3 363.8 443.9 503.1	293.8 317.8 303.2 328.6 405.1 417.2 452.9 508.7 554.0 591.0	566.1 627.5 680.4 733.4 796.9 878.9 949.3 999.4 1,038.9 1 100.6	210.0 243.7 280.2 310.8 342.9 374.3 412.8 438.4 459.5 461.6 481.4	143.2 168.0 196.2 225.9 250.6 281.5 311.2 330.8 350.0 354.7 362.1	75.8 83.9 92.3 92.7 101.6 107.6 109.6 106.8 119.3	230.2 322.4 347.3 369.7 390.5 422.6 466.1 510.9 539.9 539.9 577.3 619.2	2,344,2 2,794,5 3,097,0 3,268,1 3,540,4 3,865,5 4,195,6 4,453,5 4,709,2 5,081,9 5,454,5	2,304.0 2,801.2 3,139.4 3,273.2 3,586.3 4,033.6 4,332.7 4,592.6 4,881.3 5,210.5 5,570.0	2,394.2 2,822.3 3,159.8 3,289.7 3,571.7 3,967.2 4,244.0 4,477.7 4,754.0 5,123.8 5,508.1	8.8 12.1 4.0 8.7 11.2 7.3 5.8 6.2 7.7 7.5	8.4 12.1 4.3 9.6 12.5 7.4 6.0 6.3 6.7 6.9
1990 1991 1992 1993 1994 1994 1995 1996 1996 1997 1998 1998	-77.6 -27.0 -32.8 -64.4 -92.7 -90.7 -96.3 -101.4 -161.8 -262.1	552.1 596.6 635.0 655.6 720.7 811.9 867.7 954.4 953.9 989.3	629.7 623.5 667.8 720.0 813.4 902.6 964.0 1,055.8 1,115.7 1,251.4	1,181.7 1,236.1 1,273.5 1,294.8 1,329.8 1,374.0 1,421.0 1,474.4 1,526.1 1,631.3	507.5 526.6 532.9 525.0 518.6 518.8 527.0 531.0 531.0 531.0 531.0	373.9 383.1 376.8 363.0 353.8 348.8 354.8 354.8 349.8 349.8 346.1 361.1	133.6 143.4 156.1 162.0 164.8 170.0 172.2 181.1 184.9 193.8	674.2 709.5 740.6 769.8 811.2 855.3 894.0 943.5 995.0 1.076.3	5,786.0 5,992.5 6,326.0 6,646.5 7,021.4 7,383.5 7,807.7 8,261.4 8,729.8 9,292.7	5,878.1 6,019.1 6,375.1 6,731.7 7,177.9 7,505.3 7,934.8 8,433.7 8,955.3 9,615.6	5,835.0 6,022.0 6,371.4 6,698.5 7,109.2 7,444.3 7,870.1 8,355.8 8,810.8 9,381.3	5.8 3.3 5.8 5.1 6.3 4.7 5.7 6.3 5.5 6.4	5.5 2.4 5.9 5.6 4.6 5.7 6.3 6.2 7.4
2000 2001 2002 2003 2004 2005 2006 2006 2006 2008 2008 2008 2008	-382.1 -371.0 -427.2 -504.1 -618.7 -722.7 -769.3 -713.8 -707.8 -390.1	1,093,2 1,027,7 1,003,0 1,041,0 1,180,2 1,305,1 1,471,0 1,655,9 1,831,1 1,560,0	1,475.3 1,398.7 1,430.2 1,545.1 1,798.9 2,027.8 2,240.3 2,369.7 2,538.9 1,950.1	1,731.0 1,846.4 1,983.3 2,112.6 2,232.8 2,369.9 2,518.4 2,676.5 2,883.2 2,933.3	576.1 611.7 680.6 756.5 824.6 876.3 931.7 976.7 1,082.6 1,144.9	371.0 393.0 437.7 497.9 550.8 589.0 624.9 662.1 737.9 779.1	205.0 218.7 242.9 258.5 273.9 287.3 306.8 314.5 344.7 365.8	1,154.9 1,234.7 1,302.7 1,356.1 1,408.2 1,493.6 1,586.7 1,699.8 1,800.6 1,788.4	9,896 9 10,324 5 19,630,3 11,125,8 11,802,8 12,588,4 13,339,0 14,058,3 14,476,2 14,383,7	10,333,5 10,657,2 11,069,5 11,646,3 12,486,4 13,361,1 14,168,2 14,791,4 15,149,2 14,648,8	9,989,2 10,338,1 10,691,4 11,210,8 11,959,0 12,735,5 13,471,3 14,193,3 14,583,3	6.4 3.4 3.5 4.7 6.5 6.0 5.1 2.6 -1.3	7.5 3.1 3.9 5.2 7.2 7.0 6.0 4.4 2.4 2.4
2006: I II III IV	-775.8 -781.4 -805.7 -714.3	1,414.0 1,456.0 1,476.0 1,538.2	2,189.8 2,237.4 2,281.7 2,252.5	2,474.5 2,510.5 2,533.3 2,555.2	928.5 930.3 932.2 935.9	615.5 624.1 623.3 636.6	313.0 306.2 308.9 299.3	1,546.1 1,580.2 1,601.2 1,619.4	13,117.5 13,275.4 13,383.8 13,579.2	13,959.3 14,129.2 14,258.6 14,325.8	13,264.0 13,423.3 13,514.8 13,683.2	8.6 5.1 3.2 4.8	7.6 5.0 3.7 1.9
2007: 1 II II IV	-729.4 -724.8 -698.4 -702.5	1,564.9 1,602.1 1,685.2 1,771.6	2,294.3 2,326.9 2,383.6 2,474.0	2,599.3 2,657.4 2,700.9 2,748.3	942.8 968.1 991.4 1,004.3	636.7 656.6 674.4 680.8	306.1 311.6 317.0 323.6	1,656.5 1,689.3 1,709.5 1,743.9	13,782.5 13,973.7 14,148.8 14,328.0	14,525.0 14,722.0 14,878.3 15,040.3	13,859.5 14,073.3 14,318.3 14,522.2	5.5 6.0 5.3 4.5	5.7 5.5 4.3 4.4
2008: 1 11 11 11 11 11 12	-744.4 -738.7 -757.5 -590.5	1,803.6 1,901.5 1,913.1 1,706.2	2,548 1 2,640.2 2,670.5 2,296.7	2,808.4 2,877.1 2,941.4 2,905.9	1,038.3 1,069.5 1,108.3 1,114.3	703.6 725.6 763.6 758.9	334.8 343.9 344.7 355.3	1,770,1 1,807,6 1,833,1 1,791,7	14,382.1 14,547.1 14,583.7 14,391.8	15,118.3 15,236.4 15,304.2 14,937.8	14,544.9 14,626.6 14,707.5 14,454.3	1.0 3.5 1.4 -5.4	2.1 3.2 1.8 -9.2
2009: 1 11 11 11 11 11 11	-378.5 -339.1 -402.2 -440.5	1,509.3 1,493.7 1,573.8 1,663.4	1,887.9 1,832.8 1,976.0 2,103.9	2,879.0 2,929.4 2,955.4 2,969.5	1,106.7 1,138.3 1,164.3 1,170.4	750.7 776.2 795.8 793.8	356.0 362.1 368.5 376.5	1,772.3 1,791.2 1,791.1 1,799.1	14,305.3 14,327.4 14,398.7 14,503.4	14,556.5 14,490.3 14,644.3 14,903.9	14,277.9 14,243.8 14,363.7	-4.6 8 2.6 6.4	-9.8 -1.8 4.3 7.3

TABLE B-1. Gross domestic product, 1960-2009-Continued

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

 1 Gross domestic product (GDP) less exports of goods and services plus imports of goods and services. 2 GDP plus net income receipts from rest of the world.

TABLE B-2. Real gross domestic product, 1960-2009

[Billions of chained (2005) dollars, except as noted; quarterly data at seasonally adjusted annual rates]

		Personal co	insumption e	xpenditures			Gross priva	te domestic	investment		
							Fiz	ed investme	nt		
Year or quarter	Gross domestic						N	lonresidentia	ıl		Change
	product	lotal	Goods	Services	lotal	Total	Total	Structures	Equip- ment and software	Resi- dential	private inven- tories
1960	2,830.9	1,784.4			296.5						
1961	2,896.9	1,821.2			294.6 332.0						•••••
1963	3,206.7	1,989.9			354.3						
1964	3,392.3	2,108.4			383.5						
1966	3,845.3	2,369.0			475.8						
1967	3,942.5	2,440.0			454.1						
1969	4,133.4	2,560.7			508.5						
1970	4,269.9	2,740.2			475.1						
1971	4,413.3	2,844.6			529.3						
1972	4,647.7	3,019.5			661.3						
1974	4,889.9	3,142.8			612.6						
19/5	4,8/9.5	3,214.1			605.9		•••••				•••
1977	5,377.7	3,535.9			697.4						
1978	5,677.6	3,691.8			781.5 806.4						
1979	5 839 0	3,766,2			717.9						
1981	5,987.2	3,823.3			782.4						
1982	5,870.9	3,876.7			672.8						
1983	6.577.1	4,096.5			952.1						
1985	6,849.3	4,540.4			943.3						
1986	7,086.5	4,/24.5			936.9						
1988	7,613.9	5,066.6			988.5						
1989	7,885.9	5,209.9			1,028.1]	
1990	8,033.9	5,316.2		••••	993.5						
1992	8,287.1	5,505.7			986.7						
1993	8,523.4	5,701.2			1,074.8						
1994	9.093.7	6.079.0	1,898.6	4,208.2	1,258.9	1,235.7	792.2	342.0	493.0	456.1	32.1
1996	9,433.9	6,291.2	1,983.6	4,331.4	1,370.3	1,346.5	866.2	361.4	545.4	492.5	31.2
1997	9,854.3	6,523.4	2,078.2	4,465.0	1,540.8	1,470.8	1.087.4	407.7	710.4	540.4	71.6
1999	10,779.8	7,240.9	2,395.3	4,852.8	1,844.3	1,782.1	1,200.9	408.2	810.9	574.2	68.5
2000	11,226.0	7,608.1	2,521.7	5,093.3	1,970.3	1,913.8	1,318.5	440.0	895.8	580 0	60.2
2001	11,347.2	8.021.9	2,600.9	5,218.7	1,831.9	1,8/7.6	1 180 2	433.3	830.3	613.8	12.8
2003	11,840.7	8,247.6	2,829.9	5,418.4	1,871.6	1,856.2	1,191.0	343.0	851.4	664.3	17.3
2004	12,263.8	8,532.7	2,955.3	5,577.6	2,058.2	1,992.5	1,263.0	346.7	917.3	/29.5 775.0	50.0
2005	12,976.2	9,073.5	3,173.9	5,899.7	2,230.4	2,171.3	1,453.9	384.0	1,069.6	718.2	59.4
2007	13,254.1	9,313.9	3,273.7	6,040.8	2,146.2	2,126.3	1,544.3	441.4	1,097.0	585.0	19.5
2008 P	12,988.7	9,290.9	3,143.7	6,090.5	1,522.8	1,646.7	1,289.1	391.0	887.9	359.1	-111.7
2006: 1	12,915.9	8,986.6	3,145.7	5,841.0	2,264.7	2,200.2	1,424.9	364.8	1,060.7	775.2	65.8
H	12,962.5	9,035.0	3,150.8	5,884.2	2,261.2	2,189.9	1,450.3	383.7	1,066.3	740.1	72.5
III IV	12,965.9	9,090.7	3,170.4	5.959.4	2,229.0	2,102.2	1,400.0	394.6	1.079.3	660.2	31.8
2007 1	13.099.9	9,265 1	3,253.9	6,011.7	2,132.6	2,118.8	1,489.6	409.2	1,078.1	631.7	14.5
1	13,204.0	9,291.5	3,255.4	6.036.2	2,162.2	2,137.7	1,530.3	430.7	1,095.2	610.4	23.3
III	13,321.1	9,335.6	3,280.6	6,059,7	2,100.5	2,135.6	1,505.8	456.8	1,113.3	5/2.9	29.8
2008	13,366.9	9,349.6	3,262.1	6.087.1	2.082.9	2,079.2	1,598.9	476.8	1,111.9	483.2	.6
	13,415.3	9,351.0	3,257.8	6.092.5	2,026.5	2,064.8	1,604.4	493.2	1,097.7	462.9	-37.1
III IV	13.324.6	9,267.7	3,193.6	6,072.4	1,990.7	2,020.4	1,5/9.2	493.1 484.0	993.7	443.3	-29.7
2009: 1	12 925 4	9 209 2	3 129 8	60760	1 558 5	1 687 5	1 321 2	419.4	887 5	367.9	-113 9
H	12,901.5	9,189.0	3,105.4	6.078.8	1,456.7	1,631.9	1,288.4	400.0	876.5	344.4	-160.2
111 111 <i>.</i>	12,973.0	9,252.6	3,159.6	6,090.6	1,4/4.4	1,626.7	1,269.0	380.2	8/9.8 ¢ 100	359.6	-139.2
18 *	1 13,100.0	1 3,230.0	3,100.0	1 0.110.4	1,001.0	1,040.0	1,270.1	1		1 004.0	L

TABLE B-2. Real gross domestic product, 1960-2009—Continued

[Billions of chained (2005) dollars, except as noted; quarterly data at seasonally adjusted annual rates]

	good	et exports ds and sen	of vices	Gov	ernment of and	onsumptio gross inves	n expenditi tment	ures	Final	Gross	Adden- dum:	Percen from pi pe	t change receding riod
Year or quarter	Net	Exports	Imports	Totai		Federal		State	domes- tic product	domestic pur- chases 1	Gross national prod-	Gross domes-	Gross domes- tic
	expons	,			Total	National defense	Non- defense	local			uct*	tic product	pur- chases 1
1960 1961 1962 1963		98.5 99.0 104.0 111.5	114.5 113.8 126.7 130.1	871.0 914.8 971.1 996.1					2,836.6 2,904.6 3,064.9 2,202.6	2,867.6 2,933.3 3,119.0	2,850.6 2,918.6 3,096.8	2.5 2.3 6.1	1.8 2.3 6.3
1964 1965 1966 1967		124.6 128.1 137.0 140.1	137.0 151.6 174.1 186.8	1,018.0 1,048.7 1,141.1 1,228.7					3,393.7 3,590.7 3,806.6 3,923.3	3,426.3 3,659.2 3,910.2 4,018.2	3,420,4 3,639.5 3,873.1 3,971.1	58 6.4 6.5 2.5	5.5 6.8 6.9 2.8
1968 1969		151.1 158.4	214.7 226 9	1,267.2 1,264.3					4,119.4 4,248.6	4,225.6 4,358.6	4,164.1 4,291.6	4.8 3.1	5.2 3.1
1970 1971 1972 1973 1974 1974 1975 1976 1977 1978		175.5 178.4 191.8 228.0 246.0 244.5 255.1 261.3 288.8 213.5	236.6 249.2 277.2 290.1 283.5 252.0 301.3 334.2 363.2 260.2	1,233,7 1,206,9 1,198,1 1,193,9 1,224,0 1,251,6 1,257,2 1,271,0 1,208,4 1,232,9					4,287,9 4,407,4 4,640,6 4,888,2 4,874,1 4,926,3 5,120,2 5,344,9 5,639,7	4,352.0 4,506.9 4,755.8 4,991.2 4,926.2 4,872.0 5,189.2 5,464.4 5,763.2	4,299,4 4,446,0 4,682,9 4,964,5 4,944,0 4,921,4 5,191,2 5,433,7 5,733,2	2 34 53 58 -0 54 56 56	2 3.6 5.5 5.0 -1.3 -1.1 6.5 5.3 5.5
1973 1980 1981 1982 1983 1984 1985 1986 1986		317.5 356.0 328.8 320.3 346.4 357.0 384.4 425.7	303.2 344.7 353.8 349.3 393.4 489.1 520.9 565.4 598.9	1,358.8 1,371.2 1,395.3 1,446.3 1,494.9 1,599.0 1,696.2 1,737.1					5,841.2 5,878.7 5,959.5 5,923.3 6,172.9 6,495.6 6,838.9 7,098.7 7,296.2	5,903.3 5,789.6 5,944.7 5,865.4 6,208.3 6,745.4 7,045.3 7,303.3 7,518.4	5,930.2 5,913.4 6,052.5 5,939.1 6,202.3 6,639.8 6,893.9 7,116.5 7,342.2	3.1 -3 2.5 -19 4.5 7.2 4.1 35 32	2.4 -1.9 2.7 -1.3 5.8 8.7 4.4 3.7 2.9
1988 1989 1990		493.9 550.6 600.2	622.4 649.8 673.0	1,758.9 1,806.8 1,864.0					7,607.8 7,867.5 8,032.7	7,758.8 7,990.9 8,104.6	7,650.4 7,924.0 8,081.8	4.1 3.6 1.9	3.2 3.0 1.4
1991 1992 1993 1994 1995 1996 1997 1997 1998 1999	-98.8 -110.7 -139.8 -252.6 -356.6	640.0 684.0 706.4 768.0 845.7 916.0 1,025.1 1,048.5 1,094.3	672.0 719.2 781.4 874.6 944.5 1,026.7 1,165.0 1,301.1 1,450.9	1,884,4 1,893,2 1,878,2 1,878,0 1,888,9 1,907,9 1,943,8 1,985,0 2,056,1	704.1 696.0 689.1 681.4 694.6	476.8 470.4 457.2 447.5 455.8	227.5 225.7 231.9 233.7 238.7	1,183.6 1,211.1 1,254.3 1,303.8 1,361.8	8.034.8 8.284.3 8.515.3 8.809.2 9.073.2 9.412.5 9.782.6 10.217.1 10.715.7	8,034,6 8,309,6 8,592,9 8,976,0 9,189,0 9,542,0 9,992,8 10,539,9 11,141,1	8,055.6 8,326.4 8,563.2 8,900.5 9,129.4 9,471.1 9,881.8 10,304.0 10,812.1	-2 3.4 2.9 4.1 2.5 3.7 4.5 4.4 4.8	9 3.4 3.4 4.5 2.4 3.8 4.7 5.5 5.7
2000 2001 2002 2003 2004 2005 2006 2005 2007 2008 2008 2008 2008	-451.6 -472.1 -548.8 -603.9 -688.0 -722.7 -729.2 -729.2 -647.7 -494.3 -353.8	1,188.3 1,121.6 1,099.2 1,116.8 1,222.8 1,305.1 1,422.0 1,546.1 1,629.3 1,468.6	1,639.9 1,593.8 1,648.0 1,720.7 1,910.8 2,027.8 2,151.2 2,193.8 2,123.5 1,822.5	2,097.8 2,178.3 2,279.6 2,330.5 2,362.0 2,369.9 2,402.1 2,443.1 2,518.1 2,566.4	698.1 726.5 779.5 831.1 865.0 876.3 894.9 906.4 975.9 1,026.7	453.5 470.7 505.3 549.2 580.4 589.0 598.4 611.5 659.4 695.1	244.4 25555 273.9 281.7 284.6 287.3 296.6 294.9 316.4 331.4	1,400.1 1,452.3 1,500.6 1,499.7 1,497.1 1,493.6 1,507.2 1,536.7 1,543.7 1,542.8	11,167.5 11,391.7 11,543.5 11,824.8 12,198.2 12,588.4 12,917.1 13,234.3 13,341.2 13,115.2	11,681,4 11,825,7 12,107,7 12,449,2 12,952,5 13,361,1 13,705,7 13,901,6 13,801,2 13,335,8	11,268.8 11,404.6 11,606.9 11,914.2 12,358.5 12,735.5 13,046.1 13,362.8 13,442.6	4.1 1.1 1.8 2.5 3.6 3.1 2.7 2.1 4 -2.4	4.8 1.2 2.4 2.8 4.0 3.2 2.6 1.4 7 3,4
2006: I II III IV	-732.6 -732.8 -756.5 -694.9	1,388.8 1,412.1 1,414.1 1,473.2	2,121.3 2,144.9 2,170.5 2,168.1	2,397.1 2,399.1 2,402.7 2,409.4	900.5 892.8 892.0 894.4	595.6 597.2 594.3 606.5	305.0 295.7 297.7 287.8	1,496.6 1,506.3 1,510.8 1,515.0	12,851.3 12,891.0 12,898.3 13,027.8	13,648.7 13,695.5 13,722.8 13,755.7	12,994.2 13,035.4 13,025.1 13,129.5	5.4 1.4 .1 3.0	4.7 1.4 .8 1.0
2007: † 11 11 11 11 12	-705.0 -683.4 -638.4 -564.0	1,485.9 1,504.8 1,569.9 1,624.0	2,190.8 2,188.1 2,208.3 2,188.0	2,409.5 2,435.4 2,458.9 2,468.7	882.8 898.7 919.0 925.1	594.7 607.1 621.7 622.4	288.1 291.6 297.2 302.7	1,526.5 1,536.5 1,540.0 1,543.7	13,086.4 13,179.6 13,290.3 13,381.1	13,805.0 13,887.6 13,959.7 13,954.2	13,160.5 13,275.9 13,451.5 13,563.3	1.2 3.2 3.6 2.1	1.4 2.4 2.1 2
2008: 1 II III IV	-550.9 -476.0 -479.2 -470.9	1,623.4 1,670.4 1,655.2 1,568.0	2,174.3 2,146.5 2,134.4 2,038.9	2,484.7 2,506.9 2,536.6 2,544.0	943.4 961.3 991.6 1,007.3	634.8 645.6 675.4 681.7	308.6 315.8 315.9 325.4	1,541,9 1,546,6 1,547,0 1,539,3	13,363.5 13,453.5 13,354.3 13,193.5	13,916.4 13,885.5 13,798.8 13,604.0	13,525.4 13,533.7 13,470.7 13,240.5	7 1.5 -2.7 -5.4	-1.1 9 -2.5 -5.5
2009: I } 	-386.5 -330.4 -357.4 -341.1	1,434.5 1,419.5 1,478.8 1,541.6	1,821.0 1,749.8 1,836.2 1,882.7	2,527.2 2,568.6 2,585.5 2,584.4	996.3 1,023.5 1,043.3 1,043.5	672.8 695.2 709.3 703.1	323.4 328.2 333.8 340.4	1,533,3 1,548,0 1,545,5 1,544,3	13,055.8 13,077.8 13,127.2 13,200.2	13,303.1 13,225.9 13,323.8 13,490.3	13,018.1 12,986.8 13,084.0	-6.4 7 2.2 5.7	-8.6 -2.3 3.0 5.1

Gross domestic product (GDP) less exports of goods and services plus imports of goods and services.
 GDP plus net income receipts from rest of the world.

TABLE B-3. Quantity and price indexes for gross domestic product, and percent changes,1960-2009

		Index	numbers, 200	5=100			Percent chan	ge from prece	ding period ¹	
Veer or quarter	Gross de	omestic produc	t (GDP)	Personal co expenditu	insumption ires (PCE)	Gross d	omestic produc	t (GDP)	Personal co expenditi	onsumption ures (PCE)
rear or quarter	Real GDP (chain-type quantity index)	GDP chain-type price index	GDP implicit price deflator	PCE chain-type price index	PCE less food and energy price index	Real GDP (chain-type quantity index)	GDP chain-type price index	GDP implicit price deflator	PCE chain-type price index	PCE less food and energy price index
1960 1961 1962 1963 1964 1965 1966 1966 1967 1968 1969	22.399 22.921 24.310 25.373 26.841 28.565 30.426 31.195 32.705 33.721	18 604 18 814 19 071 19 273 19 572 19 928 20 493 21 124 22 022 23 110	18.596 18.805 19.062 19.265 19.563 19.919 20.484 21.115 22.012 23.099	18.606 18.801 19.023 19.245 19.527 19.810 20.313 20.824 21.636 22.616	19.024 19.262 19.525 19.778 20.081 20.335 20.795 21.432 22.351 23.400	2.5 2.3 6.1 4.4 5.8 6.4 6.5 2.5 4.8 3.1	1.4 1.1 1.4 1.1 1.6 1.8 2.8 3.1 4.3 4.9	1.4 1.1 1.4 1.5 1.8 2.8 3.1 4.2 4.9	16 10 12 15 14 25 25 3.9 4.5	1.8 1.3 1.4 1.3 1.5 1.3 2.3 3.1 4.3 4.7
1970 1971 1973 1973 1973 1974 1976 1976 1976 1978 1978	33,786 34,920 36,775 38,905 38,691 38,609 40,680 42,550 44,924 46,328	24.328 25.545 26.647 28.124 30.669 33.577 35.505 37.764 40.413 43.773	24.317 25.533 26.634 28.112 30.664 33.563 35.489 37.751 40.400 43.761	23.674 24.680 25.525 26.901 29.703 32.184 33.950 36.155 38.687 42.118	24 498 25.651 26.480 27.492 29.673 32.159 34.114 36.303 38.731 41.550	2 3.4 5.3 5.8 6 2 5.6 5.6 3.1	5.3 5.0 4.3 5.5 9.0 9.5 5.7 6.4 7.0 8.3	53 50 43 55 9.1 95 5.7 6.4 7.0 8.3	47 42 34 104 84 55 65 70 89	4.7 4.7 3.2 3.8 7.9 8.4 6.1 6.4 6.7 7.3
1980	46.200 47.373 46.453 48.552 52.041 54.194 56.074 57.866 60.244 62.397	47 776 52 281 55 467 57 655 59 823 61 633 63 D03 64 763 66 990 69 520	47.751 52.225 55.412 57.603 59.766 61.576 62.937 64.764 66.988 69.518	46 641 50.810 53 615 55 923 58 038 61.399 63.589 66.121 68.994	45 356 49.318 52.501 55.220 57.513 59.695 61.945 64.300 67.088 69.856	3 2.5 -1.9 4.5 7.2 4.1 3.5 3.2 4.1 3.5 3.2 3.6	9.1 9.4 6.1 3.9 3.8 3.0 2.2 2.8 3.4 3.8	9.1 9.4 6.1 4.0 3.8 3.0 2.2 2.9 3.4 3.8	10 7 8 9 5 5 4 3 3 8 3 3 2 4 3 6 4 0 4 0 4 3	92 87 65 52 42 38 38 38 38 43 41
1990 1991 1991 1992 1993 1994 1994 1995 1996 1997 1998 1998	63.568 63.419 65.571 67.441 70.188 71.953 74.645 77.972 81.367 85.295	72 213 74 762 76 537 78 222 79 867 81 533 83 083 84 554 85 507 86 766	72.201 74.760 76.533 78.224 79.872 81.536 83.088 84.555 85.511 86.768	72 147 74.755 76.954 78.643 80.265 82.041 83.826 85.395 86.207 87.596	72.838 75.673 78.218 80.068 81.836 83.721 85.346 86.981 88.242 89.555	1.9 -2 3.4 2.9 4.1 2.5 3.7 4.5 4.4 4.4	39 35 24 21 21 19 18 11	3.9 3.5 2.4 2.2 2.1 2.1 1.9 1.8 1.1 1.5	46 36 29 22 21 22 22 19 10 10	43 39 34 24 23 19 19 14 15
2000 2001 2002 2003 2004 2005 2006 2007 2006 2007 2008 2008 2009 p	88.825 89.783 91.412 93.688 97.036 100.000 102.673 104.872 105.331 102.772	88 648 90.654 92.113 94.099 96 769 100.000 103 263 106 221 108 481 109 754	88 647 90 650 92 118 94 100 96 770 100 000 103 257 106 214 108 483 109 777	89.777 91.488 92.736 94.622 97.098 100.000 102.746 105.502 109.031 109.252	91.111 92.739 94.345 95.784 97.788 100.000 102.292 104.699 107.207 108.828	4.1 1.1 1.8 2.5 3.6 3.1 27 2.1 .4 -2.4	22 23 16 22 28 33 33 29 21 12	2.2 2.3 1.6 2.2 2.8 3.3 3.3 3.3 2.9 2.1 1.2	25 1.9 1.4 20 26 30 27 27 27 33 27	1.7 1.8 1.7 1.5 2.1 2.3 2.3 2.4 2.4 2.4 1.5
2006: V	102.196 102.564 102.592 103.341	102.071 102.980 103.763 104.237	102.071 102.973 103.756 104.218	101.803 102.567 103.316 103.298	101.325 102.057 102.630 103.154	5.4 1.4 1 3.0	3.0 3.6 3.1 1.8	3.0 3.6 3.1 1.8	1.7 3.0 3.0 1	2.0 2.9 2.3 2.1
2007: I II IV	103.652 104.475 105.402 105.957	105.327 106.026 106.460 107.072	105.310 106.008 106.447 107.069	104.250 105.074 105.681 107.005	103.862 104.318 104.904 105.714	1.2 3.2 3.6 2.1	4.2 2.7 1.6 2.3	4.3 2.7 1.7 2.4	3.7 3.2 2.3 5.1	2.8 1.8 2.3 3.1
2008: I II IV	105.764 106.147 105.430 103.984	107.577 108.061 109.130 109.155	107.534 108.069 109.172 109.172	107.974 109.021 110.273 108.855	106.333 106.976 107.652 107.866	-7 1.5 -2.7 -5.4	1.9 1.8 4.0	1.7 2.0 4.1 .0	3.7 3.9 4.7 -5.0	2.4 2.4 2.6 .8
2009: I II III IV P	102.271 102.082 102.648 104.088	109.661 109.656 109.763 109.934	109.691 109.686 109.783 109.946	108.449 108.814 109.510 110.235	108.173 108.712 109.027 109.400	-6.4 7 22 5.7	1.9 .0 .4 .6	1.9 0 .4 .6	-1.5 1.4 2.6 2.7	1.1 2.0 1.2 1.4

[Quarterly data are seasonally adjusted]

¹ Quarterly percent changes are at annual rates.

		Perso e	nal consum xpenditure	nption s	Gross	private don	nestic inve	stment	Expor imports and se	ts and of goods ervices	Govern expen	ment consi ditures and investment	umption I gross t
V	Gross domes-				Non	esidential	fixed						
Year or quarter	tic product	Total	Goods	Services	Total	Struc- tures	Equip- ment and soft- ware	Resi- dential fixed	Exports	Imports	Total	Federal	State and local
1960 1961 1962 1963 1964 1965 1966 1967 1967 1968 1969	2.5 2.3 6.1 4.4 5.8 6.4 6.5 2.5 4.8 3.1	2.7 2.1 4.9 4.1 6.0 5.7 3.0 5.8 3.7	1.8 .5 5.1 4.0 7.1 6.3 2.0 6.2 3.1	3.9 3.7 4.7 6.0 5.5 5.0 4.1 5.3 4.5	57 -6 87 56 119 174 125 -13 45 76	8.0 1.4 4.6 1.2 10.4 15.9 6.8 -2.5 1.4 5.4	4.2 -1.9 11.6 8.4 12.8 18.3 16.0 -7 6.2 8.8	-7.1 3 9.6 11.8 5.8 -2.9 -8.9 -3.1 13.6 3.0	17.4 5.0 7.2 11.8 2.8 6.9 2.3 7.9 4.8	1.3 -7 11.4 2.7 5.3 10.6 14.9 7.3 14.9 5.7	02 50 62 26 22 30 88 7.7 3.1 -2	-2.7 4.2 85 .1 -13 0 11.1 10.0 .8 -3.4	4.4 6.2 3.1 6.0 6.8 6.7 6.3 5.1 5.9 3.4
1970 1971 1972 1973 1974 1975 1976 1976 1977 1978 1979	2 3.4 53 58 -6 -2 5.4 46 5.6 3.1	23 3.8 62 5.0 8 2.3 5.6 4.2 4.4 2.4	8 42 65 52 -3.6 70 4.3 4.1 1.6	39 35 58 47 19 38 43 41 47 31	- 5 0 92 14.6 -99 4.9 11.3 15.0 10.1	.3 -1.6 3.1 82 -222 -10.5 2.4 4.1 14.4 12.7	-1.0 1.0 12.9 18.3 2.6 -9.5 6.3 15.1 15.2 8.7	-6.0 27.4 17.8 -20.6 -13.0 23.5 21.5 6.3 -3.7	10 / 1.7 7.5 18.9 6 4.4 2.4 10.5 9.9	43 53 113 -23 -111 196 109 87 17	-24 -22 -7 -4 25 23 .4 11 29 19	-/4 -7.7 -4.1 -4.2 .9 .3 .0 2.1 2.5 2.4	2.8 3.1 2.2 2.9 3.8 3.7 .7 .4 3.3 1.5
1980 1981 1982 1983 1984 1985 1986 1986 1987 1988 1988	3 2.5 -1.9 4.5 7.2 4.1 3.5 3.2 4.1 3.6	-4 15 14 57 53 52 4.1 3.1 4.0 2.8	-2.5 1.2 .7 6.4 7.2 5.3 5.6 1.8 3.7 2.5	1.5 1.8 1.9 5.2 3.9 5.2 3.0 4.0 4.0 4.2 3.0	-3 57 -3.8 -1.3 17.6 6.6 -2.9 -1 5.2 5.6	5.9 8.0 -1.6 -10.8 13.9 7.1 -11.0 -2.9 7 2.0	-3.6 4.3 -5.2 5.4 19.8 6.4 1.9 1.4 7.5 7.3	-21.2 8.0 -18.2 41.4 14.8 1.6 12.3 2.0 -1.0 3.0	10.8 1.2 -7.6 -2.6 8.2 3.0 7.7 10.8 16.0 11.5	-66 26 -13 126 243 65 85 59 39 4.4	19 9 18 37 34 70 61 24 13 27	4.7 4.8 3.9 6.6 3.1 7.8 5.7 3.6 -1.6 1.6	1 -2.0 .0 1.2 3.6 6.2 6.4 1.4 3.7 3.7
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999	1.9 2 3.4 2.9 4.1 2.5 3.7 4.5 4.4 4.8	2.0 .1 3.4 3.6 3.8 2.7 3.5 3.5 5.2 5.5	6 -20 32 42 53 3.0 4.5 4.8 6.8 8.0	3.0 1.5 3.6 3.2 2.5 2.9 3.1 4.4 4.1	.5 -5.4 3.2 8.7 9.2 10.5 9.3 12.1 12.0 10.4	1.5 -11.1 -6.0 6 1.8 6.4 5.7 7.3 5.1 .1	.0 -2.6 7.3 12.5 11.9 12.0 10.6 13.8 14.5 14.1	-8.6 -9.6 13.8 8.2 9.7 -3.3 8.0 1.9 7.7 6.3	9.0 6.6 6.9 3.3 8.7 10.1 8.3 11.9 2.3 4.4	3.6 1 8.6 11.9 8.0 8.7 13.5 11.7 11.5	32 1.1 5 8 0 .6 1.0 1.9 2.1 3.6	2.0 -2 -18 -3.9 -3.8 -2.7 -1.2 -1.2 -1.1 1.9	4.1 2.2 1.5 2.6 2.7 2.3 3.6 3.9 4.5
2000 2001 2002 2003 2004 2005 2006 2006 2007 2008 2008 2009 p	4.1 1.1 1.8 2.5 3.6 3.1 2.7 2.1 .4 -2.4	5.1 2.7 2.8 3.5 3.4 2.9 2.6 2 6	5.3 3.1 4.1 4.6 4.4 4.0 3.3 3.1 -2.1 -1.9	5.0 2.5 1.9 1.9 2.9 3.0 2.7 2.4 .7	9.8 -2.8 -7.9 6.0 6.7 7.9 6.2 1.6 -17.9	7.8 -1.5 -17.7 1.1 1.4 9.2 14.9 10.3 -19.7	10.5 -3.2 -4.2 2.5 7.7 8.5 7.4 2.6 -2.6 -16.9	1.0 .6 5.2 9.8 6.2 -7.3 -18.5 -22.9 -20.4	8.6 -5.6 -2.0 1.6 9.5 6.7 9.0 8.7 5.4 -9.9	13.0 -2.8 3.4 4.4 11.0 6.1 2.0 -3.2 -14.2	2.0 3.8 4.7 2.2 1.4 .3 1.4 1.7 3.1 1.9	5 4.1 7.3 6.6 4.1 1.3 2.1 1.3 7.7 5.2	2.8 3.7 3.3 1 2 2 .9 2.0 .5 1
2006: + II IV 2007: 1	5.4 1.4 .1 3.0 1.2	4.5 2.2 2.5 4.1 3.7	7.5 .7 3.3 5.9 3.9	2.9 3.0 2.1 3.1 3.6	18.0 7.3 4.4 2.3 4.2	18.9 22.4 10.3 1.5 15.6	17.8 2.1 2.2 2.8 5	-4.2 -16.9 -21.2 -19.7 -16.2	16.5 6.9 .6 17.8 3.5	7.8 4.5 4.9 5 4.3	4.1 .3 .6 1.1	11.9 -3.4 4 1.1 -5.1	3 2.6 1.2 1.1 3.1
II IV 2009: L	3.2 3.6 2.1	1.1 1.9 1.2	.2 3.1 3.0	1.6 1.3 .3	11.4 9.6 6.7	22.7 26.6 11.2	6.5 2.2 4.5	-12.9 -22.4 -29.5 -28.2	5.2 18.5 14.5	5 3.7 -3.6	4,4 3,9 1.6 2.6	7.4 9.3 2.7 8 1	2.7 .9 1.0
2006: 1 II IV	7 1.5 -2.7 -5.4	6 .1 -3.5 -3.1	-5.1 5 -7.7 -10.0	-1.3 .5	1.4 -6.1 -19.5	14.5 1 -7.2	5.0 9.4 25.9	-20.2 -15.8 -15.9 -23.2	12.1 -3.6 -19.5	-2.5 -5.0 -2.2 -16.7	2.0 3.6 4.8 1.2	7.8 13.2 6.5	
2009: I II III V P	-6.4 -7 2.2 5.7	.6 9 2.8 2.0	2.5 -3.1 7.2 2.6	3 .2 .8 1.7	-39.2 -9.6 -5.9 2.9	-43.6 -17.3 -18.4 -15.4	-36.4 -4.9 1.5 13.3	-38.2 -23.3 18.9 5.7	-29.9 -4.1 17.8 18.1	-36.4 -14.7 21.3 10.5	-2.6 67 2.6 2	-4.3 11.4 8.0 .1	-1.5 3.9 6 3

TABLE B-4. Percent changes in real gross domestic product, 1960-2009

[Percent change from preceding period; quarterly data at seasonally adjusted annual rates]

Note: Percent changes based on unrounded data.

		Personal co	insumption e	xpenditures			Gross prive	ate domestic	investment		
	Gross						Fi	xed investme	nt		Change
Year or quarter	product	Total	Goods	Services	Total		N	Vonresidentia	il		in in private
	change			00111000	iotai	Total	Total	Structures	Equip- ment and software	Resi- dential	inven- tories
960 961 962 963 964 965 966 966 967 970 970 977 977 977 977 977 978 975 977 978 979 979 979 979 979 979 979 979	25 23 61 44 58 64 65 25 48 31 31 31 31 53 53 58 58 58 58 58 58 58 58 58 58 58 58 58	$\begin{array}{c} 1 \ 72 \\ 1 \ 30 \\ 3 \ 69 \\ 3 \ 91 \\ 3 \ 91 \\ 3 \ 50 \\ 1 \ 82 \\ 3 \ 51 \\ 2 \ 29 \\ 1 \ 44 \\ 2 \ 77 \\ 3 \ 81 \\ 3 \ 08 \\ - \ 52 \\ 1 \ 40 \\ 3 \ 51 \\ 2 \ 66 \\ 3 \ 65 \\ 3 \ 43 \\ 3 \ 32 \\ 2 \ 62 \\ 2 \ 01 \\ \end{array}$	0 60 21 1 68 1 29 1 91 2 266 2 02 62 2 95 24 1 27 1 97 1 57 -1 12 20 2 08 1 28 1 28 1 28 1 28 1 29 1 97 1 57 -74 34 1 97 1 49 1 74 9 48	1.13 1.09 1.42 1.27 1.78 1.66 1.48 1.21 1.59 1.34 1.19 1.34 1.59 1.34 1.50 1.20	000 - 10 1 81 1 00 1 25 2 16 1 14 - 76 90 90 - 104 1 67 1 96 - 131 - 298 2 84 2 43 2 16 - 212 1 55 - 255 1 45 4 63 - 12 - 51	013 - 04 1 24 1 08 1 37 - 28 90 - 31 1 47 - 104 - 171 1 47 - 104 - 171 1 47 - 218 2 04 1 02 - 121 39 - 121 1 17 2 68 2 00 - 21 - 177 - 28 - 20 - 10 - 1	$\begin{array}{c} 0.52\\06\\$	0 28 05 05 04 36 37 27 27 -01 05 20 01 -06 20 20 12 31 -09 -43 09 -43 09 -43 27 40 -09 -57 60 32 27 -00 -05 54 53 27 -05 54 54 53 27 -05 -04 -04 -05 -05 -05 -05 -04 -05 -05 -05 -05 -05 -05 -05 -05 -05 -05	0 24 - 11 61 46 71 107 - 05 41 102 - 05 41 58 - 07 07 07 81 19 18 - 70 81 19 18 - 41 - 30 - 34 - 41 - 42 - 41 - 45 - 65 - 65 - 65 - 65 - 65 - 65 - 65 - 67 - 67 - 70 -	-0.39 01 .46 588 .30 -153 -13 -13 -13 -13 -13 -13 -13 -13 -26 -14 -113 -57 -90 -04 -113 -57 -99 -99 -99 -35 -21 -117 -35 -35 -113 -133 -133 -133 -133 -133 -	-0.13 -0.5 57 08 05 58 13 58 49 10 .00 73 58 58 06 06 06 06 06 27 127 127 1.25 1.22 1.2 1.22 1.22 1.22 23 23 23 23 23 23 23 -
988 989 990 990 991 992 993 994 994 995 996 996 997 998 999 999	341 36 1.9 -2 34 2.9 41 2.5 37 4.5 4.5 4.4 4.8 4.1	2.64 1.86 1.34 .10 2.27 2.37 2.57 1.81 2.35 2.48 3.50 3.68		1.36 1.20 1.18 .61 1.49 1.35 1.27 1.08 1.26 1.33 1.90 1.78		53 .47 94 .79 1.14 1.30 .94 1.33 1.41 1.70 1.52	58 .58 .57 .57 .31 .83 .91 1.08 1.01 1.33 1.38 1.24	02 .07 39 18 02 .05 05 05 01 17 16 00 01 16 00	55 54 00 -18 50 85 86 91 85 1.12 1.22 1.24	- 05 - 14 - 37 - 37 - 37 - 37 - 31 - 39 - 14 - 33 - 14 - 33 - 08 - 32 - 28	-14 .17 -21 -26 .29 .07 .63 -46 .02 .54 -05 -05
2000 2001 2002 2003 2004 2005 2005 2006 2007 2008 2007 2008	4.1 1.1 1.8 2.5 3.6 3.1 2.7 2.1	3.44 1.85 1.85 1.97 2.42 2.34 2.01 1.84 17 40	1.29 .77 .99 1.11 1.08 .97 .78 .75 50 46	2.13 1.09 .86 1.34 1.37 1.22 1.09 .32 .06	-1.24 22 .55 1.55 .92 65 1.18 3.49	32 70 .49 1.13 1.05 .39 35 81 2.75	35 94 .10 .61 .69 .84 .70 .19 -2.09	24 05 58 10 .03 .04 .27 49 39 83	96 - 30 - 36 20 58 65 58 20 - 20 - 20 - 1.27	05 03 24 40 52 - 45 - 1.05 - 1.00 - 65	- 05 92 48 06 42 - 13 07 - 30 37 74
2006: † II IV 2007: † II IV	5.4 1.4 . 1.4 . 3.0 1.2 . 3.2 . 3.6 . 3.6 . 3.2 . 3.6 . 3.1	3.08 1.48 1.70 2.79 2.54 81 1.35	1.76 .15 .78 1.39 .93 .05 .75	1.32 1.33 .92 1.40 1.61 .76 .60	1.08 11 99 -1.99 -1.05 92 .14	1.57 32 86 91 43 .59 04	1.84 .80 .27 .46 1.25 1.10 .70	.52 .63 .32 .05 .75 .91	1.32 .17 .17 .22 04 .51 .19	- 27 -1.12 -1.36 -1.18 - 89 66 -1.14	- 49 .22 - 13 -1.08 - 61 .32
1 v 2008: I II IV	7 1.5 2.7 5.4	39 06 -2.49 -2.15	-1.24 12 -1.89 -2.41	.15 .85 .17 60 .26	-1.29 -1.20 -1.66 -1.04 -3.91	99 41 -1.30 -3.28	.78 .25 .19 73 -2.47	.42 .27 .56 .00 31	.36 - 02 - 38 - 73 -2.15	-1.44 -1.24 60 57 81	– 63 – 21 –1 25 _26 –.64
2009: I II III IV P	-6.4 7 2.2 5.7	44 62 1.96 1.44	.56 71 1.59 .61	13 .09 .37 .83	-8.98 -3.10 .54 3.82	-6.62 -1.68 - 15 43	-5.29 -1.01 59 .29	-2.28 69 68 52	-3.01 32 .10 .81	-1.33 67 .43 .14	-2.36 -1.42 .69 3.39

TABLE B-5. Contributions to percent change in real gross domestic product, 1960-2009

[Percentage points, except as noted; quarterly data at seasonally adjusted annual rates]

TABLE B-5. Contributions to percent change in real gross domestic product, 1960-2009—Continued

			Net exports	s of goods ar	nd services	-		Go	overnment overnment of and	consumption gross invest	expendituri ment	es
Year or quarter			Exports			Imports				Federal		State
	Net exports	Total	Goods	Services	Total	Goods	Services	Total	Total	National defense	Non- defense	and local
1960 1961 1962 1963 1964 1964 1966 1966 1967 1968 1969 1970 1970 1977 1972	0.72 0.6 -21 24 36 -30 -29 -22 -30 -04 34 -19 -21 82 82	0.78 03 25 35 59 15 36 12 41 25 56 10 42 1.12	0.76 02 177 29 .52 02 27 .02 30 20 20 44 02 43 1.01	0.02 01 08 06 07 13 09 10 10 05 12 11 -01 11	-0.06 .03 -47 -12 -23 -45 -65 -34 -71 -29 -29 -29 -29 -63 -29 -29	0.05 .00 40 12 19 41 49 17 68 20 15 33 57 34 34	-0.11 02 -07 00 -04 -04 -16 -03 -09 -07 04 -06 05 00	0.04 1.07 1.36 58 65 1.87 1.68 -05 -55 -55 -50 -16 -08	-0.35 .51 1.07 -17 -01 1.24 1.17 10 42 86 85 42 41 41	-0.17 .45 .63 29 19 1.21 1.19 .16 .49 .83 97 39 50 39	-0.18 .96 .44 .23 .19 .03 02 06 .06 .03 .12 .18 02 .13	0.39 .56 .29 .57 .65 .66 .63 .51 .63 .37 .31 .36 .26 .33 .44
1974 1975 1976 1977 1978 1978	.75 .89 -1.08 72 .05 .66	- 05 .37 .20 .82 .82	16 .31 .08 .68 .77	10 05 11 15 06	.94 -1.45 92 78 16	.87 -1.35 84 67 14	.00 10 07 11 02	48 10 23 60 37	.00 .03 .19 .22 .20	06 02 .07 .05 .17	.09 .03 .12 .16 .03	45 .09 .04 .38 .17
1980	1.68 15 60 -1.35 1.58 42 30 .16 .82 52	.97 .12 -73 -22 63 .23 .54 .77 1.24 .99	.86 -09 67 .19 .20 .26 .56 1.04 .75	.11 -06 -03 .17 .02 .28 .21 .20 .24	.71 27 .12 1.13 65 84 61 43 48	.67 -18 20 -101 -52 -82 -39 -36 -38	.04 09 08 13 13 02 22 07 09	38 19 35 76 70 141 127 51 26 55	.39 .42 .35 .63 .30 .74 .55 .35 .35 .41	25 38 48 50 35 60 47 35 -03 -03	14 -13 -13 -05 -05 -14 -08 -00 -12 -17	01 23 01 13 40 67 71 17 42 41
1990 1991 1991 1992 1993 1994 1994 1995 1996 1997 1998 1999	43 05 57 43 .11 15 32 1.18 99	81 63 68 32 85 1.03 90 1.30 26 47	.56 .46 .52 .23 .67 .85 .68 1.11 .18 .29	.26 .16 .10 .19 .19 .22 .19 .08 .18	38 .02 72 90 -1.28 92 -1.04 -1.62 -1.43 -1.45	26 04 78 85 1.18 86 94 -1.44 -1.21 -1.31	13 .05 .06 05 10 10 10 17 22 14	64 .22 .10 16 .00 .11 .11 .19 .34 .38 .63	.18 02 16 33 30 20 08 07 07	.00 07 32 31 19 06 13 09 .07	.18 .05 .16 02 04 01 02 .06 .02 .04	.46 .24 .26 .17 .30 .30 .27 .41 .45 .51
2000 2001 2002 2003 2004 2005 2006 2007 2008 2008 2009 $^{ m p}$	85 20 65 45 66 27 05 .63 1.20 1.08	.91 61 .15 .89 .67 .93 .96 .64 -1.21	.82 48 25 .55 .52 .68 .57 .48 ,-1.04	.08 13 .05 .03 .34 .15 .25 .39 .16 16	-1.76 .41 60 -1.55 94 98 33 .56 2.28	-1.52 .39 42 55 -1.29 87 80 24 .58 2.18	24 .02 04 26 07 18 09 02 .10	.36 .67 .84 .26 .26 .26 .32 .59 .38	.03 .24 .43 .28 .09 .15 .09 .53 .39	02 .14 .28 .36 .26 .07 .07 .10 .37 .28	05 09 15 07 02 02 07 -01 16 11	33 43 40 -01 -02 -03 11 23 .06 -01
2006: I II IV 2007: I	.44 .02 71 1.94 29	1.64 72 06 1.84 39	1.23 .54 .01 .96 .23	.41 .18 .05 .87 .16	-1.20 70 78 .10 68	81 66 74 .35 67	- 39 - 05 - 04 - 25 - 01 - 05	.75 .06 .11 .21 .00 .82	.79 - 24 - 03 - 36 50	.46 .05 09 .38 37 30	.32 29 .06 30 .01	03 .30 .14 .14 .36 .32
2008: I	1.36 2.24 	02 1.47 02 1.47 48 267	-40 1.11 .97 .34 1.17 17 250	36 36 31 17	-63 .60 .38 .88 .38 .312	-41 .51 .46 .67 .55 .309	05 22 .08 08 .21 17 .03	.75 .31 .51 .95 .24	.63 .19 .56 .55 .93 .49	46 03 39 34 93 20	.17 .16 .17 .21 .00 .29	
2009: I II II IV.P	2.64 1.65 81 .50	-3.95 45 1.78 1.90	-3.41 45 1.58 1.90	- 54 .00 .20 .00	6.58 2.09 -2.59 -1.41	6.25 1.89 -2.41 -1.55	.34 .21 18 .14	52 1.33 .55 02	33 .85 .62 .02	27 .70 .45 .19	06 .15 .17 .21	19 .48 08 04

[Percentage points, except as noted; quarterly data at seasonally adjusted annual rates]

		Personal c	onsumption ex	penditures		Gr	oss orivate dor	nestic investm	nent	
		- croanar e						ived investme		
Vear or quarter	Gross						, !			
rear or quarter	product	Total	Goods	Services	Total	Turi		Nonresidentia	H _	Resi-
						lotai	Total	Structures	Equip- ment and software	dential
1960	22.399	20.233	19.767	19.850	13.650	13.974	10.796	48.488	5.499	26.167
1962	24.310	21.671	20.915	21.554	15.283	15.190	11.666	51.393	6.017	28.756
1963	25.373	22.564	21.750 23.047	22.470 23.807	17.654	17.948	12.315	51.986	6.524 7.356	32.145
1965	28.565 30.426	25.420 26.862	24.679 26.245	25.122 26.367	20.131 21.905	19.781	16.177	66.553	8.705	33.020 30.065
1967	31.195	27.667	26.758 28.415	27.451	20.903	20.530	17.955	69.313 70.290	10.031	29.119
1969	33.721	30.359	29.283	30.204	23.409	23.329	20.181	74.096	11.598	34.066
1970 1971	33.786 34.920	31.071 32.255	29.514 30.749	31.385 32.469	21.871 24.365	22.838	20.073	74.300	11.482 11.596	32.028 40.811
1972	36.775	34 239	32.760	34.346	27.250	27.522	21.917	75.359	13.092	48.064
1974	38.691	35.637	33.200	36.664	28.200	28.159	25.316	79.755	15.890	37.897
1975	38.609 40.680	36.445 38.475	33.425 35.766	38.040 39.672	23.205 27.893	25.135	22.814 23.931	71.355	14.3//	32.9/7 40.743
1977 1978	42.550 44.924	40.094 41.862	37.301 38.842	41.312 43.234	32.107 35.978	31.582	26.632	76.079 87.058	17.577	49.490
1979	46.328	42.857	39.464	44.555	37.125	37.404	33.702	98.098	22.022	50.676
1980 1981	46.200 47.373	42.705 43.353	38.464 38.919	45.241 46.053	33.047 36.019	34.974 35.756	33.613 35.528	103.837 112.161	21.230 22.133	39 952 36 749
1982	46.453 48.552	43 958 46 471	39.190 41.684	46.950	30.972	33 249	34.190	110.325	20.982	30.077
1984	52.041	48.935	44.688	51.341	43.833	41.698	39.704	112.125	26.497	48.839
1985	54.194 56.071	53.572	47.039	53.996	43.425 43.129	43.891	42.336	120.095	28.780	49.612
1987 1988	57.866 60.244	55.225 57.451	50.564 52.442	57.818 60.272	44.458 45.504	44.646 46.118	41.096 43.245	103.859 104.539	29.107 31.302	56 811 56 235
1989	62.397	59.075	53.766	62.098	47.330	47.504	45.660	106.616	33.596	54.528
1990	63.568 63.419	60.371	54.099 53.025	63.942 64.899	45.736 42.016	45.512	45.885	96.150	33.607 32.743	49 823 45.035
1992 1993	65.571 67.441	62.430 64.647	54.696 56.969	67.212 69.363	45.421 49.481	46.075 50.024	44.811 48.723	90.354 89.768	35.129 39.515	51.267 55.454
1994	70.188	67.115	59.973 61.765	71.433	56.204	54.703	53.207	91.405	44.227	60.845
1996	74.645	71.336	64.530	75.394	63.082	63.448	64.293	102.744	54.782	63.554
1997	77.972 81.367	73.970 77.849	67.607 72.175	81.145	70.932 78.034	69.302 76.822	72.053	115.911	62.315 71.358	64 /56 69.737
1999 2000	85.295	82.106 86.270	77.924	84.469	84.903	83.969	89.129	116.049	81.451	74.098
2001	89.783	88.603	84.611	90.837	84.333	88.470	95.137	123.191	87.073	75.263
2002	91.412 93.688	90.962 93.520	92.060	92.568 94.314	83.185 86.162	84.726 87.464	87.593	97.514	83.397 85.516	79.210 85.724
2004	97.036 100.000	96.754 100.000	96.141 100.000	97.084 100.000	94.753 100.000	93.884 100.000	93.743 100.000	98.571 100.000	92.141 100.000	94.136 100.000
2006	102.673	102.886	103.251	102.692	102.678	102.309	107.913	109.180	107.434	92.679
2008	105.331	105.351	104.296	105.883	91.585	95.106	116.502	138.392	107.332	58.213
2009 2006	102.772	104.744	102.270	100.012	104 258	103 670	105 759	103.696	106 542	46.341
II	102.564	102 450	102 501	102.421	104.098	103 186	107.643	109.068	107.101	95 502
IV	103.341	104.112	104.835	102.545	99.712	100.499	109.440	112.185	108.414	85.194
2007: 1	103.652	105.059	105.854	104.641	98.176 99.539	99.838 100.726	110.561	116.327	108.285	81.521
Ш М	105.402	105.858	106.724	105.403	99.736	100.626	116.219	129.869	110.615	73.932
2008: 1	105.764	106.016	106.121	105.953	95.887	97.969	118.674	135.559	111.685	62 355
I	106.147	106.032	105.983	106.047	93.292 91.643	97.291	119.083	140.215	110.258	59.738
iv	103.984	104 267	101 186	105.837	85.519	89.964	111.040	137.603	99.808	53.549
2009: 1	102.271 102.082	104.425 104.196	101.817 101.023	105.761 105.809	71.746 67.059	79.514 76.895	98.061 95.623	119.243 113.716	89.143 88.036	47.478 44.436
III	102.648	104.917	102.789	106.014	67.874	76.647	94.183	108.074	88.370	46.403
I # *	104.000	100.407	100.401	100.404	13.130	/1.304	34.030	000000	31.174	47.040

TABLE B-6. Chain-type quantity indexes for gross domestic product, 1960-2009

[Index numbers, 2005=100; quarterly data seasonally adjusted]

	Exports	of goods and	services	Imports	of goods and	services	Governmen	t consumptio	on expenditur	es and gross	investment
Year or quarter									Federal	_	State
·	Total	Goods	Services	Total	Goods	Services	Total	Total	National defense	Non- defense	and local
1960 1961 1962 1963 1964 1965 1965 1965 1967 1968 1969	7.548 7.588 7.971 8.541 9.547 9.815 10.495 10.737 11.580 12.140	7.139 7.175 7.494 8.083 9.190 9.239 9.880 9.927 10.713 11.274	8.500 8.552 9.141 9.605 10.180 11.215 11.986 12.932 13.925 14.442	5.649 5.611 6.248 6.416 6.757 7.476 8.587 9.213 10.586 11.189	4.224 4.218 4.843 5.039 5.372 6.132 7.099 7.473 9.016 9.510	14.535 14.287 14.954 14.943 15.328 15.779 17.783 19.957 20.315 21.596	36.751 38.600 40.977 42.032 42.958 44.250 48.149 51.844 53.472 53.347	53.496 55.739 60.488 60.526 59.725 59.697 66.303 72.903 73.491 70.969	67.385 70.368 74.623 72.838 69.951 68.481 78.306 88.567 90.001 85.556	26.830 27.642 33.377 36.946 40.157 42.878 43.320 42.913 41.897 43.019	26 338 27 961 28 818 30.552 32.626 34.813 36.998 38.868 41.168 42.557
1970 1971 1972 1973 1973 1974 1975 1976 1976 1977 1978 1978	13.445 13.674 14.700 17.471 18.852 18.732 19.550 20.021 22.132 24.326	12.560 12.511 13.856 17.038 18.391 17.964 18.817 19.063 21.193 23.697	15.729 16.942 16.835 18.025 19.432 20.626 21.236 22.606 24.496 25.250	11.666 12.289 13.672 14.306 13.982 12.428 14.858 16.483 17.911 18.208	9.882 10.711 12.168 13.027 12.665 11.069 13.572 15.226 16.591 16.876	22 722 22 075 23 011 22 235 22 210 21 247 22 714 23 846 25 546 25 897	52 059 50.926 50.556 51.648 52.812 53.049 53.630 55.210 56.241	65.738 60.677 58.197 55.748 56.243 56.426 56.453 57.647 59.092 60.519	77.800 68.981 63.588 60.061 59.595 59.030 58.828 59.511 60.019 61.845	42.567 44.575 47.722 47.429 49.891 51.594 52.085 54.324 57.700 58.309	43.738 45.077 46.068 47.381 49.164 50.970 51.346 51.532 53.216 53.998
1980	26.946 27.277 25.193 24.543 26.546 27.352 29.451 32.619 37.844 42.193	26 521 26 234 23 863 23 177 25 009 25 931 27 263 30 286 30 286 35 992 40 281	26 826 29 683 28 860 28 380 30 911 31 279 35 820 39 390 42 939 47 375	16.999 17.446 17.226 13.400 24.122 25.687 27.883 29.532 30.693 32.045	15.623 15.945 15.544 17.656 21.927 23.299 25.687 26.878 26.878 27.966 29.171	25.319 26.778 28.205 30.483 38.126 41.026 41.488 46.378 47.954 50.278	57,337 57,860 58,876 61,027 63,078 67,471 71,573 73,300 74,220 76,240	63.390 66.420 68.989 73.561 75.829 81.771 86.407 89.477 88.010 89.379	64.541 68.628 73.814 79.110 82.971 90.002 95.766 100.301 99.826 99.826	61.573 62.396 59.402 62.471 61.279 64.900 67.130 67.081 63.499 68.795	53 958 52 873 52 898 53 514 55 444 58 879 62 669 63 575 65 933 68 340
1990 1991 1992 1992 1993 1994 1995 1995 1995 1996 1997 1998	45.989 49.042 52.410 54.127 58.847 64.805 70.186 78.550 80.343 83.849	43.671 46.685 50.177 51.812 56.853 63.505 69.106 79.042 80.805 83.880	52.372 55.505 58.496 60.437 64.275 68.316 73.101 77.436 79.303 83.857	33.191 33.142 35.466 38.532 43.129 46.580 50.631 57.450 64.165 71.550	30.020 30.156 32.999 36.301 41.149 44.855 49.060 56.130 62.780 70.609	53,564 52,173 50,768 52,124 54,901 56,556 59,514 64,687 71,721 76,569	78.655 79.514 79.885 79.253 79.245 79.705 80.507 82.020 83.759 86.761	91.185 91.000 89.351 85.842 82.555 80.353 79.423 78.641 77.758 79.270	99.305 98.214 93.351 88.401 84.072 80.936 79.856 77.618 75.978 77.386	74.465 76.170 81.218 80.687 79.525 79.207 78.577 80.737 81.374 83.095	71.112 72.585 74.156 75.244 75.244 75.247 81.090 83.980 87.291 91.179
2000	91.054 85.946 84.224 93.698 100.000 108.962 118.472 124.842 112.532	93.182 87.414 84.268 85.773 93.025 100.000 109.416 117.512 124.436 108 933	86.102 82.534 84.115 95.237 100.000 107.935 120.644 125.759 120.467	80.871 78.596 81.270 84.857 94.231 109.000 106.086 108.188 104.721 89.874	80.086 77.530 80.409 84.363 93.660 100.000 105.904 107.709 103.472 86.599	84.955 84.292 85.837 97.252 100.000 107.059 110.754 111.478 107.225	88.519 91.917 96.192 98.336 99.668 100.000 101.359 103.090 106.252 108.293	79.661 82.901 88.953 94.839 98.710 100.000 102.127 103.434 111.362 117.158	76.986 79.908 85.782 93.243 98.535 100.000 101.588 103.806 111.939 118.003	85.066 88.945 95.357 98.071 99.067 100.000 103.237 102.653 110.153 115.381	93.744 97.236 100.473 100.408 100.234 100.000 100.910 102.886 103.355 103.293
2006: I II III IV	106.415 108.200 108.353 112.882	107.085 109.021 109.069 112.488	104.897 106.339 106.729 113.773	104.613 105.774 107.040 106.917	104.376 105.665 107.100 106.476	105.888 106.358 106.715 109.276	101.147 101.232 101.386 101.670	102 763 101 887 101 792 102 066	101.115 101.384 100.892 102.963	106.163 102.927 103.653 100.203	100.205 100.851 101.149 101.437
2007: 1 II III IV	113.856 115.302 120.293 124.436	113.311 115.048 119.075 122.613	115.087 115.871 123.050 128.568	108.041 107.907 108.904 107.901	107.792 107.527 108.277 107.239	109.381 109.950 112.250 111.435	101.671 102.764 103.757 104.169	100.738 102.558 104.871 105.570	100.952 103.059 105.546 105.668	100.282 101.505 103.457 105.367	102.203 102.875 103.110 103.356
2008: 1 II II II IV	124.395 127.997 126.828 120.149	123.873 128.016 127.446 118.407	125.587 127.965 125.429 124.054	107.225 105.853 105.259 100.547	106.290 105.035 104.045 98.517	112.249 110.211 111.849 111.605	104.845 105.782 107.036 107.346	107.654 109.698 113.152 114.946	107.760 109.597 114.668 115.732	107.442 109.925 109.956 113.288	103.234 103.549 103.576 103.061
2009: I II III IV P	109.922 108.766 113.315 118.127	105.520 103.817 109.695 116.699	119.619 119.649 121.293 121.308	89.804 86.292 90.554 92.846	86.326 82.520 87.270 90.279	108.238 106.160 107.962 106.542	106.639 108.386 109.097 109.051	113.693 116.801 119.057 119.080	114.219 118.014 120.419 119.360	112.576 114.259 116.203 118.487	102.660 103.640 103.479 103.394

TABLE B-6. Chain-type quantity indexes for gross domestic product, 1960–2009—Continued [Index numbers, 2005=100, quarterly data seasonally adjusted]

		Personal co	insumption exp	penditures		Gro	ss private dor	nestic investm	ent	
							F	ixed investme	nt	
Year or quarter	domestic	T		0	Traci		1	Nonresidential		
	product	lotai	GOOOS	Services	Iotai	Total	Total	Structures	Equip- ment and software	Resi- dential
1960	18.604 18.814 19.071 19.273 19.572 19.928 20.493 21.124 22.022 23.110	18.606 18.801 19.023 19.245 19.527 19.810 20.313 20.824 21.636 22.616	29.144 29.253 29.404 29.648 29.971 30.286 30.953 31.499 32.597 33.860	13.581 13.827 14.090 14.306 14.573 14.846 15.277 15.786 16.468 17.326	26.607 26.533 26.548 26.463 26.613 27.037 27.592 28.320 29.378 30.770	25.530 25.449 25.391 25.545 25.545 25.981 26.528 27.271 28.367 29.767	33.978 33.783 33.788 33.784 33.955 34.342 34.854 35.741 36.999 38.527	11.516 11.446 11.537 11.636 11.801 12.143 12.580 12.973 13.621 14.518	54.445 54.146 53.878 53.581 53.558 53.607 53.749 54.940 56.416 57.985	12.962 12.983 13.003 12.901 13.003 13.372 13.857 14.339 15.100 16.144
1970 1971 1972 1973 1973 1974 1975 1976 1977 1978 1978 1978	24.328 25.545 26.647 28.124 30.669 33.577 35.505 37.764 40.413 43.773	23.674 24.680 25.525 26.901 29.703 32.184 33.950 36.155 38.687 42.118	35,152 36,208 37,135 39,350 44,261 47,837 49,709 52,363 55,576 60,832	18.287 19.285 20.103 21.078 22.868 24.836 26.558 28.560 30.779 33.353	32.072 33.671 35.077 36.972 40.648 45.666 48.190 51.805 56.030 61.099	31.047 32.611 34.009 35.888 39.422 44.361 46.932 50.616 54.891 59.866	40.348 42.246 43.673 45.355 49.733 56.581 59.718 63.805 68.078 73.606	15.473 16.664 17.863 19.247 21.910 24.534 25.741 27.973 30.675 34.238	60.119 61.905 62.651 63.716 68.414 78.523 83.143 88.083 92.731 98.610	16.666 17.632 18.703 20.359 22.460 24.547 26.124 28.759 32.281 35.902
1980 1981	47,776 52,281 55,467 57,655 59,823 61,633 63,003 64,763 66,990 69,520	46.641 50.810 53.615 55.923 58.038 59.938 61.399 63.589 66.121 68.994	67.644 72.669 74.650 75.997 77.435 78.677 78.309 80.827 82.958 86.150	36.805 40.558 43.712 46.433 48.850 51.053 53.378 55.413 58.127 60.844	66.836 73.154 76.899 76.706 77.256 78.047 79.737 81.263 83.120 85.107	65.468 71.551 75.468 75.349 75.790 76.744 78.579 80.036 82.111 84.099	80.098 87.832 92.670 91.843 91.621 92.340 93.908 94.753 96.857 98.890	37.421 42.567 45.927 44.757 45.147 46.219 47.106 47.863 49.895 51.848	107 032 114 681 119 155 119 406 118 364 118 221 120 .094 120 .750 122 .256 123 .786	39.789 43.036 45.340 46.380 47.714 48.944 50.994 53.079 54.913 56.680
1990 1991 1992 1992 1993 1994 1995 1996 1997 1998 1999 1998	72 213 74.762 76.537 78.222 79.867 81.533 83.083 84.554 85.507 86 766	72.147 74.755 76.954 78.643 80.265 82.041 83.826 85.395 86.207 87.596	89.678 91.870 92.978 93.786 94.740 95.625 96.676 96.563 95.106 95.603	63.812 66.586 69.240 71.299 73.205 75.370 77.479 79.817 81.695 83.515	86.747 87.981 87.672 88.673 89.828 90.840 90.455 90.120 89.109 88.989	85 808 87.082 86.831 87.838 89.023 90.060 89.817 89.589 88.756 88.700	100.783 102.341 101.488 101.540 102.029 102.247 101.054 99.755 97.587 96.173	53.522 54.491 54.502 56.103 58.089 60.601 62.141 64.516 67.480 69.559	125.389 127.178 125.681 124.408 123.695 122.265 119.323 115.788 110.641 107.406	58.011 58.771 59.486 61.890 64.069 66.403 67.828 69.557 71.412 74.151
2000 2001 2002 2003 2004 2005 2006 2006 2007 2008 2008 2009 ρ	88.648 90.654 92.113 94.099 96.769 100.000 103.263 106.221 108.481 109.754	89.777 91.488 92.736 94.622 97.098 100.000 102.746 105.502 109.031 109.252	97.520 97.429 96.430 96.380 97.867 100.000 101.508 102.789 106.150 103.632	85.824 88.428 90.807 93.692 96.687 100.000 103.411 106.964 110.582 112.221	89.954 90.748 91.118 92.411 95.632 100.000 104.371 106.677 107.355 106.458	89.751 90.553 90.924 92.301 95.541 100.000 104.419 106.718 107.551 106.114	96.219 95.788 95.363 95.355 96.834 100.000 103.534 106.209 107.897 107.510	72.298 76.087 79.292 82.174 88.441 100.000 112.922 121.275 125.207 122.759	106.114 103.603 101.494 100.287 99.897 100.000 100.194 100.715 101.455 102.010	77.415 80.994 83.002 86.953 93.296 100.000 106.081 107.513 105.779 100.687
2006: I II III IV	102.071 102.980 103.763 104.237	101.803 102.567 103.316 103.298	101.116 101.765 102.329 100.822	102.171 102.998 103.844 104.630	103.139 104.026 104.666 105.653	103.195 104.089 104.713 105.677	102.279 103.112 103.878 104.868	108.823 111.791 113.962 117.111	99.977 100.042 100.285 100.472	104.890 105.940 106.295 107.199
2007: I II IV	105.327 106.026 106.460 107.072	104.250 105.074 105.681 107.005	101.612 102.548 102.627 104.370	105.668 106.433 107.327 108.427	106.375 106.547 106.761 107.024	106.380 106.591 106.803 107.096	105.686 106.104 106.354 106.693	119.716 120.794 121.786 122.804	100.611 100.766 100.712 100.769	107.604 107.307 107.455 107.686
2008: I II IV	107.577 108.061 109.130 109.155	107.974 109.021 110.273 108.855	105.689 106.678 108.451 103.784	109.213 110.296 111.275 111.542	106.586 106.745 107.350 108.738	106.909 107.210 107.866 108.217	106.617 107.161 108.314 109.498	122.976 123.800 125.814 128.238	100.590 101.019 101.797 102.415	107.271 106 838 105 807 103 198
2009: I II IV P	109.661 109.656 109.763 109.934	108.449 108.814 109.510 110.235	102.186 102.864 104.216 105.264	111.749 111.954 112.312 112.869	108.245 107.019 105.465 105.102	107.668 106.463 105.265 105.062	109.154 107.993 106.656 106.238	127.092 123.706 120.451 119.786	102.450 102.304 101.802 101.485	101.915 100.554 99.863 100.417

TABLE B-7. Chain-type price indexes for gross domestic product, 1960-2009

[Index numbers, 2005=100, except as noted; quarterly data seasonally adjusted]

		Luo C		13, 2000-	100, 0A00p	it as noted	, quartery	10000	onany ouj	43(60)			
	Exports ar of go and se	nd imports bods ervices	Go	vernment c and ç	onsumption gross invest	n expenditu ment	res	Final	Gross of purch	lomestic lases ¹	Per	cent chan	ge ²
Year or quarter					Federal		State	sales of domes- tic		Less	Gross	Gross o purch	lomestic lases ¹
	Exports	Imports	Total	Total	National defense	Non- defense	and local	product	Total	food and energy	tic product	Total	Less food and energy
1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1984 1985 1986 1987 1988 1989 1990 1991 1992 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	27,453 27,871 27,940 27,877 28,107 29,001 29,877 31,022 31,698 32,771 35,283 36,928 41,784 51,478 56,328 41,784 51,478 56,328 41,784 51,478 56,328 41,784 51,478 56,328 41,784 51,478 56,328 41,784 51,478 56,328 57,449 60,927 77,984 51,478 85,744 86,478 87,280 86,478 87,280 88,342 88,476 91,373 91,993 33,212 92,833 39,242 95,597 94,727 94,477	19 941 19 941 19 706 20.088 20 512 20.797 21 281 21 364 23 5017 25 517 26 770 31 423 44 957 48 699 50 165 54 586 440 68 434 85 240 68 434 85 240 80 097 84 948 83 541 82 820 80 097 84 948 83 541 82 820 80 097 84 948 83 541 82 820 80 097 84 948 83 941 80 200 80 097 84 948 83 941 80 20 80 955 83 92 84 748 85 748 80 909 95 5748 80 20 85 748 85 748 80 917 92 856 85 748 85 748 85 748 80 917 92 856 85 748 85 748 85 748 80 917 92 856 85 748 85 748 85 748 80 757 85 748 80 757 80 757 85 748 80 757 85 748 80 757 85 748 80 757 80 757 85 748 80 757 80 757	12 809 13 065 13 398 13 690 14 070 14 444 15 671 16 520 17 517 20 421 21 989 23 594 25 977 23 594 25 976 23 594 25 977 23 594 45 768 45 768 48 75 48 76 48 77 48 76 48 77 48 77 49 77 48 7	13 677 13 908 14 202 14,506 14 995 15,379 15 914 16 386 17 287 18 226 17 287 18 226 19 699 21 383 23 4742 25 080 27 315 32 302 34 742 36 888 39.727 43 900 48 165 51 434 56 358 57 635 57 938 56 6355 59.884 66 070 68 101 69.830 71.725 73.717 79.886 66 070 68 101 69.830 71.725 73.717 79.886 82 524 84 201 19 699 10 44 10 75.763 77.047 77.931 99.886 82 524 84 201 10 44 95.335 100.007 10 4.107 10 7.576 10 104 10 107 10 107 10 10 10 107 10 107 10 10 10 10	defense 13.440 13.633 13.897 14.209 14.620 15.024 15.535 15.994 16.834 17.757 19.116 20.810 23.209 24.911 27.223 29.820 36.908 32.057 34.486 60.326 60.326 61.882 53.775 57.603 58.696 60.326 61.882 63.917 54.31 75.431 77.328 79.225 81.821 83.442 17.438 73.161 77.328 83.485 51.953 52.667 52.67 53.765 55.617 77.328 73.461 51.953 52.67 51.953 52.67 53.775 55.617 77.328 73.461 51.97 52.617 77.328 73.461 51.97 52.617 77.328 73.461 51.97 52.617 77.328 73.461 73.461 73.461 73.461 74.438 73.617 77.328 73.461 74.438 73.617 77.328 73.461 74.438 73.617 77.328 73.461 74.438 73.617 77.328 74.438 73.461 74.438 75.431 76.517 77.328 84.848 76.517 77.328 84.848 76.517 77.328 84.848 76.517 77.328 76.838 76.838 76.857 77.328 76.838 76.857 77.328 76.838 76.858 76.858 77.328 76.858 76.858 76.858 77.328 76.858 76.858 76.858 77.4388 76.858 76.858 76.858 76.858 77.4288 76.8588 76.8588 76.8588 76.8588 76.8588 76.8588 76.8588 76.8588 76.8588 76.8588 76.8588 76.8588 76.8588 76.8588 76.8588 76.8588 76.8588 76.8588 76.8588 76.85888 76.8588 76.8588 76.85888 76.85888 76.8588	defense 13 946 14 359 14 783 15 037 15 798 16 104 16 708 17 215 27 245 23 22 746 23 827 27 245 23 22 746 23 827 27 245 32 549 34 993 36 514 39 100 42 906 46 917 49 825 55 915 55 915 55 915 56 953 56 953 57 95 56 953 56 953 56 953 57 95 56 953 56 953 57 95 56 953 57 95 56 953 57 95 57 95 56 953 57 95 57	12 066 12 357 12 743 13.028 13.293 13.662 14 334 15 137 15 945 17.013 18.411 19 720 20.8945 24.970 27.410 29.114 31.062 24.957 24.970 27.410 29.114 31.042 33.042 33.042 33.042 33.042 33.042 33.042 33.042 33.042 33.042 33.042 33.042 33.042 35.976 64.654 65.457 51.034 53.002 51.034 53.002 51.034 53.002 51.034 53.002 51.034 53.002 51.034 53.002 51.034 53.002 51.034 53.002 51.034 53.002 51.034 53.002 51.034 53.002 51.034 53.002 51.034 53.002 51.0357 56.8494 70.351 72.252 73.806 75.219 76.3200 79.036 82.482 85.019 94.065 10.05276	18 455 18 663 18 920 19 125 19 424 19 781 20 346 22 988 22 1880 22 978 24 182 24 182 25 394 25 394 27 966 30 493 33 389 35 320 37 582 40 232 40 232 40 232 40 232 40 232 40 575 57 414 62 802 66 807 57 414 61 452 66 807 79 707 78 377 79 707 78 379 70 77 81 379 82 953 84 449 85 6231 92 058 84 449 85 6231 92 057 103 266 103 266 106 225 106 2057 107 069 108 2057 108 205 108 205 10	18 220 18 412 18 654 18 654 19 175 19 507 20 054 22 563 23 778 25 000 25 112 27 623 30 459 33 586 40 252 43 797 48 408 52 864 52 864 55 859 57 817 59 854 61 553 61 559 69 706 72 548 64 923 69 706 74 917 76 724 78 853 61 553 61 555 61 555	55.358 55.358 55.357 517 59.650 61.521 63.407 65.447 65.447 67.839 70.282 72.277 77.450 77.450 77.450 77.450 77.450 82.647 82.664 83.82 82.664 84.001 85.266 86.093 87.384 89.0789 99.2300 99.782 90.762 100.0057 105.984 108.689 91.99.508	1.4 1.4 1.4 1.4 1.4 1.4 1.8 2.8 3.3 4.9 5.0 4.3 4.9 5.0 4.3 5.0 4.3 5.0 4.3 5.0 4.3 5.0 5.7 5.4 7.0 8.3 9.0 9.5 5.7 5.6 4.3 8.5 9.0 9.5 5.7 5.7 5.6 4.3 8.3 9.0 9.5 5.7 5.7 5.6 4.3 8.3 3.8 8.3 8.3 8.3 8.3 8.3 8	144 111 132 166 177 289 292 49 424 49 424 49 424 49 424 49 424 49 424 49 42 42 49 42 42 42 42 42 42 42 42 42 42 42 42 42	a second
2000. 1 II IV 2007: 1	103.125 104.395 104.438	104.322 105.121 103.889	103.232 104.644 105.437 106.055	104.187 104.502 104.637	104.499 104.883 104.965	103.551 103.728 103.972 106.242	104.916 105.990 106.892	102.985 103.767 104.237 105.325	103.173 103.910 104.162	102.913 103.538 104.153 105.072	3.0 3.1 1.8	3.6 2.9 1.0	3.5 2.5 2.4
2007. T II IV IV	106.516 107.396 109.144	106.332 107.937 113.088	109.129 109.854 111.336	107.737 107.896 108.577	108.172 108.493 109.389	106.243 106.858 106.678 106.908	109.949 111.009 112.975	106.032 106.465 107.080	106.024 106.592 107.786	105.635 106.187 107.040	2.7 1.6 2.3	31 22 46	2.2 2.1 3.3
2008: I II III IV	111.156 113.890 115.638 108.871	117.234 123.069 125.203 112.730	113.038 114.772 115.963 114.233	110.077 111.265 111.784 110.628	110.857 112.402 113.059 111.334	108.469 108.922 109.149 109.198	114.803 116.877 118.493 116.396	107.623 108.127 109.202 109.078	108.678 109.722 110.871 109.790	107.743 108.544 109.317 109.151	1.9 1.8 4.0	3.4 3.9 4.3 –3.8	2.7 3.0 2.9 6
2009: I II III IV.P	105.265 105.284 106.473 107.952	103.746 104.821 107.688 111.830	113.924 114.051 114.312 114.905	111.084 111.214 111.601 112.164	111.584 111.664 112.195 112.914	110.085 110.320 110.401 110.635	115.587 115.713 115.889 116.501	109.566 109.550 109.681 109.868	109.395 109.533 109.895 110.470	109.215 109.439 109.521 109.856	1.9 .0 .4 .6	-1.4 .5 1.3 2.1	.2 .8 .3 1.2

TABLE B-7. Chain-type price indexes for gross domestic product, 1960-2009-Continued [Index numbers 2005=100, except as noted: quarterly data seasonally adjusted]

 1 Gross domestic product (GDP) less exports of goods and services plus imports of goods and services. 2 Quarterly percent changes are at annual rates.

TABLE B-8. Gross domestic product by major type of product, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

							Goods		_			
	Groce	Final sales of	Change		Total	- 1	Durable	goods	Nondural	ole goods		
Year or quarter	domestic product	domes- tic product	private inven- tories	Total	Final sales	Change in private inven- tories	Final sales	Change in private inven- tories ¹	Final sales	Change in private inven- tories ¹	Serv- ices ²	Struc- tures
1960 1961 1962 1963 1964 1965 1966 1965 1967 1968 1969	526.4 544.8 585.7 617.8 663.6 719.1 787.7 832.4 909.8 984.4	523.2 541.8 579.6 612.1 658.8 709.9 774.1 822.6 900.8 975.3	3.2 3.0 6.1 5.6 9.2 13.6 9.9 9.1 9.2	227.5 230.6 247.4 258.5 277.8 304.3 337.1 345.4 370.8 397.6	224.3 227.6 241.3 252.9 273.0 295.1 323.5 335.5 361.7 388.4	32 30 61 56 48 92 136 99 91 92	92.5 92.6 102.0 108.6 119.3 131.6 145.4 150.0 162.8 175.7	1 7 -1 3 4 2 6 3 8 6 2 10.0 4 8 4 5 6 0	131.7 135.0 139.3 144.3 153.7 163.5 178.0 185.5 198.9 212.7	16 30 27 30 10 30 30 36 50 45 3.2	237 0 250 6 270 4 286 6 307 4 330 1 362 6 397 5 439 1 478 6	61.9 63.6 67.8 72.7 78.4 84.7 88.0 89.6 100.0 108.3
1970	1,038.3 1,126.8 1,237.9 1,382.3 1,499.5 1,637.7 1,824.6 2,030.1 2,293.8 2,562.2	1,036.3 1,118.6 1,228.8 1,366.4 1,485.5 1,644.0 1,807.5 2,007.8 2,268.0 2,544.2	2.0 8.3 9.1 15.9 14.0 -6.3 17.1 22.3 25.8 18.0	408 7 432 6 472 0 547 1 588 0 628 6 706 6 773 5 872 6 977 2	406.7 424.4 462.9 531.2 574.0 634.8 689.5 751.2 846.8 959.2	2.0 8.3 91 159 14.0 -6.3 17.1 22.3 25.8 18.0	178.6 186.7 208.4 243.6 262.4 293.2 330.9 374.6 424.9 483.9	-2 29 64 130 109 -75 108 95 182 128	228.2 237.7 254.5 287.6 311.7 341.6 358.6 376.6 422.0 475.3	22 53 27 29 3.1 12 63 128 7.6 52	519 9 565 8 619 0 672 2 745 8 842 4 926 8 1.029 9 1.147 2 1.271 7	109.7 128.4 146.9 162.9 165.6 166.7 191.2 226.8 273.9 313.3
1980 1981 1982 1983 1984 1985 1986 1987 1988	2,788.1 3,126.8 3,253.2 3,534.6 3,930.9 4,217.5 4,460.1 4,736.4 5,100.4 5,482.1	2,794 5 3,097.0 3,268.1 3,540.4 3,865 5 4,195.6 4,453.5 4,709.2 5,081.9 5,454.5	-6.3 29.8 -14.9 -5.8 65.4 21.8 6.6 27.1 18.5 27.7	1,035 2 1,167 3 1,148 8 1,226 9 1,402 2 1,452 8 1,491 2 1,570 7 1,703 7 1,851 9	1,041,5 1,137,5 1,163,7 1,232,6 1,336,8 1,431,0 1,484,7 1,543,6 1,685,2 1,824,2	-63 298 -149 -58 654 218 66 271 185 277	512.3 554.8 552.5 592.3 665.9 727.9 758.3 785.3 863.3 939.7	-2.3 73 -160 25 414 4.4 -19 22.9 22.7 200	529 2 582 6 511 2 540 3 670 9 703 1 726 4 758 3 821 9 884 5	-4.0 225 1.1 -82 24.0 174 8.4 42 -4.3 77	1,431 6 1,606 9 1,759 9 1,939 1 2,102 9 2,305 9 2,488 7 2,668 0 2,881 7 3,101 2	321.3 352.6 344.5 368 7 425.8 458.7 480.1 497.6 515.0 529.0
1990 1991 1992 1993 1994 1995 1995 1996 1997 1998 1998	5,800.5 5,992.1 6,342.3 6,667.4 7,085.2 7,414.7 7,838.5 8,332.4 8,793.5 9,353.5	5,786 0 5,992 5 6,326 0 6,646 5 7,021 4 7,383 5 7,807 7 8,261 4 8,729.8 9,292 7	14.5 4 16.3 20.8 31.2 31.2 31.2 30.8 71.0 63.7 60.8	1,923 1 1,943 5 2,031 5 2,124 2 2,290 7 2,379 5 2,516 3 2,701 2 2,819 2 2,990 1	1,908,5 1,943,9 2,015,1 2,103,4 2,226,9 2,348,3 2,485,5 2,630,2 2,755,5 2,929,3	14.5 -4 16.3 20.8 63.8 31.2 30.8 71.0 63.7 60.8	973.2 967.6 1,010.7 1,072.9 1,149.8 1,225.9 1,321.0 1,430.7 1,524.2 1,633.8	7.7 -13.6 -3.0 17.1 35.7 33.6 19.1 40.0 39.3 37.4	935 3 976.3 1.004.4 1.030.4 1.077 1 1.122.4 1.164 5 1.199 5 1.231.3 1.295 5	6.8 13.2 19.3 3.7 28.1 -2.4 11.7 31.0 24.4 23.4	3,343 9 3,548 6 3,788 1 3,985 1 4,187 2 4,396 7 4,625 5 4,882 5 5,159 7 5,485 1	533.5 499.9 522.7 558.1 607.3 638.5 696.7 748.6 814.5 878.2
2000 2001 2002 2003 2004 2005 2006 2005 2006 2007 2008 2008 2008	9,951.5 10,286.2 10,642.3 11,142.1 11,867.8 12,638.4 13,398.9 14,077.6 14,441.4 14,258.7	9,896.9 10,324 5 10,630.3 11,125.8 11,802.8 12,588.4 13,339.0 14,058.3 14,476.2 14,383.7	54.5 -38.3 12 0 16 4 64 9 50.0 60.0 19.4 -34.8 -125.0	3,124,5 3,077,6 3,101,2 3,170,1 3,333,9 3,472,9 3,660,7 3,814,1 3,783,8 3,696,8	3,070.0 3,115.9 3,089.1 3,153.7 3,269.0 3,422.9 3,600.7 3,794.7 3,818.6 3,821.8	54.5 -38.3 12.0 16.4 64.9 50.0 60.0 19.4 -34.8 -125.0	1,734.4 1,7315 1,678.9 1,694.2 1,748.0 1,855.9 1,951.5 2,040.1 2,032.0 1,906.0	35.6 -44.4 17.7 13.0 37.3 35.2 25.9 7.6 10.3 -94.9	1,335.6 1,384.4 1,410.3 1,459.5 1,521.1 1,567.0 1,649.3 1,754.6 1,786.6 1,915.9	19.0 62 -56 33 27.6 14.7 34.0 11.8 -45.1 -30.1	5,878 0 6,208 7 6,535 5 6,891 7 7,319 3 7,802 1 8,285 5 8,810 8 9,265 4 9,397 3	949 0 999.9 1,005 7 1,080.4 1,214.5 1,363.4 1,452.7 1,452.8 1,392.2 1,164.6
2006: I II III IV	13,183.5 13,347.8 13,452.9 13,611.5	13,117.5 13,275.4 13,383.8 13,579.2	66.0 72.4 69.1 32.3	3,615.0 3,646.9 3,667.4 3,713.5	3,549.0 3,574.5 3,598.3 3,681.2	66.0 72.4 69.1 32.3	1,938.9 1,943.2 1,945.8 1,977.9	20.9 33.7 44.1 5.1	1,610.1 1,631.3 1,652.5 1,703.3	45.1 38.7 25.0 27.3	8,114.2 8,229.7 8,335.7 8,462.4	1,454.3 1,471.3 1,449.7 1,435.6
2007: I II III. IV	13,795.6 13,997.2 14,179.9 14,337.9	13,782.5 13,973.7 14,148.8 14,328.0	13.1 23.5 31.0 9.8	3,726.7 3,796.5 3,844.8 3,888.3	3,713.6 3,773.1 3,813.7 3,878.4	13.1 23.5 31.0 9.8	1,986.4 2,032.5 2,047.4 2,094.2	11.2 -9.2 11.0 17.3	1,727.3 1,740.5 1,766.3 1,784.2	1.9 32.6 20.1 -7.5	8,620.5 8,738.5 8,872.1 9,012.2	1,448,4 1,462,2 1,463,0 1,437,4
2008: I II IV	14,373.9 14,497.8 14,546.7 14,347.3	14,382.1 14,547.1 14,583.7 14,391.8	8.2 49.3 37.0 44.5	3,842.5 3,825.2 3,806.1 3,661.4	3,850.7 3,874.6 3,843.0 3,705.9	8.2 49.3 37.0 44.5	2,076 7 2,073 1 2,042 3 1,935 7	16.5 -22.0 35.9 10.8	1,774.0 1,801.4 1,800.7 1,770.2	-24.7 -27.3 -72.9 -55.3	9,131.8 9,263.3 9,340.8 9,325.7	1,399.5 1,409.3 1,399.8 1,360.2
2009: I II III IV P	14,178.0 14,151.2 14,242.1 14,463.4	14,305.3 14,327.4 14,398.7 14,503.4	-127.4 -176.2 -156.5 -40.0	3,649,3 3,625,7 3,679,9 3,832,4	3,776.7 3,801.9 3,836.4 3,872.4	-127.4 -176.2 -156.5 -40.0	1,905.2 1,898.8 1,911.9 1,908.0	-122.7 -129.0 -100.2 -27.7	1,871.5 1,903.1 1,924.6 1,964.4	-4.6 -47.2 -56.3 -12.3	9,308.8 9,358.4 9,417.0 9,504.9	1,219.9 1,167.0 1,145.3 1,126.1

¹ Estimates for durable and nondurable goods for 1996 and earlier periods are based on the Standard Industrial Classification (SIC); later estimates are based on the North American Industry Classification System (NAICS) ² Includes government consumption expenditures, which are for services (such as education and national defense) produced by government. In current dollars, these services are valued at their cost of production.

TABLE B-9. Real gross domestic product by major type of product, 1960-2009

(Billions of chained (2005) dollar	; quarterly data at seasonally	adjusted annual rates
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							Goods					
	: _	Final	Change		Total		Durabl	e goods	Nondura	ble goods		
Year or quarter	domestic product	sales of domes- tic product	in private inven- tories	Total	Final sales	Change in private inven- tories	Final sales	Change in private inven- tories ¹	Final sales	Change in private inven- tories ¹	Serv- ices 2	Struc- tures
1960 1961 1962	2,830.9 2,896.9 3,072.4	2,836.6 2,904.6 3,064.9	11 8 10 6 21.9	603.2 608.2 649.3							1,835.7 1,902.6 2,007.2	509.9 524.1 554.2
1963 1964 1965 1966	3,206.7 3,392.3 3,610.1 3,845.3	3,202.6 3,393.7 3,590.7 3,806.6	20.3 17.3 32 9 47.1	675.1 720.3 780.7 848.6						······	2,090.3 2,189.4 2,299.1 2,441.0	591.7 631.5 663.1 663.9
1967 1968 1969 1970	3,942.5 4,133.4 4,261.8 4,269.9	3,923.3 4,119.4 4,248.6 4,287.9	33.9 30.8 30.3 5.6	850.9 884.9 915.4 907.7							2,576.9 2,712.7 2,800.8 2,858.2	654.2 694.5 703.3 673.0
1971 1972 1973 1974	4,413.3 4,647.7 4,917.0 4,889.9	4,407.4 4,640.6 4,888.2 4,874.1	25.0 25.7 39.0 29.1	934.7 998.5 1,104.7 1,094.1							2,926.8 3,034.7 3,125.5 3,194.6	735.5 790.2 807.1 723.4
1975 1976 1977 1978	4,879.5 5,141.3 5,377.7 5,677.6	4,926.3 5,120.2 5,344.9 5,639.7	-12.8 34.3 43.1 45.6	1,066.8 1,150.5 1,205.8 1,286.8							3,309.1 3,400.2 3,517.0 3,651.5	657.6 719.2 787.2 862.8
1979 1980 1981 1982	5,855.0 5,839.0 5,987.2 5,870.9	5,841.2 5,878.7 5,959.5 5,923.3	28.0 -9.3 39.0 -19.7	1,340.0 1,328.3 1,388.2 1,316.8							3,740.1 3,811.2 3,887.4 3,956.9	887.4 823.0 811.9 742.6
1983 1984 1985 1986	6,136.2 6,577.1 6,849.3 7,086.5	6,172.9 6,495.6 6,838.9 7,098.7	-7.7 783 25.4 85	1,373.7 1,544.0 1,581.0 1,627.1							4,120.1 4,234.1 4,448.8 4,635.2	796.3 903.9 951.0 965.1
1987 1988 1989 1990	7,313.3 7,613.9 7,885.9 8.033.9	7,296.2 7,607.8 7,867.5 8.032.7	33.2 21.9 30.6 16.6	1,692.7 1,798.0 1,900.2 1,920.1			,				4,785.3 4,961.3 5,114.8 5,269.3	969.3 967.6 961.0 941.9
1991 1992 1993 1994	8,015.1 8,287.1 8,523.4 8,870.7	8.034.8 8.284.3 8.515.3 8.809.2	-1.4 17.9 22.3 69.3	1,887.6 1,964.7 2,040.3 2,183.8							5,363.0 5,521.7 5,647.9 5,781.2	869.1 902.4 930.5 978.4
1995 1996 1997 1998 1998	9,093.7 9,433.9 9,854.3 10,283.5 10,779.8	9,073.2 9,412.5 9,782.6 10,217.1 10,715.7	32.1 31.2 77.4 71.6 68.5	2,264.0 2,387.7 2,573.9 2,723.0 2,914.0	2,241.1 2,363.9 2,509.8 2,663.0 2,855.8	32.1 31.2 77.4 71.6 68.5	1,023.0 1,110.9 1,222.7 1,341.5 1,476.4	31.4 17.9 40.2 40.6 39.5	1,260.0 1,286.7 1,309.9 1,334.3 1,385.0	-3.3 12.5 36.1 29.5 27.7	5,902.5 6,045.3 6,208.3 6,421.7 6,663.6	988.9 1,053.1 1,097 8 1,155.1 1,202.2
2000	11,226.0 11,347.2 11,553.0 11,840.7 12,263.8 12,638.4 12,976.2 13,254.1 13,254.1	11,167.5 11,391.7 11,543.5 11,824.8 12,198.2 12,588.4 12,917.1 13,234.3 13,234.3	60.2 -41.8 12.8 17.3 66.3 50.0 59.4 19.5 25.9	3,056.3 3,006.9 3,059.2 3,164.0 3,326.2 3,472.9 3,652.7 3,789.7 2,985.1	3,002.8 3,043.6 3,047.4 3,146.1 3,260.9 3,422.9 3,593.5 3,771.6	60.2 -41.8 12.8 17.3 66.3 50.0 59.4 19.5 25.0	1,590.5 1,614.7 1,596.7 1,656.3 1,740.4 1,855.9 1,964.4 2,080.7	37.7 -46.4 18.1 13.5 38.1 35.2 25.2 7.6 0.4	1,411.8 1,428.2 1,451.9 1,490.5 1,520.6 1,567.0 1,629.2 1,691.7	21.4 7.3 6.4 3.6 28.1 14.7 34.1 11.8 27	6,918.7 7,095.4 7,275.6 7,416.0 7,613.1 7,802.1 7,985.0 8,192.7	1,245.3 1,254.1 1,223.2 1,263.6 1,325.6 1,363.4 1,341.1 1,281.4
2009 P	12,988.7 12,915.9 12,962.5 12,965.9	13,115.2 12,851.3 12,891.0 12,898.3	-111.7 65.8 72.5 67.5	3,615.6 3,624.5 3,640.6 3,640.9	3,755.3 3,755.3 3,559.5 3,568.5 3,568.5	-111.7 65.8 72.5 67.5	1,981.3 1,943.8 1,953.8 1,953.8	-88.9 20.6 32.9 42.4	1,767.2 1,615.9 1,614.9	-24.7 45.1 39.7 25.1	8,354.0 7,918.5 7,957.8 7,966	1,026.7 1,374.0 1,365.4 1,307
2007:	13,060.7 13,099.9 13,204.0 13,321.1	13,027.8 13,086.4 13,179.6 13,290.3	31.8 14.5 23.3 29.8	3,697.4 3,697.4 3,818.9	3,672.9 3,685.8 3,730.3 3,789.2	31.8 14.5 23.3 29.8	1,997.6 2,009.7 2,063.3 2,097.1	5.2 11.1 -8.2 10.7	1,675.0 1,675.8 1,668.1 1,693.1	26.6 3.2 30.8 18.8	8,067.2 8,120.4 8,163.1 8,224.8	1,294.4 1,287.3 1,294.5 1,287.6
2008: 	13,391.2 13,366.9 13,415.3 13,324.6 13,141.0	13,381.1 13,363.5 13,453.5 13,354.3 13,193.5	10.3 .6 -37.1 -29.7 _37.4	3,889. 3,871.4 3,885.6 3,815.5 3,649.1	3,881.3 3,870.6 3,930.0 3,850.5 3,706.7	10.3 .6 -37.1 -29.7 _37.4	2,152.9 2,141.2 2,156.8 2,121.2 2,007.5	16.7 15.2 -19.6 32.8	1,729.8 1,730.5 1,773.4 1,730.1 1,697.5	-5.6 -13.7 -18.4 -57.8 -45.1	8,262.3 8,292.1 8,322.9 8,315.1 8,329.2	1,256.3 1,221.2 1,225.3 1,208.0 1,167.0
2009: I II IV P	12,925.4 12,901.5 12,973.0 13,155.0	13.055.8 13.077.8 13.127.2 13.200.2	-113.9 -160.2 -139.2 -33.5	3,566.4 3,537.3 3,592.1 3,766.7	3,710.2 3,730.3 3,761.5 3,819.2	-113.9 -160.2 -139.2 -33.5	1,973.9 1,965.9 1,993.5 1,991.8	-115.3 -121.8 -93.1 -25.4	1,731.3 1,757.5 1,762.2 1,817.8	-40.8 -40.8 -47.6 8.6	8,311.4 8,341.8 8,363.7 8,399.0	1,051.8 1,025.2 1,023.1 1,006.8

¹ Estimates for durable and nondurable goods for 1996 and earlier periods are based on the Standard Industrial Classification (SIC), later estimates are based on the North American Industry Classification System (NAICS). ² Includes government consumption expenditures, which are for services (such as education and national defense) produced by government. In current doilars, these services are valued at their cost of production.

TABLE B-10.	Gross val	ue added by	y sector,	1960-2009
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[Billions of dollars; quarterly data at seasonally adjusted annual rates]

			Business ¹		Househ	olds and inst	titutions	Gen	eral governm	ent ³	Adden
Year or quarter	Gross domestic product	Total	Nonfarm ¹	Farm	Total	House- holds	Nonprofit institu- tions serving house- holds ²	Total	Federal	State and local	dum: dum: Gross housing value added
1960 1961 1961 1962 1963 1964 1965 1966 1966 1968 1969	526.4 544.8 585.7 617.8 663.6 719.1 787.7 832.4 909.8 984.4	419.9 431.4 463.9 488.0 524.9 570.7 624.3 653.6 713.5 769.1	401.7 413.1 445.5 507.5 550.7 603.5 633.5 693.0 746.3	18.2 18.3 18.4 18.5 17.3 19.9 20.8 20.1 20.5 22.8	44.5 47.3 51.0 54.3 57.7 61.8 66.6 71.8 77.5 85.4	32.6 34.6 37.0 39.1 41.2 43.6 46.2 49.1 51.9 56.0	12.0 12.8 14.0 15.2 16.5 18.2 20.4 22.7 25.6 29.4	62.0 66.0 70.7 75.5 81.1 86.6 96.8 107.0 118.8 130.0	33 0 34 4 36 5 38 4 40 7 42 4 47 2 51 5 56 3 59 9	28.9 31.6 34.2 37.1 40.4 44.2 49.6 55.5 62.5 70.0	39 9 42.8 46.0 48 9 51 6 54.9 58.2 62.1 65.9 71.3
1970	1,038.3 1,126.8 1,237.9 1,382.3 1,499.5 1,637.7 1,824.6 2,030.1 2,293.8 2,562.2	802.2 868.3 957.1 1,077.4 1,164.5 1,265.8 1,420.7 1,590.0 1,809.4 2,028.5	778.5 842.9 927.5 1.030.6 1.120.3 1.220.1 1.377.7 1.546.5 1.758.7 1.968.4	23.7 25.4 29.7 46.8 44.2 45.6 43.0 43.5 50.7 60.1	92.6 102.2 111.4 121.7 133.6 147.5 160.5 175.5 196.9 220.8	59.8 65.5 70.8 76.5 83.0 90.8 98.7 107.9 121.3 136.0	32.8 36.7 40.5 45.2 50.6 56.7 61.8 67.6 75.6 84.8	143.5 156.4 169.4 183.2 201.3 224.5 243.5 264.6 287.5 313.0	64.0 67.7 71.5 73.9 79.6 87.3 93.8 102.0 109.7 117.6	79.5 88.6 97.9 109.3 121.8 137.2 149.7 162.6 177.8 195.4	76.7 83.9 91.1 98.3 106.8 117.2 126.6 140.5 155.5 172.9
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989	2,788.1 3,126.8 3,253.2 3,534.6 3,930.9 4,217.5 4,460.1 4,736.4 5,100.4 5,482.1	2,186,1 2,454,0 2,514,9 2,741,1 3,065,5 3,283,9 3,461,5 3,662,0 3,940,2 4,235,7	2,134,7 2,389 0 2,454 5 2,696 2 3,001 3 3,220 5 3,402 1 3,600 5 3,879 4 4,162 0	51.4 65.0 60.4 44.9 64.2 63.4 59.5 61.5 60.7 73.8	253 5 287 5 319 3 348 2 380 3 410 1 442 3 482 8 529 7 574 2	156 5 177.8 196 7 212 5 231.0 250.3 268.0 288.0 313.1 337.2	97.0 109.7 122.7 135.6 149.3 159.8 174.3 194.8 216.6 237.0	348.5 385.3 419.0 445.4 523.4 556.3 591.5 630.6 672.2	131 2 147 4 161 2 171 2 192 1 205 0 212 6 223 3 234.8 246 4	217.3 237.9 257.7 274.1 293.1 318.4 343.7 368.2 395.8 425.8	199.8 228.8 255.7 277.7 301.3 333.1 359.7 385.5 415.3 443.4
1990 1991 1992 1993 1993 1994 1995 1996 1997 1998 1998	5,800.5 5,992.1 6,342.3 6,667.4 7,085.2 7,414.7 7,838.5 8,332.4 8,793.5 9,353.5	4,453,9 4,558,6 4,829,2 5,084,1 5,425,2 5,677,8 6,030,2 6,442,8 6,810,8 7,249,0	4,376.6 4,488.0 4,748.9 5,012.7 5,341.3 5,608.7 5,936.9 6,354.9 6,731.6 7,177.8	77.3 70.6 80.4 71.4 83.9 69.1 93.3 87.9 79.2 71.2	624 0 665 9 711.1 800 0 852 1 897 0 949.2 1,010.1 1,082.9	363 3 383 7 405 3 428 3 461 3 492 2 519.8 550.9 583.9 628.4	260 6 282 2 305 9 323 8 338 7 359 9 377 2 398 3 426 3 454 5	722.7 767.6 801.9 831.2 859.9 884.8 911.3 940.3 972.5 1,021.6	258.8 274.8 282.0 285.2 285.2 283.6 287.6 290.0 292.2 300.4	463.9 492.8 519.9 546.0 574.7 601.2 623.7 650.3 680.3 721.2	477.8 508.1 538.6 562.9 602.6 640.7 671.3 708.6 745.3 798.3
2000	9,951.5 10,286.2 10,642.3 11,142.1 11,867.8 12,638.4 13,398.9 14,077.6 14,441.4 14,258.7	7,715,5 7,913,6 8,132,8 8,502,8 9,084,6 9,695,5 10,284,1 10,789,0 10,953,1 10,668,7	7,641,9 7,837,4 8,060,5 8,410,3 8,966,4 9,593,5 10,191,1 10,672,8 10,821,0 10,562,2	73 6 76.2 72 3 92 4 118 3 102 0 93 1 116.2 132.1 106.5	1,157 2 1,232 9 1,298 0 1,347 2 1,423 8 1,506 4 1,602 9 1,686 9 1,799 9 1,830 0	673.5 719.5 746.0 762.7 806.0 864.4 924.8 973.7 1,048.7 1,062.2	483.7 513.4 552.1 584.5 617.7 642.0 678.1 713.1 751.2 767.7	1,078.8 1,139.6 1,211.4 1,292.2 1,359.3 1,436.5 1,512.0 1,601.8 1,688.4 1,760.0	315.1 324.9 351.8 382.9 412.0 438.7 460.6 485.7 515.2 558.7	763.7 814.7 859.6 909.3 947.3 997.7 1.051.3 1.116.0 1.173.2 1.201.3	849.9 904.4 932.5 938.2 988.7 1.054.0 1.130.8 1.205.4 1.306.5 1.331.3
2006: I IIIV 2007: I II II	13,183.5 13,347.8 13,452.9 13,611.5 13,795.6 13,997.2 14,179.9	10,129,8 10,246,9 10,311,9 10,447,9 10,572,3 10,737,4 10,872,9	10,043.0 10,156.4 10,218.2 10,346.6 10,462.3 10,626.8 10,758.4	86.7 90.6 93.6 101.3 110.0 110.6 114.5	1,570 4 1,599 3 1,619 6 1,622 0 1,648 7 1,666 4 1,697 6	906.0 924.3 938.4 930.4 947.4 958.3 981.7	664.4 675.0 681.2 691.6 701.3 708.1 716.0	1,483.2 1,501.6 1,521.4 1,541.6 1,574.5 1,593.4 1,609.3	455.8 459.7 462.4 464.7 480.7 484.0 487.3	1,027.5 1,041.9 1,059.0 1,076.9 1,093.8 1,109.3 1,122.0	1,104.9 1,127.8 1,146.7 1,143.7 1,166.8 1,185.6 1,217.5
2008: I II IV IV V	14,337.9 14,373.9 14,497.8 14,546.7 14,347.3	10,973.3 10,952.7 11,022.1 11,034.7 10,802.9	10,843.9 10,809.7 10,889.6 10,901.6 10,683.3	129.5 143.1 132.6 133.0 119.6	1,734.6 1,761.5 1,796.2 1,812.4 1,829.5	1,007.6 1,025.0 1,050.6 1,057.1 1,062.0	727.0 736.5 745.5 755.3 767.5	1,629.9 1,659.7 1,679.5 1,699.6 1,715.0	490.9 505.3 511.8 518.5 525.2	1,139.0 1,154.4 1,167.7 1,181.1 1,189.7	1,251.8 1,274.6 1,306.2 1,318.3 1,326.9
2009: I II IV.P	14,178.0 14,151.2 14,242.1 14,463.4	10,614.2 10,578.5 10,641.0 10,840.9	10,510.4 10,473.0 10,540.6 10,724.7	103.8 105.5 100.4 116.2	1,823.9 1,814.7 1,836.5 1,844.8	1,063.4 1,054.5 1,065.6 1,065.4	760.5 760.1 770.9 779.4	1,739.8 1,758.0 1,764.7 1,777 7	543.8 554.3 563.6 573.3	1,196.0 1,203.8 1,201.1 1,204.4	1,330.0 1,322.9 1,335.6 1,336.8

¹ Gross domestic business value added equals gross domestic product excluding gross value added of households and institutions and of general government. Nonfarm value added equals gross domestic business value added excluding gross farm value added. ² Equals compensation of employees of nonprofit institutions, the rental value of nonresidential fixed assets owned and used by nonprofit institutions serving households, and rental income of persons for tenant-occupied housing owned by nonprofit institutions. ³ Equals compensation of general government employees plus general government consumption of fixed capital.

			Business ¹		Houset	olds and ins	titutions	Gen	eral governm	ent ³	
Year or quarter	Gross domestic product	Total	Nonfarm ¹	Farm	Total	House- holds	Nonprofit institu- tions serving house- holds ²	Total	Federal	State and local	dum: dum: Gross housing value added
1960 1961 1962 1963 1964 1965 1966 1966 1967 1968 1968	2,830.9 2,896.9 3,072.4 3,206.7 3,392.3 3,610.1 3,845.3 3,942.5 4,133.4 4,261.8	1,928.1 1,965.8 2,092.6 2,189.2 2,328.0 2,492.3 2,661.0 2,712.0 2,846.8 2,934.0	1,889.6 1,927.3 2,058.9 2,155.2 2,299.7 2,462.6 2,638.6 2,638.4 2,824.8 2,910.9	25.1 25.4 24.9 25.7 26.5 25.5 27.6 26.6 27.5	335.6 349.6 368.9 384.0 399.9 419.7 438.9 457.1 480.1 501.2	197.3 206.5 217.9 226.9 236.0 246.9 256.8 267.1 274.6 285.9	135 2 139.2 146.6 152.6 159.4 168.6 178.5 186.6 204.9 214.9	670.5 694.2 721.3 742.8 768.4 794.2 843.9 888.7 923.6 947.2	369.8 377.6 393.2 396.7 400.7 403.4 429.9 457.9 465.7 467.1	310.5 326.5 338.5 356.1 377.5 400.5 424.2 442.1 468.6 490.0	237.2 250.5 265.9 278.9 291.6 307.1 320.9 335.6 348.3 364.6
1970 1971 1971 1972 1973 1974 1975 1976 1976 1977 1978	4,269.9 4,413.3 4,647.7 4,917.0 4,889.9 4,879.5 5,141.3 5,377.7 5,677.6 5,855.0	2,933.3 3,046.0 3,242.1 3,469.4 3,417.5 3,385.6 3,609.2 3,810.1 4,050.1 4,184.6	2,907.7 3,018.2 3,218.8 3,454.8 3,464.1 3,348.6 3,583.4 3,783.0 4,032.5 4,159.7	28.3 29.8 29.8 29.5 28.8 34.3 32.7 34.5 33.3 36.3	510.2 531.7 554.8 574.6 597.7 617.9 628.2 637.5 666.4 695.3	292.6 305.9 319.1 330.6 345.0 354.2 360.9 365.0 387.4 405.0	216.7 224.5 234.4 242.7 251.0 262.5 265.8 271.3 276.7 287.8	950.8 952.4 950.6 954.9 974.4 990.1 998.7 1,009.2 1,028.5 1,039.5	447.1 426.5 405.8 390.7 389.4 387.3 387.3 387.9 389.0 389.0 393.9 393.5	511.7 532.5 550.9 570.2 590.9 608.9 616.9 626.4 641.0 652.4	376.6 393.6 412.5 427.8 448.5 462.2 469.3 481.2 503.2 523.0
1980 1981 1982 1983 1984 1985 1986 1986 1987 1988 1988	5,839.0 5,987.2 5,870.9 6,136.2 6,577.1 6,849.3 7,086.5 7,313.3 7,613.9 7,885.9	4,137.4 4,252.5 4,123.7 4,345.8 4,723.2 4,942.5 5,126.9 5,295.7 5,522.7 5,522.7 5,727.3	4,114.9 4,202.5 4,066.9 4,328.5 4,886.4 5,076.1 5,245.2 5,484.5 5,678.1	35.2 46.5 48.8 31.9 43.3 52.9 50.8 51.3 45.6 52.3	730.9 754.1 778.9 801.0 826.8 841.2 863.4 895.8 937.2 974.8	430.6 444.1 452.1 460.5 476.4 487.4 493.7 506.8 525.7 542.0	297.1 306.8 324.3 338.5 348.3 351.2 368.0 388.0 411.1 432.9	1,054.4 1,060.2 1,071.0 1,077.9 1,091.3 1,122.5 1,150.1 1,175.3 1,205.8 1,234.6	399.7 405.9 412.5 422.0 431.6 443.9 451.8 463.6 469.3 475.1	661.2 660.9 665.2 662.5 666.4 685.6 705.4 719.0 743.6 766.4	555.0 576.7 592.3 605.4 624.6 649.1 661.1 676.8 696.4 712.2
1990 1991 1992 1993 1993 1994 1995 1996 1997 1996 1997 1998	8,033.9 8,015.1 8,287.1 8,523.4 8,870.7 9,093.7 9,433.9 9,854.3 10,283.5 10,779.8	5,815.3 5,764.3 5,991.8 6,185.0 6,488.2 6,670.8 6,974.6 7,335.7 7,702.4 8,132.8	5,759.9 5,707.0 5,921.3 6,128.2 6,617.8 6,617.8 6,909.4 7,261.4 7,633.5 8,060.6	56.0 56.9 66.2 57.8 70.5 56.4 65.3 72.5 69.4 72.8	1,009.6 1,038.5 1,071.4 1,106.9 1,140.0 1,175.5 1,199.8 1,240.5 1,280.2 1,325.5	555.7 572.0 589.0 603.5 631.9 651.3 665.4 687.6 703.7 740.3	454.9 467.4 483.5 504.9 508.7 524.8 535.0 553.5 577.8 585.3	1,266.2 1,279.4 1,283.7 1,286.5 1,286.8 1,287.7 1,289.8 1,289.8 1,299.6 1,314.3 1,326.3	483.8 486.7 476.5 467.4 452.2 435.1 423.2 415.2 410.4 407.1	789.2 799.4 813.0 824.2 838.5 855.1 868.4 885.6 904.6 919.5	730.2 754.6 776.7 789.1 821.7 846.9 860.4 885.6 900.9 942.3
2000	11,226.0 11,347.2 11,553.0 11,840.7 12,263.8 12,638.4 12,976.2 13,254.1 13,312.2 12,988.7	8,500.9 8,569.1 8,736.6 9,005.9 9,379.9 9,695.5 9,991.7 10,215.3 10,214.8 9,855.8	8,417.8 8,491.9 8,655.9 8,914.8 9,282.0 9,593.5 9,892.3 10,123.7 10,109.2 9,741.7	83.5 77.7 81.2 91.6 97.9 102.0 99.1 91.6 103.4 111.4	1,376.2 1,407.0 1,417.3 1,417.8 1,457.4 1,506.4 1,539.8 1,573.8 1,598.6 1,600.7	774.1 793.1 789.9 787.1 821.7 864.4 898.0 919.5 931.3 924.3	601.8 613.4 627.7 631.1 635.9 642.0 642.0 654.5 667.4 676.6	1,349.4 1,373.7 1,401.4 1,418.2 1,426.8 1,436.5 1,445.0 1,465.5 1,497.5 1,525.3	410.5 412.1 420.2 435.8 435.8 438.7 438.4 438.4 438.4 441.8 459.2 487.3	939.0 961.3 980.9 986.7 991.0 997.7 1,006.5 1,023.7 1,038.3 1,038.2	977.8 997.8 988.5 969.3 1,008.4 1,054.0 1,058.6 1,136.8 1,154.0 1,150.1
2006: 1 II III IV	12,915.9 12,962.5 12,965.9 13,060.7	9,944.7 9,980.3 9,971.3 10,070.6	9,850.1 9,873.8 9,871.4 9,974.0	93.8 107.3 99.5 96.0	1,533.8 1,542.3 1,546.1 1,537.0	890.6 900.8 905.7 894.8	643.3 641.8 640.7 642.4	1,437.6 1,440.1 1,448.7 1,453.5	436.4 436.6 440.4 440.5	1,001.2 1,003.5 1,008.3 1,013.1	1,086.4 1,099.8 1,107.7 1,100.3
2007: 1 II III IV	13,099.9 13,204.0 13,321.1 13,391.2	10,090.8 10,176.9 10,270.2 10,323.5	9,995.8 10,086.1 10,183.9 10,229.1	94.4 90.8 87.2 93.9	1,552.4 1,565.7 1,583.1 1,593.9	905.2 912.5 925.7 934.8	647.4 653.5 657.7 659.4	1,456.9 1,461.8 1,468.5 1,474.6	439.4 438.9 443.3 445.4	1,017.5 1,022.9 1,025.2 1,029.3	1,115.1 1,128.0 1,146.0 1,158.1
2008: I II IV	13,366.9 13,415.3 13,324.6 13,141.9	10,289.9 10,318.1 10,220.8 10,030.6	10,185.0 10,219.2 10,115.1 9,917.5	102.3 98.0 103.4 110.0	1,592.4 1,604.4 1,599.7 1,597.8	930.2 938.0 930.0 927.2	662.5 666.5 669.9 670.8	1,484.8 1,492.7 1,502.7 1,509.7	450.2 455.1 462.3 469.1	1,034.6 1,037.6 1,040.4 1,040.6	1,152.3 1,160.6 1,153.0 1,150.1
2009: I II IV.P	12,925.4 12,901.5 12,973.0 13,155.0	9,804.7 9,779.3 9,833.6 10,005.6	9,692.7 9,666.4 9,718.5 9,889.1	109.1 110.1 112.6 113.8	1,599.4 1,590.4 1,603.7 1,609.2	928.2 916.9 925.6 926.5	671.3 673.7 678.3 682.9	1,514.2 1,524.2 1,528.1 1,534.5	474.6 484.1 492.2 498.2	1,039.7 1,040.3 1,036.2 1,036.7	1,152.1 1,141.6 1,152.0 1,154.7

TABLE B-11. Real gross value added by sector, 1960-2009

[Billions of chained (2005) dollars; quarterly data at seasonally adjusted annual rates]

¹ Gross domestic business value added equals gross domestic product excluding gross value added of households and institutions and of general government. Nonfarm value added equals gross domestic business value added excluding gross farm value added.
² Equals compensation of employees of nonprofit institutions, the rental value of nonresidential fixed assets owned and used by nonprofit institutions serving households, and rental inceme of persons for tenant-occupied housing owned by nonprofit institutions.
³ Equals compensation of general government employees plus general government consumption of fixed capital.

TABLE B-12. Gross domestic product (GDP) by industry, value added, in current dollars andas a percentage of GDP, 1979-2008

						Private in	ndustries				
	Gross		Agricul-			Ν	Aanufacturing				
Year	domestic product	Total private industries	forestry, fishing, and hunting	Mining	Con- struc- tion	Total manufac- turing	Durable goods	Non- durabie goods	Utilities	Wholesale trade	Retail trade
						Value added					
1979	2,563.3	2,217.7	70.6	58.4	127.0	543.8	331.1	212.7	51.9	175.8	193.2
1980 1981 1982 1983 1984 1985 1986 1987 1988 1988	2,789.5 3,128.4 3,255.0 3,536.7 3,933.2 4,220.3 4,462.8 4,739.5 5,103.8 5,484.4	2,405.8 2,702.5 2,792.6 3,043.5 3,395.1 3,637.0 3,842.9 4,080.4 4,399.1 4,732.3	62.0 75.4 71.3 57.1 77.1 77.1 74.2 79.8 80.2 92.8	91.3 122.9 120.0 103.1 107.2 105.4 68.9 71.5 71.4 76.0	130.3 131.8 128.8 139.8 164.4 184.6 207.7 218.2 232.7 244.8	556.6 616.5 603.2 653.1 724.0 740.3 766.0 811.3 876.9 927.3	333.9 370.4 353.4 379.3 443.5 449.2 459.3 483.8 519.0 543.2	222.7 246.1 249.8 273.8 280.5 291.1 306.7 327.5 357.9 384.1	60.0 70.7 81.7 91.6 102.3 109.2 114.4 123.0 122.8 135.9	188.7 208.3 207.9 222.9 249.4 268.3 278.5 285.3 318.1 337.4	200.9 221.0 229.9 261.6 293.6 318.7 336.6 349.9 366.0 389.0
1990 1991 1992 1993 1994 1995 1996 1997 1998 1998	5,803.1 5,995.9 6,337.7 6,657.4 7,072.2 7,397.6 7,816.9 8,304.3 8,747.0 9,268.4	4,997.8 5,138.7 5,440.4 5,729.3 6,110.5 6,407.2 6,795.2 7,247.5 7,652.5 8,127.2	96.7 89.2 99.6 93.1 105.6 93.1 113.8 110.7 102.4 93.8	84.9 76.0 71.3 72.1 73.6 74.1 87.5 92.6 74.8 85.4	248.5 230.2 232.5 248.3 274.4 287.0 311.7 337.6 374.4 406.6	947.4 957.5 996.7 1,039.9 1,118.8 1,177.3 1,209.4 1,279.8 1,343.9 1,373.1	542.7 540.9 562.8 593.1 647.7 706.5 755.5 806.9 820.4	404.7 416.6 433.8 446.8 471.1 500.0 502.9 524.3 537.0 552.7	142.9 152.5 157.4 165.3 174.6 181.5 183.3 179.6 180.8 185.4	347.7 360.5 378.9 401.2 442.7 457.0 489.1 521.2 542.9 577.7	398 8 405.5 430.0 458.0 493.3 514.9 543.8 574.2 598.6 635.5
2000	9,817.0 10,128.0 10,469.6 10,960.8 11,685.9 12,421.9 13,178.4 13,807.5 14,264.6	8,614 3 8,869.7 9,131.2 9,542 3 10,194 3 10,853 1 11,529 3 12,064 6 12,424 6	98.0 97.9 95.4 114.4 142.2 133.3 121.6 167.9 157.7	121.3 118.7 106.5 143.3 171.3 223.8 262.4 275.0 325.3	435.9 469.5 482.3 496.2 539.2 605.4 646.0 610.8 581.5	1,426.2 1,341.3 1,352.6 1,359.3 1,427.9 1,480.6 1,577.4 1,616.8 1,637.7	865.3 778.9 774.8 771.8 807.5 845.1 899.4 922.0 914.7	560.9 562.5 577.9 587.5 620.4 635.5 678.0 694.9 723.0	189.3 202.3 207.3 220.0 240.3 239.5 272.7 281.4 306.0	591.7 607.1 615.4 637.0 686.7 722.4 773.2 805.3 818.8	662.4 691.6 719.6 751.5 776.9 824.7 866.5 892.5 885.5
	Percent				Industry value	e added as a p	ercentage of	GDP (percent)			
1979	100.0 1000 1000 1000 1000 1000 1000 100	86 5 86 4 86 4 86 8 86 1 86 8 86 3 86 1 86 4 86 8 86 7 86 1 86 8 86 1 86 1 86 1 86 1 86 1 86 1 86 1 86 1 86 1 86 1 86 1 86 1 86 1 86 1 86 1 86 2 86 2 86 3 86 3 86 4 86 9 86 7 3	28 22 24 22 16 20 20 18 17 17 16 14 15 13 15 13 13 13	23 39 39 27 25 15 15 15 14 14 15 13 11 11 11 10 10 11	5.0 4.7 4.2 4.0 4.0 4.2 4.0 4.2 4.0 4.0 4.2 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	21.2 20.0 19.7 18.5 18.4 17.5 17.1 17.5 16.3 16.0 15.7 15.6 15.6 15.8 15.9 15.5 15.5 15.5 15.5 15.5 15.5 15.5	12.9 11.8 10.9 10.7 11.3 10.2 10.2 9.9 9.9 8.9 8.9 8.9 8.9 8.9 8.9 8.9 8.9	8 3 8 0 7 7 7 7 7 7 6 9 6 9 6 9 6 9 6 9 7 0 7 0 7 0 7 0 7 0 7 0 7 0 7 0 7 0 6 9 6 9 6 9 6 9 6 8 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6	2 0 2 2 2 3 2 5 2 6 2 6 2 6 2 6 2 6 2 6 2 6 2 6 2 6 2 6	69 68 63 63 63 63 63 64 62 62 62 60 60 60 60 60 63 63 63 63 63	7.5 7.2 7.1 7.1 7.5 7.6 7.5 7.4 7.5 7.4 7.5 7.4 7.5 7.4 7.5 7.4 7.5 7.4 7.5 7.5 7.4 7.5 7.5 7.4 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5
1998 1999 2000 2001 2002 2003 2003 2004 2005 2006 2007 2008	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	87,5 87,7 87,6 87,2 87,6 87,2 87,1 87,2 87,4 87,5 87,4 87,4 87,1	12 10 10 10 10 10 12 11 9 12 11	9 9 12 12 10 13 15 15 18 20 20 20 23	4.3 4.4 4.6 4.6 4.6 4.6 4.6 4.9 4.9 4.9 4.9 4.9 4.9	15.4 14.8 14.5 13.2 12.9 12.4 12.2 11.9 12.0 11.7 11.5	92 89 88 77 74 70 69 68 68 68 68 67 64	60 57 56 55 53 51 51 50 51	2.1 2.0 1.9 2.0 2.0 2.0 2.1 1.9 2.1 2.0 2.1 2.0 2.1	62 60 59 58 59 58 59 58 59 58	6.8 6.9 6.7 6.8 6.9 6.9 6.9 6.6 6.6 6.6 6.5 6.2

[Billions of dollars; except as noted]

¹ Consists of agriculture, forestry, fishing, and hunting, mining; construction, and manufacturing. ² Consists of utilities; wholesale trade; retail trade; transportation and warehousing; information; finance; insurance; real estate; rental; and leasing; professional and business services; educational services, health care; and social assistance; arts; entertainment; recreation; accommodation; and food services; and other services; except government.

Note: Data shown in Tables B-12 and B-13 do not reflect the benchmark revision of the National Income and Product Accounts released in July 2009. For details see Survey of Current Business, May 2009.

TABLE B-12. Gross domestic product (GDP) by industry, value added, in current dollars and as a percentage of GDP, 1979-2008-Continued

			Private i	industries—Co	intinued					
Year	Transpor- tation and ware- housing	Information	Finance, insurance, real estate, rental, and leasing	Profes- sional and business services	Educational services, health care, and social assistance	Arts, entertain- ment, recreation, accommo- dation, and food services	Other services, except government	Government	Private goods- producing industries ¹	Private services- producing industries ²
		·			Value	added				
1979	96.6	90.3	390.3	164.0	120.5	77.1	58.2	345.7	799.7	1,417.9
1980 1981 1982 1983 1984 1985 1985 1986 1986 1987 1988	102.3 109.9 105.9 117.8 131.4 136.3 145.6 151.1 161.1	99.0 112.7 123.6 140.0 147.1 162.9 173.1 185.0 194.0	442 4 498 4 539 9 604 6 670 2 729 7 795 1 840 3 910 1	186.3 213.2 230.9 262.5 303.8 340.8 378.8 414.1 466.3	139.7 159.9 177.9 198.3 214.1 231.3 252.0 286.5 309.1	83.5 93.5 100.9 112.0 121.2 134.3 144.9 152.1 165.9	62.6 68.5 70.7 79.2 89.3 98.0 107.2 112.3 124.4	383 7 425 9 462 4 493 1 538 1 583 3 620.0 659.1 704.7	840.2 946.6 923.3 953.1 1.072.7 1.107.4 1.116.7 1.180.8 1.261.3	1,565,6 1,755,9 1,869,3 2,090,5 2,322,3 2,529,5 2,726,1 2,899,5 3,137,8
1989 1990 1991 1992 1993 1993 1994 1995 1996 1997 1998 1998	164.1 169.4 178.2 186.6 201.0 218.0 226.3 235.2 253.7 273.7 273.7	210.4 225.1 235.2 272.6 294.0 307.6 335.7 347.8 381.6 428.2	975.4 1,042.1 1,103.6 1,177.4 1,241.5 1,297.8 1,383.0 1,470.7 1,593.3 1,684.6 1,798.4	518.0 569.8 579.3 626.7 659.1 698.4 743.1 810.1 896.5 976.2	347.0 386.7 424.8 463.5 511.1 533.3 552.5 573.1 601.5 601.5	180.2 195.2 202.2 216.2 225.5 235.0 248.3 264.4 289.8 306.0 207.8	133.9 142.6 144.2 153.0 163.7 173.2 180.9 188.1 197.4 211.1	752.0 805.3 857.2 897.3 928.1 961.8 990.4 1.021.6 1.056.8 1.094.5	1,341.0 1,377.4 1,352.8 1,400.0 1,453.4 1,572.4 1,631.4 1,722.4 1,820.8 1,895.4 1,895.4	3,391.4 3,620.4 3,785.9 4,040.5 4,275.9 4,538.0 4,775.8 5,072.8 5,426.8 5,757.1 5,129.2
2000 2001 2002 2003 2003 2004 2005 2005 2006 2007 2008	301.6 296.9 304.6 316.6 344.6 364.7 387.4 407.2 414.9	458.3 476.9 483.0 489.1 530.6 557.8 559.6 559.6 5586.3 622.0	1,931.0 2,059.2 2,141.9 2,244.6 2,378.8 2,527.9 2,685.8 2,811.2 2,848.4	1,140.8 1,165.9 1,189.0 1,248.9 1,338.2 1,463.9 1,566.4 1,694.1 1,805.8	678.4 739.3 799.6 857.3 916.3 969.7 1,025.8 1,087.0 1,157.9	350.1 361.5 381.5 398.9 427.5 451.8 484.9 513.3 536.3	229.1 241.5 252.5 265.3 273.9 287.5 299.5 315.6 326.8	1,141.2 1,202.7 1,258.3 1,338.4 1,418.4 1,491.6 1,568.8 1,649.1 1,742.9 1,840.0	2,081 5 2,027 5 2,036.9 2,113 3 2,280 6 2,443 2 2,607.4 2,607.4 2,670.6 2,702.2	6,532,8 6,842,2 7,094,3 7,429,1 7,913,7 8,409,9 8,921,8 9,394,0 9,722,4
				Industry valu	ie added as a p	ercentage of G	GDP (percent)		•	
1979	38 37 35 33 32 32 32 32 30 30 30 30 30 30 30 30 31 31 31 31 31 31 31 31 29 29 29 29 29 29 29 29	3.5 3.6 3.6 3.6 3.6 3.9 3.9 3.9 3.9 3.9 3.9 3.9 3.9 3.9 3.9	15.2 15.9 15.9 15.9 16.6 17.1 17.0 17.3 17.8 17.8 17.8 17.8 18.0 18.4 18.6 18.4 18.6 18.4 18.6 18.4 18.5 19.2 19.3 19.3 19.3 19.4 19.7 20.5 20.4 20.4 20.4	6.4 6.7 6.8 7.1 7.4 7.7 8.1 8.5 8.7 9.4 9.8 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9	4.7 50 51 55 56 60 60 61 63 67 71 72 72 72 72 72 72 72 72 72 72 72 72 72	30 30 30 31 32 32 32 32 32 32 32 32 33 34 34 34 34 34 34 34 34 34 34 34 35 35 35 36 36 36 36 37 7	23 22 22 22 22 22 22 22 22 22 22 22 22 2	13.5 13.8 13.6 13.9 13.9 13.9 13.9 13.9 13.9 13.9 13.9	31.2 30.1 30.3 28.4 26.9 27.3 26.0 24.9 24.7 24.5 23.7 22.6 22.1 21.8 22.1 21.8 22.1 21.8 22.1 21.9 21.7 21.7 21.1 21.1 21.0 21.7 21.7 21.7 21.7 21.7 21.7 21.7 21.7	$\begin{array}{c} 55.3\\ 56.1\\ 57.4\\ 59.1\\ 59.0\\ 59.9\\ 61.1\\ 61.2\\ 61.5\\ 61.5\\ 61.5\\ 61.5\\ 61.5\\ 61.5\\ 63.8\\ 64.2\\ 64.6\\ 65.3\\ 65.6\\ 65.5\\ 67.6\\ 67.6\\ 67.7\\$

[Billions of dollars; except as noted]

Note (cont'd): Value added is the contribution of each private industry and of government to GDP. Value added is equal to an industry's gross output minus its intermediate inputs. Current-dollar value added is calculated as the sum of distributions by an industry to its labor and capital, which are derived from the components of gross domestic income Value added industry data shown in Tables B–12 and B–13 are based on the 1997 North American Industry Classification System (NAICS). GDP by industry

data based on the Standard Industrial Classification (SIC) are available from the Department of Commerce, Bureau of Economic Analysis.

TABLE B-13.	Real gross domestic product by industry, value added, and percent changes,
	1979-2008

						Private i	ndustries				
	Gross		Agricul-			Ν	Manufacturing				·
Year	domestic product	Total private industries	ture, forestry, fishing, and hunting	Mining	Con- struc- tion	Total manufac- turing	Durable goods	Non- durable goods	Utilities	Wholesale trade	Retail trade
				Chain-t	/pe quantity i	ndexes for va	lue added (20	00=100)			
1979	52.699	50.606	48.573	79.749	81.174	50.843	40.808	70.282	54.661	39.888	40.701
1980 1981 1982 1983 1984 1985 1985 1986 1987 1988 1988	52 579 53 904 52 860 55 249 59 220 61 666 63 804 65 958 68 684 71 116	50.321 51.720 50.422 52.785 56.789 59.383 61.137 63.367 66.299 68.710	47 543 59 731 62 961 43 338 57 105 69 555 68 605 71 483 64 678 71 099	89,978 90,260 86,329 81,175 88,849 93,077 87,529 91,661 91,99,992 97,072	74 626 67 939 59 460 62 805 72 200 79 043 81 818 82 448 85 435 87 646	48,190 50,480 46,795 50,455 55,084 56,582 56,516 60,746 64,212 65,033	38,476 39,563 35,645 37,953 44,042 45,187 45,550 48,859 52,843 53,696	67,152 72,303 69,864 76,660 76,466 78,688 77,515 83,572 85,425 86,109	51 968 51 733 50 698 52 706 57 341 60 940 64 406 72 315 70 613 79 002	39,782 42,074 42,096 43,770 47,143 49,523 54,486 53,070 56,444 58,603	38.907 40.035 39.951 44.123 48.265 51.232 54.187 52.138 56.545 58.838
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999	72.451 72.329 74.734 76.731 79.816 81.814 84.842 88.658 92.359 96.469	69.905 69.779 72.363 74.291 77.765 79.722 83.179 87.362 91.662 96.183	74 689 75 398 83 114 72 838 84 616 73 099 80 041 88 315 86 287 89 163	96.157 97.638 95.694 97.020 105.327 105.681 98.850 102.463 101.682 104.300	86.543 79.137 80.026 82.010 86.586 86.312 90.694 93.267 97.087 99.411	64.299 63.412 65.508 68.255 73.496 76.819 79.682 84.518 90.181 94.104	52.963 51.496 52.742 55.173 60.173 65.218 69.120 75.335 84.355 89.627	85.419 85.835 89.669 92.943 98.369 97.783 98.443 100.438 99.762 101.298	84.447 85.285 85.362 85.814 89.518 93.835 95.405 91.161 90.481 94.672	57 318 59 387 65 037 67 135 71 346 70 800 77 261 85 648 95 431 100 412	59,794 59,483 62,960 65,351 69,806 72,974 79,407 86,039 90,399 95,686
2000 2001 2002 2003 2004 2005 2006 2007 2008	100.000 100.751 102.362 104.931 108.748 111.944 115.054 117.388 118.692	100.000 100.908 102.354 105.068 109.198 113.068 116.591 118.990 119.678	100.000 93.661 98.767 106.173 113.287 122.911 116.434 124.524 123.854	100 000 94,715 88,719 87,922 88,770 85,440 91,760 91,835 91,056	100.000 100.163 98.201 96.189 96.430 95.996 92.039 81.769 77.183	100.000 94.436 97.066 98.168 103.653 104.543 110.312 113.488 110.382	100.000 94.031 95.663 98.169 103.873 109.622 118.547 124.191 122.621	100.000 95.034 99.056 98.265 103.468 98.292 100.388 100.819 96.166	100.000 95.081 99.144 105.990 112.076 105.443 106.638 107.881 109.945	100 000 107 003 108 059 110 380 112 614 116 279 116 980 117 968 116 240	100.000 106.970 109.294 113.559 116.533 126.923 133.983 140.077 139.396
		,			Percent c	hange from y	ear earlier			,,	
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988	3.2 2 2.5 -1.9 4.5 7.2 4.1 3.5 3.4 4.1	3.7 6 2.8 -2.5 4.7 7.6 4.6 3.0 3.6 4.6	7.8 -2.1 25.6 5.4 -31.2 31.8 21.8 -1.4 4.2 -9.5	-10.3 12.8 .3 -4.4 -6.0 95 4.8 -6.0 4.7 91	3.5 -8.1 -9.0 -12.5 5.6 15.0 9.5 3.5 8 3.6	3.4 -5.2 4.8 -7.3 7.8 9.2 2.7 1 7.5 5.7 5.7	1.6 -5.7 2.8 -9.9 6.5 16.0 2.6 .8 7.3 8.2	6.4 -4.5 7.7 -3.4 9.7 3 2.9 -1.5 7.8 2.2	-8.3 -4.9 -5 -20 4.0 8.8 6.3 5.7 12.3 -2.4	7.6 -3 58 1 40 7.7 50 100 -2.6 64 28	0.1 4.4 2.9 2 10.4 9.4 6.1 5.8 3.8 8.5 8.5
1900	35 19 -22 33 27 40 25 37 425 425 425 42 45 42 45 45 42 25 36 29 28 20 28 20 20 20 28 20 20 20 20 20 20 20 20 20 20 20 20 20	3.0 1.7 -2 3.7 2.7 4.7 2.5 4.3 5.0 4.9 4.9 4.9 4.9 4.9 4.9 1.4 2.7 3.9 3.5 3.1 2.1 4.3 5.0 3.5 1.4 4.7 3.9 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	5 5 5 0 .9 102 -12.4 16.2 -13.6 9.5 10.3 3 9.5 10.3 3 3 12.2 -6.3 55 7 5 5 7 5 5 7 5 5 7 5 5 6.7 85 6.9	-29 -9 15 -20 1.4 86 3 37 -6 5 37 -8 2.6 -65 -8 2.6 -63 -63 -63 10 -38 7.4	-1.3 -866 -86 -86 -86 -86 -85 -3 -3 -5 -3 -3 -5 -3 -3 -5 -3 -20 -20 -20 -20 -20 -20 -20 -20 -21 -13 -13 -13 -13 -13 -13 -13 -13 -13 -1	-1.1 -1.4 3.3 3.7 7.7 4.5 3.7 4.5 3.7 4.4 6.1 6.7 4.4 6.3 -56 2.8 9 5.5 56 2.9 2.9	-14 -28 -24 46 91 84 60 90 120 62 116 62 116 58 55 55 55 55 55 81 81	8 8 37 58 6 6 7 2.0 7 1.5 13 50 4.2 8 53 5.3 5.3 50 21 21 21 21 21 21 21 21	$\begin{array}{c} 6.9\\ 6.9\\ 1.0\\ .5\\ 4.3\\ 4.8\\ 1.7\\ -4.4\\ 8\\ 5.6\\ -4.9\\ 4.3\\ 6.9\\ 5.7\\ -5.9\\ 5.7\\ -5.9\\ 1.1\\ 1.2\end{array}$	-22 -365 955 -38 -8 -8 -91 10.9 11.4 7.0 10 21 20 33 6 8	- 5 5 8 8 8 8 8 4 5 5 5 8 8 4 5 5 5 8 9 2 2 3 9 5 5 6 8 9 5 5 4 5 4 5 5 8 9 5 5 8 8 9 5 5 8 8 8 8 8 8 8 8 8

¹ Consists of agriculture, forestry, fishing, and hunting, mining, construction, and manufacturing, ² Consists of utilities, wholesale trade; retail trade; transportation and warehousing, information, finance, insurance, real estate, rental, and leasing; professional and business services, educational services, health care, and social assistance, arts, entertainment, recreation, accommodation, and food services; and other services, except government.

			Private	industries—Co	ontinued					
Year	Transpor- tation and ware- housing	Information	Finance, insurance, real estate, rental, and leasing	Profes- sional and business services	Educational services, health care, and social assistance	Arts, entertain- ment, recreation, accommo- dation, and food services	Other services, except government	Government	Private goods- producing industries	Private services- producing industries ²
				Chain-type q	uantity indexes	s for value add	ed (2000=100)	•	•	
1979	48.252	34.231	52.965	39.387	63.234	53.512	75.703	77.721	56.085	48.120
1980	47.232 46.178 43.855 49.486 52.121 52.715 53.021 55.690 57.990 59.507 62.281 65.060	36.394 38.257 38.155 41.017 40.717 42.039 42.672 45.764 47.649 51.150 53.420 54.441	55,414 56,573 56,986 58,734 61,282 62,812 63,965 65,941 68,652 70,359 71,877 72,051	40 529 41 554 41 345 44 142 48 913 52 748 56 860 60 050 64 420 68 787 72 073 60 786	66.887 68.455 68.856 71.153 72.366 73.629 75.166 80.273 80.570 84.002 84.002 87.047 90.395	52.407 54.193 55.695 59.784 62.194 66.167 69.642 68.742 71.515 73.872 76.063 74.232	74.411 72.329 69.103 72.470 77.498 80.936 82.885 84.221 89.044 92.188 94.369 91.259	79.023 79.328 80.178 81.038 83.172 85.105 86.753 88.812 90.984 90.984	53,880 55,783 52,029 53,361 59,454 62,569 62,534 66,173 69,104 70,366 69,858 69,858	48,764 49,923 49,794 52,637 55,727 58,104 60,576 62,256 65,186 68,033 68,033 69,877 70,030
1991 1992 1993 1994 1995 1995 1996 1997 1998	65.060 68.758 71.988 77.827 80.473 84.585 88.373 91.454 95.301	54,44 57,568 61,445 65,223 67,996 72,714 74,559 82,252 95,467	73.051 74.863 76.931 78.506 80.732 82.893 86.786 90.201 94.994	69,786 72,008 73,224 75,430 77,382 82,053 87,432 91,976 96,898	89,285 91,728 92,199 92,413 93,503 94,144 94,809 95,603 97,304	74.232 77.250 78.787 80.604 83.542 86.796 90.310 93.446 96.836	91.258 92.502 95.195 98.624 99.714 99.072 99.291 101.871 100.236	93 658 94 134 94 055 94 407 94 250 94 768 95 864 96 923 98 009	68,214 70,330 72,128 77,818 79,572 82,596 87,229 91,878 95,402	70.319 73.074 75.047 77.745 79.773 83.377 87.407 91.591 96.434
2000 2001 2002 2003 2004 2004 2005 2006 2006 2007 2008	100.000 97.354 99.53 101.534 110.780 115.253 117.627 120.592 116.091	100.000 104.034 106.263 109.430 122.221 132.881 136.503 147.542 155.211	100.000 103.858 104.800 107.288 110.433 115.054 119.756 122.183 122.100	100.000 99.346 99.192 103.554 107.750 113.709 117.579 122.646 129.361	100.000 103.186 107.527 112.257 115.949 119.231 123.043 125.627 131.207	100 000 99.292 101.022 104.138 108.114 110.366 114.158 116.126 118.049	100.000 98.337 98.667 100.615 100.770 102.776 102.381 102.756 103.026	100.000 100.794 102.467 103.776 104.252 104.962 105.509 106.914 109.033	100.000 95.654 96.853 97.402 101.328 101.915 104.628 103.880 100.718	100.000 102.584 104.107 107.496 111.692 116.624 120.414 123.870 125.879
				P	ercent change	from year earli	er			
1979	5.6 -2.1 -2.2 5.3 1.1 6 5.0 4.1 2.6 4.7 4.5 5.7 4.7 4.7 5.7 4.7 4.5 5.3 5.7 4.7 4.7 4.5 5.3 5.3 5.3 5.3 4.2 4.2 4.2 2.0 9.1 4.0 2.1 5.3 5.3 5.0 5.0 4.7 4.7 5.7 5.0 5.0 4.7 4.7 5.7 4.7 5.7 4.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5	8.6 6.3 5.1 -7 3.2 1.5 7.2 4.1 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3 7.3	52 46 21 7 31 43 25 25 22 16 25 28 20 25 28 20 25 28 20 25 28 20 25 28 20 25 28 20 25 28 20 25 28 20 29 53 53 53 53 29 24 24 24 24 24 24 24 24 24 24 25 26 28 20 28 20 20 20 20 20 20 20 20 20 20 20 20 20	68 29 25 68 108 78 78 78 78 78 78 78 78 78 78 78 78 78	42 58 23 23 33 17 17 17 21 68 43 36 26 26 27 7 7 7 7 7 7 7 8 8 8 28 32 42 42 44 33 28 32 32 32 21 22 12 22 21 22 22 22 22 22 22 22 22	2.8 -2.1 3.4 2.8 7.3 4.0 6.4 5.3 -1.3 4.0 -2.4 4.1 2.3 3.6 3.9 4.0 2.3 3.6 3.9 4.0 2.3 3.6 3.3 3.6 3.3 3.7 1.7 3.1 3.4 4.0 2.3 3.6 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7	0.8 -1.7 -2.8 4.9 6.9 4.4 2.4 2.4 1.6 5.7 3.5 2.4 -3.3 3.6 1.1 -6.6 2.2 2.6 -1.6 2.2 6 -1.6 2.2 2.6 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	1.3 1.7 4 2.9 2.3 2.3 2.4 2.4 2.5 5 5 5 5 -2 5 5 12 2.4 2.4 2.5 5 5 5 12 12 11 11 11 11 13 13 13 13 13	2.7 -39 35 -67 266 114 52 -2 -1 58 44 4 4 4 4 4 4 4 1 3 58 -7 24 31 26 55 56 55 56 55 56 53 53 38 38 48 43 -77 -27 -27 -27 -21 -21 -21 -21 -21 -21 -21 -21 -21 -21	42 13 24 -3 57 59 43 28 47 44 27 59 43 28 47 44 47 27 36 26 26 45 26 45 39 37 36 26 45 33 39 39 44 42 22 9 22 9

TABLE B-13. Real gross domestic product by industry, value added, and percent changes, 1979-2008—Continued

Note: Data are based on the 1997 North American Industry Classification System (NAICS). See Note, Table 8–12.

TABLE B-14. Gross value added of nonfinancial corporate business, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

						Ne	t value add	ded					Addenda	
	Gross							Net operat	ting surplu	5				
Year or quarter	value added of non- financial corpo-	Con- sump- tion of	Total	Com- pensa- tion	Taxes on produc- tion and		Net interest and	Busi- ness	Corporate tory val consum	e profits wi uation and ption adjus	ith inven- capital stments	Profits before	Inven- tory valua-	Capital con- sumption
	rate busi- ness ¹	capital		employ- ees	less sub- sidies	Total	miscel- laneous pay- ments	transfer pay- ments	Total	Taxes on corpo- rate income	Profits after tax ²	tax	adjust- ment	adjust- ment
1960 1961 1962 1963 1964 1965 1966 1967 1968 1969	276.4 283.7 309.8 329.9 356.1 391.2 429.0 451.2 497.8 540.5	23.1 23.7 24.5 25.6 27.0 29.1 31.9 35.2 38.7 42.9	253.3 260.1 285.2 304.3 329.0 362.1 397.1 416.0 459.1 497.5	180.4 184.5 199.3 210.1 225.7 245.4 272.9 291.1 321.9 357.1	26.6 27.6 29.9 31.7 33.9 36.0 37.0 39.3 45.5 50.2	463 479 561 625 807 872 856 917 903	3.2 3.7 4.3 4.7 5.2 5.8 7.0 8.4 9.7 12.7	1.4 1.5 1.7 2.0 2.2 2.7 2.8 3.1 3.2	41.7 42.7 50.1 56.1 62.4 72.7 77.5 74.4 78.9 74.4	19.1 19.4 20.6 22.8 23.9 27.1 29.5 27.8 33.5 33.3 33.3	22.6 23.3 29.5 33.4 38.5 45.5 46.5 46.5 45.4 41.0 23.0	40.1 39.9 44.6 49.7 55.9 66.1 71.4 67.6 74.0 71.2	-0.2 3 0 1 -5 -12 -2.1 -16 -37 -59 -60	1.9 2.5 5.4 6.4 7.0 7.8 8.1 8.3 8.6 9.1
1970 1971 1972 1973 1973 1974 1975 1976 1976 1977 1978 1979	558.3 603.0 669.4 750.8 809.8 876.7 989.7 1,119.4 1,272.7 1,414.4	47.5 52.0 56.5 63.1 74.2 88.6 97.8 110.1 125.1 144.3	510.8 551.1 613.0 687.6 735.7 788.0 892.0 1.009.2 1.147.5 1.270.2	376.5 399.4 443.9 502.2 552.2 575.5 651.4 735.3 845.1 958.4	54.2 59.5 63.7 70.1 74.4 80.2 86.7 94.6 102.7 108.8	92.1 105.4 115.4 109.1 132.4 153.9 179.3 199.7 203.0	16.6 17.6 18.6 21.8 27.5 28.4 26.0 28.5 33.4 41.8	3.3 3.7 4.0 4.7 4.1 5.0 7.0 9.0 9.5 9.5	00.2 70.8 82.8 88.9 77.5 98.9 121.0 141.9 156.8 151.8	27.3 30.0 33.8 40.4 42.8 41.9 53.5 60.6 67.6 70.6	32.9 40.8 49.0 48.5 34.6 57.0 67.5 81.3 89.2 81.2	58.5 67.4 79.5 99.5 110.2 110.7 138.2 159.5 183.7 197.2	0.0 4.6 19.6 38.2 10.5 14.1 15.7 23.7 23.7 40.1	8.0 9.9 9.0 5.5 -1.2 -3.2 -1.9 -3.2 -3.2 -3.2 -3.2 -3.2 -3.2
1980 1981 1982 1983 1984 1985 1986 1986 1987 1988 1989	1.534.5 1.742.2 1.802.6 1.929.1 2.161.4 2.293.9 2.383.2 2.551.0 2.765.4 2.899.2	166.7 192.4 212.8 219.3 228.8 244.0 258.0 270.0 287.3 303.9	1,367.8 1,549.8 1,589.8 1,709.8 1,932.6 2,049.9 2,125.2 2,280.9 2,478.1 2,595.3	1,047.2 1,157.6 1,200.4 1,263.1 1,400.0 1,496.1 1,575.4 1,678.4 1,804.7 1,905.7	121.5 146.7 152.9 168.0 196.6 204.6 216.8 233.8 248.2	1991 2455 2365 2787 3475 3572 3452 3856 4396 4415	54.2 67.2 77.4 77.0 91.5 98.5 95.9 107.9 133.9	10.2 11.4 8.8 10.5 11.7 16.1 27.3 29.9 27.4 24.0	134.7 166.8 150 2 191.2 249.8 249.6 219.5 259.9 304.3 283.5	68.2 66.0 48.8 61.7 75.9 71.1 76.2 94.2 104.0 101.2	66.5 100.8 101.5 129.5 173.9 178.6 143.2 165.7 200.3 182.3	184.1 185.0 140.0 163.4 197.6 173.5 149.7 213.5 264.1 264.1 243.1	-421 -246 -75 -7.4 -4.0 71 -162 -222 -163	-7 2 6.5 17.8 35.2 76 2 62.7 62.6 62.3 56 7
1990 1991 1992 1993 1993 1994 1995 1996 1997 1998 1999	3,035,2 3,104,1 3,241,1 3,398,4 3,677,6 3,888,0 4,119,4 4,412,5 4,668,3 4,955,5	321.0 336.1 344.1 359.0 380.1 408.3 435.1 466.9 499.9 539.3	2,714.2 2,768.0 2,897.0 3,039.3 3,297.5 3,479.7 3,684.4 3,945.6 4,168.5 4,416.3	2,005,5 2,044,8 2,152,9 2,244,0 2,382,1 2,511,5 2,631,3 2,814,6 3,049,7 3,256,5	263 5 285.7 302.5 318.0 347 8 354.2 365.6 381.0 393.1 414.6	445.2 437.5 441.6 477.3 567.5 614.0 687.5 750.0 725.7 745.1	143.1 139.6 114.2 99.8 98.8 112.7 112.1 124.7 146.8 164.5	25.4 26.6 31.3 30.1 35.3 30.7 38.0 39.2 35.2 47.1	276.7 271.3 296.1 347.5 433.5 470.6 537.4 586.2 543.7 533.5	98.5 88.6 94.4 108.0 132.4 140.3 152.9 161.4 158.7 171.4	178.3 182.7 201.7 239.5 301.1 330.3 384.5 424.8 385.1 362.1	243.3 226.8 258.6 308.7 391.9 431.2 471.3 506.8 460.5 468.6	-12.9 4.9 -2.8 -4.0 -12.4 -18.3 3.1 14.1 15.7 -4.0	46.3 39.6 40.3 42.9 54.0 57.6 63.0 65.3 67.5 68.9
2000 2001 2002 2003 2004 2005 2006 2006 2007 2008 2008 2009 <i>p</i>	5,279.4 5,252.5 5,307.7 5,503.7 5,877.5 6,302.8 6,740.3 6,970.1 6,971.5	590.1 632.0 654.5 669.0 695.6 743.0 800.9 849.4 898.4 901.7	4,689,4 4,620,5 4,653,1 4,834,7 5,181,9 5,559,8 5,939,4 6,120,6 6,073,0	3,541,8 3,559,4 3,544,2 3,651,3 3,786,7 3,976,3 4,182,3 4,364,2 4,427,9 4,212,3	439.4 434.5 461.9 484.2 517.7 558.4 593.3 612.8 621.0 601.9	708.2 626.7 647.1 699.2 877.5 1,025.1 1,163.7 1,143.7 1,024.1	192.8 197.7 163.7 147.9 134.4 148.2 164.0 228.1 242.1	47 9 58.9 56.3 65.2 65.5 79.3 75.8 68.6 70.4 77.7	467.5 370.1 427.2 486.1 677.5 797.6 923.9 846.9 711.6	170.2 111.2 97.1 132.9 187.0 271.9 307.6 299.3 237.8	297.3 258.8 330.1 353.2 490.6 525.8 616.2 547.6 473.8	432.5 315.1 342.3 425.9 662.1 957.1 1,117.9 1,058.9 806.7	-16.8 8.0 -2.6 -11.3 -34.3 -30.7 -38.0 -44.0 -38.2	51.8 47.0 87.5 71.5 49.7 -128.8 -156.0 -167.9 -56.8 -113.3
2006: I II IV	6,629.5 6,668.1 6,811.8 6,851.8	781.1 794.8 807.8 820.1	5,848 5 5,873.3 6,004.0 6,031.7	4,131.8 4,153.0 4,180.3 4,264.2	583.7 591.1 596.3 602.0	1,132.9 1,129.2 1,227.3 1,165.5	152.6 157.8 164.8 180.9	78.4 76.4 74.9 73.5	902.0 894.9 987.6 911.1	294.1 308.8 329.3 298.3	607.8 586.2 658.3 612.7	1,101 8 1,096.7 1,179.3 1,093.8	-33.4 -48.4 -42.3 -28.0	-166.5 -153.3 -149.4 -154.8
2007: I II IV	6,909.3 6,988.8 6,949.7 7,032.6	831.6 843.4 855.3 867.5	6.077.7 6.145.4 6.094.4 6.165.1	4,314.0 4,345.1 4,365.4 4,432.2	604.8 610.5 614.8 620.9	1,159.0 1,189.7 1,114.1 1,112.0	201.2 223.6 236.6 251.2	70.3 68.4 67.5 68.4	887.5 897.7 810.1 792.4	313.3 305.3 284.4 294.2	574.1 592.4 525.7 498.1	1,081.2 1,091.2 1,009.6 1,053.5	-42.2 -29.5 -25.3 -79.0	-151.5 -163.9 -174.1 -182.1
2008. 1 II IV	6,934.9 6,974.4 7,042.4 6,934.1	879.8 892.2 904.6 917.1	6,055.1 6,082.2 6,137.8 6,017.0	4,429.6 4,431.6 4,440.4 4,410.1	618.5 623.5 627.8 614.2	1,006.9 1,027.1 1,069.6 992.7	242.1 246.0 233.3 246.8	68.1 68.3 68.7 76.5	696.7 712.8 767.6 669.4	255.9 263.1 254.5 177.7	440.8 449.7 513.1 491.6	851.6 895.6 882.0 597.4	-107.9 -129.6 -54.5 139.2	-47.0 -53.2 -60.0 -67.2
2009: 1 11 11 11 11 11	6,703.8 6,671.9 6,665.2	916.7 903.0 894.0 893.2	5,787.1 5,768.9 5,771.2	4,238.5 4,194.4 4,198.3 4,218.0	602.7 603.1 593.9 607.8	945.8 971.4 979.0	237.4 229.2 219.2	79.2 83.2 73.1 75.3	629.2 659.0 686.6	197.9 217.0 227 0	431.3 442.1 459.6	676.9 755.2 809.4	81.1 18.1 -17.1	-128.7 -114.2 -105.7 -104.5

¹ Estimates for nonfinancial corporate business for 2000 and earlier periods are based on the Standard Industrial Classification (SIC); later estimates are based on the North American Industry Classification System (NAICS).
² With inventory valuation and capital consumption adjustments

TABLE B-15. Gross value added and price, costs, and profits of nonfinancial corporate business, 1960-2009

	Gross valu	: ue added of		Price per u	nit of real gr	oss value ado	ded of nonfin	ancial corpor	ate business	(dollars) 1.2	
Year or quarter	nonfinancia business of do	al corporate s (billions llars)		Com- pensation of		Unit non	abor cost		Corporat valuation	e profits with and capital co adjustments	inventory unsumption 4
	Current dollars	Chained (2005) dollars	Total	employ- ees {unit labor cost}	Total	Con- sumption of fixed capital	Taxes on production and imports ³	Net inter- est and miscel- laneous payments	Total	Taxes on corporate income	Profits after tax ⁵
1960 1961 1962 1963 1964 1965 1964 1965 1966 1967 1968 1969 1969	276 4 283.7 309 8 329 9 356 1 391 2 429 0 451 2 497 8 540 5 558 3	1,075 0 1,099 2 1,193 2 1,264 9 1,354 2 1,466 7 1,571 9 1,614 3 1,719 0 1,788 5 1,774 1	0.257 .258 .260 .261 .263 .267 .273 .279 .290 .302 .315	0.168 .168 .167 .166 .167 .174 .180 .187 .200 .212	0.050 .052 .051 .050 .050 .050 049 .053 .057 .061	0 021 .022 .021 .020 .020 .020 .020 .022 .023 .024	0 026 027 026 026 026 025 026 025 026 028 030	0.003 .004 .004 .004 .004 .004 .005 .005 .007	0.039 039 042 044 046 050 049 046 046 042	0.018 017 018 018 019 019 019 019 019 019 019	0.021 .025 .026 .028 .031 .031 .029 .026 .023
1971 1972 1973 1974 1975 1976 1976 1977 1978 1978	603.0 669.4 750.8 809.8 876.7 989.7 1,119.4 1,272.7 1,414.4	1,847,3 1,988,5 2,111,0 2,077,6 2,047,1 2,214,4 2,378,5 2,534,0 2,612,4	.313 .326 .337 .356 .390 .428 .447 .471 .502 .541	.216 .223 .238 .266 .281 .294 .309 .334 .367	.002 .072 .071 .075 .087 .099 .098 .102 .106 .116	.027 .028 .028 .030 .036 .043 .044 .049 .055	.034 .034 .035 .038 .042 .042 .044 .044 .045	.009 .010 .019 .010 .013 .014 .012 .012 .013 .016	034 038 042 042 037 048 055 060 060 062	015 016 017 029 021 020 024 025 027 027	019 022 025 023 017 028 030 034 035 031
1980 1981 1982 1982 1983 1984 1985 1986 1987 1986 1987 1988 1988	1,534.5 1,742.2 1,802.6 1,929.1 2,161.4 2,293.9 2,383.2 2,551.0 2,765.4 2,899.2	2,584.7 2,687.9 2,622.6 2,746.2 2,989.4 3,120.3 3,197.9 3,364.7 3,560.4 3,618.2	.594 .648 .687 .702 .723 .735 .745 .758 .777 .801	.405 .431 .458 .460 .468 .479 .493 .493 .507 .527	136 156 173 173 172 175 185 181 184 196	.064 .072 .081 .080 .077 .078 .081 .080 .081 .081 .084	.051 .059 .062 .065 .068 .073 .073 .073 .073 .073 .073 .073 .075	.021 .025 .030 .028 .029 .029 .031 .028 .030 .030 .037	.052 .062 .057 .070 .084 .080 .069 .069 .069 .085 .085	.026 .025 .019 .022 .025 .023 .024 .028 .029 .029 .028	026 038 039 047 058 057 045 045 045 056
1990 1991 1992 1993 1994 1994 1995 1996 1997 1998 1998 1999	3.035.2 3.104.1 3.241.1 3.398.4 3.677.6 3.888.0 4.119.4 4.412.5 4.668.3 4.955.5	3,672,6 3,655,5 3,768,0 3,866,5 4,115,3 4,309,4 4,548,0 4,548,0 4,843,8 5,123,5 5,422,5	826 849 860 879 894 902 906 911 911 911	.546 .559 .571 .580 .579 .583 .579 .581 .595 .601	205 215 210 209 209 210 210 210 210 211 214	.087 .092 .091 .093 .092 .095 .096 .096 .098 .099	.079 .085 .089 .090 .093 .089 .089 .087 .084 .084	.039 .038 .030 .026 .024 .026 .025 .026 .029 .029 .030	.075 .074 .079 .090 .105 .109 .118 .121 .116 .106 .088	027 024 025 028 032 033 034 033 031 032	.049 050 054 062 073 .077 085 088 075 067
2000 2001 2002 2003 2004 2005 2006 2007 2008	5,279.4 5,252.5 5,307.7 5,503.7 5,877.5 6,302.8 6,740.3 6,970.1 6,971.5	5,707.9 5,604.6 5,629.3 5,767.4 6,040.4 6,302.8 6,536.5 6,649.4 6,675.5	.925 937 943 954 .973 1 000 1.031 1.048 1.044	.621 .635 .630 .633 .627 .631 .640 .656 .663	222 236 237 237 234 243 250 264 275	.103 .113 .116 .116 .115 .118 .123 .128 .135	.085 .088 .092 .095 .097 .101 .102 .102 .104	.034 .035 .029 .026 .022 .024 .025 .034 .036	.082 .066 .076 .084 .112 .127 .141 .127 .107	.030 .020 .017 .023 .031 .043 .047 .045 .036	052 .046 059 .061 .081 .083 .094 .082 .071
2006: I II IV	6,629.5 6,668.1 6,811.8 6,851.8	6,505.1 6,480.0 6,567.2 6,593.8	1.019 1.029 1.037 1.039	.635 .641 .637 .647	.245 .250 .250 .253	120 123 123 124	102 103 102 102	023 024 025 027	.139 .138 .150 .138	.045 .048 .050 .045	.093 .090 .100 .093
2007: 1 II IV	6,909.3 6,988.8 6,949.7 7,032.6	6,597.4 6,649.8 6,624.9 6,725.5	1.047 1.051 1.049 1.046	.654 .653 .659 .659	.258 .263 .268 .268	126 127 129 129	102 102 103 102	.030 .034 .036 .037	.135 .135 .122 .118	.047 .046 .043 .044	.087 .089 .079 .074
2008: T H IV	6,934.9 6,974.4 7,042.4 6,934.1	6,664.3 6,735.8 6,722.6 6,579.3	1.041 1.035 1.048 1.054	.665 .658 .661 .670	.271 .272 .274 .282	132 132 135 139	103 103 104 105	.036 .037 .035 .038	105 106 114 102	.038 .039 .038 .027	.066 .067 .076 .075
2009: 1	6,703.8 6,671.9 6,665.2	6,278.8 6,269.8 6,291.5	1.068 1.064 1.059	.675 .669 .667	.293 .290 .283	.146 .144 .142	.109 .109 .106	.038 .037 .035	.100 .105 .109	032 .035 .036	.069 .071 .073

[Quarterly data at seasonally adjusted annual rates]

¹ Estimates for nonfinancial corporate business for 2000 and earlier periods are based on the Standard Industrial Classification (SIC); later estimates are based on the North American Industry Classification System (NAICS). ² The implicit price deflator for gross value added of nonfinancial corporate business divided by 100.

³ Less subsidies plus business current transfer payments.

⁴ Unit profits from current production.

⁵ With inventory valuation and capital consumption adjustments.

TABLE B-16. Personal consumption expenditures, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

	Ī			Goo	ods					Adden			
			Dura	ible		Nondurable				lousehold o expen	consumptio ditures	n	dum: Personal
Year or quarter	Personal con- sump- tion expendi- tures	Total	Total ¹	Motor vehicles and parts	Total ¹	Food and bever- ages pur- chased for off- premises consump- tion	Gasoline and other energy goods	Total	Total ¹	Housing and utilities	Health care	Financial services and insur- ance	sump- tion expendi- tures exclud- ing food and energy ²
1960 1961 1962 1963 1964 1965 1966 1967 1967 1968 1969	331.8 342.2 363.3 382.7 411.5 443.8 480.9 507.8 558.0 605.1	177.0 178.8 189.0 198.2 212.3 229.7 249.6 259.0 284.6 304.7	45.6 44.2 49.5 54.2 59.6 66.4 71.7 74.0 84.8 90.5	19.6 17.7 21.4 24.2 25.8 29.6 29.9 29.6 35.4 37.4	131.4 134.6 139.5 143.9 152.7 163.3 177.9 185.0 199.8 214.2	62 6 63 7 64 7 65 9 69 5 74 4 80 6 82 6 88 8 95 4	15.8 15.7 16.3 16.9 17.7 19.1 20.7 21.9 23.2 25.0	154.8 163.4 174.4 184.6 199.2 214.1 231.3 248.8 273.4 300.4	149.5 157.9 168.7 178.6 192.5 206.9 223.5 240.4 264.0 290.4	56.7 60.3 64.5 68.2 72.1 76.6 81.2 86.3 92.7 101.0	16.0 17.1 19.1 21.0 24.2 26.0 28.7 31.9 36.6 42.1	13.6 14.8 15.4 15.9 17.7 19.4 21.3 22.8 25.8 28.5	245.1 253.8 272.9 290.0 313.8 339.3 368.1 391.1 432.9 470.8
1970 1971 1972 1973 1974 1975 1976 1977 1978 1979	648 3 701 6 770 2 852 0 932 9 1,033 8 1,151 3 1,277 8 1,427 6 1,591 2	318 8 342 1 373 8 416 6 451 5 491 3 546 3 600 4 663 6 737 9	90.0 102.4 116.4 130.5 130.2 142.2 168.6 192.0 213.3 226.3	34,5 43,2 49,4 54,4 52,6 68,2 79,8 89,2 90,2	228.8 239.7 257.4 286.1 321.4 349.2 377.7 408.4 450.2 511.6	103.5 107.1 114.5 126.7 143.0 156.6 167.3 179.8 196.1 218.4	26 3 27 6 29 4 34 3 43 8 48 0 53 0 57 8 61 5 80 4	329.5 359.5 396.4 435.4 481.4 542.5 604.9 677.4 764.1 853.2	318 4 347.2 382.8 420 7 465.0 524.4 584.9 655.6 739.6 825.4	109.4 120.0 131.2 143.5 158.6 176.5 194.7 217.8 244.3 273.4	47.7 53 7 59 8 67.2 76 1 89.0 101 8 115.7 131 2 148 8	31 1 34 1 38.3 41.5 45.9 54.0 59 3 67.8 80 6 87 6	503 3 550 1 607 9 670.9 722.4 800.6 898 3 1,002 5 1,127 8 1,245 4
1980 1981 1982 1983 1984 1985 1986 1986 1987 1987 1988	1,755.8 1,939.5 2,075.5 2,288.6 2,501.1 2,717.6 2,896.7 3,097.0 3,350.1 3,594.5	799 8 869 4 899 3 973 8 1,063 7 1,137 6 1,195 6 1,256 3 1,337 3 1,423 8	226 4 243 9 253 0 295 0 380 4 421 4 442 0 475 1 494 3	84.4 93.0 100.0 122.9 147.2 170.1 187.5 188.2 202.2 207.8	573 4 625 4 646 3 678 8 721 5 757 2 774 2 814 3 862 3 929 5	239 2 255 3 267 1 277 0 291 1 303 0 316 4 324 3 342 8 365 4	101 9 113 4 108 4 106 5 108 2 110 5 91 2 96 4 99 9 110 4	956.0 1.070.1 1.176.2 1.314.8 1.437.4 1.580.0 1.701.1 1.840.7 2.012.7 2.170.7	924 1 1,033,9 1,136,1 1,271,9 1,389,8 1,529,7 1,645,8 1,782,1 1,946,0 2,099,0	311.8 352.0 387.0 421.2 458.3 500.7 535.7 571.8 614.5 655.6	171 7 201.9 225.2 253.1 276.5 302 2 330 2 330 2 366 0 410 1	95.6 102.0 116.3 145.9 156.6 180.5 196.7 207.1 219.4 235.7	1 .358 3 1,507 1 1.627 2 1,824 2 2,016.9 2,215 1 2,401 8 2,587 3 2,813 2 3,019 8
1990 1991 1992 1993 1994 1995 1996 1996 1997 1998	3,835,5 3,980,1 4,236,9 4,483,6 4,750,8 4,987,3 5,273,6 5,570,6 5,518,5 6,342,8	1,491.3 1,497.4 1,563.3 1,642.3 1,746.6 1,815.5 1,917.7 2,006.8 2,110.0 2,290.0	497.1 477.2 508.1 551.5 607.2 635.7 676.3 715.5 780.0 857.4	205.1 185.7 204.8 224.7 249.8 255.7 273.5 293.1 320.2 350.7	994.2 1,020.3 1,055.2 1,090.8 1,139.4 1,179.8 1,241.4 1,291.2 1,330.0 1,432.6	391 2 403.0 404.5 413.5 432.1 443.7 461.9 474.8 486.5 513.6	124.2 121.1 125.0 126.9 129.2 133.4 144.7 147.7 133.4 148.8	2.344.2 2.673.6 2.673.6 3.004.3 3.171.7 3.355.9 3.563.9 3.808.5 4.052.8	2,264,5 2,398,4 2,581,3 2,746,6 2,901,9 3,064,6 3,240,2 3,451,6 3,677,5 3,907,4	696 4 735 5 771 2 814 5 866 5 913 8 961 2 1,009 9 1,065 2 1,125 0	506 2 555 8 612 8 648 6 680 5 719 9 752 1 790 9 832 0 863 6	253.2 282.0 311.8 341.0 364.7 393.6 431.3 469.6 514.2	3,221 3 3,351 1 3,601 1 3,828 2 4,072 3 4,291 9 4,542 0 4,821 6 5,173 5 5,554 6
2000 2001 2002 2003 2004 2005 2006 2007 2006 2007 2008 2007 2008	6.830 4 7,148.8 7,439 2 7,804 0 8,285.1 8,819.0 9,322.7 9,826 4 10,129.9 10,092 6	2,233,6 2,459,1 2,534,0 2,610,0 2,727,4 2,892,3 3,073,9 3,221,7 3,365,0 3,403,2 3,257,6	915 8 946.3 992 1 1.014.8 1.061.6 1.105 5 1.133.0 1.160 5 1.095.2 1.034 4	363.2 363.2 383.3 401.3 401.5 409.6 397.1 400.3 342.3 312.6	1,543 4 1,587.7 1,617.9 1,712.6 1,830.7 1,968 4 2,088.7 2,204.5 2,308.0 2,223 3	537.5 559.7 569.6 593.1 628.2 665.0 698.0 740.1 784.3 790.1	188 8 183.6 174.6 209.6 249.9 304 8 336.9 336.9 336.9 336.9 307.4	4.371.2 4.614.8 4.829.2 5.076 6 5.392 8 5.745.1 6.461.4 6.726.8 6.835.0	4,205.9 4,428.6 4,624.2 4,864.8 5,182.8 5,531.0 5,860.6 6,207.9 6,448.0 6,569.7	1,198.6 1,287.7 1,334.8 1,393.8 1,462.2 1,582.8 1,686.0 1,763.1 1,843.7 1,878.3	918 4 996 6 1,082 9 1,149 3 1,229 7 1,316 0 1,380 7 1,469 6 1,554 2 1,626 0	570 0 562 8 576.2 601 8 667.5 712.6 752 4 824 2 835.6 828 5	5,966,4 6,255,9 6,549,4 6,840,9 7,238,8 7,658,8 8,086,9 8,508,2 8,508,2 8,709,1 8,709,1 8,782,2
2006 I II IV	9,148.2 9,266.6 9,391.8 9,484.1	3,180.8 3,206.5 3,250.5 3,250.5 3,249.1	1,132.5 1,125.1 1,132.4 1,132.4	395.5 394.5 400.4 398.1	2,048.3 2,081.4 2,118.1 2,106.9	684.9 692.3 699.8 714.8	324.5 343.3 363.3 316.7	5,967.4 6,060.1 6,141.3 6,235.0	5,740.2 5,822.9 5,893.1 5,986.2	1,645.8 1,677.0 1,705.7 1,715.3	1,360.6 1,374.4 1,383.6 1,404.4	733 4 745 0 753 0 778 1	7,941.2 8,029 5 8,122.1 8,254 8
2007: V	9,658.5 9,762.5 9,865.6 10,019.2	3,306 3 3,338 2 3,366 6 3,448 9	1,153.0 1,154.9 1,161.4 1,172.7	399.6 401.3 398.3 401.9	2,153.3 2,183.3 2,205.2 2,276.2	727.1 732.1 742.7 758.4	335.2 362.4 365.4 408.8	6,352.2 6,424.3 6,499.0 6,570.3	6.103.7 6.179.5 6.242.8 6.305.8	1,741.4 1,755.8 1,770.4 1,784.8	1,442.9 1,458.4 1,475.2 1,501.7	799.3 819.5 835.3 842.8	8,386.4 8,456.4 8,545.7 8,644.3
2008: I II IV	10.095.1 10.194.7 10.220.1 10.009.8	3,447 2 3,474 9 3,463 0 3,227 5	1,145.8 1,126.5 1,088.5 1,019.9	382.7 357.5 332.7 296.4	2,301.4 2,348.4 2,374.5 2,207.6	770.1 786.3 793.4 787.5	427.8 441.9 461.4 321.2	6,647.9 6,719.8 6,757.1 6,782.3	6,377.5 6,446 1 6,474.5 6,494.1	1.811.9 1.838.6 1.852.2 1.872.1	1,531.6 1,551.0 1,559.3 1,574.9	839.6 842 1 837.3 823.5	8,681.9 8,741 8,741.8 8,671.4
2009: I II IV P	9,987.7 9,999.3 10,132.9 10,250.5	3,197 7 3,193 8 3,292 3 3,346 8	1.025.2 1.011.5 1.051.3 1.049.3	300.6 299.5 331.7 318.5	2,172.4 2,182.2 2,241.0 2,297.5	786.5 786.3 789.4 798.0	271.0 279.4 324.4 354.9	6,790.0 6,805.6 6,840.6 6,903.7	6,522.0 6,545.9 6,575.7 6,635.3	1,878 8 1,871 1 1,872 5 1,890 6	1,598 0 1,622 6 1,633.0 1,650.3	816 7 824.9 832 4 839 8	8,705.8 8,727 9 8,816.0 8,878 3

Includes other items not shown separately

2 Food consists of food and beverages purchased for off-premises consumption, food services, which include purchased meals and beverages, are not classified as food

				Go	ods					Services			Adden-
	Demonal		Dura	able		Nondurable				Household (expen	consumptio ditures	'n	dum: Personal
Year or quarter	con- sump- tion expendi- tures	Total	Total ¹	Motor vehicles and parts	Total ¹	Food and bever- ages pur- chased for off- premises consump- tion	Gasoline and other energy goods	Totał	Total ¹	Housing and utilities	Health care	Financial services and insur- ance	sump- tion expendi- tures exclud- ing food and energy ²
1995	6.079.0	1,898.6	511.6	255.6	1,437.8	548.5	264.3	4,208.2	4,068.6	1,234.9	947.5	489.4	5,126.4
1996	6,291.2	1,983.6	549.8	268.0	1,479.4	554.0	268.5	4,331.4	4,183.3	1,261.7	967.1	507.8	5,321.9
1997	6,523.4	2,078.2	594.7	286.1	1,522.9	558.9	273.9	4,465.0	4,327.2	1,290.4	997.1	525.2	5,543.3
1998	6,865.5	2,218.6	667.2	316.1	1,580.3	565.5	283.8	4,661.8	4,510.6	1,329.8	1,029.5	558.6	5,862.9
1998	7,240.9	2,395.3	753.8	345.1	1,660.9	587.4	292.5	4,852.8	4,690.4	1,371.8	1,045.6	605.6	6,202.5
2000 2001 2002 2003 2004 2005 2006 2006 2007 2008 2009 ^p	7,608 1 7,813 9 8,021 9 8,247,6 8,532 7 8,819,0 9,073 5 9,313,9 9,290,9 9,237 3	2,521.7 2,600.9 2,706.6 2,829.9 2,955.3 3,073.9 3,173.9 3,273.7 3,206.0 3,143.7	819 9 864 4 930 0 986 1 1,051 0 1,105 5 1,150 4 1,199 9 1,146 3 1,100 5	356.1 374.3 394.0 405.3 411.3 409.6 396.6 402.4 347.5 316.8	1,714.7 1,745.6 1,780.2 1,845.6 1,904.6 1,968.4 2,023.6 2,074.8 2,057.3 2,037.3	500.6 607.6 609.0 622.4 639.2 665.0 686.2 700.7 700.7 697.1	287.1 289.2 294.0 302.2 306.5 304.8 298.4 300.7 287.4 292.7	5.093.3 5.218.7 5.318.1 5.418.4 5.577.6 5.745.1 5.899.7 6.040.8 6.083.1 6.090.5	4,917.8 5,028.8 5,109.3 5,199.0 5,359.3 5,531.0 5,664.4 5,796.1 5,817.6 5,833.9	1,413.7 1,451.5 1,462.0 1,480.2 1,512.8 1,582.8 1,616.7 1,631.8 1,647.2 1,657.6	1,081.5 1,135.4 1,202.3 1,229.4 1,268.6 1,316.0 1,340.0 1,375.5 1,416.4 1,446.2	665.4 660.7 658.3 657.8 691.8 712.6 735.4 772.3 759.8 758.7	6,548.6 6,745.7 6,941.9 7,142.0 7,402.6 7,658.8 7,905.7 8,126.3 8,123.6 8,069.3
2006:	8.986.6	3,145.7	1,142.3	393.3	2,003.7	676.7	296.4	5,841.0	5,618.2	1,598.9	1,337.3	726.0	7,837.8
	9.035.0	3,150.8	1,139.4	393.2	2,011.6	684.2	297.2	5,884.2	5,652.1	1,617.8	1,339.2	731.3	7,868.0
	9.090.7	3,176.4	1,152.1	400.3	2,024.5	686.6	300.0	5,914.3	5,671.4	1,627.6	1,335.8	735.6	7,914.3
V	9.181.6	3,222.5	1,167.9	399.7	2,054.7	697.5	299.9	5,959.4	5,716.0	1,622.5	1,347.7	748.8	8,002.8
2007: I	9,265.1	3,253.9	1,183.7	402.4	2,070.3	700.8	301.5	6,011.7	5,770.8	1,629.3	1,365.1	762.8	8,074.9
II	9,291.5	3,255.4	1,189.9	404.1	2,066.1	696.2	301.3	6,036.2	5,799.2	1,630.1	1,371.7	776.7	8,106.7
III	9,335.6	3,280.6	1,205.0	400.5	2,076.8	699.2	301.5	6,055.5	5,809.8	1,634.6	1,377.6	779.1	8,146.4
IV	9,363.6	3,304.8	1,221.2	402.6	2,086.0	706.6	298.5	6,059.7	5,804.8	1,633.1	1,387.6	770.5	8,177.1
2008: 1	9,349.6	3,262.1	1,193.2	384.4	2,070.1	708.0	292.6	6,087.1	5,827.3	1,643.8	1,409.0	766.1	8,164.7
II	9,351.0	3,257.8	1,175.7	361.4	2,081.4	708.9	289.9	6,092.5	5,831.2	1,647.3	1,418.2	763.8	8,170.8
III	9,267.7	3,193.6	1,139.6	337.8	2,051.5	699.6	280.1	6,072.4	5,805.2	1,641.6	1,416.1	758.5	8,120.1
IV	9,195.3	3,110.4	1,076.8	306.2	2,026.1	686.4	287.2	6,080.4	5,806.6	1,656.3	1,422.4	750.6	8,038.7
2009:	9,209.2	3,129.8	1,087.2	311.2	2,035.5	687.4	293.2	6,076.0	5,817.2	1,656.9	1,434.3	751.4	8,047.7
	9,189.0	3,105.4	1,071.7	306.2	2,025.7	693.5	294.0	6,078.8	5,826.7	1,651.8	1,448.2	756.1	8,028.2
	9,252.6	3,159.6	1,122.7	335.2	2,033.3	700.1	292.7	6,090.6	5,834.3	1,654.0	1,448.6	761.8	8,086.3
V p	9,298.5	3,180.0	1,120.3	314.7	2,054.6	707.3	290.7	6,116.4	5,857.2	1,667.8	1,453.7	765.5	8,115.1

TABLE B-17. Real personal consumption expenditures, 1995-2009

[Billions of chained (2005) dollars; quarterly data at seasonally adjusted annual rates]

¹ Includes other items not shown separately.
² Food consists of food and beverages purchased for off-premises consumption; food services, which include purchased meals and beverages, are not classified as food.

Note: See Table B-2 for data for total personal consumption expenditures for 1960-94.

TABLE B-18. Private fixed investment by type, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

	Nonresidential												Residential	
						Eq	uipment a	nd softwa	re				Struc	tures
Year or quarter	Private	Total			Informa	ation proce and sol	ssing equ Itware	ipment				Total		
Year or quarter	invest- ment	non- resi- den- tial	Struc- tures	Total	Total	Com- puters and periph- eral equip- ment	Soft- ware	Other	Indus- trial equip- ment	Trans- por- tation equip- ment	Other equip- ment	resi- den- tial	Total ¹	Single family
1960 1961 1962 1963 1964 1965 1966 1965 1966 1967 1968 1969	75 7 75 2 82 0 88 1 97 2 109 0 117 7 118 7 132 1 147 3	49.4 48.8 53.1 56.0 63.0 74.8 85.4 86.4 93.4 104.7	19.6 19.7 20.8 21.2 23.7 28.3 31.3 31.5 33.6 37.7 40.2	29.8 29.1 32.3 34.8 39.2 46.5 54.0 54.9 59.9 67.0	4.9 5.3 5.7 6.5 7.4 8.5 10.7 11.3 11.9 14.6	0.2 .3 .7 .7 1.2 1.7 1.9 1.9 1.9 2.4 2.4	0.1 2 .4 5 7 1.0 1.2 1.3 1.8 2.3	46 48 51 54 59 67 80 82 87 104	94 88 93 10.0 11.4 13.7 16.2 16.9 17.3 19.1 20.3	8.5 8.0 9.8 9.4 10.6 13.2 14.5 14.3 17.6 18.9 16.2	7.1 7.0 7.5 8.8 9.9 11.0 12.7 12.4 13.0 14.4 15.6	26.3 26.4 29.0 32.1 34.3 34.2 32.3 32.4 38.7 42.6 41.4	25.8 25.9 28.4 31.5 33.6 33.5 31.6 31.6 37.9 41.6	14.9 14.1 15.1 17.6 17.6 16.6 16.8 19.5 19.7
1970 1971 1972 1973 1974 1975 1976 1976 1977 1978 1979	169.9 198.5 228.6 235.4 236.5 274.8 339.0 412.2 474.9	114 1 128.8 153.3 169.5 173.7 192.4 228.7 280.6 333.9	40.3 42 7 47.2 55.0 61.2 61 4 65 9 74 6 93.6 117 7	71.5 81.7 98.3 108.2 112.4 126.4 154.1 187.0 216.2	17.3 19.5 23.1 27.0 28.5 32.7 39.2 48.7 58.5	2.7 2.8 3.5 3.9 3.6 4.4 5.7 7.6 10.2	2.3 2.4 2.8 3.9 4.8 5.2 5.5 6.3 8.1	12.2 13.2 16.3 19.2 20.2 23.1 28.0 34.8 40.2	20.3 19.5 21.4 26.0 30.7 31.3 34.1 39.4 47.7 56.2	18.4 21.8 26.6 26.3 25.2 30.0 39.3 47.3 53.6	16.3 19.0 22.6 24.3 27.4 29.6 36.3 43.2 47.9	55.8 69.7 75.3 66.0 62.7 82.5 110.3 13*6 14*0	54.5 68 1 73.6 64.1 60.8 80.4 107 9 128.9 137 8	25.8 32.8 35.2 29.7 29.6 43.9 62.2 72.8 72.8 72.3
1980	485.6 542.6 532.1 570.1 670.2 714.4 739.9 757.8 803.1 847.3	362.4 420.0 426.5 417.2 489.6 526.2 519.8 524.1 563.8 607.7	136.2 167 3 177.6 154.3 177.4 194.5 176.5 174.2 182.8 193.7	226.2 252.7 248.9 262.9 312.2 331.7 343.3 349.9 381.0 414.0	68.8 81.5 88.3 100.1 121.5 130.3 136.8 141.2 154.9 172.6	12.5 17.1 18.9 23.9 31.6 33.7 33.4 35.8 38.0 43.1	98 118 140 164 204 238 256 290 342 419	46.4 52.5 55.3 69.6 72.9 77.7 76.4 82.8 87.6	60.7 65.5 62.7 58.9 68.1 72.5 75.4 76.7 84.2 93.3	48.4 50.6 46.8 53.5 64.4 69.0 70.5 68.1 72.9 67.9	48.3 55.2 51.2 50.4 58.1 59.9 60.7 63.9 69.0 80.2	123 2 122 6 105 7 152 9 180 6 188 2 220 1 233 7 239 3 239 5	119.8 118.9 102.0 148.6 175.9 183.1 214.6 227.9 233.2 233.4	52 9 52 0 41.5 72.5 86.4 87.4 104.1 117.2 120.1 120.9
1990 1991 1992 1993 1994 1994 1995 1996 1997 1998 1999 1998	846.4 803.3 848.5 932.5 1,033.5 1,112.9 1,209.4 1,317.7 1,447.1 1,580.7	622.4 598.2 612.1 666.6 731.4 810.0 875.4 968.6 1,061.1 1 154.9	202 9 183.6 172.6 177.2 186.8 207.3 224.6 250.3 275.1 283.9	419.5 414.6 439.6 489.4 544.6 602.8 650.8 718.3 786.0 871.0	177.2 182.9 199.9 217.6 235.2 263.0 290.1 330.3 366.1 417.1	38.6 37.7 44.0 47.9 52.4 66.1 72.8 81.4 87.9 97.2	47.6 53.7 57.9 64.3 68.3 74.6 85.5 107.5 126.0 157.3	90.9 91.5 98.1 105.4 114.6 122.3 131.9 141.4 152.2 162.5	92.1 89.3 93.0 102.2 113.6 129.0 136.5 140.4 147.4 149.1	70.0 71.5 74.7 89.4 107.7 116.1 123.2 135.5 147.1 174.4	80.2 70.8 72.0 80.2 88.1 94.7 101.0 112.1 125.4 130.4	224.0 205.1 236.3 266.0 302.1 302.9 334.1 349.1 385.9 425.8	218.0 199.4 230.4 259.9 295.9 1 296.5 327.7 342.8 379.2 418.5	112.9 99.4 122.0 140.1 162.3 153.5 170.8 175.2 199.4 223.8
2000 2001 2002 2002 2003 2004 2005 2006 2007 2008 2009 P	1,717,7 1,700,2 1,634,9 1,713,3 1,903,6 2,122,3 2,267,2 2,269,1 2,170,8 1,747,9	1,268.7 1,227.8 1,125.4 1,135.7 1,223.0 1,347.3 1,505.3 1,640.2 1,693.6 1,386.6	318.1 329.7 282.8 281.9 306.7 351.8 433.7 535.4 609.5 480.7	950.5 898.1 842.7 853.8 916.4 995.6 1,071.7 1,104.8 1,084.1 906.0	478.2 452.5 419.8 430.9 455.3 475.3 505.2 537.4 562.9 519.9	103 2 87 6 79 7 77 6 80 2 78 9 84.9 89 2 86 7 74 7	184.5 186.6 183.0 191.3 205.7 218.0 229.8 245.6 264.1 241.8	190.6 178.4 157.0 162.0 169.4 178.4 190.6 202.5 212.1 203.4	162.9 151.9 141.7 142.6 142.0 159.6 178.4 193.2 193.8 150.4	170.8 154.2 141.6 132.9 161.1 181.7 198.2 181.7 132.3 72.4	138.6 139.5 139.6 147.5 157.9 178.9 189.8 192.6 195.1 163.2	449.0 472.4 509.5 577.6 680.6 775.0 761.9 629.0 477.2 361.3	441.2 464.4 501.3 569.1 671.4 765.2 751.6 618.6 467.2 352.0	236.8 249.1 265.9 310.6 377.6 433.5 416.0 305.2 185.8 105.2
2006: I II IV	2,270,6 2,279,7 2,264,4 2,254,2	1,457.2 1,495.3 1,522.7 1,546.1	396.8 428.6 447.6 461.7	1,060.5 1,066.7 1,075.1 1,084.4	498.7 500.5 510.1 511.6	84.0 84.1 86.7 84.8	223.3 227.5 232.1 236.2	191.4 188.9 191.4 190.5	168.0 180.7 181.4 183.7	203.8 195.5 195.3 198.2	190.0 190.0 188.2 191.0	813.3 784.4 741.7 708.1	803.0 774.2 731.4 697.8	465.6 435.2 398.7 364.5
2007 	2,254 1 2,278.6 2,280.8 2,263.0	1,574,1 1,623,5 1,665,2 1,697,9	489.5 519.9 556.1 575.9	1,084.6 1,103.5 1,109.1 1,122.0	525.1 530.1 538.4 555.8	88.8 86.9 88.2 93.1	238.3 242.6 246.7 254.8	197.9 200.6 203.6 208.0	182.1 198.8 199.0 192.9	192.3 183.0 176.5 175.1	185.2 191.6 195.2 198.2	680.0 655.1 615.6 565.2	669.6 644.8 605.3 554.8	339.8 324.0 298.0 259.1
2008: I II IV	2,223.0 2,214.0 2,179.7 2,066.6	1,705.0 1,719.7 1,711.0 1,638.7	586.3 610.6 620.4 620.7	1,118.7 1,109.2 1,090.6 1,018.0	566.3 576.2 568.8 540.2	93.7 92.9 84.3 75.8	263.2 268.0 266.4 258.7	209.5 215.3 218.1 205.6	195.3 197.3 194.8 187.9	164.3 143.8 125.9 95.3	192.7 192.0 201.1 194.7	518.1 494.2 468.6 427.8	507.9 484.0 458.7 418.3	220.5 197.4 176.0 149.1
2009: I II IV P	1,817.2 1,737.7 1,712.6 1,724.0	1,442.6 1,391.8 1,353.9 1,358.2	533.1 494.8 457.9 436.8	909.5 897.0 895.9 921.5	508.3 512.2 519.0 540.3	71.1 72.0 72.5 83.3	240.5 240.2 241.4 245.1	196.7 200.1 205.1 211.9	157.8 151.4 146.5 145.9	65.4 70.6 73.2 80.5	178.0 162.7 157.2 154.8	374.6 345.9 358.8 365.7	365.2 336.8 349.6 356.5	111.8 93.1 105.2 110.9

¹ Includes other items not shown separately.

TABLE B-19. Real private fixed investment by type, 1995-2009

									_					
						Nonresi	dential					1	Residentia	ti -
						Eq	uipment a	nd softwa	re				Struc	tures
	Private	Total			Informa	ation proce and so	ssing equ Itware	ipment				i Total	i	
Year or quarter	invest- ment	non- i resi- den- tial i	Struc- tures	Total	Total	Com- puters and periph- eral equip- ment ¹	Soft- ware	Other	Indus- trial equip- ment	Trans- por- tation equip- ment	Other equip- ment	tial ²	Total ²	Single family
1995 1996 1997 1998 1998	1,235.7 1,346.5 1,470.8 1,630.4 1,782.1	792.2 866.2 970.8 1,087.4 1,200.9	342.0 361.4 387.9 407.7 408.2	493.0 545.4 620.4 710.4 810.9	149.5 179.1 220.8 271.1 332.0		66.9 78.5 101.7 122.8 151.5	93.7 102.7 111.5 125.5 139.9	145.5 150.9 154.1 160.8 161.8	131.5 136.8 148.2 162.0 190.3	110.6 114.8 125.9 138.8 142.4	456.1 492.5 501.8 540.4 574.2	450.1 486.8 496.3 534.5 567.5	240.2 262.4 261.6 290.1 311.5
2000	1,913.8 1,877.6 1,798.1 1,856.2 1,992.5 2,122.3 2,171.3 2,126.3 2,018.4 1,646.7	1,318.5 1,281.8 1,180.2 1,191.0 1,263.0 1,347.3 1,453.9 1,544.3 1,569.7 1,289.1	440.0 433.3 356.6 343.0 346.7 351.8 384.0 441.4 486.8 391.0	895.8 866.9 830.3 851.4 917.3 995.6 1.069.6 1.097.0 1.068.6 887.9	391.9 390.2 379.3 405.0 443.1 475.3 514.8 555.7 588.8 553.7		172.4 173.7 173.4 185.6 204.6 218.0 227.1 241.5 257.0 238.3	168.4 163.2 148.4 156.4 168.1 178.4 191.2 202.3 211.1 202.3	175.8 162.8 151.9 151.6 147.4 159.6 172.9 180.9 174.7 133.9	186.2 169.6 154.2 140.4 162.3 181.7 196.5 177.4 128.9 66.1	150.4 149.3 148.2 155.0 164.4 178.9 185.5 184.1 180.3 144.8	580.0 583.3 613.8 664.3 729.5 775.0 718.2 585.0 451.1 359.1	572.6 575.6 605.9 655.9 720.1 765.2 708.1 575.0 441.5 350.0	315.0 315.4 327.7 362.6 406.1 433.5 391.1 283.9 179.7 108.8
2006:	2,200.2 2,189.9 2,162.2 2,132.9	1,424.9 1,450.3 1,466.0 1,474.5	364.8 383.7 393.2 394.6	1,060.7 1,066.3 1,072.0 1,079.3	505.7 508.9 520.4 524.1		222.4 224.8 228.5 232.8	192.2 189.8 191.9 191.0	165.1 176.2 174.7 175.6	202.6 194.1 193.7 195.5	187.3 187.0 183.4 184.3	775.2 740.1 697.4 660.2	764.9 730.0 687.3 650.2	442.4 409.4 374.6 338.0
2007: I II III IV	2,118.8 2,137.7 2,135.6 2,113.0	1,489.6 1,530.3 1,565.8 1,591.3	409.2 430.7 456.8 469.1	1,078.1 1,095.2 1,101.3 1,113.3	540.2 546.9 558.2 577.5		235.0 238.9 242.6 249.6	198.4 200.3 203.1 207.4	172.4 186.9 185.9 178.6	188.2 178.1 171.8 171.5	178.3 183.7 186.4 188.0	631.7 610.4 572.9 525.0	621.6 600.4 562.9 515.0	314.0 301.6 277.9 242.1
2008: I II III IV	2,079.2 2,064.8 2,020.4 1,909.3	1,598.9 1,604.4 1,579.2 1,496.1	476.8 493.2 493.1 484.0	1,111.9 1,097.7 1,071.0 993.7	591.7 601.3 594.5 567.6		257.3 260.3 258.3 252.2	209.2 214.2 216.7 204.3	179.3 178.6 173.7 167.2	161.9 141.0 121.7 90.9	182.3 180.9 185.4 172.6	483.2 462.9 443.3 415.0	473.3 453.0 433.7 405.8	208.6 189.1 171.8 149.4
2009: I II III IV.P	1,687.5 1,631.9 1,626.7 1,640.6	1,321.2 1,288.4 1,269.0 1,278.1	419.4 400.0 380.2 364.6	887.5 876.5 879.8 907.7	537.5 544.8 554.9 577.6		235.5 236.2 239.2 242.2	195.8 199.1 203.9 210.5	140.8 135.2 130.4 129.2	59.8 62.7 66.0 76.0	157.3 144.0 140.1 137.9	367.9 344.4 359.6 364.6	358.9 335.5 350.5 355.2	112.9 96.3 110.4 115.5

[Billions of chained (2005) dollars; quarterly data at seasonally adjusted annual rates]

¹ For information on this component, see *Survey of Current Business* Table 5.3.6, Table 5.3.1 (for growth rates), Table 5.3.2 (for contributions), and Table 5.3.3 (for quantity indexes). ² Includes other items not shown separately.

TABLE B-20. Government consumption expenditures and gross investment by type, 1960-2009

					Governme	nt consum	ption expe	enditures a	and gross i	nvestmen	t			
						Federal						State a	nd local	
				National	defense			Nonde	etense				Gross in	vestment
Year or quarter	Total				Gross inv	/estment			Gross inv	restment		Con-		
	lütai	Total	Total	Con- sump- tion expen- ditures	Struc- tures	Equip- ment and soft- ware	Total	Con- sump- tion expen- ditures	Struc- tures	Equip- ment and soft- ware	Total	sump- tion expen- ditures	Struc- tures	Equip- ment and soft- ware
1960	111.5 119.5 130.1 136.4 143.2 151.4 171.6 192.5 209.3 221.4	64.1 67.9 75.2 76.9 78.4 80.4 92.4 104.6 111.3 113.3	53.3 56.5 61.1 61.0 60.6 71.7 83.4 89.2 89.5	41.0 42.7 46.6 48.3 48.8 50.6 59.9 69.9 77.1 78.1	2.2 2.4 2.0 1.6 1.3 1.1 1.3 1.2 1.2 1.5	10.1 11.5 12.5 11.0 10.2 8.9 10.5 12.3 10.9 9.9	10.7 11.4 14.1 15.9 18.2 19.8 20.8 21.2 22.0 23.8	8.7 9.0 11.3 12.4 14.0 15.1 15.9 17.0 18.2 20.2	1.7 1.9 2.1 2.3 2.5 2.8 2.8 2.8 2.2 2.1 1.9	0.3 .6 .8 1.2 1.6 1.9 2.1 1.9 2.1 1.9 1.7	47.5 51.6 59.5 64.8 71.0 79.2 87.9 98.0 108.2	33.5 36.6 39.0 41.9 45.8 50.2 56.1 62.6 70.4 79.8	12 7 13.8 14.5 16.0 17.2 19.0 21.0 23.0 25.2 25.6	1.2 1.3 1.5 1.8 1.9 2.1 2.3 2.4 2.7
1970	233.7 246.4 263.4 281.7 317.9 357.7 383.0 414.1 453.6 500.7	113.4 113.6 119.6 122.5 134.5 149.0 159.7 175.4 190.9 210.6	87.6 84.6 86.9 88.1 95.6 103.9 111.1 120.9 130.5 145.2	76.5 77.1 79.5 79.4 84.5 90.9 95.8 104.2 112.7 123.8	1.3 1.8 2.1 22 23 21 24 25 2.5	9.8 5.7 6.6 8.9 10.7 13.2 14.4 15.3 18.9	25.8 29.1 32.7 34.3 39.0 45.1 48.6 54.5 60.4 65.4	22.1 24.9 28.2 29.4 33.4 38.7 41.4 46.5 50.6 55.1	2.1 2.5 2.7 3.1 3.4 4.1 4.6 5.0 6.1 6.3	1.7 1.7 1.8 1.8 2.2 2.4 2.7 3.0 3.7 4.0	120.3 132.8 143.8 159.2 183.4 208.7 223.3 238.7 262.7 290.2	91 5 102 7 113 2 126.0 143 7 165.1 179.5 195 9 213 2 233 3	25.8 27.0 27.1 29.1 34.7 38.1 38.1 36.9 42.8 49.0	3.0 3.1 3.5 4.1 4.9 5.5 5.7 5.9 6.6 7.8
1980	566 1 627 5 680 4 733 4 796 9 878 9 949 3 999 4 1,038 9 1,100 6	243.7 280.2 310.8 342.9 374.3 412.8 438.4 459.5 461.6 481.4	168.0 196.2 225.9 250.6 281.5 311.2 330.8 350.0 354.7 362.1	143 7 167 3 191 1 208 7 232 8 253 7 267 9 283 6 293 5 299 4	3.2 3.2 4.0 4.8 4.9 6.2 6.8 7.7 7.4 6.4	21.1 25.7 30.8 37.1 43.8 51.3 56.1 58.8 53.9 56.3	75.8 83.9 92.3 92.7 101.6 107.6 109.6 106.8 119.3	63.8 71.0 72.1 77.7 77.1 84.7 90.1 90.1 88.3 99.1	7.1 7.7 6.8 6.7 7.0 7.3 8.0 9.0 6.8 6.9	4.9 5.3 6.0 7.8 8.7 9.6 9.5 10.4 11.7 13.4	322.4 347.3 369.7 390.5 422.6 466.1 510.9 539.9 577.3 619.2	258.4 282.3 304.9 324.1 347.7 381.8 418.1 441.4 471.0 504.5	55.1 55.4 54.2 60.5 67.6 74.2 78.8 84.8 88.8	8 9 95 10.6 12.2 14.4 16.8 18.6 19.6 21.5 26.0
1990 1991 1992 1992 1993 1994 1995 1996 1997 1998 1999	1,181,7 1,236,1 1,273,5 1,294,8 1,329,8 1,374,0 1,421,0 1,474,4 1,526,1 1,631,3	507.5 526.6 532.9 525.0 518.6 518.8 527.0 531.0 531.0 531.0 554.9	373 9 383 1 376 8 363 0 353 8 348 8 354 8 349 8 349 1 361 1	308.0 319.7 315.2 307.5 300.8 297.0 303.2 304.5 300.3 313.0	6.1 4.6 5.2 5.3 5.8 6.7 6.3 6.1 5.8 5.4	59.8 58.8 56.3 50.1 47.2 45.1 45.4 39.2 39.9 42.8	133 6 143 4 156 1 162 0 164 8 170 0 172 2 181 1 184 9 193 8	111 0 1186 1289 1337 1399 1432 1434 153.0 154.3 160.3	8.0 9.2 10.3 11.2 10.2 10.8 11.3 9.9 10.8 10.7	14.6 15.7 16.9 17.0 14.7 16.0 17.5 18.2 19.9 22.7	674 2 709 5 740 6 769 8 811 2 855 3 894 0 943 5 995 0 1,076 3	547.0 577.5 606.2 634.2 668.2 701.3 730.2 764.5 808.6 870.6	98 5 103 2 104 2 104 5 108 7 117 3 126 8 139 5 143 6 159 7	28.7 28 9 30 1 31 2 34 3 36 7 36 9 39 4 42 9 46 1
2000 2001 2002 2003 2004 2005 2006 2006 2007 2008 2008 2009 p	1,731 0 1,846 4 1,983 3 2,112 6 2,232 8 2,369 9 2,518 4 2,676 5 2,883 2 2,933 3	576.1 611.7 680.6 756.5 824.6 876.3 931.7 976.7 1.082.6 1.144.9	371 0 393 0 437 7 497 9 550.8 589.0 624 9 662.1 737 9 779 1	321 8 342 0 380 7 435 2 481 2 514 8 543 9 574 9 634 0 666.8	5.4 5.8 7.3 7.1 7.5 8.1 10.5 12.9 16.7	43.8 45.6 51.2 55.4 62.4 66.8 72.9 76.8 91.0 95.5	205 0 218.7 242 9 258.5 273 9 287 3 306.8 314 5 344.7 365 8	174.2 188 1 209.8 225.1 240.2 251.0 267.1 273 9 300 4 320.0	83 81 99 103 91 83 95 11.1 11.7 13.2	22.6 22.5 23.2 23.1 24.6 28 0 30.2 29.5 32.5 32.5	1,154,9 1,234,7 1,302,7 1,356,1 1,408,2 1,493,6 1,586,7 1,699,8 1,800,6 1,788,4	930 6 994 2 1,049 4 1,096 5 1,139 1 1,212 0 1,282 3 1,366 1 1,452 4 1,430 9	176 0 192 3 205 8 211 8 220 2 230 8 249 9 277 2 290 9 301 9	48.3 48.2 47.5 47.8 48.9 50.8 54.5 56.4 57.3 55.5
2006 [.] V	2,474.5 2,510.5 2,533.3 2,555.2	928.5 930.3 932.2 935.9	615 5 624.1 623 3 636 6	538.3 541.2 543.7 552.3	7.5 8.0 7.8 8.9	69.7 74.8 71.8 75.4	313.0 306.2 308.9 299.3	272.1 267.2 269.4 259.8	8.6 9.2 9.3 10.8	32.3 29.7 30.2 28.7	1,546.1 1,580.2 1,601.2 1,619.4	1,254.5 1,274.6 1,292.7 1,307.6	238.4 251.3 253.6 256.3	53.2 54.3 54.9 55.5
2007 [.]	2,599.3 2,657.4 2,700.9 2,748.3	942.8 968.1 991.4 1,004.3	636.7 656.6 674.4 680.8	554.3 568.8 585.1 591.4	95 10.9 105 10.9	73.0 76.9 78.8 78.5	306.1 311.6 317.0 323.6	266.8 271.2 275.6 282.1	10.4 10.9 11.7 11.3	28.8 29.5 29.7 30.2	1,656.5 1,689.3 1,709 5 1,743.9	1,331.2 1,357.3 1,373.6 1,402.5	269.4 275.7 279.4 284.5	56.0 56.3 56.5 56.9
2008: 1	2,808,4 2,877,1 2,941,4 2,905,9	1,038.3 1,069.5 1,108.3 1,114.3	703 6 725 6 763 6 758 9	609.7 622.4 655.2 648.8	11.5 12.1 13.0 14.8	82.4 91.1 95.3 95.3	334.8 343.9 344.7 355.3	293.5 300.8 300.7 306.6	10.4 11.1 12.3 13.2	30.9 32.0 31.7 35.6	1,770.1 1,807 6 1,833 1 1,791.7	1,429.3 1,458.3 1,480.4 1,441.7	283.5 291.5 295.4 293.2	57.3 57.7 57.3 56.8
2009: I	2,879.0 2,929.4 2,955.4 2,969.5	1,106.7 1,138.3 1,164.3 1,170.4	750.7 776.2 795.8 793.8	642.9 662.7 679.3 682.4	15.8 16.4 18.5 16.3	91 9 97 2 98 0 95 1	356.0 362.1 368.5 376.5	311.3 316.4 321.9 330.3	13.2 13.2 13.3 13.0	31.5 32.4 33.2 33.2	1,772.3 1,791.2 1,791.1 1,799.1	1,424.4 1,429.9 1,429.8 1,439.7	292.5 305.8 305.9 303.5	55.4 55.4 55.4 55.9

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

TABLE B-21. Real government consumption expenditures and gross investment by type,1995-2009

						Governme	nt consum	otion expe	nditures a	and gross i	nvestmen	t			
							Federal					_	State a	nd local	
		į			National	defense			Nonda	efense				Gross inv	vestment
Year or qua	rter	Total			Con	Gross inv	estment	ĺ	Con	Gross inv	estment		Con-		Fauin
			Total	Total	sump- tion expen- ditures	Struc- tures	Equip- ment and soft- ware	Total	sump- tion expen- ditures	Struc- tures	Equip- ment and soft- ware	Total	tion expen- ditures	Struc- tures	and soft- ware
1995 1996 1997 1998 1998		1,888.9 1,907.9 1,943.8 1,985.0 2,056 1	704.1 696.0 689.1 681.4 694.6	476.8 470.4 457.2 447.5 455.8	424.5 418.5 412.2 401.2 407.6	10 1 9 2 8.7 8.1 7.2	43 7 43.8 38.9 40.1 42 4	227.5 225.7 231.9 233.7 238.7	201 2 196.2 203.2 201.2 202.9	15.7 15.9 13.8 14.5 14.0	137 155 166 187 217	1,183.6 1,211.1 1,254.3 1,303.8 1,361.8	983.0 1.001 0 1.027.7 1.070.8 1.109.5	175.4 184.3 196.7 196.5 210.9	29.1 29.9 33.1 37.7 41.8
2000 2001 2002 2003 2004 2005 2006 2006 2007 2008 2008 2009 p		2,097.8 2,178.3 2,279.6 2,330.5 2,362.0 2,369.9 2,402.1 2,443.1 2,518.1 2,566.4	698.1 726.5 779.5 831.1 865.0 876.3 894.9 906.4 975.9 1,026.7	453.5 470 7 505 3 549 2 580 4 589 0 598.4 611.5 659.4 695.1	403.9 418 5 445.8 484.1 509.4 514.8 519.1 527.4 561.6 589.4	6.9 65 70 85 7.5 7.5 9.1 11.0 14.3	43 6 46.3 52.7 57.0 63.3 66.8 71.9 75.0 87.2 91.8	244.4 255.5 273.9 281.7 284.6 287.3 296.6 294.9 316.4 331.4	212.4 224.2 239.7 247.1 250.2 251.0 257.5 255.2 273.5 286.9	10.4 9.8 11.8 11.9 9.9 8.3 8.8 9.8 9.9 11.0	21.5 21.6 22.7 23.0 24.6 28.0 30.3 29.9 33.2 33.4	1,400.1 1,452.3 1,500.6 1,499.7 1,497.1 1,493.6 1,507.2 1,536.7 1,543.7 1,542.8	1.133.7 1.726 1.2113 1.2075 1.2074 1.2120 1.220.7 1.242.6 1.2515 1.249.4	222.2 234.8 244.2 245.5 241.3 230.8 231.4 236.9 234.6 237.0	44.3 45.3 45.8 47.2 48.6 50.8 55.2 57.4 58.0 56.0
2006: V		2,397.1 2,399.1 2,402.7 2,409.4	900.5 892.8 892.0 894.4	595.6 597.2 594.3 606.5	519.2 515.9 516.7 524.5	7.1 7.5 7.2 8.0	69.3 73.9 70.4 74.1	305.0 295.7 297.7 287.8	264.4 257 3 259.0 249.2	8.3 8.7 8.6 9.8	32.4 29.7 30.1 28.8	1,496.6 1,506.3 1,510.8 1,515.0	1.214.1 1.216.5 1.222.3 1.230.0	228.9 234.9 232.8 229.1	53.7 54.8 55.8 56.3
2007: V		2,409.5 2,435.4 2,458.9 2,468.7	882.8 898.7 919.0 925.1	594.7 607.1 621.7 622.4	514.6 522.2 535.9 536.7	84 9.6 9.2 9.4	71.6 75.4 76.8 76.4	288.1 291.6 297.2 302.7	249.7 252.1 256.8 262.2	9.3 9.7 10.3 9.8	29.0 29.8 30.1 30.6	1,526.5 1,536.5 1,540.0 1,543.7	1,235.6 1,242.3 1,245.1 1,247.4	234.3 237.2 237.6 238.4	56.8 57.2 57.6 58.1
2008: I II III IV		2,484.7 2,506.9 2,536.6 2,544.0	943.4 961.3 991.6 1,007.3	634.8 645.6 675.4 681.7	545.4 548.4 574.0 578.7	9.8 10.4 11.1 12.7	79.7 87.4 90.9 90.8	308.6 315.8 315.9 325.4	268.4 273.8 273.3 278.4	8.9 9.4 10.3 10.8	31.4 32.6 32.2 36.5	1,541.9 1,546.6 1,547.0 1,539.3	1,249.6 1,250.1 1,252.5 1,253.6	234.3 238.1 236.8 229.4	58.5 58.7 58.0 57.0
2009 ⁻ I II IV.P		2,527.2 2,568.6 2,585.5 2,584.4	996.3 1,023.5 1,043.3 1,043.5	672.8 695.2 709.3 703.1	571.5 588.2 599.6 598.2	13.2 13.9 15.9 14.0	88.4 93.5 94.1 91.1	323.4 328.2 333.8 340.4	280.1 284.0 288.3 295.2	10.8 11.0 11.3 11.1	32.3 33.2 34.1 33.9	1,533.3 1,548.0 1,545.5 1,544.3	1,252.3 1,252.7 1,246.6 1,246.1	226.2 239.0 242.2 240.8	55.7 55.7 55.8 56.7

[Billions of chained (2005) dollars; quarterly data at seasonally adjusted annual rates]

Note: See Table B-2 for data for total government consumption expenditures and gross investment for 1960-94.

				Final	Ratio of inven	private tories					
Quarter	Total ²	Farm	Mining, utilities, and	Manufac-	Wholesale	Retail	Other indus-	Non-	sales of domestic busi-	to final : domestic	sales of business
	1		construc- tion ²	torniy	Table	u aue	tries ²	Idim*	ness ³	Total	Non- farm
Fourth quarter	100.4	42.0		40.7	10.0	21.0	6.1	02.5	22.0	4.00	2.00
1961	136.4	42 9 44.6		48.7	17.3	21.9	6.6	93.5	32.3 33.9	4.22	2.89
1962	147.4	47.0 44.4		53.2	18.0	22.7	6.6 7 1	100.5	35.6	4.14	2.82
1964	154.5	42.2		58.6	20.8	25.2	7.7	112.2	40.8	3.79	2.75
1965	169.4	47.2		63.4	22.5	28.0	8.3	122.2	44.9	3.77	2.72
1967	194.8	45.7		79.9	28.1	30.9	10.1	149.1	49.9	3.90	2.99
1968	208.1	48.8 52.8		92.6	29.3	34.2 37.5	10.6	159.3	55.0	3.79	2.90
1970	235.7	52.4		95.5	36.4	38.5	12.9	183.3	61.9	3.81	2.96
1971	253.7	59.3 73.7		96.6	39.4	44.7 49.8	13.7	194.4	67.5 75.7	3.76	2.88
1973	351.5	102.2		121.5	51.7	58.4	17.7	249.4	83.7	4.20	2.98
19/4	405.6	87.b 89.5		162.6	66.91	63.9 64.4	24.7	318 1 319 0	89.8	4.52 4.04	3.54
1976	439.6	85.3		178.7	74.1	73.0	28.5	354.2	111.2	3 95	3.19
1977	482.0	90.6		219.8	99.0	80.9 94.1	33.3 38.8	451.7	124.0	3.89	3.15
1979	667.6	134 9		261.8	119.5	104.7	46.6	532 6	159 4	4 19	3 34
1980 1981	739.0	140.3 127.4		293.4	139.4	111.7	54.1 66.6	598.7	174.1	4 24	3.44
1982	773.9	131.3		304.6	147 9	123.2	66.8	642.6	194.8	3 97	3.30
1983	796.9	131.4		308.9	153.4	137.6	65.2 66.9	737.6	215.7	3.69	3.16
1985	875.9	125 8	l •	333.3	175.9	171.4	69.5	750.2	249.5	3.51	3 01
1987	924.2	119.9		339.6	195.8	199.1	69.9	804.4	204.2	3.25	2 82
1988	999.7	130.7		372.4	213.9	213.2	69.5 70.1	869.1	304.1	3.29	286
1990	1,044.5	133.1	, i	404 5	236.8	236.6	71.0	948.9	335.9	3.22	2.03
1991	1,057.2	123.2		384.1	239.2	240.2	70.5	934.0	345.7	3.06	2.70
1992	1,116.0	132.3		377.0	258.6	268.6	76.5	949.5	370.9	2.92	2.50
1994	1,194.5	134.5		404.3	281.5	293.6	80.6	1,060.0	413.9	2.89	2.56
NAICS	(,237.2	131.1		424.3	505.7	J12.2	03.0	1,120.1	430.0	2.00	2.00
1996 1997	1,284.7	136.6 136.9	31.1	421.0	285.1	328.7	82.1 87.1	1,148.1	465.6 492.2	2.76	2.47
1998	1,341.6	120.5	36.6	432.3	312.0	349.2	91.1	1,221.1	525.8	2.55	2.32
2000	1,432 /	124.3	38.5 12.2	457.5	334.8	3/7.7	99.8	1,308.4	557.Z	2.5/	2.35
2000	1,447.3	126.2	45.3	440.9	335.8	386.0	113.0	1,321.1	603.0	2.35	2.19
2002	1,489.1	135.9 151.0	46.5	443.7 447.6	343.2	408.0	111.8	1,353.2	608.5 646.3	2.45	2 22
2004	1,681.5	157.2	64.1	487.2	388.9	460.9	123.2	1,524.3	685.2	2 45	2.22
2005	1,804.6	165.2	81./	531.5	422.8	4/3./	129.8	1,639.4	728.7	2.48	2.25
	1,861.7	150 4	81.5	561.5	430.3	478.0	133.9	1,704.2	745.2	2.44	2 23
III	1,896.9	165.3	86.3	571.4	450.0	487.8	136.2	1,731.6	758.7	2.50	2.28
2007: 1	1,951.8	177 4	94.5	581.9	463.7	494.1	140.2	17745	784.3	2.40	2.27
II	1,972.6	175.1	98.1	590.7	468.2	498.0	142.5	1,797.5	795.0	2.48	2.26
IV	2,003.9	188.4	94.4	625.3	499.9	513.6	143.0	1,882.2	804.7	2.49	2.26
2008: 1	2,124.9	195.8	102.9	646.1	514.2	514.3	151.6	1,929.1	810.9	2.62	2.38
U	2,199.7	210.0	114.5	673.3	531.0	516.4 520.7	154.6 158.2	1,989.8	818.3 814.4	2.69 2.67	2.43
IV	2,015.9	178.4	100.1	592.8	482.7	506.4	155 5	1,837.5	800.0	2.52	2.30
2009: 1	1,948.1	171.9	96.4 96.9	575.8 567.4	464.3	489.7 479.5	150.0	1,776.1	794.1	2.45	2.24
	1,892.3	168.6	97 7	564.3	436.6	477.1	147.9	1,723.7	795.3	2.38	2.17
N 6	1,914.2	167.0	98.1	570.0	445.6	484.5	148.9	1,747.2	801.3	2.39	2 18

TABLE B-22. Private inventories and domestic final sales by industry, 1960-2009

[Billions of dollars, except as noted; seasonally adjusted]

¹ Inventories at end of quarter Quarter-to-quarter change calculated from this table is not the current-dollar change in private inventories component of gross domestic product IGDP1. The former is the difference between two inventory stocks, each valued at its 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 change in private inventories is stated at annual rates.

sales by farm and by government enterprises.

Note The industry classification of inventories is on an establishment basis. Estimates through 1995 are based on the Standard Industrial Classification (SIC). Beginning with 1996, estimates are based on the North American Industry Classification System (NAICS).
				Private in	ventories 1				Final	Ratio ol	private tories
Quarter	Total 2	Farm	Mining, utilities, and	Manufac-	Wholesale	Retail	Other Indus-	Non-	sales of domestic busi-	to final domestic	sales of business
			construc- tion ²	uning	trade	trade	tries ²	1910 4	ness ³	Total	Non- farm
Fourth quarter	0.50	100.0		1047	00.5	00 F	05.0	220.2	144.0	2.27	2.24
1960 1961 1962	487.9 498.5 520.4	133 3 135 8 137.6		164.7 169.6 180.9	68.4 71.6	69.5 68.2 73.0	35.8 39.5 39.4	338.3 346.1 366.5	144.8 151.2 157.0	3.37 3.30 3.31	2.34 2.29 2.33
1963 1964	540.6 557.9	139.0 135.1		187.8 198.2	77.5 (77.0 81.1	42.1	385.5 407.3	166.3 176.4	3.25	2.32 2.31
1965	590.8	137.7		212.2	87.8	89.3	46.6	437.8	191.6	3.08	2.29
1967	671.8	130.5		240.6	107.7	96.6	53.5	519.5	200.6	3.35	2.59
1968	702.6	142.9		271.5	111.5	104.8	55.1 57.9	545.9	211.5	3.32	2.58
1909	738.5	142.5		284.0	128.7	112.2	58.6	585.5	218.4	3.38	2.68
1971	763.5	144.6		280.6	135.5	127.4	60.7	606.1	229.6	3.33	2 64
1972	789.1 828.1	145.0		288.3	141.6	137.3	67.0	673.3	248.7	3.17	2.54
1974	857.2	142.4		333.0	158.9	146.2	71.4	712.3	247.8	3.46	2.87
1976	878.7	146.6		340.1	162.2	149.5	74.0	728.5	272.4	3.23	2.67
1977	921.8	153.9		349.6	175.3	158.1	79.6	764.2	286.7	3.21	2.67
1979	995.4	160.2		379.7	198.7	168.6	84.3	832.8	315.4	3.16	2.64
1980	986.0	153.0		380.1	204.0	163.8	82.9	832.4	315.1	3.13	2.64
1981	1,025.0	170.6		365.2	209.8	168.9	92.3 89.4	833.3	312.0	3.20	2.67
1983	997.7	153.1		367.5	206.3	182.7	88.3	844.0	335.2	2.98	2 52
1985	1,101.3	166.5		392.4	229.2	220.8	94.8	934.7	369.9	2.98	2 53
1986	1,109.8	164.2	•••••	388.3	237.7	224.3 246.1	98.3	945.1	383.8	2.89	2.46
1988	1,164.9	142.0		416.2	254.9	253.9	99.3	1,021.6	414.7	2.81	2.46
1989	1,195.6	142.0		431.8	258.5	268.8	94.8	1,052.4	425.9	2.80	2.4/
1990	1,210.7	146.0		441.0	207.2	267.2	94.8	1,066.8	428.0	2.83	2.49
1992	1,228.6	153.8		429.0	280.3	272.5	97.7	1,077.7	451.1	2.72	2.39
1994	1,320.1	160.0		446.3	302.7	309.4	106.1	1,163.4	485.5	2.72	2.40
1995 NAICS	1,352.2	147.0		461.7	316.2	321.9	108.6	1,207.7	503.4	2.69	2.40
1996	1,383.4	155.3	47.6	465.7	298.0	335.3	87.6	1,230.9	529.2	2.61	2.33
1997	1.532.4	160.6	50.1	490.0 507.6	324.9	349.5	93.2	1,304.4	586.2	2.65	2.37
1999	1,600.9	156.9	57.1	523.8	369.7	390.5	106.6	1,444.7	616.4	2.60	2.34
2000	1,661.1	155.2	54.3 65.1	531.9	390.4 376.8	411.1	119.3	1,505.9	638.7	2.60	2.36 2.27
2002	1,632.1	152.2	61.0	500.5	376.7	424.2	118.0	1,480.0	645.5	2.53	2.29
2003	1,649.5	152.4	69.6	492.0	3/6.3	441.5	126.0	1,497.2	698.6	2.44	2.21
2005	1,765.8	160.4	73.4	519.0	415.0	469.8	128 3	1,605.4	719.8	2.45	2.23
2006: 1	1,782.2	161.3 159.3	75.8	523.7	419.5	472.7 474.8	129.0	1,621.0	732.7	2.43	2.21
	1,817.2	157.7	85.9	534.3	428.7	478.3	131.9	1,659.5	735.9	2.47	2.26
IV	1,825.2	156.7	90.3	536.0	428.3	480.6	132.9	1,668.6	746.3	2.45	2.24
2007: 1	1,828.8	158.2	92.0	535.2	429.0	479.7	134.2	1,677.7	757.1	2.43	2.22
ill	1,842.1	156.4	91.7 89.0	539.1	432.3	486.9	135.5	1,685.8	764.0 770.4	2.41	2.21
2008: 1	1,844.8	152.8	90.5	548.6	433.2	482.1	137.1	1,692.6	766.5	2.41	2.13
	1,835.5	152.4	91.1	542.8	432.8	478.6	137.2	1,683.6	772.4	2.38	2.18
IV	1,818.8	150.7	87.5	537.1	433.8	400.0	137.0	1,668.6	746.0	2.40	2.21
2009:	1,790.3	150.7	89.2	529.9	419.0	462.8	138.1	1,639.8	734.7	2.44	2.23
II	1.750.2	151.3 151.8	91.1	520.0	400.8 384.1	450.0 445.7	136.6 135.6	1,599.1	734.3	2.38	2.18
Ν <i>ρ</i>	1,707.1	150.2	89.0	503.3	383.5	446.1	134.8	1,556.9	742.4	2.30	2.10

TABLE B-23. Real private inventories and domestic final sales by industry, 1960-2009

[Billions of chained (2005) dollars, except as noted; seasonally adjusted]

¹ Inventories at end of quarter. Quarter-to-quarter changes calculated from this table are at quarterly rates, whereas the change in private inventories

component of gross domestic product (GDP) is stated at annual rates. ² Inventories of construction, mining, and utilities establishments are included in other industries through 1995. ³ Quarterly totals at monthly rates. Final sales of domestic business equals final sales of domestic product less gross output of general government, gross value added of nonprofit institutions, compensation paid to domestic workers, and space rent for owner-occupied housing. Includes a small amount of final sales by farm and by government enterprises.

Note: The industry classification of inventories is on an establishment basis. Estimates through 1995 are based on the Standard Industrial Classification (SIC) Beginning with 1996, estimates are based on the North American Industry Classification System (NAICS). See Survey of Current Business, Tables 5.7.6A and 5.7.6B, for detailed information on calculation of the chained (2005) dollar inventory series.

TABLE B-24. Foreign transactions in the national income and product accounts, 1960-2009

	Curr	ent receip	ots from re	st of the v	world	Current payments to rest of the world										
Year or quarter		Exp	ports of go and service	ods s			lmı a	ports of go and service	ods es		to	Current t transfer p rest of th	axes and payments e world (n	iet)	l Balance	
Year or quarter	Total	Total	Goods 1	Serv- ices ¹	come re- ceipts	Total	Total	Goods '	Serv- ices 1	come pay- ments	Total	From per- sons (net)	From gov- ern- ment (net)	From busi- ness (net)	on current account, NIPA ²	
1960 1961 1961 1962 1963 1964 1964 1965 1966 1966 1967 1968 1969	31.9 32.9 35.0 37.6 42.3 45.0 49.0 52.1 58.0 63.7	27.0 27.6 29.1 31.1 35.0 37.1 40.9 43.5 47.9 51.9	20.5 20.9 21.7 23.3 26.7 27.8 30.7 32.2 35.3 38.3	6.6 6.7 7.4 7.7 8.3 9.4 10.2 11.3 12.6 13.7	4.9 5.3 5.9 6.5 7.2 7.9 81 87 10.1 11.8	28.8 28.7 31.2 32.7 34.8 38.9 45.2 48.7 56.5 62.1	22.8 22.7 25.0 26.1 28.1 31.5 37.1 39.9 46.6 50.5	15.2 15.1 16.9 17.7 19.4 22.2 26.3 27.8 33.9 36.8	7.6 7.6 8.1 8.4 8.7 9.3 10.7 12.2 12.6 13.7	1.8 1.8 2.1 2.3 2.6 3.0 3.3 4.0 5.7	4.1 4.2 4.4 4.5 4.4 4.7 5.1 5.5 5.9 5.9	0.5 5 .6 7 7 .8 8 1.0 10 10	3.6 3.6 3.7 3.7 3.5 3.8 4.1 4.2 4.6 4.5	01 1 1 2 2 2 3 3	32 42 38 49 7.5 62 38 35 1.5 1.5	
1970	72.5 77.0 87.1 118.8 156.5 166.7 181.9 196.6 233.1 298.5	59.7 63.0 70.8 95.3 126.7 138.7 149.5 159.4 186.9 230.1	44.5 45.6 51.8 73.9 101.0 109.6 117.8 123.7 145.4 184.0	15.2 17.4 19.0 21.3 25.7 29.1 31.7 35.7 41.5 46.1	12 8 14.0 16.3 23.5 29.8 28.0 32.4 37.2 46.3 68.3	68.8 76.7 91.2 109.9 150.5 146.9 174.8 207.5 245.8 299.6	55.8 62.3 74.2 91.2 127.5 122.7 151.1 182.4 212.3 252.7	40.9 46.6 56.9 71.8 104.5 99.0 124.6 152.6 177.4 212.8	14.9 15.8 17.3 19.3 22.9 23.7 26.5 29.8 34.8 39.9	6.4 6.4 7.7 10.9 14.3 15.0 15.5 16.9 24.7 36.4	6.6 7.9 9.2 7.9 8.7 9.1 8.1 8.1 8.8 10.6	1.3 1 4 1 6 1 4 1 3 1 4 1.4 1.6 1.7	4.9 6.1 7.4 5.6 7.1 5.3 5.3 5.3 6.8	4 5 7 10 7 11 1.4 1.4 20	37 31 -40 89 60 198 7.1 -109 126 -12	
1980	359 9 397 3 384 2 378 9 424 2 414.5 431.3 486.6 595.5 680.3	280.8 305.2 283.2 277.0 302.4 302.0 320.3 363.8 443.9 503.1	225.8 239.1 215.0 207.3 225.6 222.2 226.0 257.5 325.8 369.4	55.0 66.1 68.2 69.7 76.7 79.8 94.3 106.2 118.1 133.8	79.1 92.0 101.0 101.9 121.9 112.4 111.0 122.8 151.6 177.2	351 4 393 9 387.5 413.9 514.3 528.8 574 0 640.7 711.2 772.7	293.8 317.8 303.2 328.6 405.1 417.2 452.9 508.7 554.0 591.0	248.6 267.8 250.5 272.7 336.3 343.3 370.0 414.8 452.1 484.8	45.3 49.9 52.6 56.0 68.8 73.9 82.9 93.9 101.9 106.2	44.9 59.1 64.5 64.8 85.6 85.9 93.4 105.2 128.3 151.2	12.6 17.0 19.8 20.5 23.6 25.7 27.8 26.8 29.0 30.4	2.0 5.6 6.7 7.0 7.9 8.3 9.1 10.0 10.8 11.6	83 97 101 122 144 154 134 13.4 13.7 14.2	2.4 3.2 3.4 3.5 2.9 3.2 3.4 4.5 4.6	8.5 3.4 -3.3 -35.1 -90.1 -114.3 142.7 -154.1 -154.1 -115.7 -92.4	
1990 1991	740.6 764.7 786.8 810.8 904.8 1.041.1 1.113.5 1.233.9 1.240.1 1.308.8	552.1 596.6 635.0 655.6 720.7 811.9 867.7 954.4 953.9 989.3	396.6 423.6 448.0 459.9 510.1 583.3 618.3 687.7 680.9 697.2	155.5 173.0 187.0 195.7 210.6 228.6 249.3 266.7 273.0 292.1	188.5 168.1 151.8 155.2 184.1 229.3 245.8 279.5 286.2 319.5	815.6 756.9 832.4 889.4 1.019.5 1.146.2 1.227.6 1.363.3 1.444.6 1.600.7	629.7 623.5 667.8 720.0 813.4 902.6 964.0 1.055.8 1.115.7 1.251.4	508 1 500 7 544 9 592 8 676 8 757 4 807 4 885 7 930.8 1,047 7	121 7 122.8 122.9 127.2 136.6 145.1 156 5 170.1 184 9 203.7	154.1 138.2 122.7 124.0 160.0 199.6 214.2 256.1 268.9 291.7	31.7 -4.9 41.9 45.4 46.1 44.1 49.5 51.4 60.0 57.6	12.2 14.1 14.5 17.1 18.9 20.3 22.6 25.7 29.7 32.2	14.7 -24.0 22.0 22.9 21.1 15.6 20.0 16.7 17.4 18.0	4.8 5.0 5.4 6.0 8.2 6.9 9.1 13.0 7.4	-74.9 7.9 -45.6 -78.6 -114.7 -105.1 -114.1 -129.3 -204.5 -291.9	
2000	1,473.7 1,350.8 1,316.5 1,394.4 1,628.8 1,878.1 2,192.1 2,517.7 2,640.3	1,093.2 1,027.7 1,003.0 1,041.0 1,180.2 1,305.1 1,471.0 1,655.9 1,831.1 1,560.0	784.3 731.2 700.3 726.8 817.0 906.1 1.024.4 1.139.4 1.266.9 1.035.1	308.9 296.5 302.7 314.2 363.2 399.0 446.6 516.5 564.2 524.9	380.5 323.0 313.5 353.3 448.6 573.0 721.1 861.8 809.2	1,884.1 1,742.4 1,768.1 1,910.5 2,253.4 2,618.6 2,990.5 3,242.4 3,347.6	1,475.3 1,398.7 1,430.2 1,545.1 1,798.9 2,027.8 2,240.3 2,369.7 2,538.9 1,950.1	1,246.5 1,171.7 1,193.9 1,289.3 1,501.7 1,708.0 1,884.9 1,987.7 2,126.4 1,569.8	228.8 227.0 236.3 255.9 297.3 319.8 355.4 382.1 412.4 380.4	342.8 271 1 264.4 284.6 357.4 475.9 648.6 746.0 667.3	66.1 72.6 73.5 80.7 97.1 115.0 101.5 126.6 141.4 142.6	34.6 38.1 40.6 41.2 43.6 48.4 51.6 58.7 64.5 62.7	20.0 16.2 21.6 25.8 27.2 35.3 28.8 36.5 40.8 50.5	11.4 18.3 11.3 13.7 26.3 31.3 21.1 31.4 36.2 29.5	-410.4 -391.6 -451.6 -516.1 -624.6 -740.5 -798.4 -724.7 -707.2	
2006: I II IV	2,073.0 2,172.4 2,217.6 2,305.3	1,414.0 1,456.0 1,476.0 1,538.2	985.1 1.016.5 1.030.6 1.065.4	428.9 439.6 445.3 472.8	659.0 716.4 741.6 767.2	2,862.6 2,983.5 3,070.9 3,045.0	2,189.8 2,237.4 2,281.7 2,252.5	1,842.9 1,884.3 1,925.0 1,887.5	346 9 353 1 356 6 365 0	578.5 640.9 679.7 695.5	94.3 105.1 109.5 97.1	46 8 52.2 52 7 54.8	26.9 33.6 34.6 20.1	20.6 19.4 22.3 22.2	-789 6 -811 0 -853 3 -739.7	
2007: 1 II III IV	2,352.8 2,454.2 2,582.8 2,681.0	1,564.9 1,602.1 1,685.2 1,771.6	1,081,4 1,109,4 1,156.6 1,210,4	483.4 492 7 528.6 561.2	787.9 852.1 897.6 909.4	3,152.2 3,216.8 3,267.6 3,332.9	2,294.3 2,326.9 2,383.6 2,474.0	1,926.9 1,951.1 1,993.8 2,078.9	367.4 375.8 389.8 395.2	724.0 776.0 759.1 725.1	133 9 113.9 124.8 133.8	57 8 57 9 58 7 60 4	46 2 26 1 32 4 41 2	29.9 29.9 33.7 32.1	-799 3 -762.6 -684 8 -651.9	
2008. (II IV	2,660.0 2,742.0 2,738.6 2,420.7	1,803.6 1,901.5 1,913.1 1,706.2	1,247.3 1,326.2 1,338.5 1,155.7	556.3 575.3 574.6 550.5	856.3 840 5 825.6 714.4	3,377.4 3,495.3 3,475.8 3,041.7	2,548.1 2,640.2 2,670.5 2,296.7	2,143.1 2,226.8 2,243.3 1,892.5	404.9 413.4 427.2 404.2	685.3 711.6 664.8 607.4	144 0 143.6 1 140 4 137.5	63 1 66 2 66 7 61 8	43 8 43.0 37.2 39.1	37 1 34.4 36.5 36.6	-717.4 -753.3 -737.1 -621.0	
2009.	2,089.0 2,065.0 2,164.4	1,509.3 1,493.7 1,573.8 1,663.4	989.5 978.1 1,045.2 1,127.6	519.8 515.6 528.5 535.8	579 6 571 3 590 6	2,498.5 2,454.5 2,589.8	1,887.9 1,832.8 1,976.0 2,103.9	1,508.2 1,461.1 1,592.8 1,716.9	379.6 371.7 383.1 387.0	479.7 478.6 469.1	130 9 143.0 144.8 131.5	63.8 63.1 61.9 61.9	35.9 50.4 54.0 41.5	31.2 29.6 28.9 28.1	-409.5 -389.5 -425.5	

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

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. ² National income and product accounts (NIPA).

		Exports	of goods and s	ervices			Imports	of goods and :	services	
-			Goods ¹					Goods 1		
Year or quarter ' i	Total	Total	Durable goods	Non- durable goods	Services '	Total	Total	Durable goods	Non- durable goods	Services ¹
1995 1996 1997 1998 1998	845.7 916.0 1.025.1 1.048.5 1.094.3	575.4 626.2 716.2 732.2 760.0	363.6 405.4 478.7 494.2 517.8	216.2 223.4 237.9 237.6 240.8	272.6 291.7 308.9 316.4 334.6	944.5 1,026.7 1,165.0 1,301.1 1,450.9	766.1 837.9 958.7 1,072.3 1,206.0	422.9 468.1 545.4 617.2 707.1	360.0 384.1 424.1 462.9 500.2	180 9 190.3 206 9 229.4 244 9
2000	1,188.3 1,121.6 1,099.2 1,116.8 1,222.8 1,305.1 1,422.0 1,546.1 1,629.3 1,468.6	844 3 792.0 763.5 777.2 842.9 906.1 991.4 1.064.8 1.127.5 987.0	584.6 535.9 505.6 514.5 571.0 624.9 691.9 749.1 784.0 650.9	256 5 255 2 259 1 263 8 272 2 281 2 299 6 316 1 342 7 331 6	343 5 329.3 335.6 339.6 380.0 399.0 430.6 481.3 501.7 480.6	1,639.9 1,593.8 1,648.0 1,720.7 1,910.8 2,027.8 2,151.2 2,193.8 2,123.5 1,822.5	1,367 9 1,324.2 1,373 4 1,440.9 1,599 7 1,708 0 1,808.8 1,839.6 1,767.3 1,479.1	814.8 764.5 796.5 830.6 945.0 1,025.4 1,115.3 1,139.8 1,089.2 858.8	549 2 564 2 580 2 615 2 655 8 682 6 694 5 701 4 678 5 612 5	271 7 269.6 274.5 279.8 311.0 319.8 342.4 354.2 356.5 342.9
2006: I II IV	1,388.8 1,412.1 1,414.1 1,473.2	970.3 987.8 988.3 1,019.2	678.3 688.2 688.4 712.7	292.1 299.7 299.9 306.7	418.5 424.3 425.8 453.9	2,121.3 2,144.9 2,170.5 2,168.1	1,782.7 1,804.7 1,829.3 1,818.6	1,103,2 1,109,0 1,116,8 1,132,3	681.2 696.7 712.6 687.6	338.6 340.1 341.3 349.5
2007: I II IV	1,485.9 1,504.8 1,569.9 1,624.0	1,026.7 1,042.4 1,078.9 1,111.0	721.5 732.0 758.4 784.6	305.6 310.7 320.9 327.2	459.2 462.3 490.9 512.9	2,190.8 2,188.1 2,208.3 2,188.0	1,841.1 1,836.5 1,849.4 1,831.6	1,141,5 1,127,8 1,144,3 1,145,5	700.6 709.0 706.4 689.6	349.8 351.6 359.0 356.4
2008: I II II IV	1,623.4 1,670.4 1,655.2 1,568.0	1,122.4 1,159.9 1,154.8 1,072.9	783.3 808.3 807.0 737.4	338.6 351.0 347.8 333.3	501.1 510.5 500.4 494.9	2,174.3 2,146.5 2,134.4 2,038.9	1,815.4 1,794.0 1,777.1 1,682.6	1,132.0 1,122.3 1,097.6 1,004.7	686.7 676.4 680.2 670.7	359.0 352.5 357.7 356.9
2009: 1 	1,434.5 1,419.5 1,478.8 1,541.6	956.1 940.7 993.9 1,057.4	637.3 611.4 651.8 702.9	314.9 324.0 337.2 350.2	477.2 477.4 483.9 484.0	1,821.0 1,749.8 1,836.2 1,882.7	1,474.4 1,409.4 1,490.6 1,541.9	835.3 798.1 863.5 938.3	629.4 602.1 618.4 600.0	346.2 339.5 345.3 340.7

TABLE B-25. Real exports and imports of goods and services, 1995-2009

[Billions of chained (2005) dollars; quarterly data at seasonally adjusted annual rates]

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.

Note: See Table B-2 for data for total exports of goods and services and total imports of goods and services for 1960-94.

TABLE B-26. Relation of gross domestic product, gross national product, net national product, and national income, 1960–2009

		Plus.	Less	Foundation	Less: Cons	umption of fix	ed capital	E avrel av		
Year or quarter	Gross domestic product	receipts from rest of the world	payments to rest of the world	Gross national product	Total	Private	Govern- ment	Net Net national product	Statistical discrep- ancy	Equals National income
1960 1961 1962 1963 1964 1965 1966 1965 1966 1967 1968 1969	526.4 544.8 565.7 617.8 663.6 719.1 787.7 832.4 909.8 984.4	4 9 5.3 5.9 6 5 7.2 7.9 8.1 8.7 10.1 11.8	18 18 21 23 26 30 33 40 5.7	529 6 548 3 589 7 622 2 668 6 724 4 792 8 837 8 915 9 990 5	56 6 58 2 60.6 63 3 66 4 70 7 76 5 82 9 90 4 99 2	41.6 42.6 44.1 45.9 48.3 51.9 56.5 61.6 67.4 74.5	15 0 15 6 16 5 17 5 18 1 18 9 20 0 21 4 23 0 24 7	473.0 490 1 529 2 558 9 602.2 653.7 716.3 754.9 825.5 891.4	-1.0 -6 3 8 1.5 62 4.5 4.3 2.9	473 9 490 7 528.9 559 7 601.4 652 2 710.1 750.4 821 2 888.5
1970	1,038 3 1,126 8 1,237 9 1,382 3 1,499 5 1,637 7 1,824 6 2,030 1 2,293 8 2,562 2	12.8 14.0 16.3 23.5 29.8 28.0 32.4 37.2 46.3 68.3	6.4 6.4 7.7 10.9 14.3 15.0 15.5 16.9 24.7 36.4	1,044 7 1,134 4 1,246 4 1,394 9 1,515.0 1,650 7 1,841 4 2,050 4 2,315 3 2,594 2	108.3 117.8 127.2 140.8 163.7 190.4 208.2 231.8 261.4 298.9	817 895 977 1095 1278 1504 1655 1861 2120 2445	26 6 28 2 29 4 31 3 35 9 42 6 45 6 49 5 54 4	936.4 1,016.6 1,119.3 1,254.1 1,460.3 1,633.3 1,818.6 2,053.9 2,295.3	6.9 11.0 8.9 8.0 9.8 16.3 23.5 21.2 26.1 47.0	929.5 1,005.6 1,110.3 1,246.1 1,341.5 1,444.0 1,609.8 1,797.4 2,027.9 2,248.3
1980	2,788 1 3,126 8 3,253 2 3,534 6 3,930 9 4,217 5 4,460 1 4,736 4 5,100 4 5,482 1	79 1 92.0 101.0 121.9 112.4 111.0 122.8 151.6 177.2	44.9 59.1 64.5 64.8 85.6 85.9 93.4 105.2 128.3 151.2	2,822 3 3,159.8 3,289.7 3,571 7 3,967.2 4,244.0 4,477.7 4,754.0 5,123.8 5,508.1	344.1 393.3 433.5 451.1 474.3 505.4 538.5 571.1 611.0 651.5	282 3 323 2 356 4 369 5 412 8 439 1 464 5 497 1 529 6	61 8 70.1 77 1 81 6 86 9 92 7 99 4 106 6 113.9 121 8	2,478,2 2,766,4 2,856,2 3,120,6 3,492,8 3,738,6 3,939,2 4,182,9 4,512,8 4,856,6	45.3 36.6 4.8 49.7 31.5 42.3 67.7 32.9 -9.5 56.1	2,433 0 2,729.8 2,851 4 3,070 9 3,461 3 3,696 3 3,871 5 4,150 0 4,522 3 4,800 5
1990 1991 1992 1993 1994 1995 1996 1997 1997 1998 1999	5.800 5 5.992 1 6.342 3 6.667 4 7.085 2 7.414.7 7.838 5 8.332 4 8.793 5 9,353 5	188 5 168 1 151 8 155 2 184 1 229 3 245 8 279 5 286 2 319 5	154 1 138.2 122.7 124.0 160.0 199.6 214.2 256.1 268.9 291.7	5.835.0 6.022.0 6.371.4 6.698.5 7.109.2 7.444.3 7.870.1 8.355.8 8.810.8 9.381.3	691 2 724.4 744.4 819 2 869 5 i 912 5 963.8 1,020.5 1,094.4	560 4 585.4 599 9 626 4 661.0 704.6 743 4 789.7 841.6 907.2	130 8 138 9 144 5 151 6 158 2 164 8 169 2 174 1 179 0 187 2	5,143 7 5,297 6 5,627 1 5,920 5 6,290 1 6,574 9 6,957 6 7,392 0 7,790 3 8,286 9	84 2 79.7 110.0 135.8 108.8 52.5 25.9 -14.0 -85.3 -71.1	5.059 5 5.217 9 5.517 1 5.784.7 6.181 3 6.522 3 6.931 7 7.406 0 7.875 6 8.358.0
2000 2001 2002 2003 2004 2005 2006 2005 2006 2007 2008 2008	9,951.5 10,286.2 10,642.3 11,142.1 11,867.8 12,638.4 13,398.9 14,077.6 14,441.4 14,258.7	380.5 323 0 313 5 353 3 448 6 573 0 721 1 861 8 809 2	342.8 271.1 264.4 284.6 357.4 475.9 648.6 746.0 667.3	9,989.2 10,338.1 10,691.4 11,210.8 11,959.0 12,735.5 13,471.3 14,193.3 14,583.3	1,184.3 1,256.2 1,305.0 1,354.1 1,432.8 1,541.4 1,660.7 1,760.0 1,847.1 1,863.7	986.8 1,051.6 1,094.0 1,135.9 1,200.9 1,290.8 1,290.8 1,391.4 1,469.6 1,536.2 1,538.4	197 5 204 6 210 9 218 1 231 9 250 6 269 3 290 4 310 9 325 3	8,804.9 9,081 9 9,386 4 9,856 8 10,526 2 11,194 2 11,810 7 12,433 3 12,736 2	-134.0 -103.4 -22.1 16.6 -7.8 -79.7 -220.6 14.8 101.0	8,938.9 9,185.2 9,408.5 9,840.2 10,534.0 11,273.8 12,031.2 12,448.2 12,635.2
2006: I	13,183.5 13,347.8 13,452.9 13,611.5	659.0 716.4 741.6 767.2	578.5 640.9 679.7 695.5	13,264.0 13,423.3 13,514.8 13,683.2	1,618.0 1,648.2 1,675.2 1,701.3	1,357.4 1,381.1 1,403.2 1,423.9	260.6 267.1 272.0 277.4	11,646.0 11,775.2 11,839.6 11,981.9	-192.2 -190.7 -253.4 -246.0	11,838.2 11,965.9 12,093.0 12,227.9
2007 I II III IV	13,795.6 13,997.2 14,179.9 14,337.9	787.9 852.1 897.6 909.4	724 0 776.0 759.1 725.1	13,859 5 14,073.3 14,318 3 14,522.2	1,726 7 1,749.4 1,771.2 1,792.8	1,443.1 1,461.4 1,478.7 1,495.1	283.7 288.0 292.5 297.6	12,132.8 12,324.0 12,547.2 12,729.4	-121.1 -97.1 64.9 94.0	12,253.9 12,421.1 12,482.2 12,635.4
2008. V	14,373.9 14,497.8 14,546.7 14,347.3	856.3 840.5 825.6 714.4	685.3 711.6 664.8 607.4	14,544.9 14,626.6 14,707.5 14,454.3	1,813 6 1,835.6 1,858 2 1,881 0	1,510.6 1,527.0 1,544.4 1,562.6	303.0 308.5 313.8 318.4	12,731.2 12,791.1 12,849.3 12,573.3	69.8 126.7 68.3 139.4	12,661.5 12,664.4 12,781.0 12,433.9
2009: I II III IV p	14,178.0 14,151.2 14,242.1 14,463.4	579.6 571.3 590.6	479.7 478.6 469.1	14,277.9 14,243.8 14,363.7	1,883.6 1,864.0 1,850.7 1,856.4	1,561.3 1,540.5 1,525.5 1,526.3	322.3 323.5 325.2 330.1	12,394.3 12,379.8 12,512.9	185.4 161.7 163.2	12,208.9 12,218.1 12,349.7

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

TABLE B-27. Relation of national income and personal income, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

					Less:				Plu	IS.	Equals
Year or quarter	National income	Corporate profits with inventory valuation and capital con- sumption adjust- ments	Taxes on production and imports less subsidies	Contribu- tions for govern- ment sccial insurance, domestic	Net interest and miscel- laneous payments on assets	Business current transfer payments Inet)	Current surplus of govern- ment enter- prises	Wage accruais less disburse- ments	Personal income receipts on assets	Personal current transfer receipts	Personal income
1960 1961 1962 1963 1964 1964 1965 1966 1967 1968 1968 1969	473.9 490 7 528.9 559.7 601 4 652 2 710.1 750.4 821.2 888.5	53.1 54.2 62.3 68.3 75.5 92.5 90.2 97.3 94.5	43.4 45.0 48.1 51.2 54.5 57.7 59.3 64.1 72.2 79.3	16.4 17.0 19.1 21.7 22.4 23.4 31.3 34.9 38.7 44.1	10.6 12.5 14.2 15.2 17.4 19.6 22.4 25.5 27.1 32.7	1.9 2.0 2.2 2.7 3.1 3.6 3.5 3.8 4.3 4.9	0.9 8 9 1.4 1.3 1.3 1.3 1.0 .9 1.2 1.0	0.0 .0 .0 .0 .0 .0 .0 .0	37.9 40.1 44.1 47.9 53.8 59.4 64.1 69.0 75.2 84.1	25.7 295 304 322 335 36.2 39.6 48.0 56.1 62.3	411.3 428 8 456 4 479 5 514 3 555 5 603.8 648.1 711 7 778.3
1970 1971 1972 1973 1974 1975 1976 1977 1976 1977 1978	929.5 1,005.6 1,110.3 1,246.1 1,341.5 1,444.0 1,609.8 1,797.4 2,027.9 2,248.3	82.5 96.1 111.4 124.5 115.1 133.3 161.6 191.8 218.4 225.4	86.6 95.8 101.3 112.0 121.6 130.8 141.3 152.6 162.0 171.6	46.4 51.2 59.2 75.5 85.2 89.3 101.3 113.1 131.3 152.7	39.1 43.9 47.9 55.2 70.8 81.6 85.5 101.1 115.0 138.9	4.5 4.3 4.9 6.0 7.1 9.4 9.5 8.5 10.8 13.3	0 - 2 5 - 4 - 9 - 32 - 18 - 2.7 - 2.2 - 2.9	.0 .6 0 1 .1 .1 .1 .3 2	93.5 101.0 109.6 124.7 146.4 162.2 178.4 205.3 234.8 274.7	74.7 88.1 97.9 112.6 133.3 170.0 184.0 194.2 209.6 235.3	838 6 903 1 992 6 1,110.5 1,222 7 1,334.9 1,474.7 1,632.5 1,836.7 2,059 5
1980 1981 1982 1983 1984 1985 1985 1986 1987 1988 1988 1988	2,433.0 2,729.8 2,851.4 3,070.9 3,461.3 3,696.3 3,696.3 3,871.5 4,150.0 4,522.3 4,800.5	201.4 223 3 205.7 259.8 318 6 332.5 314 1 367.8 426 6 425 6	190.5 224.2 225.9 242.0 268.7 286.8 298.5 317.3 345.0 371.4	166.2 195.7 208.9 257.5 281.4 303.4 323.1 361.5 385.2	181.8 232.3 271.1 327.1 327.1 341.5 367.1 366.7 385.3 434.1	14.7 17.9 20.6 22.6 30.3 35.2 36.9 36.9 33.6 33.6 33.6 39.2	-5.1 -5.6 -4.5 -3.2 -1.9 .6 9 .2 2.6 4.9	.0 .1 .0 -4 .2 -2 .0 .0 .0 .0	338.7 421.9 488.4 529.6 607.9 653.2 694.5 715.8 767.0 874.8	279 5 318 4 354 8 383 7 400 1 424 9 451 0 467 6 496 5 542 6	2,301 5 2,582 3 2,766 8 2,952 2 3,268 9 3,496 7 3,696 0 3,924 4 4,231 2 4,557 5
1990 1991 1992 1992 1993 1994 1995 1996 1996 1997 1998 1999 1998	5,059.5 5,217.9 5,517.1 5,784.7 6,181.3 6,522.3 6,931.7 7,406.0 7,875.6 8,358.0	434.4 457.3 496.2 543.7 628.2 716.2 801.5 884.8 812.4 812.4	398.0 429.6 453.3 466.4 512.7 523.1 545.5 577.8 603.1 628.4	410.1 430.2 455.0 477.4 508.2 532.8 555.1 587.2 624.7 661.3	444.2 418.2 387.7 364.6 362.2 358.3 371.1 407.6 479.3 481.4	40.1 39.9 40.7 40.5 41.9 45.8 53.8 51.3 65.2 69.0	1.6 5.7 8.2 8.7 9.6 13.1 14.4 14.1 13.3 14.1	.1 -15.8 6.4 17.6 16.4 3.6 -2.9 7 5.2	920.8 928.6 909.7 900.5 947.7 1,005.4 1,080.7 1,165.5 1,269.2 1,246.8	594.9 665.9 745.8 790.8 826.4 878.9 924.1 949.2 977.9 1.021.6	4,846.7 5,031.5 5,347.3 5,568.1 5,874.8 6,200.9 6,209.9 6,591.6 7,000.7 7,525.4 7,910.8
2000 2001 2002 2003 2004 2005 2006 2007 2006 2007 2008 2007	8,938.9 9,185.2 9,408.5 9,840.2 10,534.0 11,273.8 12,031.2 12,448.2 12,635.2	819.2 784.2 872.2 977.8 1.246.9 1.456.1 1.608.3 1.541.7 1.360.4	662.7 669.0 721.4 757.7 817.0 869.3 935.5 974.0 993.8 964.3	705.8 733.2 751.5 778.9 827.3 872.7 921.8 959.3 990.6 973.2	539.3 544.4 506.4 504.1 461.6 543.0 652.2 739.2 815.1 786.2	87.0 101.3 82.4 76.1 81.7 95.9 83.0 102.2 118.8 134.0	9.1 4.0 6.3 7.0 1.2 3.5 4.2 6.6 6.9 8.1	.0 .0 15.0 -15.0 5.0 1.3 6.3 5.0 5.0	1,360.7 1,346.0 1,309.6 1,312.9 1,408.5 1,542.0 1,829.7 2,031.5 1,994.4 1,791.5	1,083.0 1,188.1 1,282.1 1,341.7 1,415.5 1,508.6 1,605.0 1,718.0 1,875.9 2,106.9	8,559.4 8,883.3 9,060.1 9,378.1 9,377.2 10,485.9 11,268.1 11,894.1 12,238.8 12,072.1
2006: 1	11,838.2 11,965.9 12,093.0	1,590.9 1,597.7 1,655.1	916.0 931.9 941.9	915.4 917.4 920.8	608.9 654.4 661.6	82.8 79.3 83.6	-2.4 -3.8 -4.7	-20.0 .0 .0	1,711.1 1,817.2 1,881.3	1,569.0 1,597.9 1,620.7	11,026.7 11,204.0 11,336.9
2007: 	12,227.9 12,253.9 12,421.1 12,482.2 12,635.4	1,535.4 1,535.4 1,594.9 1,537.1 1,499.4	966.0 966.9 976.1 986.9	952.5 953.7 958.6 972.6	690.6 711.3 756.0 798.9	97.8 99.0 105.0	-8.4 -6.9 -4.9	-25.0 .0	1,968.2 2,022.0 2,065.8 2,069.8	1,693.8 1,699.1 1,725.5 1,753.7	11,706.9 11,823.4 11,945.6 12,100.3
2008: I II	12,661.5 12,664.4 12,781.0 12,433.9	1,459.7 1,403.7 1,454.6 1,123.6	989.3 997.9 1,005.7 982.1	985.3 988.9 994.9 993.3	790.7 809.0 806.1 854.7	114.8 112.6 116.0 131.8	-5.6 -6.3 -6.9 -8.9	.0 .0 .0 .0	2,020.8 1,997.3 2,001.4 1,958.1	1,794.1 1,937.0 1,874.3 1,898.0	12,142.2 12,292.9 12,286.6 12,233.5
2009: H III IV P	12,208.9 12,218.1 12,349.7	1,182.7 1,226.5 1,358.9	963.2 964.6 955.4 973.8	969.7 970.9 974.0 978.4	826.2 784.4 759.7 774.7	137.9 145.4 124.8 128.1	-10.7 -8.8 -6.3 -6.6	20.0	1,845.5 1,773.4 1,763.1 1,784.0	1,987.3 2,140.3 2,137.5 2,162.5	11,952.7 12,048.8 12,083.9 12,203.1

TABLE B-28. National income by type of income, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

				Compen	sation of en		Proprie inventory consur	etors' incom valuation a nption adjus	e with nd capital tments	Rental		
			Wage a	and salary a	ccruals	Si waq	upplements jes and sala	to aries				of per- sons
Year or quarter	National income	Total	Total	Govern- ment	Other	Total	Employer contribu- tions for employee pension and insurance funds	Employer contribu- tions for govern- ment social insur- ance	Total	Farm	Non- farm	with capital con- sump- tion adjust- ment
1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1984 1985 1986 1987 1988	$\begin{array}{c} 473 \ 9 \\ 490 \ 7 \\ 528 \ 9 \\ 559 \ 7 \\ 6014 \\ 652 \ 2 \\ 710 \ 1 \\ 750 \ 4 \\ 821 \ 2 \\ 710 \ 1 \\ 750 \ 4 \\ 821 \ 2 \\ 710 \ 1 \\ 1750 \ 4 \\ 821 \ 2 \\ 710 \ 1 \\ 1005 \ 6 \\ 1110 \ 3 \\ 1005 \ 6 \\ 1110 \ 3 \\ 1005 \ 6 \\ 1110 \ 3 \\ 1005 \ 6 \\ 1110 \ 3 \\ 1005 \ 6 \\ 1110 \ 3 \\ 1005 \ 6 \\ 1110 \ 3 \\ 1005 \ 6 \\ 1110 \ 3 \\ 1005 \ 6 \\ 1110 \ 3 \\ 1005 \ 6 \\ $	296 4 305 3 327 1 345.2 370 7 399 5 442 7 475 1 524 3 577 6 617 2 658 9 725 1 811 2 890 2 949 1 1.059 3 1.180 5 1.335 5 1.498 3 1.180 5 1.335 5 2.245 4 2.035 5 2.245 4 2.411 7 2.557 7 2.735 6 2.954 2	$\begin{array}{c} 272 \ 9\\ 280 \ 5\\ 299 \ 4\\ 314 \ 9\\ 337 \ 8\\ 363 \ 8\\ 400 \ 3\\ 429 \ 0\\ 518 \ 3\\ 551 \ 6\\ 584 \ 5\\ 584 \ 5\\ 584 \ 5\\ 638 \ 8\\ 772 \ 3\\ 814 \ 8\\ 997 \ 7\\ 994 \ 2\\ 1,206 \ 6\\ 1,253 \ 3\\ 1,373 \ 4\\ 1,511 \ 4\\ 1,587 \ 5\\ 1,844 \ 9\\ 1,982 \ 6\\ 2,102 \ 3\\ 2,256 \ 3\\ 2,256 \ 3\\ 2 \ 439 \ 8\\ 2 \ 439 \ 8\\ 2 \ 439 \ 8\\ 2 \ 439 \ 8\\ 1 \ 439 \ 6\\ 2 \ 439 \ 8\\ 2 \ 439 \ 8\\ 1 \ 538 \ 4\\ 1 \ 538 \ 5\\ 1 \ 588 \ 5\\ 1 \ 588 \ 5\\ 1 \ 588 \ 5\ 5\ 5\ 5\ 1\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\$	49 2 525 5 66 3 66 0.0 64 9 69 9 78 4 86 5 96 7 105 6 117 2 126 8 137 9 148 8 96 7 126 8 137 9 148 8 200 0 237 1 261 5 248 8 307 5 324 8 348 1 373 9 397 2 423 1 452 0	223 7 228 0 243 0 254 8 272 9 293 8 272 9 293 8 321 9 342 5 375 3 412 7 434 3 457 8 560 0 560 0 560 0 560 0 560 0 560 0 560 0 511 8 638 6 390 6 1.016 2 1.120 6 1.016 2 1.120 6 1.496 8 1.608 7 1.496 8 1.608 7 1.408	23 6 24 8 27 8 30 4 32 9 35 7 42 3 59 3 65 7 74 4 102 5 118 0 134 8 64 4 102 5 118 0 134 3 245 0 274 2 308 3 332 1 358 0 274 2 308 3 332 1 358 0 274 2 308 3 332 1 358 0 274 2 308 3 375 1 358 0 274 2 378 3 379 4 379 5 379 5 5 379 5 379 5 5 379 5 379 5 579 5 5	14 3 15 2 16 6 18 0 20 3 22 7 22 5 28 1 32 4 36 5 41 8 47 9 55 2 62 7 73 3 87 6 62 7 225 3 105 2 125 3 143 4 162 4 162 4 284 5 297 5 281 5 297 5 313 1	9 3 3 9 6 11 2 12 4 12 6 13 11 1 2 13 13 11 6 8 18 0 22 8 26 4 2 39 8 26 4 4 7 3 39 8 8 9 13 9 0 14 7 7 54 4 6 1 1 7 1 5 5 8 2 6 6 1 1 19 9 8 13 9 0 13 9 0 13 9 0 13 9 0 14 7 7 15 6 3 18 4 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	507 532 553 565 594 639 682 698 698 742 775 785 785 1136 1135 1136 1132 1136 1132 1135 1132 1135 1132 1135 1132 1135 1132 1135 1132 1135 1132 1135 1132 1135 1132 1135 1132 1135 1135	106 11.2 11.0 98 98 98 13.0 13.0 13.0 11.7 12.8 12.9 13.4 17.0 29 13.4 29 13.4 17.0 29 13.4 17.0 29 13.4 17.0 29 13.4 17.0 29 13.4 17.0 29 13.4 17.0 29 13.4 17.0 29 13.4 20 17.2 20 19 22.2 2 19 13.4 20 17.2 20 19 22.2 2 20 17.2 2 19 22.5 22.0 20 19 22.2 2 20 20 20 19 20 20 20 17.2 20 20 20 20 20 20 19.0 20 20 20 19.0 20 20 19.0 20 20 19.0 20 20 20 19.9 20 20 20 19.9 20 20 20 20 20 20 20 20 20 20 20 20 20	40 1 42 0 44 1 455 5 58 2 58 2 58 2 58 2 58 2 58 2 58 2	17 0 17 7 18 6 19 3 19 4 19 9 20 5 20 9 20 9 20 9 20 9 20 9 20 9 20 9 20 9
1989 1990 1991 1992 1993 1994 1994 1995 1996 1997 1998 1998	4,800 5 5,059 5 5,217 9 5,517 1 5,784 7 6,181 3 6,522 3 6,931 7 7,406 0 7,875 6 8,358 0	3,131.3 3,326.3 3,438.3 3,631.4 3,797.1 3,998.5 4,195.2 4,391.4 4,665.6 5,023.2 5,353.9	2,583.1 2,741.2 2,814.5 2,957.8 3,083.0 3,248.5 3,434.4 3,620.0 3,873.6 4,180.9 4,465.2	481.1 519.0 548.8 572.0 589.0 609.5 629.0 648.1 671.8 701.2 733.7	2,101,9 2,222,2 2,265,7 2,385,8 2,494,0 2,639,0 2,805,4 2,971,9 3,201,8 3,479,7 3,731,5	548.3 585.1 623.9 673.6 714.1 750.1 760.8 771.4 792.0 842.3 888.8	354.6 378.6 408.7 445.2 474.4 495.9 496.6 502.4 535.1 565.4	193 7 206 5 215 1 228 4 239 7 254 1 264 1 274 8 289 6 307 2 323 3	351.6 365.1 367.3 414.9 449.6 485.1 516.0 583.7 628.2 687.5 746.8	33.0 32.2 27.5 35.8 32.0 35.6 23.4 38.4 38.4 32.6 28.9 28.5	318.6 333.0 339.8 379.1 417.6 449.5 449.5 492.6 545.2 545.2 595.6 658.7 718.3	42.4 49.8 61.6 84.6 114.1 142.9 154.6 170.4 176.5 191.5 208.2
2000 2001 2002 2003 2003 2004 2005 2005 2005 2006 2007 2008 2009 p	8,938,9 9,185,2 9,408,5 9,840,2 10,534,0 11,273,8 12,031,2 12,448,2 12,635,2	5,788,8 5,979,3 6,110,8 6,382,6 6,693,4 7,065,0 7,477,0 7,856,5 8,037,4 7,841,3	4,827 7 4,952 2 4,997 3 5,154 6 5,410 7 5,706 0 6,070 1 6,402 6 6,540 8 6,335 6	779 7 821 9 873 1 913 3 952 8 991 5 1,035 2 1,089 1 1,141 3 1,182 5	4,048,0 4,130,3 4,124,2 4,241,3 4,457,9 4,714,5 5,035,0 5,313,5 5,399,6 5,153,1	961 2 1,027 1 1,113 5 1,228 0 1,282 7 1,359 1 1,406 9 1,453 8 1,496 6 1,505 7	615 9 669 1 747 4 845 6 931 6 931 6 960 1 993 0 1 023 9 1 043 9	345 2 358 0 366 1 382 4 408 1 427 5 446 7 460 8 472 7 461 8	817.5 870.7 890.3 930.6 1.033.8 1.069.8 1.133.0 1.096.4 1.106.3 1.042.3	29.6 30.5 18.5 36.5 49.7 43.9 29.3 39.4 48.7 29.9	787.8 840.2 871.8 894.1 1,025.9 1,103.6 1,056.9 1,057.5 1,012.4	215 3 232 4 218.7 204.2 198 4 178 2 146 5 144 9 210 4 268 3
2006: 1 11 11 11 1V	11,838.2 11,965.9 12,093.0 12,227.9	7,353.7 7,419.9 7,484.1 7,650.3	5,958.9 6,018.6 6,075.4 6,227.6	1,019.0 1,028.3 1,041.0 1,052.3	4,939.9 4,990.3 5,034.5 5,175.4	1,394.8 1,401.3 1,408.7 1,422.6	950.7 956.8 962.7 970.4	444_1 444_5 445_9 452_2	1,126.9 1,133.2 1,131.2 1,140.6	28.4 28.4 28.4 32.2	1,098.5 1,104.8 1,102.8 1,108.4	161 3 153 2 140 3 131 2
2007 [.] I II III IV	12,253.9 12,421.1 12,482.2 12,635.4	7,757.2 7,819.7 7,869.6 7,979.3	6,318.6 6,372.2 6,412.5 6,507.3	1,073.2 1,084.2 1,093.2 1,105.8	5,245.3 5,288.0 5,319.4 5,401.4	1,438.6 1,447.5 1,457.1 1,472.1	980.5 989.4 996.9 1,005.2	458.1 458.2 460.2 466.9	1,094.2 1,096.0 1,093.2 1,102.1	36.7 35.7 37.5 47.9	1,057.5 1,060.3 1,055.7 1,054.2	121.1 140.3 150.2 168.0
2008: 1 11 11 11 11 11	12,661.5 12,664.4 12,781.0 12,433.9	8,017.5 8,032.8 8,069.1 8,030.3	6,533.0 6,539.2 6,567.7 6,523 5	1,125 3 1,136.4 1,148 5 1,154 9	5,407.7 5,402.8 5,419.2 5,368.6	1,484.5 1,493.5 1,501.4 1,506.8	1.014.0 ¹ 1.021.7 1.026 7 1.033 2	470.5 471.8 474.7 473.6	1,115.2 1,111.9 1,114.4 1,083.6	57.2 49.4 49.3 39.0	1,057.9 1,062.5 1,065.1 1,044.5	179.9 202.8 222.2 236.7
2009: 1 II II IV P	12,208.9 12,218.1 12,349.7	7,825.8 7,815.9 7,841.5 7,882.1	6,327.8 6,313.1 6,333.2 6,368.2	1,171.8 1,184.4 1,184.8 1,189.0	5,156.0 5,128.8 5,148.4 5,179.2	1,498.0 1,502.8 1,508.3 1,513.8	1,037.8 1,042.0 1,046.1 1,049.8	460.2 460.8 462.2 464.1	1,037.8 1,028.0 1,037.9 1,065.5	27.3 28.9 25.8 37 4	1,010.5 999.1 1,012.0 1,028.1	245.9 262.0 277.9 287.4

See next page for continuation of table

	Corp	orate profi	ts with inv	ventory va	uation an	d capital c	onsumptio	on adjustr	ients					
			Profits w witho	ith invento out capital	ory valuati consumpt	on adjustr ion adjust	ment and ment			Net	Taxes		Busi- ness	Current surplus
Year or quarter	i				Profits			Inven-	Capital con-	and miscel-	on produc-	Less: Sub-	current transfer	of govern-
	i Total	Total	Profite	Taxes	Pro	ofits after	tax	tory valua-	tion adjust-	laneous pay-	and	sidies	pay- ments	ment enter-
		lotal	before tax	corpo- rate income	Total	Net divi- dends	Undis- tributed profits	tion adjust- ment	ment	ments			(net)	
1960 1961 1962 1963 1964 1965 1966 1966 1967 1968 1968	53 1 54 2 62 3 68 3 75 5 86 5 92 5 90 2 97 3 94 5	51.5 51.8 57.0 62.1 68.6 78.9 84.6 82.0 88.8 85.5	51.6 51.6 57.0 62.1 80.2 86.7 83.5 92.4 91.4	22.8 22.9 24.1 26.4 28.2 31.1 33.9 32.9 39.6 40.0	28.8 28.7 32.9 35.7 40.9 49.1 52.8 50.6 52.8 51.4	13.4 13.9 15.0 16.2 20.2 20.7 21.5 23.5 24.2	15.5 14.8 17.9 19.5 22.7 28.9 32.1 29.1 29.3 27.2	-0.2 3 0 -5 -1.2 -2.1 -1.6 -3.7 -5.9	1.6 2.3 5.3 6.2 6.9 7.6 8.0 8.0 8.2 8.5 9.0	10.6 12.5 14.2 15.2 17.4 19.6 22.4 25.5 27.1 32.7	44.5 47.0 50.4 53.4 57.3 60.7 63.2 67.9 76.4 83.9	1.1 2.0 2.3 2.2 2.7 3.0 3.9 3.8 4.2 4.5	19 20 22 27 31 36 35 38 43 49	0.9 .8 1.4 1.3 1.3 1.0 .9 1.2 1.0
1970 1971 1972 1973 1974 1974 1975 1976 1977 1978 1979 1980	82.5 96.1 111.4 124.5 115.1 133.3 161.6 191.8 218.4 225.4 201.4	74.4 88.3 101.6 115.4 109.6 135.0 165.6 194.8 222.4 232.0 211.4	81.0 92.9 108.2 135.0 147.8 145.5 179.7 210.5 246.1 272.1 253.5	34.8 38.2 42.3 50.0 52.8 51.6 65.3 74.4 90.0 87.2	46.2 54.7 65.9 85.0 93.9 114.5 136.1 161.3 182.1 166.4	24.3 25.0 26.8 29.9 33.2 33.0 39.0 44.8 50.8 57.5 64.1	21.9 29.7 39.0 55.1 61.8 60.9 75.4 91.3 110.5 124.6 102.3	6.6 4.6 19.6 38.2 10.5 14.1 15.7 23.7 40.1 42.1	8.1 7.8 9.8 9.1 5.6 -1.7 -4.0 -3.0 -4.0 -6.6 -10.0	39.1 43.9 47.9 55.2 70.8 81.6 85.5 101.1 115.0 138.9 181.8	91.4 100.5 107.9 117.2 124.9 135.3 146.4 159.7 170.9 180.1 200.3	4.8 4.7 5.2 3.3 4.5 5.1 7.1 8.9 8.5 9.8	4.5 4.3 4.9 6.0 7.1 9.4 9.5 10.8 13.3 14.7	.0 2 .5 4 9 -3.2 -1.8 -2.7 -2.2 -2.9 -5.1
1981 1982 1983 1984 1985 1986 1986 1987 1988 1989	223.3 205.7 259.8 318.6 332.5 314.1 367.8 426.6 425.6	219.1 191.1 226.6 257.5 253.0 306.9 367.7 374.1	243.7 198.6 234.0 268.6 257.5 246.0 323.1 389.9 390.5	84.3 66.5 80.6 97.5 99.4 109.7 130.4 141.6 146.1	159.4 132.1 153.4 171.1 158.1 136.3 192.7 248.3 244.4	73.8 77.7 90.8 97.6 106.2 112.3 129.9 158.0	85.6 54.4 69.9 80.3 60.5 30.1 80.3 118.4 86.4	-24.6 -7.5 -7.4 -4.0 0 7.1 -16.2 -22.2 -16.3	4.2 14.6 33.3 54.0 75.1 61.1 61.0 58.9 51.5	232.3 271.1 285.3 327.1 341.5 367.1 366.7 385.3 434.1	235.6 240.9 263.3 289.8 308.1 323.4 347.5 374.5 374.5 398.9	11.5 15.0 21.3 21.1 21.4 24.9 30.3 29.5 27.4	17.9 20.6 22.6 30.3 35.2 36.9 34.1 33.6 39.2	-5.6 -4.5 -3.2 -1.9 .6 .9 .2 2.6 4.9
1990 1991 1992 1993 1993 1994 1995 1996	434.4 457.3 496.2 543.7 628.2 716.2 801.5	398.8 430.3 471.6 515.0 586.6 666.0 743.8	411.7 425.4 474.4 519.0 599.0 684.3 740.7	145.4 138.6 148.7 171.0 193.1 217.8 231.5	266.3 286.8 325.7 348.0 405.9 466.5 509.3	169.1 180.7 188.0 202.9 235.7 254.4 297.7	97.2 106.1 137.7 145.1 170.2 212.1 211.5	-12.9 4.9 -2.8 -4.0 -12.4 -18.3 3.1	35.7 27.0 24.6 28.7 41.6 50.2 57.7	444.2 418.2 387.7 364.6 362.2 358.3 371.1	425.0 457.1 483.4 503.1 545.2 557.9 580.8	27.0 27.5 30.1 36.7 32.5 34.8 35.2	40.1 39.9 40.7 40.5 41.9 45.8 53.8	1.6 5.7 8.2 8.7 9.6 13.1 14.4

556.3

474.5 521.7

507.4

509.4

573.0

659.7

923.3

1,349.5

1,322.8

1,170.6

1.368.5

1,330.0

836.8

976.1

1.031.1

297.7 331.2 351.5

337.4

377.9

370.9 399.3

424.9 550.3

557.3

704.8

767.8

689.9

576.1

646.4

691.1

727.1 754.5

772.6

778.1

770.6

749.9

719.4 693.7

676.6

669.9

618.1

556.0

549.9

580.5

225.1 123.1

184.3

129.5 138.5

173.8

234.8 373.0

670.5

644.7

555 1

480.7

708.2 653.6 641.4

575.5

505.5

564.0

547.6

603.2

578.2

582.3 -129.6

595.3

166.9

358.0

475.1

624.1

14.1

15.7 --4.0

-16.8

8.0 -2.6 -11.3 -34.3

-30.7

-38.0 -176.4

-44.0 -38.2

-33.4 -191.0

-48.4 -173.7

-42.3

-42.2 -170.0

-29.5 -184.2

-25.3

-107.9

-54.5

139.2

81.1 18.1

-17.1

245.4

248.4

258.8

265.1 203.3

192.3

243.8

306.1

412.4 1,227.8

473.3 451.5 292.2

460.7 1,354.6

475.1 1,344.7

496.6 460.7

469.5 1,278.1

466.5 1,342.1

440.0 1,318.2

430.1 1,353.0

323.2 317.5 1,297.6 1,276.0

304.8 1,271.9

223.3

270.3

305.9

321.0 1,173.9

TABLE B-28. National income by type of income, 1960-2009-Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

1 477 8 Source: Department of Commerce (Bureau of Economic Analysis)

1962 1963

997

1998

1999

2000

2001

2002 2003

2004 2005

2006

2007

2008 -2009 P

2006:

2007

2008

2009

111

IV

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181 IV P 884.8

812.4

856.3

819.2

784.2

872.2

977 8

1 246 9

1,456.1

608.3

1.360.4

1,590.9

1,597.7

1,655.1

1.589.6

1,535.4

1,537.1

1,499.4

1,459.7

1,454.6

1.123.6

1,182.7

1,226.5 1,358.9

815.9

738.6

776.6

755.7

720.8

762.8

892.2

1 195 1

1,609.5

1,784.7

1,730.4

1,424.5

1,781.9

1,771.4

1,822.8

1,762.7

1 705 4

1,779.1

1,732.9

1,704.1

1,512.9 1,463.8 1,522.2

1,199.3

1,327.6

1,355.1

801.8

722.9

780.5

772.5

765.3

903.5

1 229 4

1,640.2

1,822.7

17744

1,462.7

1,815.3

1,819.8

1,865.1

1.790.7

17476

1,808.6

1,758.2

1,783.1

1,620.8

576.6

060.1

1,246.5

1,495.0

33.8 36.4 45.2

45.8

58.7

41.4

491

46.4

60.9

51.4

54.8 53.5

59.7

55.6

51.4

49.8 48.7

49.2

58.3

56.0 55.4

53.1 52.9

52.9 55.2

55.5

54.9 67.7

60.5 128.1

611.6

639.5

673.6

708.6

727.7

762.8

805.8

863.4

930.2

986.8

1,023.9

971.5

983.3

991.6

1,000.7

1.015.3

1,042.3

1.019.6

1.034.3

4793

481.4

506.4 504.1

461.6

543.0

652.2

739.2 815.1 1,028.7

786.2

608.9

654.4

661.6

684.0

690.6

711.3 1,025.2

756.0 1,032.2

798.9

790.7 1,042.5

809.0

806.1 1.058.5

854.7 1,037.3

826.2 10188

784.4

759.7 1,023.1

774.7

69.0 407.6

73.8 79.7

63.6 539.3

63.4 544.4

109.4

85.6 51.8

-153.4

-188.7

-127.7

-167.7

-173.2

-195.8

-204.7

-53.2

-60.1

-67.6

-75.6

-144.9

-128.6

-118.9

-118.3

-64.1

51.3

65.2

69.0

87.0

101.3

82.4 76.1

81.7

95.9

83 0

102.2 118.8

134.0

82.8

79.3

83.6

86.1

97.8

99 0

105.0

107.0

1148

112.6

116.0

131.8

137.9

145.4

124.8

14.1

13.3

14.1

9.1

4.0

6.3 7.0 1.2

-3.5 -4.2

-6.6

-8.1

-2.4

-3.8

-47

-6.0

-8.4

-6.9

-4.9

-6.0

-5.6 -6.3

-6.9

-8.9

-107

-8.8

-63

-6.6

Table B-29.	Sources of	personal	income,	1960-2009
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[Billions of dollars; quarterly data at seasonally adjusted annual rates]

			C	ompensati	on of emplo	yees, receiv	/ed		Proprie inventory consurr	etors' incom valuation a option adjus	e with nd capital tments	Rental
			Wa di	age and sal sbursemen	ary ts	S wa	upplements ges and sala	to aries				of persons
Year or quarter	Personal income	Total	Total	Private indus- tries	Govern- ment	Total	Employer contribu- tions for employee pension and insurance funds	Employer contribu- tions for govern- ment social insurance	Total	Farm	Non- farm	with capital con- sump- tion adjust- ment
1960 1961 1962 1963 1964 1965 1966 1967 1968 1970 1971 1972 1973 1974 1975 1976 1977 1978	411 3 428 8 456 4 479 5 514 3 555 5 603 8 648 1 711 7 903 1 992 6 1,110 5 1,222 7 1,334 9 1,344 9 1,345 1 1,334 9 1,345 1 1,334 9 1,334 9 1,335 1 1,334 9 1,335 1 1,335 1 1,355 1 1,35	2964 3053 3271 3452 3707 3995 4427 4751 5243 5776 6187 4751 8113 8907 9490 1,0592 1,1804 13352	272.9 280.5 299.4 317.9 337.8 363.8 400.3 429.0 518.3 551.6 584.0 638.8 708.8 708.8 708.8 708.8 814.7 899.6 99.4 1 120.3	223 7 228 0 243 0 254 8 272.9 293 8 321.9 342 5 375 3 412 7 434 3 457 4 560 0 611.8 638 6 710 8 791 6 900 6	492 52.5 56.3 600 64.9 68.9 784 8655 96.7 105.6 137.6 137.6 148.8 161.0 1761.1 188.8 161.0 1761.1 188.8 202.5 202.5	236 248 278 304 329 357 461 523 593 657 744 1025 1180 1343 1596 1364 2149	143 152 166 180 203 227 255 281 324 365 418 479 552 627 733 876 1052 1253 1434	93 96 112 124 126 124 126 126 126 126 126 126 126 126 126 126	507 532 553 565 594 639 682 698 742 775 785 84.7 960 1136 1135 1196 1322 1322 1460	106 11.2 11.2 11.0 98 120 120 130 116 117 128 129 129 129 129 129 129 129 129 17.0 17.2 17.2	40.1 42.0 44.1 45.5 51.9 55.2 58.2 58.2 58.2 58.2 58.2 58.2 58.2	170 177 186 193 194 199 205 209 206 209 206 209 201 231 239 231 239 234 239 234 239 234 239 234 239 234 239 234 239 234 239 234 239 234 239 234 239 234 239 239 234 239 239 234 239 239 239 239 239 239 239 239 239 239
1979 . 1960 . 1981 . 1982 . 1983	2,059 5 2,301 5 2,582 3 2,766 8 2,952 2 3,268 9 3,496 7 3,696 0 3,924 4 4,231 2 4,557 5	1,498 5 1,647 6 1,819 6 1,919 6 2,036 0 2,245 2 2,412 0 2,557 7 2,735 6 2,954 2 3,131 3	1.253 5 1.373 5 1.511 3 1.587 5 1.678 0 1.844 7 1.982 8 2.102 3 2.256 3 2.256 3 2.439 8 2.583 1	1,016.2 1,112.0 1,225.5 1,280.0 1,352.7 1,496.8 1,608.7 1,705.1 1,833.1 1,987.7 2,101.9	237.3 261.5 285.8 307.5 325.2 347.9 374.1 374.1 397.2 423.1 423.1	245.0 274.2 308.3 332.1 358.0 400.5 429.2 455.3 479.4 514.4 514.8	162 4 185 2 204 7 222 4 238.1 261.5 281.5 297.5 313.1 329.7 354 6	82.6 88.9 103.6 109.8 199.8 199.9 199.9 199.9 199.9 199.9 199.9 199.9 199.9 199.9 199.9 199.9 199.9 166.3 193.7	181 1 173 5 181 6 174 8 190 7 233 1 246 1 262 6 294 2 334 8 351 6	22.2 11.7 19.0 13.3 6.2 20.9 21.0 22.8 28.9 28.9 28.9 26.8 33.0	159 0 161 8 162 6 161 5 184 5 212 1 225 1 239 7 265 3 308 0 318 6	22.6 28.5 36.5 38.1 38.2 40.0 41.9 33.8 34.2 40.2 40.2 40.2 40.2
1990 1991 1992 1993 1994 1994 1995 1996 1997 1996 1997 1998	4.846.7 5.031.5 5.347.3 5.568.1 5.874.8 6.200.9 6.591.6 7,000.7 7,525.4 7,910.8	3,326,2 3,438,4 3,647,2 3,790,6 3,980,9 4,178,8 4,387,7 4,668,6 5,023,9 5,348,8	2,741 1 2,814 5 2,973 5 3,076 6 3,230 8 3,418 0 3,616 3 3,876 6 4,181 6 4,460 0	2,222,2 2,265,7 2,401,5 2,487,6 2,621,3 2,789,0 2,968,3 3,204,8 3,480,4 3,726,3	519.0 548 8 572.0 589 0 609 5 629 0 648 1 671 8 701 2 733 7	585.1 623.9 673.6 714.1 750.1 760.8 771.4 792.0 842.3 888.8	378.6 408.7 445.2 474.4 495.9 496.7 496.6 502.4 535.1 565.4	206 5 215.1 228 4 239.7 254.1 264 1 274 8 289 6 307 2 323 3	365 1 1 367 3 414 9 449 6 485 1 516 0 583 7 628 2 687 5 746 8	32 2 1 27 5 1 35 8 32 0 23 4 38 4 32 6 28 9 28 5	333 0 3398 3791 417.6 449.5 492.6 545.2 595.6 658.7 718.3	49.8 61.6 84.6 114.1 154.6 170.4 170.4 170.5 191.5 208.2
2000	8,559,4 8,883,3 9,060,1 9,378,1 9,937,2 10,485,9 11,268,1 11,894,1 12,238,8 12,072,1	5,788,8 5,979,3 6,110,8 6,367,6 6,708,4 7,060,0 7,475,7 7,862,7 8,042,4 7,836,3	4,827 7 4,952 2 4,997 3 5,139 6 5,425 7 5,701.0 6,068.9 6,408.9 6,545.9 6,330.6	4,048.0 4,130.3 4,124.2 4,226.3 4,472.9 4,709.5 5,033.7 5,319.8 5,404.6 5,148.1	779 7 821 9 873 1 913 3 952 8 991 5 1,035 2 1,089 1 1,141 3 1,182 5	961.2 1.027 1 1.113 5 1.228 0 1.282 7 1.359 1 1.406 9 1.453 8 1.496 6 1.505 7	615 9 669 1 747 4 845 6 931 6 960 1 993 0 1.023 9 1.043 9	345 2 358 0 366 1 382 4 408 1 427 5 446 7 460 8 472 7 461 8	817.5 870.7 890.3 930.6 1.033.8 1.069.8 1.133.0 1.096.4 1.106.3 1.042.3	29.6 30.5 18.5 49.7 43.9 29.3 39.4 39.4 48.7 29.9	787 8 840.2 871.8 984.1 1,025 9 1,103.6 1,056.9 1,057.5 1,012.4	215 3 232 4 218.7 204 2 198.4 178 2 146.5 144.9 210 4 268.3
2006:	11,026.7 11,204.0 11,336.9 11,504.8	7,373.7 7,419.9 7,484.1 7,625.3	5,978.9 6,018.6 6,075.4 6,202.6	4,959.9 4,990.3 5,034.5 5,150.4	1,019 0 1,028.3 1,041.0 1,052 3	1,394.8 1,401.3 1,408.7 1,422.6	950.7 956.8 962.7 970.4	444.1 444.5 445.9 452.2	1,126.9 1,133.2 1,131.2 1,140.6	28.4 28.4 28.4 32.2	1,098.5 1,104.8 1,102.8 1,108.4	161 3 153.2 140.3 131 2
2007: 1 11 11 11	11,706.9 11,823.4 11,945.6 12,100.3	7,782 2 7,819 7 7,869 6 7 979 3	6,343.6 6,372.2 6,412.5 6,507.3	5,270.3 5,288.0 5,319.4 5,401.4	1,073 2 1,084.2 1,093.2 1,105.8	1,438.6 1,447.5 1,457.1 1,472.1	980.5 989.4 996.9 1 005.2	458.1 458.2 460.2	1,094.2 1,096.0 1,093.2 1 102.1	36.7 35.7 37.5	1,057.5 1,060.3 1,055.7 1,054.2	121.1 140.3 150.2 168.0
2008 I II IV	12,142.2 12,292.9 12,286.6 12,233.5	8,017.5 8,032.8 8,069.1 8,050.3	6,533.0 6,539.2 6,567.7 6,543.5	5,407.7 5,402.8 5,419.2 5,388.6	1,125.3 1,136.4 1,148.5 1,154.9	1,484.5 1,493.5 1,501.4 1,506.8	1,014.0 1,021.7 1,026.7 1,033.2	470.5 471.8 474.7 473.6	1,115.2 1,111.9 1,114.4	57 2 · 49.4 · 49.3 ·	1,057.9 1,062.5 1,065.1	179.9 202.8 222.2 236.7
2009 I II IV P	11,952 7 12,048 8 12,083 9 12,203 1	7,805.8 7,815.9 7,841.5 7,882.1	6,307 8 6,313 1 6,333.2 6,368.2	5,136.0 5,128.8 5,148.4 5,179.2	1,171.8 1,184.4 1,184.8 1,189.0	1,498.0 1,502.8 1,508.3 1,513.8	1,037.8 1,042.0 1,046.1 1.049.8	460.2 460.8 462.2 464 1	1,037.8 1,028.0 1,037.9 1,065.5	27 3 28.9 25.8 37.4	1.010.5 999.1 1.012.0 1.028.1	245.9 262.0 277.9 287.4

See next page for continuation of table.

	Person	al income r	eceipts			Persi	onal current	transfer reci	eipts			
		-				Govern	ment social	benefits to p	persons		0.1	Contribu- tions
ir or quarter	Total	Personal interest income	Personal dividend income	Total	Totai	Old-age, survivors, disability, and health insurance benefits	Govern- ment un- employ- ment insur- ance benefits	Veterans benefits	Family assis- tance ¹	Other	Other current transfer receipts, from business (net)	for govern- ment social insurance domestic
	37.9 40.1 44.1 47.9 53.8 59.4 64.1 69.0 75.2 84.1	24.5 26.2 29.1 31.7 35.6 39.2 43.4 47.5 51.6 59.9	13.4 13.9 15.0 16.2 20.2 20.7 21.5 23.5 24.2	25.7 29.5 30.4 33.5 36.2 39.6 48.0 56.1 62.3	24.4 28.1 28.8 30.3 31.3 33.9 37.5 45.8 53.3 59.0	11.1 12.6 14.3 15.2 16.0 18.1 20.8 25.8 30.5 33.1	3.0 4.3 3.1 3.0 2.7 2.3 1.9 2.2 2.1 2.2	46 50 47 48 47 49 49 56 59 67	10 11 13 14 15 17 19 23 28 35	4.7 5.1 55 59 6.4 7.0 8.1 99 11.9 13.4	1.3 1.4 1.5 2.2 2.3 2.1 2.3 2.1 2.3 2.8 3.3	16 / 17 / 19 / 21 / 22 / 23 / 31 / 34 / 38 / 44 /
	93 5 101.0 109.6 124.7 146.4 162.2 178.4 205.3 234.8 274.7	69.2 75.9 82.8 94.8 113.2 129.3 139.5 160.6 184.0 217.3	24 3 25 0 26 8 29 9 33 2 32 9 39 0 44 7 50 7 57 4	74.7 88.1 97.9 112.6 133.3 170.0 184.0 194.2 209.6 235.3	71.7 85.4 94.8 108.6 128.6 163.1 177.3 189.1 203.2 227.1	38.6 44.7 49.8 60.9 70.3 81.5 93.3 105.3 116.9 132.5	4.0 5.8 5.7 4.4 17.6 15.8 12.7 9.1 9.4	7 7 8 8 9 7 10 4 11 8 14 5 14 4 13 8 13 9 14 4	4.8 6.9 7.2 8.0 9.3 10.1 10.6 10.8 11.1	16.6 20.0 22.7 25.7 31.7 40.2 43.7 46.7 52.5 59.6	2.9 2.7 3.1 3.9 4.7 6.8 6.7 5.1 6.5 8.2	46 - 51 : 59 : 75 ! 85 : 89 : 101 : 113 : 131 : 152 :
	338.7 421.9 488.4 529.6 607.9 653.2 694.5 715.8 767.0 874.8	274.7 348.3 410.8 446.3 517.2 555.8 588.4 603.6 637.3 717.0	64 0 73 6 77 6 83 3 90 6 97 4 106 0 112 2 129 7 157 8	279.5 318.4 354.8 383.7 400.1 424.9 451.0 467.6 496.5 542.6	270.8 307.2 342.4 369.9 380.4 402.6 428.0 447.4 475.9 519.4	154.8 182.1 204.6 222.2 237.8 253.0 268.9 282.6 300.2 325.6	15.7 15.6 25.1 26.2 15.9 15.7 16.3 14.5 14.5 14.3	15 0 16.1 16.4 16.6 16.4 16.7 16.7 16.7 16.6 16.9 16.9 17.3	12.5 13.1 12.9 13.8 14.5 15.2 16.1 16.4 16.9 17.5	72.8 80.2 83.4 91.0 95.9 102.0 109.9 117.3 128.7 144.8	8.6 11.2 12.4 13.8 19.7 22.3 22.9 20.2 20.2 20.2 20.6 23.2	166. 195. 208. 226. 257. 281. 303. 323 361. 385.
	920.8 928.6 909.7 900.5 947.7 1,005.4 1,080.7 1,165.5 1,269.2 1,246.8	751.9 748.2 722.2 698.1 712.7 751.9 784.4 835.8 919.3 910.9	168 8 180 3 187 6 202 3 235 0 253 4 296 4 329 7 349 8 335 9	594.9 665.9 745.8 790.8 826.4 878.9 924.1 949.2 977.9 1 021.6	572.7 648.2 729.5 776.7 813.1 860.2 901.2 929.8 951.9 987.6	351.8 381.7 414.4 444.7 476.6 508.9 536.9 563.5 574.7 588.6	18.0 26.6 38.9 34.1 23.5 21.4 22.0 19.9 19.5 20.3	17.8 18.3 19.3 20.0 20.1 20.9 21.7 22.6 23.5 24.3	19.2 21.1 22.2 22.8 23.2 22.6 20.3 17.9 17.4 17.9	165.9 200.5 234.6 255.0 269.7 286.4 300.3 306.0 316.8 336.4	22.2 17.6 16.3 14.1 13.3 18.7 22.9 19.4 26.0 34.0	410 430.1 455.1 477.4 508.1 532.8 555. 587.1 624.1 661.1
	1,360.7 1,346.0 1,309.6 1,312.9 1,408.5 1,542.0 1,829.7 2,031.5 1,994.4 1,791.5	984.2 976.5 911.9 889.8 860.2 987.0 1,127.5 1,266.4 1,308.0 1,236.9	376 5 369 5 397 7 423 1 548 3 555 0 702 2 765 1 686 4 554 6	1,083.0 1,188.1 1,282.1 1,341.7 1,415.5 1,508.6 1,605.0 1,718.0 1,875.9 2,106.9	1,040.6 1,141.3 1,247.9 1,316.0 1,398.6 1,482.7 1,583.6 1,687.8 1,843.2 2,074.2	620.5 667.7 706.1 740.4 790.2 844.7 943.3 1,003.7 1,070.3 1 156.7	20.6 31.7 53.2 52.8 36.0 31.3 29.9 32.3 50.6 120.2	25.2 26.8 29.8 32.2 34.5 36.8 39.3 42.1 45.6 51.5	18.4 18.1 17.7 18.4 18.4 18.2 18.2 18.2 18.5 18.9 19.9	355.9 397.1 441.1 472.3 519.6 551.7 552.9 591.2 657.9 725.9	42.4 46.8 34.2 25.7 16.9 25.8 21.4 30.2 32.6 32.7	705.8 733. 751.9 778.9 827.5 872.7 921.8 959.6 959.6 959.6 990.6 972

Consists of aid to families with dependent children and, beginning in 1996, assistance programs operating under the Personal Responsibility and Work Opportunity Reconciliation Act of 1996

29.6 29.4 30.4

30.3

31.4 31.2

32.8 33.9

35.7 38.7 57.7

70.3

96.2

122.5 135.7

126.7

38.9 39.2 39.5

39.7

41.0 42.0 42.2

43.0

44.8 45.0 46.1

46.5

50.3 50.5 52.0

53.3

18.2

18.2 18.2

18.3

18.4 18.4

18.5

18.6

18.6 18.8

18.9

19.5

19.7 19.9

20.1

543.1

549.6 561.3

557.4

595.0 579.5

587.7

602.7

613.3

737.5

642.3

660.4

763.9

748 1

Source: Department of Commerce (Bureau of Economic Analysis)

1.711.1

1.817.2 1.881.3

1,909.0

1,968.2 2,022.0

2,065.8 2,069.8

2,020.8 1,997.3 2,001.4

1,958.1

1.845.5 1,773.4 1,763.1

1 784 0

1,067.2

1,128.7

1,156.8

1,157.2

1,198.3

1,246.5

1,297.9

1,322.8

1,304.6

1,306.6

1,292.9

1,243.4

1,241.1

1,228.2

643.9

688.5

724.5

751.9

769.9 775.5

767.9

747.0

716.2 690.7 673.7

665.2

602.1 532.3 528.2

555.8

1.569.0

597.9

620.7

1,632.4

1,693.8

1,725.5

1,753.7

1,794.1

1.874.3

1,898.0

,987.3

2,140.3 2.137.5

2,162.5

1.547.3

1,578.0

1,600.1

1,609.1

1.666.7

1.669.3

1,693.9

1,721.2

1,761.5

1.841.7

1,865.3

1,954.7

2,107.7

2,129.6

917.5

941.6 950.7

963.4

981.0 998.2

1,012.7

1,023.1

1,049.1

1.064.5

1,087.0

1,128.5

1,151.1

1.165.8

1,181.5

Yea

1960 1961

1969

1970

1976

1977

1978 1979

1980

1986 1987 1988

1989 1990

1991 1992 1993

1998 1999

2006

2007

2008

2009

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16.4 17.0

19.1 21.7 22.4 23.4 31.3 34.9

38.7

44.1

46.4 51.2 59.2 75.5 85.2

89.3

101.3 113.1

131.3 152.7

166.2

195.7 208.9 226.0 257.5 281.4

303.4 323.1

361.5 385.2

410.1 430.2 455.0

477.4 508.2 532.8 555.1

587.2 624.7

661.3 705.8 733.2 751.5 778.9

827.3 872.7 921.8 959.3

990.6 973.2

915.4 917.4

920.8

933.8

952.5 953.7 958.6

972.6

985.3

988.9 994.9

993.3

969 7

970.9 974 0

978.4

21.7 19.8 20.6

23.3

27.1 29.8 31.6 32.4

32.6

32.6 32.6 32.7

32.5 32.7 32.8 32.9

TABLE B-30. Disposition of personal income, 1960-2009

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

					Less: Perso	nal outlays			Perc	ent of disposes of the second se	sable le ²
	Personal	Less. Personal	Equals: Dispos-		Portonal			Equals:	Personal	outlays	
Year or quarter	income	current taxes	able personal income	Total	consump- tion expendi- tures	Personal interest pay- ments ¹	Personal current transfer payments	Personal saving	Total	Personal consump- tion expendi- tures	Personal saving
1960	411.3 428.8 456.4 479.5 514.3 555.5 603.8 648.1 711.7 778.3	46.1 47.3 51.6 52.1 57.7 66.4 73.0 87.0 104.5	365.2 381.6 404.9 425.0 462.3 497.8 537.4 575.1 624.7 673.8	338.9 349.7 371.4 391.8 421.7 455.1 493.1 520.9 572.2 621.4	331.8 342 2 363.3 382.7 411.5 443.8 480.9 507.8 558.0 605.1	6.2 6.5 7.0 7.9 8.9 9.9 10.7 11.1 12.2 14.0	0.8 1.0 1.1 1.2 1.3 1.4 1.6 2.0 2.0 2.2	26.3 31.9 33.5 40.5 42.7 44.3 54.2 52.5 52.5	92.8 91.6 91.7 91.2 91.2 91.4 91.8 90.6 91.6 92.2	90.9 89.7 90.0 89.0 89.0 89.2 89.5 88.3 89.3 89.3	7.2 8.4 8.3 7.8 8.8 8.6 8.2 9.4 8.4 7.8
1970	838.6 903.1 992.6 1,110.5 1,222.7 1,334.9 1,474.7 1,632.5 1,836.7 2,059.5	103.1 101.7 123.6 132.4 151.0 147.6 172.3 197.5 229.4 268.7	735.5 801.4 869.0 978.1 1,071.7 1,187.3 1,302.3 1,435.0 1,607.3 1,790.9	666.1 721.0 791.5 875.2 957.5 1.061.3 1.179.6 1.309.7 1.465.0 1.633.4	648.3 701.6 770.2 852.0 932.9 1.033.8 1.151.3 1.277.8 1.427.6 1.591.2	15.2 16.6 18 1 19 8 21.2 23 7 23.9 27 0 31.9 36.2	2.6 2.8 3.2 3.4 3.4 3.4 4.4 4.8 5.4 6.0	69.4 80.4 77.5 102.9 114.2 125.9 122.8 125.3 142.4 157.5	90.6 90.0 91.1 89.5 89.3 89.4 90.6 91.3 91.1 91.2	88.1 87.5 88.6 87.1 87.0 87.1 87.0 87.1 88.4 89.0 88.8 88.8 88.8	9.4 10.0 8.9 10.5 10.7 10.6 9.4 8.7 8.9 8.8
1980	2,301.5 2,582.3 2,766.8 2,952.2 3,268.9 3,496.7 3,696.0 3,924.4 4,231.2 4,557.5	298.9 345.2 354.1 352.3 377.4 417.3 437.2 489.1 504.9 566.1	2,002.7 2,237.1 2,412.7 2,599.8 2,891.5 3,079.3 3,258.8 3,435.3 3,726.3 3,726.3 3,991.4	1,806.4 2,000.4 2,148.8 2,372.9 2,595.2 2,825.7 3,012.4 3,211.9 3,469.7 3,726.4	1,755.8 1,939.5 2,075.5 2,288.6 2,501.1 2,717.6 3,097.0 3,350.1 3,3594.5	43.6 49.3 59.5 69.2 77.0 89.4 94.5 91.7 91.7 91.7 91.0 93.9	6.9 11.5 13.8 15.1 17.1 18.8 21.1 23.2 25.6 28.0	196.3 236.7 263.9 226.9 296.3 253.6 246.5 223.4 223.4 265.0	90 2 89 4 89.1 91 3 89.8 91 8 92 4 93.5 93.1 93.4	87 7 86.7 86.0 88.0 88.3 88.3 90.2 89.9 90.1	9.8 10.6 10.9 87 10.2 8.2 76 6.5 6.5 6.6
1990 1991 1991 1992 1993 1994 1995 1996 1997 1998 1999 1998	4,846 7 5,031,5 5,347,3 5,568,1 5,874,8 6,200,9 6,591,6 7,000,7 7,525,4 7,910,8	592.7 586.6 610.5 646.5 690.5 743.9 832.0 926.2 1,026.4 1,107.5	4,254 0 4,444,9 4,736,7 4,921,6 5,184,3 5,457,0 5,759,6 6,074,6 6,498,9 6,803,3	3,977 3 4,131 7 4,388 7 4,636 2 4,913 6 5,170 8 5,478 5 5,794 2 6,157 5 6,595 5	3,835,5 3,980,1 4,236,9 4,483,6 4,750,8 4,987,3 5,273,6 5,570,6 5,518,5 6,342,8	111.3 115.0 111.3 107.0 113.0 130.6 147.3 159.7 169.5 176.5	30.6 36.7 40.5 45.6 49.8 52.9 57.6 63.9 69.5 76.2	276 7 313.2 348.1 285.4 270.7 286.3 281.1 280.4 341.5 207 8	93 5 93 0 92 7 94 2 94 8 94 8 95 1 95 4 94 7 96 9	90 2 895 89 4 91 1 91 6 91.4 91.7 91.7 91.2	6.5 7.0 7.3 5.8 5.2 4.9 4.9 5.3 3.1
2000 2001 2002 2003 2004 2005 2006 2007 2006 2007 2008 2008 2008	8,559,4 8,883.3 9,060.1 9,378.1 9,937.2 10,485.9 11,268.1 11,894.1 12,238.8 12,072.1	1,232.3 1,234.8 1,050.4 1,000.3 1,047.8 1,208.6 1,352.4 1,490.9 1,432.4 1,107.6	7,327,2 7,648,5 8,009,7 8,377,8 8,889,4 9,277,3 9,915,7 10,403,1 10,806,4 10,964,5	7,114.1 7,443.5 7,727.5 8,088.0 8,585.7 9,149.6 9,680.7 10,224.3 10,520.0 10,461.8	6.830.4 7,148.8 7,439.2 7,804 0 8,285.1 8,819.0 9,322.7 9,826 4 10,129.9 10,092.6	200 3 203.7 191.3 182 7 190.3 210.8 230.1 256 8 237.7 214.3	83.4 91.0 97.0 101.3 110.3 119.8 128.0 141.0 152.3 154.9	213 1 204 9 282 2 289 8 303 7 127 7 235 0 178 9 286 4 502 7	97 1 97 3 96 5 96 6 98 6 98 6 98 6 98 3 97 3 95 4	93.2 93.5 92.9 93.2 93.2 95.1 94.0 94.5 93.7 92.0	2 9 2.7 3.5 3.5 3.4 1.4 2.4 1.7 2.7 4.6
2006. 	11,026.7 11,204.0 11,336.9 11,504.8	1,321.5 1,340.2 1,354.3 1,393.5	9,705.2 9,863.8 9,982.5 10,111.2	9,493.5 9,618.2 9,754.9 9,856.4	9,148 2 9,266 6 9,391 8 9,484 1	223.9 223.7 233.5 239.2	121.4 127.8 129.6 133.2	211.7 245.6 227.7 254.8	97.8 97.5 97.7 97.5	94.3 93.9 94.1 93.8	2.2 2.5 2.3 2.5
2007: 	11,706.9 11,823.4 11,945.6 12,100.3	1,459.5 1,481.8 1,500.7 1,521.9	10,247.4 10,341.7 10,445.0 10,578.4	10,038.3 10,158.2 10,275.6 10,425.0	9,658.5 9,762.5 9,865.6 10,019.2	242.1 256.2 268.2 260.7	137.8 139.4 141.8 145.0	209.1 183.5 169.4 153.5	98.0 98.2 98.4 98.5	94.3 94.4 94.5 94.7	2.0 1.8 1.6 1.5
2008: II IV	12,142,2 12,292,9 12,286,6 12,233,5	1,531.8 1,326.2 1,437.3 1,434.3	10,610.4 10,966.7 10,849.3 10,799.1	10,484.1 10,592.2 10,613.6 10,389.9	10,095.1 10,194.7 10,220.1 10,009.8	239.8 243.9 238.3 228.8	149.2 153.6 155.2 151.3	126.3 374.4 235.7 409.2	98.8 96.6 97.8 96.2	95.1 93.0 94.2 92.7	1.2 3.4 2.2 3.8
2009: I II IV P	11,952.7 12,048.8 12,083.9 12,203.1	1,187.3 1,082.6 1,086.1 1,074.4	10,765.4 10,966.2 10,997.8 11,128.6	10,362.3 10,370.5 10,502.8 10,611.8	9,987.7 9,999.3 10,132.9 10,250.5	220.4 216.7 215.5 204.7	154.2 154.5 154.4 156.6	403.1 595.7 495.0 516.9	96.3 94.6 95.5 95.4	92.8 91.2 92.1 92.1	3.7 5.4 4.5 4.6

 1 Consists of nonmortgage interest paid by households 2 Percents based on data in millions of dollars.

TABLE B-31. Total and per capita disposable personal income and personal consumption expenditures, and per capita gross domestic product, in current and real dollars, 1960-2009

	D	isposable pe	rsonal incom	e	Perso	nal consump	tion expendit	ures	Gross d	omestic	
Year or quarter	Tot (billions o	al f dollars)	Per c (doll	apita ars)	Tot (billions o	tal f dollars)	Per ca (doli	apita ars)	proc per ci (doli	apita arsi	Population (thou-
	Current dollars	Chained (2005) dollars	Current dollars	Chained (2005) dollars	Current dollars	Chained (2005) dollars	Current dollars	Chained (2005) dollars	Current dollars	Chained (2005) dollars	sands}1
1960	365 2 381.6 404 9 425 0 462 3 497.8 537 4 537 4 575 1 624 7 673 8	1,963 9 2,030.8 2,129.6 2,209.5 2,368.7 2,514.7 2,647.3 2,763.5 2,889.2 2,981.4	2,020 2,077 2,170 2,245 2,408 2,562 2,733 2,894 3,112 3,324	10,865 11,052 11,413 11,672 12,342 12,939 13,465 13,904 14,392 14,706	331.8 342.2 363.3 382.7 411.5 443.8 480.9 507.8 558.0 605.1	1,784 4 1,821 2 1,911 2 1,989 9 2,108 4 2,241 8 2,369 0 2,440 0 2,580 7 2,677 4	1,836 1,862 1,947 2,022 2,144 2,284 2,446 2,555 2,780 2,985	9,871 9,911 10,243 10,512 10,985 11,535 12,050 12,276 12,856 13,206	2,912 2,965 3,139 3,263 3,458 3,700 4,007 4,188 4,532 4,856	15,661 15,766 16,466 16,940 17,675 18,576 19,559 19,836 20,590 21,021	180,760 183,742 186,590 189,300 191,927 194,347 196,599 198,752 200,745 202,736
1970 1971 1972 1973 1974 1975 1976 1976 1977 1978 1979	735 5 801.4 869.0 978.1 1,071.7 1,187.3 1,302.3 1,435.0 1,607.3 1,790.9	3,108 8 3,249 1 3,406 6 3,638 2 3,610 2 3,691 3 3,838 3 3,970 7 4,156 5 4,253 8	3,586 3,859 4,140 4,615 5,010 5,497 5,972 6,514 7,220 7,956	15,158 15,644 16,228 17,166 16,878 17,091 17,600 18,025 18,670 18,897	648 3 701 6 770 2 852 0 932 9 1,033.8 1,151 3 1,277 8 1,427 6 1,591 2	2,740,2 2,844,6 3,019,5 3,169,1 3,142,8 3,214,1 3,393,1 3,535,9 3,691,8 3,779,5	3,161 3,378 3,669 4,020 4,362 4,786 5,279 5,801 6,413 7,069	13,361 13,696 14,384 14,953 14,693 14,881 15,558 16,051 16,583 16,790	5.063 5.425 5.897 6.522 7.010 7.583 8.366 9,216 10,303 11,382	20,820 21,249 22,140 23,200 22,861 22,592 23,575 24,412 25,503 26,010	205,089 207,692 209,924 211,939 213,898 215,981 218,086 220,289 222,629 222,106
1980	2,002,7 2,237,1 2,412,7 2,599,8 2,891,5 3,079,3 3,258,8 3,435,3 3,726,3 3,726,3 3,991,4	4,295.6 4,410.0 4,506.5 4,655.7 4,989.1 5,144.8 5,315.0 5,402.4 5,635.6 5,785.1	8,794 9,726 10,390 11,095 12,232 12,911 13,540 14,146 15,206 16,134	18,863 19,173 19,406 19,868 21,105 21,571 22,083 22,246 22,997 23,385	1,755.8 1,939.5 2,075.5 2,288.6 2,501.1 2,717.6 2,896.7 3,097.0 3,350.1 3,594.5	3,766,2 3,823,3 3,876,7 4,098,3 4,315,6 4,540,4 4,724,5 4,870,3 5,066,6 5,209,9	7,710 8,432 9,766 10,580 11,394 12,036 12,753 13,670 14,530	16.538 16.623 16.694 17,489 18,256 19,037 19,630 20,055 20,675 21,060	12,243 13,594 14,009 15,084 16,629 17,683 18,531 19,504 20,813 22,160	25,640 26,030 25,282 26,186 27,823 28,717 29,443 30,115 31,069 31,877	227,726 230,008 232,218 234,333 236,394 238,506 240,683 242,843 245,061 247,387
1990	4,254.0 4,444.9 4,736.7 4,921.6 5,184.3 5,457.0 5,759.6 6,074.6 6,498.9 6,803.3	5,896 3 5,945.9 6,155 3 6,258 2 6,459.0 6,651.6 6,870.9 7,113 5 7,538.8 7,766.7	17,004 17,532 18,436 18,909 19,678 20,470 21,355 22,255 23,534 24,356	23,568 23,453 23,958 24,044 24,517 24,951 25,475 26,061 27,299 27,805	3,835.5 3,980.1 4,236.9 4,483.6 4,750.8 4,987.3 5,273.6 5,570.6 5,918.5 6,342.8	5,316.2 5,324.2 5,505.7 5,701.2 5,918.9 6,079.0 6,291.2 6,523.4 6,865.5 7,240.9	15.331 15,699 16,491 17,226 18,033 18,708 19,553 20,408 21,432 22,707	21,249 21,000 21,430 22,466 22,803 23,325 23,899 24,861 25,923	23,185 23,635 24,686 25,616 26,893 27,813 29,062 30,526 31,843 33,486	32,112 31,614 32,255 32,747 33,671 34,112 34,977 36,102 37,238 38,592	250,181 253,530 256,922 260,282 263,455 266,588 269,714 272,958 276,154 279,328
2000 2001	7,327,2 7,648,5 8,009,7 8,377,8 8,889,4 9,277,3 9,915,7 10,403,1 10,806,4 10,964,5	8,161.5 8,360.1 8,653.9 9,155.1 9,277.3 9,650.7 9,860.6 9,911.3 10,035.3	25,944 26,805 27,799 28,805 30,287 31,318 33,157 34,445 35,450 35,659	28,899 29,299 29,976 30,442 31,193 31,318 32,271 32,648 32,514 32,637	6,830,4 7,148,8 7,439,2 7,804,0 8,285,1 8,819,0 9,322,7 9,826,4 10,129,9 10,092,6	7,608.1 7,813.9 8,021.9 8,247.6 8,532.7 8,819.0 9,073.5 9,313.9 9,290.9 9,237.3	24,185 25,054 25,819 26,832 28,228 29,771 31,174 32,535 33,231 32,823	26,939 27,385 27,841 28,357 29,072 29,771 30,341 30,838 30,479 30,042	35,237 36,049 36,935 38,310 40,435 42,664 44,805 46,611 47,375 46,372	39,750 39,768 40,096 40,711 41,784 42,664 43,391 43,884 43,671 42,242	282,418 285,335 288,133 290,845 293,502 296,229 299,052 302,025 304,831 307,484
2006: 1 II III IV	9,705.2 9,863.8 9,982.5 10,111.2	9,533.8 9,617.3 9,662.5 9,788.8	32,572 33,031 33,341 33,680	31,997 32,205 32,272 32,606	9,148.2 9,266.6 9,391.8 9,484.1	8,986.6 9,035.0 9,090.7 9,181.6	30,703 31,031 31,367 31,591	30,161 30,255 30,362 30,584	44,246 44,698 44,931 45,340	43,348 43,407 43,305 43,505	297,959 298,625 299,411 300,213
2007: 1 II III IV.	10,247.4 10,341.7 10,445.0 10,578.4	9,830.2 9,842.7 9,883.9 9,886.2	34,055 34,287 34,540 34,893	32,668 32,633 32,684 32,684	9,658.5 9,762.5 9,865.6 10,019.2	9,265.1 9,291.5 9,335.6 9,363.6	32,097 32,367 32,624 33,049	30,790 30,806 30,871 30,886	45,846 46,407 46,890 47,294	43,534 43,777 44,050 44,171	300,913 301,617 302,406 303,166
2008: + II III	10,610.4 10,966.7 10,849.3 10,799.1	9,826.8 10,059.0 9,838.3 9,920.4	34,925 36,022 35,551 35,304	32,345 33,041 32,238 32,431	10,095.1 10,194.7 10,220.1 10,009.8	9,349.6 9,351.0 9,267.7 9,195.3	33,228 33,486 33,489 32,724	30,774 30,715 30,368 30,061	47,312 47,620 47,666 46,904	43,997 44,065 43,662 42,963	303,810 304,445 305,177 305,800
2009: I II IV F	10,765.4 10,966.2 10,997.8 11,128.6	9,926.4 10,077.5 10,042.3 10,095.1	35,124 35,709 35,728 36,071	32,387 32,815 32,625 32,721	9,987.7 9,999.3 10,132.9 10,250.5	9,209.2 9,189.0 9,252.6 9,298.5	32,587 32,560 32,919 33,225	30,047 29,922 30,059 30.139	46,258 46,080 46,268 46,880	42,172 42,011 42,146 42,639	306,496 307,101 307,815 308,522

[Quarterly data at seasonally adjusted annual rates, except as noted]

¹ Popu ation of the United States including Armed Forces overseas; includes Alaska and Hawaii beginning in 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-32. Gross saving and investment, 1960-2009

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

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						Gross	saving					
					Net s	aving				Consum	otion of fixe	d capital
Voor or quarter	Tetel			Net priva	te saving		Net g	overnment s	aving			
rear or quarter	lotal gross saving	Total net saving	Total	Personal saving	Undis- tributed corporate profits ¹	Wage accruals less disburse- ments	Total	Federal	State and local	Total	Private	Govern- ment
1960 1961 1962 1963 1964 1965 1966 1965 1967 1968 1969	111.3 114.3 124.9 133.2 143.4 158.5 168.7 170.6 182.0 198.4	54.7 56.1 64.3 69.8 77.0 87.7 92.3 87.6 91.6 99.3	43.3 49.3 56.7 58.8 69.7 78.0 82.3 89.9 86.6 82.7	26.3 31.9 33.5 40.5 42.7 44.3 54.2 52.5 52.5	16.9 17.4 23.2 25.7 29.2 35.3 38.0 35.8 34.1 30.3	0.0 0 0 0 0 0 0 0 0 0	11.4 6.8 7.7 11.0 7.3 9.8 10.0 -2.3 5.1 16.5	7.1 2.6 2.4 5.3 9 3.2 2.3 -9.3 -2.4 8.6	4.3 4.3 5 2 5 7 6 4 6 5 7.8 7.0 7.5 8.0	56.6 58 2 60.6 63 3 66.4 70.7 76.5 82.9 90.4 99.2	41 6 42 6 44 1 45 9 48 3 51 9 56 5 61 6 67 4 74 5	15.0 15.6 16.5 17.5 18.1 18.9 20.0 21.4 23.0 24.7
1970 1971 1972 1973 1973 1974 1975 1976 1976 1977 1978 1979	192 8 209 2 237 3 292 2 301 8 296 9 342 0 396 7 476 3 533 2	84 5 91 5 110 1 151 4 138 1 106 5 133 8 164 9 214 9 234 3	92 9 113 7 119 4 147 5 143 3 174 6 180 1 197 9 225 2 235 3	69 4 80.4 77.5 102.9 114.2 125.9 122.8 125.3 142.4 157.5	23.4 32.9 42.2 44.6 29.1 48.7 57.3 72.6 82.8 77.8	0 4 -3 0 0 0 0 0 0 0	-8.4 -22.2 -9.3 3.9 -5.2 -68.2 -46.3 -33.0 -10.2 1.0	-155 -287 -249 -118 145 -70.6 -537 -461 -289 140	7.1 6.5 15.6 15.7 9.3 2.5 7.4 13.1 18.7 13.0	108.3 117.8 127.2 140.8 163.7 190.4 208.2 231.8 261.4 298.9	81 7 89 5 97 7 109 5 127 8 150 4 165 5 186 1 212 0 244 5	26.6 28 2 29 4 31 3 35 9 42.6 45.6 49.5 54 4
1980	542.7 646.1 621.5 602.4 753.4 738.4 709.3 782.3 901.5 924.1	198.6 252 7 187.9 151.3 279.0 232.9 170.8 211.2 290.5 272.7	246.5 301 9 325.4 322.6 426.5 389 2 344.7 348.5 411.7 386.5	196.3 236.7 263.9 226.9 296.3 253.6 246.5 223.4 253.6 256.6 265.0	50.2 65.2 61.5 95.7 130.3 135.6 98.3 125.1 155.1 121.5		-47.8 -49.2 -1375 -171.4 -1475 -156.3 -1739 -137.4 -121.2 -113.8	-56.6 -56.8 -135.3 -176.2 -171.5 -178.6 -194.6 -149.3 -138.4 -133.9	8.8 7.6 -2 2 4.9 23 9 22 4 20 7 17.2 20 1	344.1 393.3 433.5 451.1 474.3 505.4 538.5 538.5 538.5 511.1 611.0 651.5	282.3 323.2 356.4 369.5 387.5 412.8 439.1 464.5 497.1 529.6	61.8 70.1 77 1 81.6 86.9 92 7 99 4 106.6 113 9 121 8
1990 1991 1992 1993 1993 1994 1994 1995 1996 1997 1998 1998	917 6 951.3 932.3 958 4 1,094.7 1,219.0 1,344.4 1,525.7 1,654.4 1,708.0	226 4 227.0 187.9 180 4 275 5 349.6 431 8 561 9 633 9 613.6	396 7 451.2 491 8 461 6 487 7 546.6 557 1 557 5 553 4 473.0	276.7 313.2 348.1 285.4 270.7 286.3 281.1 280.4 341.5 207.8	120 0 138.0 159.5 169.7 199.4 243.9 272.3 308.2 212.6 260.1	0 -15.8 6.4 17.6 16.4 36 -2.9 7 5.2	- 170.3 -224.2 -303.9 -281.2 -212.2 -197.0 -125.3 -23.8 80.5 140.6	-176.4 -218.4 -302.5 -280.2 -220.4 -206.2 -148.2 -60.1 33.6 98.8	6.2 -5.8 -1.4 9 9.2 230 36.3 46.9 41.8	691.2 724.4 744.4 778.0 819.2 869.5 912.5 963.8 1,020.5 1,094.4	560.4 585.4 599.9 626.4 661.0 704.6 743.4 789.7 841.6 907.2	130.8 138.9 144.5 151.6 158.2 164.8 169.2 174.1 179.0 187.2
2000 2001 2002 2003 2004 2005 2006 2006 2007 2008 2008 2008 2009 P	1,800 1 1,695 7 1,560,9 1,552,8 1,724 2 1,903,4 2,174,4 2,040,2 1,824 1	615.8 439.4 255.9 198.7 291.4 362.0 513.7 280.2 -23.0	389.4 414.9 562.8 613.9 679.2 619.1 666.5 495.0 659.8	213.1 204.9 282.2 289.8 303.7 127.7 235.0 178.9 286.4 502.7	176.3 210.0 280.6 309.2 390.5 486.4 430.3 322.4 378.3	.0 .0 15.0 -15.0 1.3 -6.3 -5.0 5.0	226.5 24.6 306.9 415.2 387.8 257.1 152.7 214.8 682.7	185.2 40.5 -252.8 -379.5 -283.0 -203.8 -236.5 -642.6	41.3 -15.9 -54.1 -38.8 -8.4 25.9 51.0 21.7 -40.2	1,184.3 1,256.2 1,305.0 1,354.1 1,432.8 1,541.4 1,660.7 1,760.0 1,847.1 1,863.7	986.8 1,051.6 1,094.0 1,135.9 1,200.9 1,290.8 1,391.4 1,469.6 1,536.2 1,538.4	197.5 204.6 210.9 218.1 231.9 250.6 269.3 290.4 310.9 325.3
2006: V 2007:	2,148.9 2,159.2 2,161.2 2,228.4 2.036.1	530.9 511.0 485.9 527.1 309.3	675.6 677.2 659.0 654.1 477.4	211.7 245.6 227.7 254.8 209.1	483.9 431.5 431.4 374.3 293.3	-20.0 .0 25.0 -25.0	-144.7 -166.2 -173.1 -127.0 -168.1	-207.3 -229.4 -215.5 -163.0 -200.9	62.6 63.2 42.4 35.9 32.8	1,618.0 1,648.2 1,675.2 1,701.3 1,726.7	1,357 4 1,381 1 1,403.2 1,423.9 1,443 1	260.6 267 1 272 0 277.4 283 7
II III IV	2,096.8 2,028.7 1,999.3	347.4 257.5 206.5	533 8 495.9 472.9	183.5 169.4 153.5	350.3 326.5 319.4	.0 .0	-186.3 -238.4 -266.3	-221.3 -258.8 -265.0	34.9 20.3 -1.3	1,749.4 1,771.2 1,792.8	1,461.4 1,478.7 1,495.1	288 0 292.5 297.6
2008' T II III IV	1,903 5 1,780 1 1,842.4 1,770.5	89.9 -55.5 -15.8 -110.5	543.4 767.0 709.0 619.7	126.3 374.4 235.7 409.2	417.1 392.6 473.2 230.5	.0 .0 .0 -20.0	-453.5 -822.5 -724.8 -730.2	-433.5 -796.9 -665.7 -674.1	-20.1 -25.5 -59.0 -56.1	1,813.6 1,835.6 1,858.2 1,881.0	1,510.6 1,527.0 1,544.4 1,562.6	303.0 308.5 313.8 318.4
2009: I II IV.P	1,595.3 1,530.7 1,491.7	-288.3 -333.3 -359.0	717.4 960.2 983.0	403.1 595.7 495.0 516.9	294.2 364.5 488.0	20.0 .0 .0 0	-1,005.7 -1,293.5 -1,342.0	-969.1 -1,268.9 -1,327.0	-36.6 -24.6 -14.9	1,883.6 1,864.0 1,850.7 1,856.4	1,561.3 1,540.5 1,525.5 1,526.3	322.3 323.5 325.2 330.1

' With inventory valuation and capital consumption adjustments.

See next page for continuation of table.

TABLE B-32. Gross saving and investment, 1960-2009-Continued

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

	G	iross dome transact	estic inves tions, and	tment, caj net lendin	pital accoi ig, NIPA ²	unt					Addenda:			
		Gross do	mestic inv	restment		Nat	Statis-		Gross g	overnment	saving		Cross	Not
Year or quarter	Total	Total	Gross private domes- tic invest- ment	Gross govern- ment invest- ment ³	Capital ac- count trans- actions (net) ⁴	lending or net borrow- ing (-), NIPA ^{2, 5}	tical dis- crep- ancy	Gross private saving	Total	Federal	State and local	Net domes- tic invest- ment	saving as a percent of gross national income	as a percent of gross national income
1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1974 1975 1978 1979 1978 1980 1982 1982 1984 1985 1986 1987 1988 1989 1989 1989 1989 1989	110.3 113,7 125,2 132,3 144,2 150,0 174,9 175,1 186,4 201,3 199,7 220,2 246,2 300,2 246,2 301,6 313,2 365,4 4417,9 502,4 4417,9 502,4 580,2 588,0 682,6 626,2 652,1 784,9 780,7 787,7 797,	107 2 109 5 121 4 127 4 136 7 153 8 171 1 171 6 184 8 199 7 196 0 219 9 250 2 291 3 305 7 293 3 305 7 293 3 358 4 575 0 581 4 579 5 679 5 679 5 679 5 679 5 687 2 875 0 896 0 919 7 960 7 1,072 6 1,076 7	78 9 78 2 88 1 102 1 113 3 128 6 112 1 156 4 122 4 249 5 244 5 26 243 2 273 6 273 5 273 5	28 3 33 3 33 6 46 4 35 6 43 0 43 0 43 0 43 6 43 3 43 6 43 3 43 6 43 3 43 6 43 3 43 6 43 3 43 6 43 6		32 32 32 32 32 32 32 32 32 32	-1.0 6 .8 .8 .8 .6 .2 .4 .5 .6 .2 .4 .5 .6 .2 .9 .6 .2 .9 .6 .2 .9 .6 .2 .9 .6 .2 .9 .6 .2 .9 .8 .9 .8 .9 .8 .9 .8 .9 .8 .9 .8 .9 .8 .9 .8 .9 .9 .8 .9 .8 .9 .8 .9 .8 .9 .9 .8 .9 .9 .8 .3 .5 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2	84 9 91 9 100 8 104 7 118 0 129 8 138 7 151 5 203 2 217 1 345 6 384 1 479 7 528 8 681 9 692 2 814 0 802 0 783 8 813 0 908 8 916 1 925 1	264 224 224 284 284 286 286 300 41.2 280 41.2 280 41.2 280 41.2 300 41.2 352 307 -337 307 -282 307 -337 307 -337 53.5 53.5 140 209 -604 -606 4 -806 6 -745 53.5 -308 -70.3 8 -308 -7.3 8 -395 5 -395 5	17 7 13 4 13 9 17 4 13 2 15 3 4 5 12 2 23 9 -12 2 -8 3 5 2 -12 2 -8 3 5 2 -23 9 -32 3 -33 9 -33 9 -33 9 -33 3 -23 1 -23 6 -12 6 -23 0 -23 0 -23 6 -23 0 -23 6 -23 0 -23 6 -23 0 -23 6 -23 0 -23 0 -23 6 -23 0 -23 0 -23 0 -23 1 -23 9 -33 9 -33 9 -33 9 -33 9 -33 0 -23 0 -24 0 -23 0 -24 0 -23 0 -24	87 90 103 111 121 145 145 158 173 205 270 227 405 406 4357 405 406 4357 405 406 4357 405 406 4357 405 406 4357 405 405 405 405 405 405 405 405 405 405	$\begin{array}{c} 506 \ 6\\ 513 \ 3\\ 60 \ 9\\ 1\\ 703 \ 8\\ 86 \ 6\\ 944 \ 4\\ 1005 \ 5\\ 876 \ 6\\ 102 \ 2\\ 1231 \ 6\\ 102 \ 2\\ 1231 \ 6\\ 102 \ 2\\ 1371 \ 6\\ 1235 \ 6\\ 236 \ 4\\ 2354 \ 4\\ 2354 \ 4\\ 2354 \ 4\\ 2354 \ 4\\ 2354 \ 4\\ 2364 \ 5\\ 3381 \ 1\\ 3381 \ 1\\ 396 \ 7\\ 236 \ 5\\ 3385 \ 5\\ 3381 \ 1\\ 396 \ 5\\ 3385 \ 5\\ 5\ 5\\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ 5\ $	21 0 20 8 21 2 21 4 21 5 20 0 20 1 20 1 20 1 20 1 20 1 20 1 20 1	
1991 1992 1993 1994 1994 1995 1996 1997 1998 1998	1,031 0 1,042.3 1,094.2 1,203.5 1,271.6 1,370.3 1,511.7 1,569.1 1,637.0	1,023,2 1,087,9 1,172,8 1,318,2 1,376,6 1,484,4 1,641,0 1,773,6 1,928,9	802 9 864.8 953 3 1,097 3 1,144.0 1,240.2 1,388.7 1,510.8 1,641.5	220.3 223.1 219.4 220.9 232.6 244.2 252.4 262.9 287.4	4.8 - 8 1.5 1.9 1.1 9 1.2 1.0 5.2	3.2 -44.8 -80.0 -116.6 -106.2 -115.1 -130.6 -205.5 -297.1	79.7 110.0 135.8 108.8 52.5 25.9 -14.0 -85.3 -71.1	1,036.8 1,091.7 1,088.0 1,148.6 1,251.2 1,300.5 1,375.4 1,394.9 1,380.3	-85.3 -159.4 -129.5 -53.9 -32.2 43.9 150.3 259.5 327.8	-146.4 -227.9 -202.4 -140.3 -124.5 -66.3 22.4 116.4 183.9	61.1 68.5 72.9 86.4 92.3 110.2 127.9 143.1 143.9	298.8 343.5 394.8 499.0 507.2 571.9 677.2 753.1 834.5	14.9 14.6 15.6 16.5 17.1 18.2 18.6 18.1	3.8 3.0 2.7 3.9 4.7 5.5 6.7 7.1 6.5
2000	1,666.2 1,592.3 1,538.9 1,569.4 1,716.3 1,623.7 1,953.8 2,025.4 1,925.2	2,076.5 1,984.0 1,990.4 2,085.5 2,340.9 2,564.2 2,752.2 2,750.0 2,632.4 2,138.4	1,772.2 1,661.9 1,647.0 1,729.7 1,968.6 2,172.2 2,327.2 2,288.5 2,136.1 1,622.9	304.3 322.0 343.5 355.8 372.4 392.0 425.1 461.6 496.3 515.5	1.4 -11.7 1.8 3.8 -1.1 -11.1 4.2 2.2 4	-411.7 -380.0 -453.4 -519.9 -623.5 -729.5 -802.6 -726.8 -726.8	-134.0 -103.4 -22.1 16.6 -7.8 -79.7 -220.6 -14.8 101.0	1,376.2 1,466.5 1,656.8 1,749.8 1,880.1 1,909.9 2,057.9 1,964.6 2,195.9	424.0 229.2 95.9 197.1 155.9 6.5 116.5 75.6 371.8	273.0 129.1 -163.6 -285.5 -284.6 -182.6 -97.2 -123.9 -522.8	151.0 100.1 67.7 88.4 128.7 176.1 213.8 199.5 151.0	892.2 727.7 685.4 731.4 908.2 1,022.9 1,091.6 990.0 785.3 274.7	17.8 16.2 14.6 13.9 14.4 14.9 15.9 14.4 12.6	6.1 4.2 2.4 1.8 2.4 2.8 3.8 2.0 2
2006: I II IV	1,956.7 1,968.5 1,907.7 1,982.4	2,746.2 2,779.5 2,761.1 2,722.1	2,336.5 2,352.1 2,333.5 2,286.5	409.7 427.4 427.6 435.6	7.2 4.3 2.4 2.8	-796.7 -815.4 -855.8 -742.5	-192.2 -190.7 -253.4 -246.0	2,033.0 2,058.2 2,062.2 2,078.0	115.9 101.0 98.9 150.4	-103.5 -123.4 -107.7 -54.2	219.4 224.4 206.6 204.7	1,128.2 1,131.3 1,085.8 1,020.8	16.0 15.9 15.7 16.0	3.9 3.8 3.5 3.8
2007: V	1,914.9 1,999.7 2,093.6 2,093.3	2,714.3 2,762.3 2,778.4 2,745.2	2,267.2 2,302.0 2,311.9 2,272.9	447.1 460.2 466.6 472.3	2.5 .8 2.8 2.7	-801.8 -763.3 -687.6 -654.6	-121.1 -97.1 64.9 94.0	1,920.5 1,995.1 1,974.6 1,968.0	115.6 101.7 54.0 31.3	-90.6 -109.6 -145.5 -149.8	206.2 211.2 199.6 181.1	987.5 1,012.9 1,007.2 952.4	14.6 14.8 14.2 13.9	2.2 2.5 1.8 1.4
2008: II IV	1,973.2 1,906.8 1,910.6 1,909.9	2,690.7 2,660.2 2,647.8 2,530.9	2,214.8 2,164.6 2,142.7 2,022.1	475.9 495.5 505.0 508.9	2.8 3.0 -11.6 4.0	-720.3 -756.4 -725.5 -625.1	69.8 126.7 68.3 139.4	2,054.0 2,294.1 2,253.3 2,182.3	-150.5 -514.0 -411.0 -411.8	-316.2 -677.3 -544.7 -553.0	165.7 163.3 133.7 141.2	877.1 824.6 789.6 650.0	13.2 12.3 12.6 12.4	.6 4 1 8
2009: I II IV.P	1,780.8 1,692.4 1,654.9	2,190.3 2,082.0 2,080.4 2,201.0	1,689.9 1,561.5 1,556.1 1,684.0	500.4 520.4 524.3 517.0	3.1 3.0 2.9	-412.6 -392.5 -428.4	185.4 161.7 163.2	2,278.7 2,500.7 2,508.5	-683.4 -970.0 -1,016.8	-846.6 -1,144.9 -1,201.0	163.2 174.9 184.2	306.7 218.0 229.7 344.6	11.3 10.9 10.5	-2.0 -2.4 -2.5

² National income and product accounts (NIPA).

Consists on government investment, see Table B–20
 Consists of capital transfers and the acquisition and disposal of nonproduced nonfinancial assets.
 Prior to 1982, equals the balance on current account, NIPA (see Table B–24).

TABLE B-33. Median money income (in 2008 dollars) and poverty status of families and people, by race, selected years, 1996-2008

			Fami	lies 1			People	helow	Median	money inco	me (in 200	8 dollars)
				Below po	verty level		povert	y level	ofpe	eople 15 ye with in	ars old and icome ²	over
Year	Number	money income	To	tai	Fen house	nale holder	Number		Ma	ales	Fen	nales
	lions)	2008 dol- lars) ²	Number (mil- lions)	Percent	Number (mil- lions)	Percent	(mil- lions)	Percent	All people	Year- round full-time workers	Ali people	Year- round full-time workers
ALL RACES 1996 1997 1997 1998 1999 1999 2000 4 2000 4 2000 2002 2003 2004 5 2005 2005 2006 2007 2008 WHITE 1996 1997 1996 1997 1996	70 2 70 9 71 6 73 2 73 8 74 3 76 9 76 9 77 4 78 9 78 9 78 9 58 9 59 55 56 01	\$57,801 59,613 61,653 63,099 63,430 62,519 61,671 61,623 61,671 61,623 61,976 62,372 63,712 61,521 61,158 62,536 64,669	7.7 7.3 7.2 6 8 6 4 6 8 6 4 6 8 6 4 6 8 7 2 7 6 7 7 7 7 7 6 8 1 5.1 5.1 5.1 5.1	11.0 10.3 9.3 9.6 10.0 10.2 9.9 9.8 9.8 9.8 9.8 9.8 9.8 9.8 9.8 9.8	4.2 40 3.8 36 33 39 40 4.0 4.1 4.1 4.1 4.2 2.3 2.3 2.3 2.1	32.6 31.6 29.9 27.8 26.5 28.0 28.3 28.3 28.3 28.3 28.3 28.3 28.3 28.3	36.5 35.6 34.5 32.8 31.6 32.9 34.6 35.9 37.0 37.0 37.0 37.3 39.8 24.7 24.4 23.5	13.7 13.3 12.7 11.9 11.3 11.7 12.1 12.5 12.7 12.6 12.3 12.5 13.2 11.2 11.0 11.0 10.5	\$32,568 33,723 34,947 35,268 35,437 35,391 34,993 35,040 34,784 34,493 34,452 33,161 34,092 34,930 36,469	\$45,829 47,146 47,822 48,393 48,625 48,812 48,587 47,495 46,529 48,000 47,779 47,472 48,310 48,000 47,779	\$17,511 18,329 19,035 19,776 20,084 20,205 20,121 20,205 20,138 20,487 21,373 21,726 20,867 17,711 18,448 19,282	\$34,073 34,815 35,426 35,362 36,412 36,995 37,066 37,066 37,066 37,365 36,608 37,366,678 37,366,678 37,366,678 37,366,678 37,366,678 37,365,736,688 34,651 35,405 36,018
1999 ³ 2000 ⁴ 2001	61.1 61.3 61.6	66,004 66,302 65,754	4.4 4.3 4.6	7.3 7.1 7.4	1.9 1.8 1.9	22.5 21.2 22.4	22.2 21.6 22.7	9.8 9.5 9.9	37,039 37,255 36,776	50,670 50,328 49,607	19,838 20,104 20,251	36,181 37,448 37,517
Alone ⁶ 2002 2003 2004 2005 2006 2006 2007 2008 2007 2008 2008 2008 2008 2008	62 3 62.6 63 1 63.4 64 1 63.6 64.2	65,386 65,286 64,657 65,420 65,440 66,903 65,000	4 9 5.1 5.3 5.1 5.1 5.0 5.0 5.4	7 8 8.1 8.4 8.0 8.0 7.9 8.4	2 0 2 2 2 3 2 3 2 3 2 4 2 3 2 4 2 3 2 4	22.6 24.0 24.7 25.3 25.1 24.7 25.2	23 5 24.3 25.3 24.9 24.4 25.1 27.0	10.2 10.5 10.8 10.6 10.3 10.5 11.2	36,363 35,977 35,729 35,490 36,140 36,491 35,120	49,518 49,335 48,554 48,192 49,051 49,050 49,924	20,152 20,396 20,175 20,590 21,445 21,879 20,950	37,580 37,686 37,309 37,609 37,937 38,139 37,210
Alone or in combination ⁶ 2002	63.0 63.5 64.0 64.3 65.0 64.4 65.0	65,166 65,094 64,500 65,208 65,352 66,702 64,804	5.0 5.2 5.4 5.2 5.2 5.2 5.2 5.2 5.5	7.9 8.1 8.5 8.0 8.0 8.0 8.0 8.5	2.1 2.2 2.3 2.4 2.4 2.4 2.4 2.4	22.6 24.2 24.8 25.5 25.0 24.8 25.4	24.1 25.0 26.1 25.6 25.2 25.9 27.9	10.3 10.6 10.9 10.7 10.4 10.6 11.3	36,283 35,891 35,651 35,406 35,959 36,377 35,013	49,448 49,261 48,429 48,021 48,982 48,980 49,755	20,113 20,359 20,140 20,535 21,399 21,818 20,921	37,566 37,672 37,266 37,530 37,899 38,104 37,177
BLACK 1996 1997 1998 1998 1999 3 2000 4 2001	8.5 8.4 8.5 8.7 8.7 8.7 8.8	36,241 38,257 38,788 41,156 42,105 40,860	2.2 2.0 2.0 1.9 1.7 1.8	26.1 23.6 23.4 21.8 19.3 20.7	1.7 1.6 1.6 1.5 1.3 1.3	43 7 39.8 40.8 39.2 34.3 35.2	9.7 9.1 9.1 8.4 8.0 8.1	28.4 26.5 26.1 23.6 22.5 22.7	22,534 24,205 25,487 26,414 26,685 26,106	37,080 35,976 36,240 38,965 38,120 38,821	16,086 17,453 17,330 19,093 19,856 19,801	30,049 30,448 31,480 32,487 32,195 33,197
Alone ⁶ 2002 2003 2004 ⁵ 2005 2006 2007 2007 2007 2008 2007 2008	8 9 8.9 9.1 9.3 9.3 9.4	40,123 40,235 40,064 39,113 40,867 41,685 39,879	1.9 2.0 2.0 2.0 2.0 2.0 2.1	21.5 22.3 22.8 22.1 21.6 22.1 22.0	1.4 1.5 1.5 1.5 1.5 1.5 1.5	35.8 36.9 37.6 36.1 36.6 37.3 37.2	8.6 8.8 9.0 9.2 9.0 9.2 9.2 9.4	24.1 24.4 24.7 24.9 24.3 24.5 24.5 24.7	25,805 25,739 25,864 24,984 26,765 26,814 25,254	38.217 39.135 36,157 37,755 37,885 38,148 38,612	20.022 19,411 19,787 19,445 20.400 20.511 20,197	33,062 32,336 33,222 33,487 33,036 32,805 32,186
Alone or in combination ⁶ 2002	9.1 9.1 9.3 9.5 9.5 9.5 9.6	40,254 40,514 40,261 39,256 41,135 41,767 39,936	2.0 2.0 2.1 2.1 2.0 2.1 2.1	21.4 22.1 22.8 22.0 21.5 22.0 21.9	1.5 1.5 1.5 1.5 1.5 1.6 1.6	35.7 36.8 37.6 36.2 36.4 37.2 37.1	8.9 9.1 9.4 9.5 9.4 9.7 9.9	23.9 24.3 24.7 24.7 24.2 24.4 24.4 24.6	25,742 25,679 25,890 24,935 26,777 26,783 25,118	38,258 39,176 36,146 37,657 37,921 38,193 38,365	19,952 19,363 19,773 19,405 20,359 20,469 20,203	33,156 32,399 33,276 33,491 33,087 32,889 32,204

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.

2 Current dollar median money income adjusted by consumer price index research series (CPI-U-RS).
3 Reflects implementation of Census 2000-based population controls comparable with succeeding years.
4 Reflects household sample expansion.

⁶ For 2004, figures are revised to reflect a correction to the weights in the 2005 Annual Social and Economic Supplement ⁶ Data are for "white alone," for "white alone or in combination," for "black alone," and for "black alone or in combination." ("Black" is also "black or African American") Beginning with data for 2002 the Current Population Survey allowed respondents to choose more than one race; for earlier years are respondent to the second respondents could report only one race group.

Note: Poverty thresholds are updated each year to reflect changes in the consumer price index (CPI-U). For details see publication Series P–60 on the Current Population Survey and Annual Social and Economic Supplements:

Source: Department of Commerce (Bureau of the Census).

POPULATION, EMPLOYMENT, WAGES, AND PRODUCTIVITY TABLE B-34. Population by age group, 1933-2009

[Thousands of persons]

	i	i				Age (years)			
	July 1	Total	Under 5	5–15	16 19	20-24	25-44	4564	65 and over
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 24,516	9,895 9,840	11,690 11,807	39,868	26,249	9,031 9,288
1942		134,860	11,301	24,231	9,730	11,955	40,861	27,196	9,584
1943 1944		136,739 138,397	12,016	24,093 23,949	9,607 9,561	12,064 12,062	41,420 42,016	27,671 28,138	9,867 10,147
1945	·····	139,928	12,979	23,907	9,361	12,036	42,521	28,630	10,494
1946 1947		141,389	13,244	24,103	9,1191 9,097.	11,814	43,027 43,657	29,064	10,828
1948		146,631	14,919	25,209	8,952	11,794	44,288	29,931	11,538
1945		152 271	16 410	25,032	8 542	11 680	45.672	30,403	12,397
1951		154,878	17,333	27,279	8,446	11,552	46,103	31,362	12,803
1952		160,184	17,638	30,227	8,460	11,062	46,495	32,394	13,617
1954		163,026	18,057	31,480	8,637 8,744	10,832	47,001 47,194	32,942	14,076 14,525
1956		168,903	19,003	33,994	8,916	10,616	47,379	34,057	14,938
1957 1958		1/1,984	19,494 19,887	35,272	9,195 9,543	10,603	47,440 47,337	34,591	15,388
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 11,025	11,134	47,140 47,084	36,203 36,722	16,675 17.089
1962		186,538	20,469	41,205	11,180	11,959	47,013	37,255	17,457
1963 1964		189,242	20,342 20,165	41,626 42,297	12,007	13,269	46,994 46,958	37,782 38,338	17,778
1965		194,303	19,824	42,938	13,516	13,746	46,912	38,916	18,451
1960		198,712	18,563	43,702	14,200	15,248	47,194	40,193	19,071
1968		200,706	17,913	44,622 44 840	14,452 14,800	15,786 16 480	47,721 48.064	40,846 41,437	19,365 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 18,153	48,936 50 482	42,482	20,561
1973		211,909	16,851	43,582	16,446	18,521	51,749	43,235	21,525
1974		213,854 215,973	16,487 1 16,121	42,989 42,508	16,769 17,017	18,975	53,051	43,522 43,801	22,061
1976		218,035	15,617	42,099	17,194	19,986	55,852	44,008	23,278
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	61,3791	44,390	25,134
1980		229,966	16,893	38,838 38,144	16,812	21,590	65,528	44,504 44,500	26,221
1982		232,188	17,228	37,784	16,332 15,823	21,902 21,844	67,692 69,733	44,462 44,474	26,787 27,361
1984		236,348	17,695	37,461	15,295	21,737	71,735	44,547	27,878
1985 1986		238,466 240,651	17,842	37,450 37,404	15,005 15,024	21,478 20,942	73,673 75,651	44,602 44,660	28,416 29,008
1987		242,804	18,052	37,333	15,215	20,385	77,338	44,854 45,471	29,626
1989		247,342	18,508	37,972	14,913	19,442	79,943	45,882	30,682
1990		250,132	18,856	38,632	14,466	19,323	81,291	46,316	31,247
1991	••••••	253,493	19,208	39,349 40,161	13,992	19,414	83,201	40,074 48,553	32,356
1993		260,255	19,729	40,904	13,953 14,228	19,101 18,758	83,766 84 334	49,899 51,318	32,902
1995		266,557	19,627	42,510	14,522	18,391	84,933	52,806	33,769
1996		269,667	19,408	43,172 43,833	15,057	17,965	85,527	54,396 56,283	34,143 34,402
1998		276,115	19,145	44,332	15,856	18,250	85,663	58,249 60,362	34,619
2000	1	275,255 282,385	19,130	44,755	16,104	19,186	85,153	62,417	35.077
2001	1	285,267	19,348	45,178	16,252	19,855	84,889	64,414	35,332
2002	1	288,028 290,704	19,534 19,770	45,125 45,040	16,302 16,349	20,367 20,769	84,557 84,202	68,623	35,591 35,952
2004	1	293,310	20,059	44,881	16,497	20,964	83,953	70,654	36,301
2005	1	293,994	20,301	44,709	16,945	21,038	83,730	74,787	37,264
2007	1	301,714	20,730	44,390 44,320	17,200 17,330	21,111 21,204	83,724	76,616 78,077	37,942 38,870
2009	1	307,226	21,268	44,371	17,319	21,424	83,565	79.651	39,628

¹ Revised total population data are available as follows: 2000, 282,385; 2001, 285,309, 2002, 288,105, 2003, 290,820; 2004, 293,463, 2005, 296,186; 2006, 298,996, 2007, 302,004; 2008, 304,798; and 2009, 307,439.

Note: Includes Armed Forces overseas beginning with 1940. Includes Alaska and Hawaii beginning with 1950. All estimates are consistent with decennial census enumerations.

Source: Department of Commerce (Bureau of the Census).

	,		Ci	vilian labor fo	rce				Coulton	Unomploy
Year or month	Civilian noninsti- tutional	Total		Employment		Un-	Not in Jabor force	Civilian labor force participa	employ- ment/	ment rate,
	population ¹	IUIAI	Total	Agricultural	Non- agricultural	ment	luice	tion rate ²	ratio 3	workers ⁴
		The	ousands of pe	rsons 14 years	s of age and ov	ver			Percent	£
1929		49,180	47,630	10,450	37,180	1,550				3.2
1933		51,590 55,230	38,760 45,750	9,610	28,670	9,480			1 i	24.9
1940	99,840	55,640	47,520	9,540	37,980	8,120	44,200	55.7 56.0	47.6	14.6
1942	98,640	56,410	53,750 54,470	9,250	44,500	2,660	42,230	57.2	54.5 57.6	4.7
1944	93,220	54,630	53,960	8,950	45,010	670	38,590	58.6	57.9	1.2
1945 1946 1947	103,070 106,018	57,520	52,820 55,250 57,812	8,320 8,256	44,240 46,930 49,557	2,270 2,356	40,230 45,550 45,850	57.2 55.8 56.8	53.6 54.5	1.9 3.9 3.9
		The	ousands of pe	rsons 16 years	of age and ov	/er				
1947 1948	101,827 103,068	59,350 60,621	57,038 58,343	7,890 7,629	49,148 50,714	2,311 2,276	42,477 42,447	58.3 58.8	56.0 56.6	3.9 3.8
1949	103,994	61,286 62,208	57,651 58,918	7,658	49,993	3,637	42,708 42,787	58.9 59.2	55.4	5.9 53
1951 1952	104,621	62,017 62,138	59,961 60,250	6,726	53,235 53,749	2,055	42,604	59 2 59 0	57 3	33
1953 ⁵ 1954	107,056 108,321	63,015 63,643	61,179 60,109	6,260 6,205	54,919 53,904	1,834 3,532	44,041 44,678	58 9 58 8	57 1 55 5	29
1955 1956	109,683	65,023 66,552	62,170 63,799	6,450	55.722 57.514	2,852	44,660	59 3 60 0	56.7	4.4
1957	112,265	66,929 67,639	64,071 63,036	5,947	58,123 57,450	2,859 4,602	45,336	59.6 59.5	57 1	4.3
1959	115,329	68,369 69,629	64,630	5,565	59,065	3,740	46,960	59 3 60 4	56.0	5.5
1961 1962 5	118,771	70,459	65,746	5,200	60,546	4,714 3,911	48,312	59.3 58.8	55.4	67
1963 1964	122,416	71,833 73,091	67,762 69,305	4,687 4,523	63,076 64,782	4,070 3,786	50,583 51,394	58.7 58.7	55.4 55.7	57
1965 1966	126,513	74,455	71,088	4,361	66,726	3,366	52,058 52,288	58.9 59.2	56.2 56.9	45
1967 1968	129,874	77,347 78,737	74,372 75,920	3,844 3,817	70,527	2,975 2,817	52,527 53,291	59.6 59.6	57.3 57.5	3.8 3.6
1969 1970	134,335	80,734 82,771	77,902	3,606	74,296	2,832	53,602 54,315	60.1	58.0 57.4	3.5
1971 1972 ⁵	140,216	84,382 87,034	79,367 82,153	3,394 3,484	75,972	5,016 4,882	55,834 57,091	60.2 60.4	56.6 57.0	5.9
1973 ⁵ 1974	147,096 150,120	89.429 91,949	85,064 86,794	3,470 3,515	81,594 83,279	4,365 5,156	57,667 58,171	60.8 61.3	57.8 57.8	4.9 5.6
1975 1976	153,153 156 150	93,775 96,158	85,846 88,752	3,408 3,331	82,438 85,421	7,929 7,406	59,377 59,991	61 2 61 6	56.1 56.8	8.5 7.7
1977 1978 ⁵	159,033 161,910	99,009 102,251	92,017 96,048	3,283 3,387	88,734 92,661	6,991 6,202	60,025 59,659	62.3 63.2	57.9 59.3	7.1
1979 1980	164,863 167,745	104,962 106,940	98,824 99,303	3,347 3,364	95,477 95,938	6,137 7,637	59,900 60,806	63.7	59.9 59.2	5.8
1981 1982	170,130 172,271	108,670 110,204	100,397 99,526	3,368 3,401	97,030 96,125	8,273 10,678	61,460 62,067	63 9 64.0	59.0 57.8	76 97
1983 1984	174,215 176,383	111,550 113,544	100,834 105,005	3,383 3,321	97,450 101,685	10,717 8,539	62,665 62,839	64.0 64.4	57.9 59.5	9.6 7.5
1985 1986 ⁵	178,206 180,587	115,461 117,834	107,150 109,597	3,179 3,163	103,971 106,434	8,312 8,237	62,744 62,752	64.8 65.3	60.1 60.7	7.2 7.0
1987 1988	182,753 184,613	119,865 121,669	112,440 114,968	3,208 3,169	109,232 111,800	7,425 6,701	62,888 62,944	65.6 65.9	61 5 62.3	6.2 5.5
1989 1990 ⁵	186,393	123,869 125,840	117,342 118,793	3,199	114,142 115,570	6,528 7.047	62,523 63,324	66.5	63 0 62 8	5.3 5.6
1991 1992	190,925 192,805	126,346 128,105	117,718 118,492	3,269 3,247	114,449 115,245	8,628 9,613	64,578 64,700	66.2 66.4	61.7 61.5	6.8 7.5
1993 1994 ⁵	194,838 196,814	129,200 131,056	120,259 123,060	3,115 3,409	117,144 119,651	8,940 7,996	65,638 65,758	66.3 66.6	61.7 62.5	6.9 6.1
1995 1996	198,584 200,591	132,304 133,943	124,900 126,708	3,440 3,443	121,460 123,264	7,404 7,236	66,280 66,647	66 6 66 8	62.9 63.2	5.6 5.4
1997 5 1998 5	203,133 205,220	136,297 137,673	129,558 131,463	3,399 3,378	126,159 128,085	6,739 6,210	66,837 67,547	67.1 67.1	63.8 64.1	4.9 4.5
1999 5	207,753	139,368	133,488	3,281	130,207	5,880	68,385	67.1	64.3	4.2

TABLE B-35. Civilian population and labor force, 1929-2009

[Monthly data seasonally adjusted, except as noted]

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

	· · · ·								· · · ·	
			Ci	vilian labor fo	rce	l			0	
	Civilian			Employment			Not in	Civilian	employ-	Unemploy- ment
Year or month	tutional population 1	Total	Total	Agricultural	Non- agricultural	Un- employ- ment	labor force	participa- tion rate ²	ment/ population ratio ³	rate, civilian workers ⁴
	+	Tho	usands of pe	rsons 16 years	of age and ov	er			Percent	
2000 5. 6	212 577	142 583	136.891	2 464	134 427	5 692	69 994	67.1	64.4	40
2001 2002 2003 ⁵ 2004 ⁵	215,092 217,570 221,168 223,357	143,734 144,863 146,510 147,401	136,933 136,485 137,736 139,252	2,299 2,311 2,275 2,232	134,635 134,174 135,461 137,020	6,801 8,378 8,774 8,149	71,359 72,707 74,658 75,956	66.8 66.6 66.2 66.0	63.7 62.7 62.3 62.3	4.7 5.8 6.0 5.5
2005 5	226,082	149,320 151,428	141,730 144,427	2,197	139,532 142,221	7,591 7,001	76,762	66.0 66.2	62.7 63.1	5.1 4.6
2007 5 2008 5 2009 5	231,867 233,788 235,801	153,124 154,287 154,142	146,047 145,362 139,877	2,095 2,168 2,103	143,952 143,194 137,775	7,078 8,924 14,265	78,743 79,501 81,659	66.0 66.0 65.4	63.0 62.2 59.3	4.6 5.8 9.3
2006: Jan ⁵	227,553	150,201	143,142	2,163	140,932	7,059	77,352	66.0	62.9	4.7
Feb Mar	227,763	150,629	143,444	2,180	141,251	7,075	77,135	66.2	63.0	4.8
Apr May	228,199	150,915	143,794	2,253 2,198	141,461 141,889	6,977	77,284 77,343	66.1	63.U 63.1	4./
June	228,671	151,368 151,383	144,370 144,229	2,258	142,065 142,083	6,998 7,154	77,303 77,529	66.2	63.1 63.0	4.6
Aug	229,167	151,729	144,631	2,237	142,442	7,097	77,439	66.2	63.1	4.7
Oct	229,420	152,020	145,292	2,176	142,640	6,853	77,655	66.2	63.3	4.5 4.4
Nov Dec	229,905 230,108	152,360 152,698	145,477 145,914	2,159	143,280 143,661	6,883 6,784	77,545 77,410	66.3 66.4	63.3 63.4	4.5 4.4
2007: Jan ⁵	230,650	153,117	146.032	2,214	143,757	7,085	77,533	66.4	63.3	4.6
Mar	230,834	153,093	146,043	2,302	143,738	6,725	77,893	66.3	63.4	4.5 4.4
Apr Mav	231,253	152,531	145,686 145,952	2,077	143,545 143,843	6,845 6,765	78,721 78,763	66.0 66.0	63.0 63.1	4.5 4.4
June	231,713	153,045	146,079	1,951	144,137	6,966	78,668	66.0	63.0	4.6
Aug	231,956	152,781	145,685	1,861	143,856	7,096	79,429	65.8	62.7	4.6
Sept Oct	232,461	153,393 153,158 i	146,193 145,885	2,077	144,117	7,200	79,067 79,557	65.8	62.9 62.7	4./
Nov	232,939	153,767	146,483	2,138	144,347	7,284	79,172	66.0 66.0	62.9 62.7	4.7
2008: Jan ⁵	232,616	154,048	146,421	2,205	144,146	7,628	78,568	66.2	62.9	5.0
Feb Mar	232,809	153,600 153,966	146,165	2,202	143,965 143,976	7,435	79,209 79.029	66.0	62.8 62.7	4.8 5.1
Apr	233,198	153,936	146,306	2,122	144,129	7,631	79,262	66.0	62.7	5.0
June	233,405	154,420	146,023	2,125	143,639	8,560	79,300	66.1	62.6	5.5
July Aug	233,864 234,107	154,410 154,696	145,515 145,187	2,141	143,422 143.045	8,895 9,509	79,454 79,411	66.0	62.2 62.0	5.8
Sept	234,360	154,590	145,021	2,207	142,793	9,569	79,770	66.0	61.9 61.7	6.2
Nov	234,828	154,524	143,907	2,195	141,742	10,617	80,304	65.8	61.3	6.9
2009 Jan 5	235,035	154,587	143,188	2,185	140,975	11,400	80,448	65.8	60.9 60.6	7.4
Feb	234,913	154,401	141,687	2,148	139,559	12,714	80,512	65.7	60.3	8.2
Apr	235,086	154,164	140,854	2,051	138,762	13,816	80,554	65.8	59.9	8.9
May	235,452	154,956 154,759	140,438 140,038	2,166	138,287	14,518 14,721	80,496 80,895	65.8	59.6 59.4	9.4 9.5
July	235,870	154,351	139,817	2,138	137,629	14,534	81,519	65.4	59.3	9.4
Aug Sept	236,087	154,426	139,433	2,095	137,285	14,993	81,661	65.1	59.1	9.7
Oct Nov	236,550	153,854	138,242 138,381	2,041	136,311	15,612 15,340	82,696 83,022	65.0 64 9	58.4 58.5	10.1
Dec	236,924	153,059	137,792	2,056	135,717	15,267	83,865	64.6	58.2	10.0

TABLE B-35. Civilian population and labor force, 1929-2009-Continued

[Monthly data seasonally adjusted, except as noted]

⁵ Not strictly comparable with earlier data due to population adjustments or other changes. See Employment and Earnings or population control adjustments to the Current Population Survey (CPS) at http://www.bis.gov/cps/documentation.htm#concepts for details on breaks in series. ⁶ Beginning in 2000, data for agricultural employment are for agricultural and related industries, data for this series and for nonagricultural employment are not strictly comparable with data for earlier years. Because of Independent seasonal adjustment for these two series, monthly data will not add to total civilian. employment.

Note: Labor force data in Tables B-35 through B-44 are based on household interviews and relate tu 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* or population control adjustments to the CPS at http://www.bls.gov/cps/documentation.htm#concepts.

_				Civilia	an employ	ment				-	Ur		ent		
			· · ··	Males			Females				Males			Females	
Yea	ar or month	Total	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over	Total	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
1962 1963 1964 1965 1966 1967 1968 1969		66,702 67,762 69,305 71,088 72,895 74,372 75,920 77,902	44,177 44,657 45,474 46,340 46,919 47,479 48,114 48,818	2,362 2,406 2,587 2,918 3,253 3,186 3,255 3,430	41.815 42.251 42.886 43.422 43.668 44.294 44.859 45.388	22,525 23,105 23,831 24,748 25,976 26,893 27,807 29,084	1,833 1,849 1,929 2,118 2,468 2,468 2,526 2,526 2,687	20,693 21,257 21,903 22,630 23,510 24,397 25,281 26,397	3,911 4,070 3,786 3,366 2,875 2,975 2,817 2,832	2,423 2,472 2,205 1,914 1,551 1,508 1,419 1,403	408 501 487 479 432 448 426 440	2,016 1,971 1,718 1,435 1,120 1,060 993 963	1,488 1,598 1,581 1,452 1,324 1,468 1,397 1,429	313 383 385 395 405 391 412 413	1,175 1,216 1,195 1,056 921 1,078 985 1,015
1970 1971 1972 1973 1974 1975 1976 1977 1978 1979		78,678 79,367 82,153 85,064 85,846 88,752 92,017 96,048 98,824	48,990 49,390 50,896 52,349 53,024 51,857 53,138 54,728 56,479 57,607	3,409 3,478 3,765 4,039 4,103 3,839 3,947 4,174 4,336 4,300	45,581 45,912 47,130 48,310 48,922 48,018 49,190 50,555 52,143 53,308	29,688 29,976 31,257 32,715 33,769 33,989 35,615 37,289 39,569 41,217	2,735 2,730 2,980 3,231 3,345 3,263 3,389 3,514 3,734 3,783	26,952 27,246 28,276 29,484 30,424 30,726 32,226 33,775 35,836 37,434	4,093 5,016 4,882 4,365 5,156 7,929 7,406 6,991 6,202 6,137	2,238 2,789 2,659 2,275 2,714 4,442 4,036 3,667 3,142 3,120	599 693 711 653 757 966 939 874 813 811	1,638 2,097 1,948 1,624 1,957 3,476 3,098 2,794 2,328 2,308	1,855 2,227 2,222 2,089 2,441 3,486 3,369 3,324 3,061 3,018	506 568 598 583 665 802 780 789 769 743	1,349 1,658 1,625 1,507 1,777 2,684 2,588 2,535 2,292 2,276
1980 1981 1982 1983 1984 1985 1986 1987 1988 1988 1989	· · · · · · · · · · · · · · · · · · ·	99,303 100,397 99,526 100,834 105,005 107,150 109,597 112,440 114,968 117,342	57,186 57,397 56,271 56,787 59,091 59,891 60,892 62,107 63,273 64,315	4.085 3.815 3.379 3.300 3.322 3.328 3.323 3.381 3.492 3.477	53,101 53,582 52,891 53,487 55,769 56,562 57,569 58,726 59,781 60,837	42,117 43,000 43,256 44,047 45,915 47,259 48,706 50,334 51,696 53,027	3,625 3,411 3,170 3,043 3,122 3,105 3,149 3,260 3,313 3,282	38,492 39,590 40,086 41,004 42,793 44,154 45,556 47,074 48,383 49,745	7,637 8,273 10,678 10,717 8,539 8,312 8,237 7,425 6,701 6,528	4,267 4,577 6,179 6,260 4,744 4,521 4,530 4,101 3,655 3,525	913 962 1,090 1,003 812 806 779 732 667 658	3,353 3,615 5,089 5,257 3,932 3,715 3,751 3,369 2,987 2,867	3,370 3,696 4,499 4,457 3,794 3,791 3,707 3,324 3,046 3,003	755 800 825 687 661 675 616 558 536	2,615 2,895 3,613 3,632 3,107 3,129 3,032 2,709 2,487 2,467
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999		118,793 117,718 118,492 120,259 123,060 124,900 126,708 129,558 131,463 133,488	65,104 64,223 64,440 65,349 66,450 67,377 68,207 69,685 70,693 71,446	3,427 3,044 2,944 3,156 3,292 3,310 3,401 3,558 3,685	61,678 61,178 61,496 62,355 63,294 64,085 64,897 66,284 67,135 67,761	53,689 53,496 54,052 54,910 56,610 57,523 58,501 59,873 60,771 62,042	3,154 2,862 2,724 2,811 3,005 3,127 3,190 3,260 3,493 3,487	50,535 50,634 51,328 52,099 53,606 54,396 55,311 56,613 57,278 58,555	7,047 8,628 9,613 8,940 7,996 7,404 7,236 6,739 6,210 5,880	3,906 4,946 5,523 5,055 4,367 3,983 3,880 3,577 3,266 3,066	667 751 806 768 740 744 733 694 686 633	3.239 4,195 4,717 4,287 3,627 3,239 3,146 2,882 2,580 2,433	3,140 3,683 4,090 3,885 3,629 3,421 3,356 3,162 2,944 2,814	544 608 621 597 580 602 573 577 519 529	2.596 3.074 3.469 3.288 3.049 2.819 2.783 2.585 2.424 2.285
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009		136,891 136,933 136,485 137,736 139,252 141,730 144,427 146,047 145,362 139,877	73,305 73,196 72,903 73,332 74,524 75,973 77,502 78,254 77,486 73,670	3,671 3,420 3,169 2,917 2,952 2,923 3,071 2,917 2,736 2,328	69,634 69,776 69,734 70,415 71,572 73,050 74,431 75,337 74,750 71,341	63,586 63,737 63,582 64,404 64,728 65,757 66,925 67,792 67,876 66,208	3,519 3,320 3,162 3,002 2,955 3,055 3,091 2,994 2,837 2,509	60,067 60,417 60,420 61,402 61,773 62,702 63,834 64,799 65,039 63,699	5,692 6,801 8,378 8,774 8,149 7,591 7,001 7,078 8,924 14,265	2,975 3,690 4,597 4,906 4,456 4,059 3,753 3,882 5,033 8,453	599 650 700 697 664 667 622 623 736 898	2,376 3,040 3,896 4,209 3,791 3,392 3,131 3,259 4,297 7,555	2,717 3,111 3,781 3,868 3,694 3,531 3,247 3,196 3,891 5,811	483 512 553 554 543 519 496 478 549 654	2,235 2,599 3,228 3,314 3,150 3,013 2,751 2,718 3,342 5,157
2008	Jan Feb Apr May June July Aug Sept Oct Nov Dec	146,421 146,165 146,173 146,306 146,023 145,768 145,515 145,187 145,021 144,677 143,907 143,188	78,259 78,224 78,101 78,104 77,959 77,646 77,436 77,436 77,205 76,902 76,902 76,407 75,812	2,782 2,785 2,794 2,872 2,872 2,681 2,737 2,725 2,661 2,557 2,575	75,477 75,439 75,306 75,232 75,044 75,000 74,964 74,698 74,480 74,241 73,850 73,237	68,162 67,941 68,072 68,202 68,064 67,998 67,869 67,752 67,816 67,775 67,500 67,376	2,981 2,900 2,945 3,024 2,802 2,802 2,802 2,801 2,772 2,694 2,632	65,181 65,041 65,127 65,178 65,178 65,178 65,07 64,956 65,015 65,003 64,806 64,744	7,628 7,435 7,793 7,631 8,397 8,560 8,895 9,509 9,569 10,172 10,617 11,400	4,238 4,070 4,253 4,232 4,619 4,777 5,128 5,253 5,603 5,918 6,153 6,650	749 629 604 593 766 740 850 714 739 851 800 778	3.489 3.441 3.649 3.639 3.853 4.037 4.278 4.540 4.864 5.067 5.353 5.871	3,390 3,365 3,540 3,398 3,779 3,783 3,767 4,256 3,967 4,254 4,464 4,750	501 494 487 591 591 568 587 579 579 579 531 538 590	2,889 2,871 3,054 2,903 3,187 3,215 3,180 3,677 3,388 3,723 3,926 4,160
2009	Jan Feb Mar Apr May June July Aug Sept Oct Nov . Dec	142,221 141,687 140,854 140,902 140,438 140,038 139,817 139,433 138,768 138,242 138,381 137,792	75,118 74,756 74,072 74,107 73,974 73,727 73,613 73,436 73,120 72,844 72,794 72,499	2,492 2,490 2,445 2,442 2,423 2,373 2,357 2,294 2,259 2,182 2,131 2,108	72,625 72,266 71,667 71,665 71,552 71,354 71,255 71,142 70,861 70,662 70,662 70,391	67,103 66,931 66,782 66,794 66,463 66,311 66,205 65,997 65,648 65,398 65,587 65,293	2,713 2,693 2,673 2,647 2,617 2,570 2,519 2,519 2,446 2,368 2,266 2,318 2,294	64,391 64,238 64,110 64,147 63,847 63,741 63,685 63,552 63,552 63,280 63,133 63,269 62,998	11,919 12,714 13,310 13,816 14,518 14,721 14,534 14,993 15,159 15,612 15,340 15,267	6,948 7,425 7,852 8,689 8,642 9,031 9,077 9,340 9,171 8,955	805 831 854 902 857 914 976 961 978 932 944	6,144 6,593 7,013 7,441 7,787 7,892 7,728 8,055 8,116 8,362 8,239 8,011	4.971 5.290 5.458 5.521 5.829 5.972 5.972 5.962 6.081 6.271 6.169 6.312	569 614 595 563 616 729 667 675 675 717 695 690	4.402 4.676 4.863 4.957 5.213 5.225 5.225 5.295 5.406 5.554 5.473 5.622

TABLE B-36. Civilian employment and unemployment by sex and age, 1962-2009

[Thousands of persons 16 years of age and over; monthly data seasonally adjusted]

Note: See footnote 5 and Note, Table B-35.

TABLE B-37. Civilian employment by demographic characteristic, 1962-2009

									,				
			Wh	ite ¹			Black an	d other ¹		Bla	ack or Afric	an Americ	an ¹
Year or month	civilian workers	Total	Males	Females	Both sexes 16–19	Total	Males	Females	Both sexes 16–19	Total	Males	Females	Both sexes 16–19
1962 1963 1964 1965 1966 1967 1968 1968	66,702 67,762 69,305 71,088 72,895 74,372 75,920 77,902	59,698 60,622 61,922 63,446 65,021 66,361 67,750 69,518	40,016 40,428 41,115 41,844 42,331 42,833 43,411 44,048	19,682 20,194 20,807 21,602 22,690 23,528 24,339 25,470	3,774 3,851 4,076 4,562 5,176 5,114 5,195 5,508	7,003 7,140 7,383 7,643 7,877 8,011 8,169 8,384	4.160 4.229 4.359 4.496 4.588 4.646 4.702 4.770	2,843 2,911 3,024 3,147 3,289 3,365 3,467 3,614	420 404 440 474 545 568 584 609				· · · · · · · · · · · · · · · · · · ·
1970 1971 1972 1973 1974 1975 1976 1976 1977 1978 1978	78,678 79,367 82,153 85,064 86,794 85,846 88,752 92,017 96,048 98,824	70,217 70,878 73,370 75,708 77,184 76,411 78,853 81,700 84,936 87,259	44,178 44,595 45,944 47,085 47,674 46,697 47,775 49,150 50,544 51,452	26,039 26,283 27,426 28,623 29,511 29,714 31,078 32,550 34,392 35,807	5,5/1 5,670 6,173 6,623 6,796 6,487 6,724 7,068 7,367 7,356	8,464 8,488 8,783 9,356 9,610 9,435 9,899 10,317 11,112 11,565	4,813 4,796 4,952 5,265 5,352 5,161 5,363 5,579 5,936 6,156	3,650 3,692 3,832 4,092 4,258 4,275 4,536 4,739 5,177 5,409	574 538 573 647 652 615 611 619 703 727	7,802 8,128 8,203 7,894 8,227 8,540 9,102 9,359	4,368 4,527 4,527 4,275 4,404 4,565 4,796 4,923	3,433 3,601 3,677 3,618 3,823 3,975 4,307 4,436	509 570 554 507 508 508 508 571 579
1980 1981 1982 1983 1984 1984 1985 1986 1986 1987 1988 1988	99.303 100.397 99.526 100.834 105.005 107.150 109.597 112.440 114.968 117.342	87.715 88,709 87.903 88,893 92.120 93,736 95,660 97,789 99,812 101,584	51,127 51,315 50,287 52,462 53,046 53,785 54,647 55,550 56,352	36,587 37,394 37,615 38,272 39,659 40,690 41,876 43,142 44,262 45,232	7,021 6,588 5,984 5,799 5,836 5,768 5,768 5,792 5,898 6,030 5,946	11,588 11,688 11,624 11,941 12,885 13,414 13,937 14,652 15,156 15,757	6,059 6,083 5,983 6,166 6,629 6,845 7,107 7,459 7,722 7,963	5,529 5,606 5,641 5,775 6,256 6,256 6,830 7,192 7,434 7,795	689 637 565 543 607 666 681 742 774 813	9,313 9,355 9,189 9,375 10,119 10,501 10,814 11,309 11,658 11,953	4,798 4,794 4,637 4,753 5,124 5,270 5,428 5,661 5,824 5,928	4,515 4,561 4,552 4,622 4,995 5,231 5,386 5,648 5,834 6,025	547 505 428 416 474 532 536 587 601 625
1990 1991 1992 1993 1994 1994 1995 1996 1997 1998 1999	118,793 117,718 118,492 120,259 123,060 124,900 126,708 129,558 131,463 133,488	102,261 101,182 101,669 103,045 105,190 106,490 107,808 109,856 110,931 112,235	56,703 55,797 55,959 56,656 57,452 58,146 58,888 59,998 60,604 61,139	45,558 45,385 45,710 46,390 47,738 48,344 48,920 49,859 50,327 51,096	5,779 5,216 4,985 5,113 5,398 5,593 5,667 5,807 6,089 6,204	16,533 16,536 16,823 17,214 17,870 18,409 18,900 19,701 20,532 21,253	8,401 8,426 8,482 8,693 8,998 9,231 9,319 9,687 10,089 10,307	8,131 8,110 8,342 8,521 8,872 9,179 9,580 10,014 10,443 10,945	801 690 684 691 763 826 832 853 962 968	12.175 12.074 12.151 12.382 12.835 13.279 13.542 13.969 14.556 15.056	5,995 5,961 5,930 6,047 6,241 6,422 6,456 6,607 6,871 7,027	6,180 6,113 6,221 6,334 6,595 6,857 7,086 7,362 7,685 8,029	598 494 492 494 552 586 613 631 736 691
2000 2001 2002 2002 2003 2004 2004 2005 2006 2006 2007 2008 2008 2008	136,891 136,933 136,485 137,736 139,252 141,730 144,427 146,047 145,362 139,877	114,424 114,430 114,013 114,235 115,239 116,949 118,833 119,792 119,126 114,996	62,289 62,212 61,849 61,866 62,712 63,763 64,883 65,289 64,624 61,630	52,136 52,218 52,164 52,369 52,527 53,186 53,950 54,503 54,501 53,366	6,160 5,817 5,441 5,064 5,039 5,105 5,215 4,990 4,697 4,138					15,156 15,006 14,872 14,739 14,909 15,313 15,765 16,051 15,953 15,025	7,082 6,938 6,959 6,820 6,912 7,155 7,354 7,500 7,398 6,817	8,073 8,068 7,914 7,919 7,997 8,158 8,410 8,551 8,554 8,208	711 637 611 516 520 536 618 566 541 442
2008: Jan Feb Apr May June July Aug Sept Oct Nov Doc	146,421 146,165 146,173 146,306 146,023 145,768 145,515 145,187 145,021 144,677 143,907	119,926 119,665 119,605 119,676 119,676 119,624 119,441 119,382 119,016 119,031 118,697 118,018 117,335	65,220 65,161 65,135 65,040 65,029 64,837 64,885 64,580 64,368 64,153 63,789 63,284	54,706 54,504 54,559 54,636 54,595 54,604 54,497 54,436 54,663 54,663 54,543 54,229 54,050	4,797 4,788 4,639 4,961 4,910 4,729 4,623 4,642 4,607 4,607 4,609 4,487 4,487					16.079 16.165 16.12/ 16.218 16.030 16.026 15.950 16.024 15.742 15.787 15.676	7,554 7,560 7,477 7,533 7,448 7,462 7,377 7,495 7,329 7,286 7,150 7,150	8,524 8,604 8,650 8,685 8,582 8,563 8,573 8,529 8,413 8,501 8,526 8,526	573 572 527 573 558 527 533 594 564 535 473 472
2009: Jan Feb Mar Apr June July Aug Sept Oct Nov	142,221 141,687 140,854 140,902 140,438 140,038 139,817 139,433 138,768 138,242 138,381	116,709 116,427 115,663 115,896 115,451 115,102 114,984 114,784 114,215 113,754 113,669	62,836 62,487 61,908 62,019 61,895 61,665 61,648 61,510 61,237 60,953 60,833	53,873 53,939 53,755 53,877 53,557 53,437 53,336 53,274 52,979 52,801 52,836	4,409 4,494 4,346 4,300 4,315 4,205 4,140 4,060 3,980 3,816 3,820					15,048 15,463 15,296 15,176 15,119 15,066 15,048 15,048 15,050 14,914 14,754 14,763 14,904	7,014 6,940 6,865 6,839 6,822 6,792 6,832 6,792 6,832 6,745 6,694 6,748 6,755	8,449 8,356 8,311 8,281 8,244 8,255 8,219 8,169 8,060 8,015 8,148	483 496 455 461 496 442 448 476 460 460 401 401 409 373
Nov Dec	138,381 137,792	113,669 113,339	60,833 60,598	52,836 52,741	3,820 3,804					14,904 14,758	6,755 6,765	8,148 7,992	

[Thousands of persons 16 years of age and over; monthly data seasonally adjusted]

¹ Beginning in 2003, persons who selected this rare group only. Prior to 2003, persons who selected more than one race were included in the group lifey identified as the main race. Data for "black or African American" were for "black" prior to 2003. Data discontinued for "black and other" series. See Employment and Earnings or concepts and methodology of the Current Population Survey (CPS) at http://www.bls.gov/cps/documentation.htm#concepts for details.

Note: Beginning with data for 2000, detail will not sum to total because data for all race groups are not shown here. See footnote 5 and Note, Table B–35.

TABLE B-38. Unemployment by demographic characteristic, 1962-2009

			Wh	ite 1			Black an	d other 1		Bla	ack or Afric	an Americ	an 1
Year or month	All civilian workers	Total	Males	Females	Both sexes 16–19	Total	Males	Females	Both sexes 16–19	Total	Males	Females	Both sexes 16–19
1962 1963 1964 1965 1966 1966 1967 1968 1969	3,911 4,070 3,786 3,366 2,875 2,975 2,975 2,817 2,832	3.052 3.208 2.999 2.691 2.255 2.338 2.226 2.260	1,915 1,976 1,779 1,556 1,241 1,208 1,142 1,137	1,137 1,232 1,220 1,135 1,014 1,130 1,084 1,123	580 708 708 705 651 635 644 660	861 863 787 678 622 638 590 571	509 496 426 360 310 300 277 267	352 367 361 318 312 338 313 304	142 176 165 171 186 203 194 193				
1970 1971 1972 1973 1974 1975 1976 1977 1978 1978	4,093 5,016 4,882 4,365 5,156 7,929 7,406 6,991 6,202 6,137	3,339 4,085 3,906 3,442 4,097 6,421 5,914 5,914 4,698 4,658	1,857 2,309 2,173 1,836 2,169 3,627 3,258 2,883 2,883 2,411 2,405	1,482 1,777 1,733 1,606 1,927 2,794 2,656 2,558 2,287 2,260	871 1,011 1,021 955 1,104 1,413 1,364 1,284 1,189 1,193	754 930 977 924 1.058 1.507 1.492 1.550 1.505 1.473	380 481 486 440 544 815 779 784 731 714	374 450 491 484 514 692 713 766 774 759	235 249 288 318 355 355 355 379 394 362	906 846 965 1.369 1.334 1.393 1.330 1.330	448 395 494 741 698 641 636	458 451 470 629 637 695 690 683	279 262 297 330 330 354 360 333
1980 1980 1981 1982 1983 1984 1985 1986 1987 1988 1987 1988	7,637 8,273 10,678 10,717 8,539 8,312 8,237 7,425 6,701 6,528	5,884 6,343 8,241 8,128 6,372 6,191 6,140 5,501 4,944 4,770	3,345 3,580 4,846 4,859 3,600 3,426 3,433 3,132 2,766 2,636	2,540 2,762 3,395 3,270 2,772 2,765 2,708 2,369 2,177 2,135	1,291 1,374 1,534 1,534 1,116 1,074 1,070 995 910 863	1,752 1,930 2,437 2,588 2,167 2,121 2,097 1,924 1,757 1,757	922 997 1,334 1,401 1,144 1,095 1,097 969 888 889	830 933 1,104 1,187 1,022 1,026 999 955 869 868	377 388 443 441 384 394 383 353 316 331	1,553 1,731 2,142 2,272 1,914 1,864 1,864 1,684 1,547 1,544	815 891 1,167 1,213 1,003 951 946 826 771 773	738 840 975 1,059 911 913 894 858 776 772	343 357 396 392 353 357 347 312 288 300
1990 1991 1991 1992 1993 1994 1994 1995 1996 1997 1998 1998	7,047 8,628 9,613 8,940 7,996 7,404 7,236 6,739 6,210 5,880	5,186 6,560 7,169 6,655 5,892 5,459 5,300 4,836 4,836 4,484 4,273	2,935 3,859 4,209 3,828 3,275 2,999 2,896 2,641 2,431 2,274	2,251 2,701 2,959 2,827 2,617 2,460 2,404 2,195 2,053 1,999	903 1,029 1,037 992 960 952 939 912 876 844	1,860 2,068 2,444 2,285 2,104 1,945 1,936 1,903 1,726 1,606	971 1,087 1,314 1,227 1,092 984 984 984 935 835 835 792	889 981 1,130 1,058 1,011 961 952 967 891 814	308 330 390 373 360 394 367 359 329 318	1,565 1,723 2,011 1,844 1,666 1,538 1,592 1,560 1,426 1,309	806 890 1,067 971 848 762 808 747 671 626	758 833 944 872 818 777 784 813 756 684	268 280 324 313 300 302 310 302 281 268
2000 2001 2002 2003 2004 2005 2006 2007 2008 2007 2008 2009	5,692 6,801 8,378 8,774 8,149 7,591 7,001 7,078 8,924 14,265	4,121 4,969 6,137 6,311 5,847 5,350 5,002 5,143 6,509 10,648	2,177 2,754 3,459 3,643 3,282 2,931 2,730 2,869 3,727 6,421	1,944 2,215 2,678 2,668 2,565 2,419 2,271 2,274 2,782 4,227	795 845 925 909 890 845 794 805 947 1,157					1.241 1.416 1.693 1.787 1.729 1.700 1.549 1.445 1.788 2.606	620 709 835 891 860 844 774 752 949 1,448	621 706 858 895 868 856 775 693 839 1,159	230 260 265 241 267 253 235 246 288
2008 Jan Feb Mar Apr June July Aug Sept Oct Nov Dec	7,628 7,435 7,793 7,631 8,397 8,560 8,895 9,509 9,569 9,569 10,172 10,617 11,400	5,536 5,461 5,585 5,543 6,071 6,222 6,525 6,882 6,868 7,523 7,875 8,458	3,124 3,058 3,097 3,143 3,418 3,514 3,801 3,878 4,119 4,420 4,637 4,901	2,412 2,403 2,488 2,400 2,652 2,708 2,724 3,004 2,749 3,103 3,238 3,557	907 803 733 827 992 969 1.085 955 974 1.017 1.018 1.033					1,620 1,462 1,619 1,534 1,660 1,758 1,934 2,027 2,027 2,031 2,150	845 749 810 762 867 979 974 1,094 1,115 1,122 1,226	775 713 809 772 831 763 779 960 933 902 910 924	296 253 249 190 262 223 261 254 242 267 220 220 220
2009: Jan Feb Apr May June July Aug Sept Oct Nov Dec	11,919 12,714 13,310 13,816 14,518 14,721 14,534 14,993 15,159 15,612 15,340 15,267	8,815 9,408 9,996 10,213 10,874 10,986 10,927 11,254 11,366 11,813 11,589 11,266	5,177 5,575 5,932 6,196 6,625 6,712 6,907 6,907 6,985 7,213 7,037 6,707	3.638 3.834 4.064 4.017 4.250 4.274 4.251 4.274 4.347 4.347 4.381 4.600 4.552 4.559	1,006 1,077 1,107 1,107 1,163 1,202 1,303 1,212 1,279 1,142 1,174					2,278 2,396 2,367 2,676 2,650 2,617 2,600 2,682 2,701 2,754 2,757 2,843	1,307 1,365 1,362 1,538 1,490 1,444 1,397 1,499 1,468 1,496 1,559 1,505	971 1,031 1,005 1,138 1,161 1,173 1,203 1,184 1,233 1,257 1,198 1,337	288 289 228 268 294 280 270 247 287 287 287 298 370 356

[Thousands of persons 16 years of age and over; monthly data seasonally adjusted]

¹ See footnote 1 and Note, Table B–37.

Note: See footnote 5 and Note, Table B-35.

TABLE B-39. Civilian labor force participation rate and employment/population ratio, 1962-2009

				Labor ford	e particip	ation rate					Employme	nt/popula	tion ratio		
Yea	ar or month	All civilian workers	Males	Females	Both sexes 16-19 years	White ²	Black and other ²	Black or African Ameri- can ²	All civilian workers	Males	Females	Both sexes 16–19 years	White ²	Black and other ²	Black or African Ameri- can ²
1962 1963 1964 1965 1966 1967 1968 1968		58 8 58 7 58 7 58 9 59 2 59 6 59 6 59 6 60 1	82.0 81.4 81.0 80.7 80.4 80.4 80.1 79.8	37.9 38.3 38.7 39.3 40.3 41.1 41.6 42.7	46.1 45.2 44.5 45.7 48.2 48.4 48.3 49.4	58 3 58 2 58 2 58 4 58 7 59 2 59 3 59 3 59 9	63 2 63 0 63 1 62 9 63 0 62 8 62 2 62 1		55 5 55 4 55.7 56 2 56 9 57 3 57 5 58 0	77 7 77 1 77 3 77 5 77 9 78 0 77 8 77 8 77 6	35 6 35.8 36.3 37.1 38.3 39.0 39.6 40.7	39.4 37.4 37.3 38.9 42.1 42.2 42.2 43.4	55.4 55.3 55.5 56.0 56.8 57.2 57.4 58.0	56 3 56 2 57 0 57 8 58 4 58 2 58 0 58 1	
1970 1971 1972 1973 1974 1975 1976 1977 1978		60.4 60.2 60.4 60.8 61.3 61.2 61.6 62.3 63.2 63.7	79.7 79.1 78.9 78.8 78.7 77.9 77.5 77.7 77.9 77.7 77.9 77.8	43.3 43.4 43.9 44.7 45.7 46.3 47.3 48.4 50.0 50.9	49.9 49.7 51.9 53.7 54.8 54.0 54.5 56.0 57.8 57.9	60.2 60.1 60.4 61.4 61.5 61.8 62.5 63.3 63.3	61.8 60.9 60.5 60.3 59.6 59.8 60.4 62.2 62.2	59.9 60.2 59.8 58.8 59.0 59.8 61.5 61.5	57 4 56 6 57 0 57 8 57 8 57 8 56 1 56 8 57 9 59 3 59 3	762 749 750 755 749 717 720 728 738 738	40.8 40.4 41.0 42.0 42.6 42.0 43.2 44.5 46.4 47.5	42.3 41.3 43.5 45.9 46.0 43.3 44.2 46.1 48.3 48.5	57.5 56.8 57.4 58.2 58.3 56.7 57.5 58.6 60.0 60.0	56.8 54.9 55.0 54.3 51.4 52.0 52.5 54.7 55.2	53.7 54.5 53.5 50.1 50.8 51.4 53.6 53.8
1980 1981 1982 1983 1984 1985 1986 1987 1988 1988		63.8 63.9 64.0 64.0 64.4 64.8 65.3 65.6 65.9 66.5	77.4 77.0 76.6 76.4 76.4 76.3 76.3 76.2 76.2 76.2	51.5 52.1 52.6 52.9 53.6 54.5 55.3 56.0 56.6 57.4	56.7 55.4 53.5 53.9 54.5 54.7 54.7 54.7 55.3 55.9	64.1 64.3 64.3 64.6 65.0 65.5 65.8 66.2 66.7	61.7 61.3 61.6 62.1 62.6 63.3 63.7 64.3 64.0 64.0	61.0 60.8 61.0 61.5 62.2 62.9 63.3 63.8 63.8 63.8 64.2	59.2 59.0 57.8 57.9 59.5 60.1 60.7 61.5 62.3 63.0	72.0 71.3 69.0 68.8 70.7 70.9 71.0 71.0 71.5 72.0 72.5	47.7 48.0 47.7 48.0 49.5 50.4 51.4 52.5 53.4 54.3	46.6 44.6 41.5 41.5 43.7 44.4 45.5 46.8 47.5	60.0 60.0 58.8 58.9 60.5 61.0 61.5 62.3 63.1 63.8	53.6 52.6 50.9 51.0 53.6 54.7 55.4 56.8 57.4 58.2	52.3 51.3 49.4 49.5 52.3 53.4 55.6 56.3 56.9
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999		66.5 66.2 66.4 66.3 66.6 66.6 66.8 67.1 67.1 67.1	76.4 75.8 75.8 75.4 75.1 75.0 74.9 75.0 74.9 75.0 74.9 74.9	57.5 57.4 57.8 57.9 58.8 58.9 59.3 59.8 59.8 59.8 59.8 60.0	53.7 51.6 51.3 51.5 52.7 53.5 52.3 51.6 52.8 52.8 52.0	66.9 66.6 66.8 67.1 67.1 67.2 67.5 67.3 67.3	64.4 63.8 64.6 63.8 63.9 64.3 64.6 65.2 65.2 65.9	64.0 63.3 63.9 63.2 63.4 63.7 64.1 64.7 65.6 65.8	62.8 61.7 61.5 61.7 62.5 62.9 63.2 63.8 64.1 64.3	72.0 70.4 69.8 70.0 70.4 70.8 70.9 71.3 71.6 71.6	54.3 53.7 53.8 54.1 55.3 55.6 56.0 56.8 57.1 57.4	45.3 42.0 41.0 41.7 43.4 44.2 43.5 43.4 45.1 45.1	63.7 62.6 62.4 62.7 63.5 63.8 64.1 64.6 64.7 64.8	57.9 56.7 56.4 56.3 57.2 58.1 58.6 59.4 60.9 61.3	56.7 55.4 54.9 55.0 56.1 57.1 57.4 58.2 59.7 60.6
2000 2001 2002 2003 2004 2005 2006 2007 2008 2007		67.1 66.8 66.6 66.2 66.0 66.0 66.0 66.0 66.0 66.0	74.8 74.4 73.5 73.3 73.3 73.5 73.2 73.0 72.0	59.9 59.8 59.6 59.5 59.2 59.3 59.4 59.3 59.4 59.3 59.5 59.2	52.0 49.6 47.4 44.5 43.9 43.7 43.7 41.3 40.2 37.5	67.3 67.0 66.8 66.5 66.3 66.3 66.5 66.4 66.3 66.4 66.3 65.8		65.8 65.3 64.8 64.3 63.8 64.2 64.1 63.7 63.7 63.7 63.7	64.4 63.7 62.7 62.3 62.3 62.3 62.7 63.1 63.0 62.2 59.3	71.9 70.9 69.7 68.9 69.2 69.6 70.1 69.8 68.5 68.5 64.5	57.5 57.0 56.3 56.1 56.0 56.2 56.6 56.6 56.6 56.2 56.2 54.4	45.2 42.3 39.6 36.8 36.4 36.5 36.9 34.8 32.6 28.4	64.9 64.2 63.4 63.0 63.1 63.4 63.8 63.6 63.8 63.6 62.8 60.2		60.9 59.7 58.1 57.4 57.2 57.7 58.4 58.4 58.4 57.3 53.2
2008:	Jan Feb Apr May June July Aug Sept Oct Nov Dec	66.2 66.0 66.1 66.2 66.1 66.2 66.1 66.0 66.0 66.0 66.0 65.8 65.8	73.3 73.1 73.0 73.0 73.0 73.0 73.0 73.0 73.0 73.0	59.6 59.3 59.5 59.5 59.6 59.5 59.3 59.6 59.4 59.5 59.5	41.2 40.0 40.1 41.0 42.1 40.4 40.5 39.9 40.0 39.8 38.5 38.4	66.5 66.2 66.3 66.4 66.4 66.4 66.4 66.4 66.3 66.4 66.2 66.2 66.2	· · · · · · · · · · · · · · · · · · ·	64.0 63.7 64.0 63.8 63.6 63.6 63.6 63.6 63.6 63.6 63.2 63.4	62.9 62 8 62.7 62.6 62 4 62 2 62 0 61.9 61.3 60.9	69.6 69.5 69.2 69.0 68.8 68.6 68.4 68.1 67.7 67.2 66.6	56.7 56.5 56.6 56.6 56.5 56.4 56.2 56.1 56.1 56.1 56.1 56.0 55.7 55.6	33.9 33.4 33.7 34.6 34.1 32.7 32.1 32.4 32.3 31.8 30.7 30.4	63.5 63.3 63.3 63.2 63.1 63.0 62.7 62.7 62.4 62.0 61.6		58.2 58.4 58.2 58.5 57.7 57.6 57.3 57.4 56.3 56.4 55.9 55.8
2009:	Jan Feb Mar Apr Apr June July Aug Sept Oct Nov Dec	65.7 65.6 65.8 65.8 65.8 65.7 65.4 65.4 65.4 65.1 65.0 64.9 64.6	72.3 72.3 72.0 72.4 72.5 72.3 72.0 72.3 72.0 72.2 71.8 71.8 71.8 71.5 71.0	59.5 59.6 59.5 59.5 59.4 59.2 59.4 59.2 59.4 59.2 59.1 58.8 58.7 58.8 58.7 58.8 58.6	38.5 38.8 38.1 38.1 38.3 37.9 37.5 36.8 36.1 35.8 35.6	66.0 66.1 66.2 66.3 66.3 66.3 65.9 65.9 65.7 65.6 65.4 65.4 65.0		63.2 63.0 62.4 63.2 62.9 62.6 62.5 62.5 62.2 61.6 61.7 62.2 51.9	60.6 60.3 59.9 59.9 59.6 59.4 59.3 59.1 58.7 58.4 58.5 58.2	66.1 65.8 65.1 64.9 64.6 64.5 64.3 63.9 63.6 63.5 63.5 53.2	55.4 55.2 55.0 54.7 54.5 54.4 54.2 53.8 53.6 53.7 53.4	30.4 30.3 29.7 29.8 29.5 29.0 28.6 27.8 27.2 26.1 26.2 25.9	61.4 61.2 60.7 60.8 60.6 60.3 60.2 60.1 59.7 59.4 59.4 59.1		55.1 54.5 54.0 53.7 53.5 53.3 53.3 52.7 52.1 52.0 52.5 51.9

[Percent¹; monthly data seasonally adjusted]

¹ Civilian labor force or civilian employment as percent of civilian noninstitutional population in group specified.

² See footnote 1, Table B-37.

Note: Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B–35.

									· ·							
						White ²					Black an	d other o	r black or A	African A	merican	2
Vaa	r or month	All civilian			Males			Female	3			Males			Female	s
rea	I OF INORUI	work- ers	Total	Total	1619 years	20 years and over	Totai	16—19 years	20 years and over	Total	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
		1										Bla	ick and oth	er ²		
1968 .		59.6	59.3	80.4	55.9 56.8	83.2	40.7	43.0	40.4	62.2	77.7	49.7	82.2	49.3	34.8	51.4
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 . 1972 .		60.2 60.4	60.4	79.6	57.9 60.1	82.3 82.0	42.b 43.2	45.4 48.1	42.3 42.7	60.9 60.2	74.9	44.7 46.0	80.0 78.6	49.2 48.8	31.2 32.3	51.8
												Black or	African An	nerican ²		
1972 . 1973 .		60.4 60.8	60.4 60.8	79.6 79.4	60.1 62.0	82.0 81.6	43.2 44.1	48.1 50.1	42.7 43.5	59.9 60.2	73.6 73.4	46.3 45.7	78.5 78.4	48.7 49.3	32.2 34.2	51.2 51.6
1974 . 1975 .		61.3 61.2	61.4 61.5	79.4 78.7	62.9 61.9	81.4 80.7	45.2 45.9	51.7 51.5	44.4 45.3	59.8 58.8	72.9 70.9	46.7 42.6	77.6 76.0	49.0 48.8	33.4 34.2	51.4 51.1
1976 . 1977 .		61.6 62.3	61.8 62.5	78.4 78.5	62.3 64.0	80.3 80.2	46.9 48.0	52.8 54.5	46.2 47.3	59.0 59.8	70.0 70.6	41.3 43.2	75.4 75.6	49.8 50.8	32.9 32.9	52.5 53.6
1978 . 1979 .		63.2 63.7	63.3 63.9	78.6 78.6	65.0 64.8	80.1 80.1	49.4 50 5	56.7 57.4	48.7 49.8	61.5 61.4	71.5 71.3	44.9 43.6	76.2 76.3	53.1 53.1	37.3 36.8	55.5 55.4
1980 . 1981 -		63.8	64.1 64.3	78.2	63.7 62.4	79.8	51.2 51.9	56.2	50.6	61.0 60.8	70.3	43.2 41.6	75.1 74.5	53.1 53.5	34.9 34.0	55.6 56.0
1982		64.0 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 54.2	33.5	56.2
1984 . 1995 -		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
1986 -		653	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
1988 . 1988 .	••••••	65.9	66.2	76.9	60.0 61.0	78.3	56.4 57.2	57.2	56.3	63.8 64.2	71.0	43.8	74.6	58.0 58.7	37.9	60.0 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 . 1992 .		66.4	66.8	76.5	57.3 56.9	78.0	57.4 57.7	54.1	57.b 58.1	63.9	70.4	37.3 40.6	74.5	57.5	33.5	60.8
1993. 1994		66.5	65.8	76.2 75.9	56.6 57.7	77.3	58.0 58.9	53.5 55.1	58.3 59.2	63.2 63.4	69.6 69.1	39.5 40.8	73.2	57.9 58.7	34.b 36.3	60.2 60.9
1995. 1996.		66.6 66.8	67.1 67.2	75.8	58.5 57.1	77.3	59.0 59.1	55.5 54.7	59.2 59.4	63.7 64.1	69.0 68.7	40.1 39.5	72.5	59.5 60.4	39.8 38.9	61.4 62.6
1997. 1998.		67.1 67.1	67.5 67.3	75.9 75.6	56.1 56.6	77.5 77.2	59.5 59.4	54.1 55.4	59.9 59.7	64.7 65.6	68.3 69.0	37.4 40.7	72.2	61.7 62.8	39.9 42.5	64.0 64.8
1999 . 2000		67 1	673	756	56 4 56 5	77.2	59.6 59.5	54.5 54.5	59.9 59.9	65.8	68.7 69.2	38.6	72.4	63.5 63.1	38.8	66.1 65.4
2001.		66.8	67.0	75.1	53.7	76.9	59.4 59.3	52.4	59.9	65.3	68.4 68.4	37.9	72.1	62.8	37.3	65.2
2002 . 2003 . 2004 .		66 Z	66.5	74.2	47.5	76.3	59.2	47.9	59.9	64.3 63.8	67 3	31.1	71.5	61.9	33.7	64.6 64.2
2004.2005.		66.0	66.3	74.1	46.2	76.2	58.9	47.6	59.7	64.2 64.1	67.3	32.6	71.3	61.6	32.2	64.4
2000 . 2007 .		66 0	66.4	74.0	44.3	76.3	59.0	40.0	60.1	63.7	66.8	29.4	71.2	61.1	31.2	64.0 64.0
2008 .		65.4	65.8	72.8	40.3	75.3	59.1	40.9	60.4	62.4	65.0	26.4	69.6	60.3	27.9	63.4
2008:	Jan Feb	66.2 66 0	66.5 66.2	74.0 73.8	42.3 42.2	76.5 76.3	59.2 59.0	45.2 43.5	60.2 60.1	64.0 63.7	67.7 66.8	37.8 28.0	71.2	61.1 61.1	27.7 33.9	64.3 63.8
	Mar Apr	66.1 66.0	66.3 66.2	73.8 73.7	42.1 43.8	76.3 76.0	59.1 59.0	43.2 44.8	60.2 60.0	64.0 64.0	66.6 66.5	26.2 25.5	71.3	62.0 61.9	31.9 31.5	64 9 64.8
	May June	66.2 66.1	66.4 66.3	73.9	45.8 43.9	76.1	59.2 59.2	44.4 43.2	60.3 60.4	63.8 63.6	66.6 66.9	30.4 28.2	70.9	61.5	31.0	64.5 64.1
	July Aug	66 0 66 1	66.4 66.4	74.1	44.0	76.4	59.1 59.3	43.2	60.2	63.6 64.4	66.7 67.5	29.5	71.1	61.0	29.9	64.0 64.7
	Sept	66 0	66.3	73.7	42.5	76.1	59.2	42.8	60.4	63.6	67.0	30.0	71.4	60.8 61.1	30.0	63.8 64.2
	Nov	65.8	66 2	73.5	42.0	75.9	59.2	41.6	60.4	63.2	65.6	24.9	70.9	61.2	26.7	64.5 64.5
2009:	Jan	65.7	66.0	73.1	41.7	75.5	59.2	41.5	60.5	63.2	66.0	20.7	70.8	61.0	30.7	63.9
	Feb Mar	65.7 65.6	66.1 66.0	73 1 72.8	41.7 40.8	75.5 75.3	59.4 59.4	43.6 42.6	60.6 60.6	63.0 62.4	65.8 65.1	27.0 23.5	70.3	60.7 60.2	28 3 27 6	63 9 63 3
	Apr May	65.8 65.8	66.2 66.3	73.2 73.4	40.3 41.8	75.7 75.9	59.5 59.4	42.0 41.6	60.7 60.6	63.2 62.9	66.2 65.6	29.2 25.0	70.5	60.8 60.6	27.7 29.7	64.0 63.6
	June July	65.7 65.4	66 1 65 9	73.2 73.1	40.3 40.9	75.7 75.6	59.2 59.1	42.1 41.1	60.4 60.3	62.6 62.5	64.9 64.7	25.2 26.7	69.5 69.2	60.7 60.6	29.0 28.9	63.8 63.7
	Aug	65.4	66.0 65.7	73.1	41.8 40.3	75.5 75.4	59.1 58.8	40.5 39.5	60.4 60.1	62.2 61.6	64.8 64.0	25.0 25.8	69.4 68.4	60.1 59.6	27.8	63.2 62.9
	Oct	65.0	65.6 65.4	72.7	39.6	75.3	58.8	38.7	60.2 60.1	61.7 62.2	64 6 65 0	26.1	69.0	59.4 59.2	267	62.5
	Dec	64.6	65.0	717	37.8	75.0	58.6	39.0	60.0	61.9	64.6	27 6	68.8	59.7	25.5	62.7

TABLE B-40. Civilian labor force participation rate by demographic characteristic, 1968-2009 [Percent 1; monthly data seasonally adjusted]

 $^{\rm 1}$ Civilian labor force as percent of civilian noninstitutional population in group specified $^{\rm 2}$ See footnote 1, Table B–37.

Note. Data relate to persons 16 years of age and over See footnote 5 and Note, Table B–35.

TABLE B-41. Civilian employment/population ratio by demographic characteristic, 1968-2009

[Percent ': monthly data seasonally adjusted]

		r -				White ²					Black ar	nd other o	or black or A	African A	merican ²	2
V		AI civilian			Mates			Female	6			Males	:		Females	
rea	r or month	work- ers	Total	Total	16—19 years	20 years and over	Total	16–19 years	20 years and over	Total	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
		i										BI	ack and oth	er ²		
1968 1969		57.5	57.4 58.0	78 3 78 2	50 3 51 1	81.6 81.4	38.9 40.1	37 8 39 5	39.1 40.1	58.0 58.1	73.3	387 390	78.9 78.4	45.2 45.9	24.7 25.1	48.2 48.9
1970.		57.4	57.5 56.8	76 8	496	80.1 79.0	40 3 39 9	39 5 38 6	40.4 40.1	56.8 54.9	70.9	35 5 31 8	76.8	44.9	22 4	48.2
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
1070		67.0		70.0	51 5	0.05	40.7		40.0	F2.2	0.00	Black o	r African Ar	nerican ²	10.2	40.5
1972. 1973.		57.8	57.4	76 U 76.5	51.5 54.3	79.0	40.7	41.3	40.6	53.7 54.5	67.5	31.6 32.8	73.0	43.0	19.2 22.0	46.5
1974 . 1975 . 1976 .		56.1	56.7 57.5	73 0	50.6	75.7	42.4	44.5	42.2 41.9	50.1 50.1	60.6 60.6	26.3	66.5	43.5	20.9	40.9
1977 . 1978 -		57.9	58.6	74.1 75.0	54.4	76.5	44.5	45.9	44.4	51.4 53.6	61.4	26.4	67.5	43.3 45.8	18.5	47.0
1979		59.9	60.6	751	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. 1981. 1982.		59.2 59.0	60.0 58.8	73.4 72.8	51.3	75.0 75.1 73.0	47.0	47.9	47.0 48.5 48.4	51.3 49.4	59.1 56.0	27.0 24.6 20.3	64.5 61.4	45.7	19.7	49.1
1983 . 1984		57.9	58.9 60.5	70.4	47.4	72.6	48.5	44.5 47.0	48.9	49.5 52.3	56.3 59.2	20.3 20.4 23.9	61.6 64.1	44.1	17.0	47.4
1985. 1986		60.1 60.7	61.0 61.5	72.3	49.9 49.6	74.3 74.3	50.7 51.7	47.1 47.9	51.0 52.0	53.4 54.1	60.0 60.6	26.3 26.5	64.6 65.1	48.1 48.8	23.1 23.8	50.9 51.6
1987. 1988.		61.5 62.3	62.3 63.1	72.7 73.2	49.9 51.7	74.7 75.1	52.8 53.8	49.0 50.2	53.1 54.0	55.6 56.3	62.0 62.7	28.5 29.4	66.4 67.1	50.3 51.2	25.8 25.8	53.0 53.9
1989. 1990		63.0 62.8	63.8 63.7	73.7 73.3	52.6 51.0	75.4 75.1	54.6 54.7	50.5 48.3	54.9 55.2	56.9 56.7	62.8 62.6	30.4 27.7	67.0 67.1	52.0 51.9	27.1 25.8	54.6 54.7
1991 1992		61.7 61.5	62.6 62.4	71.6 71.1	47.2 46.4	73.5 73.1	54.2 54.2	45.9 44.2	54.8 54.9	55.4 54.9	61.3 59.9	23.8 23.6	65.9 64.3	50.6 50.8	21.5 22.1	53.6 53.6
1993 1994		61.7 62.5	62.7 63.5	71.4 71.8	46.6 48.3	73.3 73.6	54.6 55.8	45.7 47.5	55.2 56.4	55.0 56.1	60.0 60.8	23.6 25.4	64.3 65.0	50.9 52.3	21.6 24.5	53.8 55.0
1995. 1996.		62.9 63.2	63.8 64.1	72.0 72.3	49.4 48.2	73.8 74.2	56.1 56.3	48.1 47.6	56.7 57.0	57.1 57.4	61.7 61.1	25.2 24.9	66.1 65.5	53.4 54.4	26.1 27.1	56.1 57.1
1997 1998		63.8 64.1	64.6 64.7	72.7 72.7	48.1 48.6	74.7 74.7	57.0 57.1	47.2 49.3	57.8 57.7	58.2 59.7	61.4 62.9	23.7 28.4	66.1 67.1	55.6 57.2	28.5 31.8	58.4 59.7
1999 . 2000		64.3 64.4	64.8 64.9	72.8	49.3 49.5	74.8 74.9	57.3 57.4	48.3 48.8	58.0 58.0	60.6 60.9	63.1 63.6	26.7 28.9	67.5 67.7	58.6 58.6	29.0 30.6	61.5 61.3
2001 . 2002 .		63 7 62.7	64.2 63.4	72.0 70.8	46.2 42.3	74.0 73.1	57.0 56.4	46.5 44.1	57.7 57.3	59.7 58.1	62.1 61.1	26.4 25.6	66.3 65.2	57.8 55.8	27.0 24.9	60.7 58.7
2003 2004		62.3 62.3	63.0 63.1	70.1 70.4	39.4 39.7	72.5 72.8	56.3 56.1	41.5 40.3	57.3 57.2	57.4 57.2	59.5 59.3	19.9 19.3	64.1 63.9	55.6 55.5	23.4 23.6	58.6 58.5
2005.		62.7	63.4 63.8	70.8	38.8 40.0	73.3	56.3 56.6	41.8	57.4	57.7 58.4	60.2 60.6	20.8	64.7	55.7 56.5	22.4	58.9 59.4
2007		62.2	62.8	69.7	37.3	/3.5 72.4	56.3	39.Z 37.1	57.9	58.4 57.3	59.1	19.5	63.9 63.9	55.5 55.8	23.3	59.8 59.1
2009.	Jan	62.9	63.5	70.7	34.2	73.5	56.7	39.4 39.4	57 9	58 2	60.9	23.4	65.3	52.0 56.0	19.6	59.5
	Feb Mar	62.8	63.3 63.3	70.5	35.1	73.3	56.5	38.3	57.8	58.4 58.2	60.8 60.1	19.3	65.3	56.7	23.6	59.6 59.9
	Apr May	62.6	63.2	70.3	37.0	72.9	56.5	38.9	57.8	58.5	59.7	18.5	64.5	56.1	24.3	59.3
	July	62.4 62.2	63.0 62.7	70.0	33.0	72.7	56.3 56.2	36.5	57.0	57.0 57.3	58.9 58.9	18.1	63.7 64.0	55.9 55.5	21.2	59.3 59.2
	Sept	61.9	62.7	69.3 69.1	34.1	72.0	56.4 56.2	36.3	57.8	56.3	58.3 57 g	20.2	62.8	54.7 55.2	21.8	57.9 58.6
	Nov Dec	61.3 60.9	62.0	68.5 67.9	33.3 32.8	71.2 70.6	55.8 55.6	35.2 34.7	57.3 57.1	55.9 55.8	56.7 56.4	14.3	61.7	55.3 55.2	20.8	58.6
2009:	Jan	60.6	61.4	67.5	32.2	70.2	55.4	35.2	56.9	55.1 54.5	55.6	15.3	60.4 50.7	54.7	21.5	57.9
	Mar	59.9	60.7	66.4	31.2	69.2 69.2	55.3 55.4	35.4	56.7 56.8	54.0 53.7	54.3 54.0	13.7	59.1	53.7 53.5	20.4	56.9
	May	59.6 59.4	60.6 60.2	66.3 66.0	31.5	69.0 68.8	55.0 54.9	34.7 34.1	56.4	53.5 53.3	53.8 53.5	13.5	58.5 58.1	53.2 53.2	19.3 19.4	56.4
	July	59.3	60.2 60.1	66.0 65.8	30.2 30.1	68.7 68.5	54.7 54.6	33.4 32.3	56.2	53.3 52.7	53.7 53.0	16.2	58.1	52 9 52 5	19.2 21.0	56.1
	Sept	58.7 58.4	59.7 59.4	65.4 65.1	29.5 28.3	68.1 67.8	54.3 54.0	31.7 30.4	55.8 55.7	52.1 52.0	52.5 52.8	12.7 14.7	57.1 57.2	51.7 51.4	17.2 15.8	55 0 54 8
	Nov Dec	58.5 58.2	59.4 59.1	64 9 64 6	27.7 27.5	67.7 67.4	54.1 53.9	31.2 31.3	55.6 55.5	52.5 51.9	52.8 52.8	12.9 13.2	57.4 57.4	52.2 51.1	15.0 15.2	55.7 54.5

 $^\circ$ Civilian employment as percent of civilian coninstitutional population in group specified. 2 See footnote 1, Table B–37.

Note: Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B-35

TABLE B-42. Civilian unemployment rate, 1962-2009

[Percent 1; monthly data seasonally adjusted, except as noted]

	A		Males			Female	S	Roth		Ву	race		Hispanic	Married	Women
Year or month	civilian work- ers	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over	sexes 16–19 years	White ²	Black and other ²	Black or African Ameri- can ²	Asian (NSA) ^{2, 3}	or Latino ethnic- ity ⁴	men, spouse pres- ent	who maintain families {NSA}3
1962 1963 1964 1965 1966 1966 1967 1968 1968	5.5 5.7 5.2 4.5 3.8 3.8 3.6 3.5	5.2 5.2 4.6 4.0 3.2 3.1 2.9 2.8	14.7 17.2 15.8 14.1 11.7 12.3 11.6 11.4	4.6 4.5 3.9 3.2 2.5 2.3 2.2 2.1	6.2 6.5 5.5 4.8 5.2 4.8 5.2 4.8 4.7	14.6 17.2 16.6 15.7 14.1 13.5 14.0 13.3	54 54 52 45 38 42 38 37	14.7 17.2 16.2 14.8 12.8 12.9 12.7 12.2	4.9 5.0 4.6 4.1 3.4 3.4 3.2 3.1	10.9 10.8 9.6 8.1 7.3 7.4 6.7 6.4				3.6 3.4 2.8 2.4 1.9 1.8 1.6 1.5	4.9 4.4 4.4
1970	4.9 5.6 4.9 5.6 8.5 7.7 7.1 6.1 5.8	4.4 5.3 5.0 4.2 4.9 7.9 7.1 6.3 5.3 5.3	15.0 16.6 15.9 13.9 15.6 20.1 19.2 17.3 15.8 15.9	3.5 4.4 3.3 3.8 6.8 5.9 5.2 4.3 4.2	5.9 6.9 6.0 6.7 9.3 8.6 8.2 7.2 6.8	15.6 17.2 16.7 15.3 16.6 19.7 18.7 18.3 17.1 16.4	48 57 54 49 55 80 74 70 60 57	15.3 16.9 16.2 14.5 16.0 19.9 19.0 17.8 16.4 16.1	4.5 5.4 5.1 4.3 5.0 7.8 7.0 6.2 5.2 5.1	8.2 9.9 10.0 9.9 13.8 13.1 13.1 13.1 11.9 11.3	10 4 9 4 10 5 14 8 14 0 14 0 12 8 12 3		7.5 8.1 12.2 11.5 10.1 9.1 8.3	2.6 3.2 2.8 2.3 2.7 5.1 4.2 3.6 2.8 2.8	5.4 7.3 7.2 7.0 100 101 94 85 83
1980 1981 1982 1983 1984 1985 1986 1986 1987 1988	7.1 7.6 9.7 7.5 7.2 7.0 6.2 5.5 5.5	6.9 7.4 9.9 7.4 7.0 6.9 6.2 5.5 5.2	18.3 20.1 24.4 23.3 19.6 19.5 19.0 17.8 16.0 15.9	59 63 889 662 61 54 48 45	7.4 7.9 9.4 9.2 7.6 7.4 7.1 6.2 5.6 5.4	17.2 190 21.9 21.3 18.0 17.6 17.6 17.6 15.9 14.4 14.0	64 68 83 68 68 68 62 54 49 47	17.8 19.6 23.2 22.4 18.9 18.6 18.3 16.9 15.3 15.0	6.3 6.7 86 8.4 6.5 62 6.0 5.3 4.7 4.5	131 142 173 178 144 137 131 116 104 100	14.3 15.6 18.9 19.5 15.9 15.1 14.5 13.0 11.7 11.4		10.1 10.4 13.8 13.7 10.7 10.5 10.6 8.8 8.2 8.0	42 43 65 46 43 44 39 33 30	92 10.4 11.7 12.2 10.3 10.4 9.8 9.2 8.1 8.1
1990 1991 1992 1993 1994 1995 1996 1997 1997 1998	5.6 6.8 7 5 6.9 6.1 5 6 5.4 4.9 4.5 4.2	5.7 7.2 7.9 7.2 5.6 5.4 4.9 4.4 4.1	16.3 19.8 21.5 20.4 19.0 18.4 18.1 16.9 16.2 14.7	50 64 71 64 54 46 46 42 37 35	55 64 70 66 56 5.4 5.0 4.6 4.3	14.7 175 186 175 162 161 152 150 129 132	49 57 63 59 49 48 48 48 48 41 38	15.5 18.7 20.1 19.0 17.6 17.3 16.7 16.0 14.6 13.9	48 61 66 61 53 49 47 42 39 37	10.1 11.1 12.7 11.7 10.5 9.6 9.3 8.8 7.8 7.8 7.0	11.4 12 5 14 2 13.0 11 5 10.4 10.5 10 0 8.9 8.0	· · · · · · · · · · · · · · · · · · ·	8.2 10.0 11.6 10.8 9.9 1.93 1.93 1.93 1.93 1.93 1.93 1.93	34 44 51 44 37 33 30 27 24 22	83 93 100 97 89 80 82 81 7.2 64
2000 2001 2002 2003 2004 2005 2006 2007 2007 2008 2008 2009	4.0 4.7 5.8 6.0 5.5 5.1 4.6 4.6 5.8 9.3	3.9 4.8 5.9 6.3 5.6 4.6 4.7 6.1 10.3	14.0 16.0 18.1 19.3 18.4 18.6 16.9 17.6 21.2 27.8	3.3 4.2 5.3 5.0 4.4 4.0 4.1 5.4 9.6	4.1 5.6 5.7 5.4 4.6 4.5 5.4 8.1	12.1 13.4 14.9 15.6 15.5 14.5 13.8 13.8 16.2 20.7	36 41 51 49 46 41 40 49 75	13.1 14.7 16.5 17.5 17.0 16.6 15.4 15.7 18.7 24.3	3.5 42 5.1 5.2 4.8 4.4 4.0 41 5.2 8.5		7.6 8.6 10.2 10.8 10.4 10.0 8.9 8.3 10.1 14.8	3 6 4.5 5.9 6.0 4 4 3.0 3.0 3.2 4.0 7.3	5.7 6.6 7.5 7.7 7.0 6.0 5.2 5.6 7.6 7.6 7.6	20 27 36 38 31 28 24 25 34 66	5.9 6.6 8.0 8.5 7.8 7.1 6.5 8.0 11.5
2008. Jan Feb Mar June July Aug Sept Oct Nov Dec	5.0 4.8 5.1 5.0 5.4 5.5 5.5 5.8 6.1 6.2 6.6 7.4	5.1 4.9 5.2 5.8 6.8 6.8 7.1 7.5 8.1	21.2 18.4 17.8 17.1 20.8 21.1 24.1 20.7 21.3 24.2 23.8 23.2	4 4 4.4 4.6 4.9 5.1 5.4 5.7 6.1 6.4 6.8 7.4	47 47 49 53 53 59 55 59 62 66	14 4 14 6 14.2 14 1 16 9 16.8 17 3 17 2 17.1 16.1 16.6 18.3	4.2 4.2 4.5 4.3 4.7 4.7 4.7 5.4 5.4 5.0 5.7 6.0	17.8 16.5 16.0 15.6 18.9 19.0 20.8 18.9 19.3 20.3 20.3 20.3 20.8	4 4 4 4 4 5 4 4 5 0 5 5 5 5 5 5 5 5 6 0 6 3 6 7		9.2 8.3 9.1 8.6 9.6 9.4 9.9 10.8 11.4 11.3 11.5 12.1	3.2 3.0 3.6 3.2 3.8 4.5 4.0 4.4 3.8 3.8 3.8 3.8 5.1	6.4 62 6.9 6.9 7.7 7.5 80 80 80 89 89 89 89 4	2.7 2.7 2.9 2.8 2.9 3.0 3.3 3.6 3.9 4.1 4.3 4.6	7.0 6.7 7.1 6.8 7.9 8.5 8.5 8.2 8.8 9.3 9.5
2009 Jan Feb Mar June July Aug Oct Nov Dec	7.7 8.2 8.6 9.4 9.5 9.4 9.7 9.8 10.1 10.0 10.0	8.5 9.0 9.6 10.1 10.5 10.6 10.5 11.0 11.0 11.0 11.4 11.2 11.0	24.4 25.0 25.9 27.1 26.5 27.9 29.9 29.9 31.0 30.4 30.9	7.8 8.4 9.9 9.4 9.8 10.0 9.8 10.2 10.3 10.6 10.4 10.2	6.9 7.3 7.6 8.1 8.3 8.2 8.3 8.5 8.8 8.6 8.8	17.3 18.6 18.2 17.6 19.1 22.1 20.9 21.4 22.2 24.0 23.1 23.1	6.4 6.8 7.1 7.5 7.6 7.6 7.7 8.1 8.0 8.2	20.9 21.8 22.0 21.8 23.2 24.3 24.5 25.7 26.1 27.6 26.8 27.1	7.0 7.5 8.0 8.6 8.7 8.9 9.1 9.4 9.3 9.0		12.8 13.5 13.5 15.0 15.0 14.8 14.7 15.2 15.5 15.7 15.6 16.2	62 69 64 66 67 82 83 75 74 7.5 7.4 7.5 8.4	9.9 11.0 11.6 11.4 12.7 12.3 12.4 13.0 12.7 13.1 12.7 13.1 12.7 12.9	5.1 5.6 6.0 6.3 6.9 7.1 7.3 7.5 7.5 7.3	10.3 10.3 10.8 10.0 11.0 11.7 12.6 11.7 12.6 12.9 11.6 12.9 11.4 13.0

¹ Unemployed as percent of civihan labor force in group specified ² See footnote 1, Table 8–37. ³ Not seasonally adjusted (NSA).

⁴ Persons whose ethnicity is identified as Hispanic or Latino may be of any race

Note. Data relate to persons 16 years of age and over See footnote 5 and Note, Table B–35 $\,$

						White ²					Black an	d other or	black or	African A	merican ²	
		All		т I	Males			Females			!	Males	-		Females	
Year o	r month	work- ers	Total	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over	Total	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
												Bla	ck and ot	ner ²		·
1968 1969		3.6 3.5	3 2 3.1	2.6 2.5	10.1 10.0	2.0 1.9	4.3 4.2	12.1 11.5	3.4 3.4	6.7 6.4	5.6 5.3	22.1 21.4	3.9 3.7	8.3 7 8	28.7 27.6	6.3 5.8
1970 1971 1972		4.9 5.9 5.6	4.5 5.4 5.1	4.0 4.9 4.5	13.7 15.1 14.2	3.2 4.0 3.6	5.4 6.3 5.9	13.4 15.1 14.2	4.4 5.3 4.9	8.2 9.9 10.0	7.3 9.1 8.9	25.0 28.8 29.7	5.6 7.3 6.9	93 10.9 11.4	34 5 35 4 38 4	6.9 8.7 8.8
												Black or	African A	merican ²		
1972 1973 1974 1975 1976 1977 1978 1978		5.6 4.9 5.6 8.5 7.7 7.1 6.1	5.1 4.3 5.0 7.8 7.0 6.2 5.2	4.5 3.8 4.4 7.2 6.4 5.5 4.6 4.5	14.2 12.3 13.5 18.3 17.3 15.0 13.5 13.9	3.6 3.0 3.5 6.2 5.4 4.7 3.7	5.9 5.3 6.1 8.6 7.9 7.3 6.2	14.2 13.0 14.5 17.4 16.4 15.9 14.4 14.0	4.9 4.3 5.1 7.5 6.8 6.2 5.2	10.4 9.4 10.5 14.8 14.0 14.0 12.8 12.3	9.3 8.0 9.8 14.8 13.7 13.3 11.8 11.4	31.7 27.8 33.1 38.1 37.5 39.2 36.7 34.2	7.0 6.0 7.4 12.5 11.4 10.7 9.3 9.3	11.8 11.1 11.3 14.8 14.3 14.9 13.8 13.8	40.5 36.1 37.4 41.0 41.6 43.4 40.8 39.1	9.0 86 8.8 12.2 11.7 12.3 11.2 10.9
1980 1981 1982 1983 1983 1984 1985 1986 1986 1987 1988		7 1 7 6 9 7 9 6 7 5 7 2 7 0 6 2 5 5 5 2	6.3 6.7 8.6 8.4 6.5 6.2 6.0 5.3 4.7	6.1 6.5 8.8 6.4 6.1 6.0 5.4 4.7	16.2 17.9 21.7 20.2 16.8 16.5 16.3 15.5 13.9 13.7	5.3 5.6 7.8 7.9 5.7 5.4 5.3 4.8 4.1	6.5 6.9 8.3 7.9 6.5 6.4 6.1 5.2 4.7	14.8 16.6 19.0 18.3 15.2 14.8 14.9 13.4 12.3	5.6 5.9 7.3 6.9 5.8 5.7 5.4 4.6 4.1	14.3 15.6 18.9 19.5 15.9 15.1 14.5 13.0 11.7	14.5 15.7 20.1 20.3 16.4 15.3 14.8 12.7 11.7	37.5 40 7 48.9 48.8 42.7 41.0 39.3 34.4 32.7	12.4 13.5 17.8 18.1 14.3 13.2 12.9 11.1 10.1	14.0 15.6 17.6 18.6 15.4 14.9 14.2 13.2 13.2	39.8 42.2 47.1 48.2 42.6 39.2 39.2 34.9 32.0	10.9 11.9 13.4 15.4 16.5 13.5 13.1 12.4 11.6 10.4
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999		5.6 6.8 7.5 6.9 6.1 5.6 5.4 4.9 4.5 4.2	4.8 6.1 6.6 6.1 5.3 4.9 4.7 4.2 3.9 3.7	4.9 6.5 7.0 6.3 5.4 4.9 4.7 4.2 3.9 3.6	14.3 17.6 18.5 17.7 16.3 15.6 15.5 14.3 14.1 12.6	4.3 5.8 6.4 5.7 4.8 4.3 4.1 3.6 3.2 3.0	4.3 5.6 5.7 5.2 4.8 4.7 4.2 3.9 3.8	11.3 12.6 15.2 15.8 14.7 13.8 13.4 12.9 12.8 10.9 11.3	4.0 4.1 5.5 5.2 4.6 4.3 4.1 3.7 3.4 3.3	11.4 12.5 14.2 13.0 11.5 10.4 10.5 10.0 8.9 8.0	11.9 13.0 15.2 13.8 12.0 10.6 11.1 10.2 8.9 8.2	31.9 36.3 42.0 40.1 37.6 37.1 36.9 36.5 30.1 30.9	10.0 10.4 11.5 13.5 12.1 10.3 8.8 9.4 8.5 7.4 6.7	10.9 12.0 13.2 12.1 11.0 10.2 10.0 9.9 9.0 7.8	33.0 29.9 36.0 37.2 37.4 32.6 34.3 30.3 28.7 25.3 25.1	9.6 9.7 10.6 11.8 10.7 9.8 8.6 8.7 8.8 7.9 6.8
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009		4.0 4.7 5.8 6.0 5.5 5.1 4.6 4.6 5.8 9.3	3.5 4.2 5.1 5.2 4.8 4.4 4.0 4.1 5.2 8.5	3.4 4.2 5.3 5.6 5.0 4.4 4.0 4.2 5.5 9.4	12.3 13.9 15.9 17.1 16.3 16.1 14.6 15.7 19.1 25.2	2.8 3.7 4.7 5.0 4.4 3.8 3.5 3.7 4.9 8.8	3.6 4.1 4.9 4.8 4.7 4.4 4.0 4.0 4.9 7.3	10.4 11.4 13.1 13.3 13.6 12.3 11.7 12.1 14.4 18.4	3.1 3.6 4.4 4.2 3.9 3.6 3.6 4.4 6.8	7.6 8.6 10.2 10.8 10.4 10.0 8.9 8.3 10.1 14.8	8.0 9.3 10.7 11.6 11.1 10.5 9.5 9.1 11.4 17.5	26.2 30.4 31.3 36.0 35.6 36.3 32.7 33.8 35.9 46.0	6.9 9.5 10.3 9.9 9.2 8.3 7.9 10.2 16.3	7.1 8.1 9.8 10.2 9.8 9.5 8.4 7.5 8.9 12.4	22.8 27.5 28.3 30.3 28.2 30.3 25.9 25.3 26.8 33.4	6.2 7.0 8.8 9.2 8.9 8.5 7.5 6.7 8.1 11.5
2008 Ja Fei Mi Ap Mi Ju Ju Ju Se Oc De	n b ar r r ay ay g g pt t v c 	5.0 4.8 5.1 5.4 5.5 6.1 6.2 6.6 6.9 7.4	4.4 4.5 4.4 5.0 5.5 5.5 6.0 6.3 6.7	4.6 4.5 4.6 5.0 5.1 5.5 5.7 6.0 6.4 6.8 7.2	19.1 16.8 14.5 15.4 18.9 22.3 19.5 19.7 21.8 21.4 21.5	3.9 4.0 4.1 4.4 4.5 4.8 5.1 5.4 5.4 5.8 6.1 6.6	4.2 4.4 4.2 4.6 4.7 4.8 5.2 4.8 5.4 5.6 6.2	12.8 11.9 11.8 13.2 15.4 15.0 15.5 14.5 15.2 14.2 15.4 16.3	3.8 3.8 4.0 3.7 4.1 4.2 4.2 4.8 4.3 4.9 5.2 5.7	9.2 8.3 9.1 8.6 9.6 9.4 9.9 10.8 11.4 11.3 11.5 12.1	10.1 9.0 9.8 9.2 10.4 10.7 11.7 11.5 13.0 13.3 13.6 14.7	38.0 31.1 39.1 27.4 39.4 35.5 38.7 29.8 32.8 39.5 42.5 35.3	8.3 8.0 8.5 9.0 9.6 10.4 10.6 12.0 11.9 12.4 13.8	8.3 7.7 8.6 8.2 8.8 8.2 8.3 10.1 10.0 9.6 9.6 9.8	28.7 30.3 26.5 22.9 24.7 24.0 27.3 30.1 27.3 26.3 21.9 31.3	7.5 6.7 7.5 87.5 9.2 9.2 9.2 8.9
2009: Ja Fel Ma Ap Ma Ju Ju Se Oc De	n b ar r ay ay by g pt t v c	7.7 8.2 8.6 9.4 9.5 9.4 9.7 9.7 9.8 10.1 10.0 10.0	7.0 7.5 8.0 8.1 8.6 8.7 8.7 8.9 9.1 9.4 9.3 9.0	7.6 8.2 8.7 9.1 9.7 9.8 9.8 10.1 10.2 10.6 10.4 10.0	22.0 22.4 23.5 22.9 24.6 24.4 26.1 28.1 26.8 28.6 26.0 27.4	7.0 7.6 8.1 9.0 9.2 9.1 9.3 9.6 9.9 9.8 9.3	6.3 6.6 7.0 6.9 7.4 7.4 7.4 7.5 7.6 8.0 7.9 8.0	15.0 16.3 17.1 17.1 16.6 19.0 18.7 20.2 19.7 21.4 20.0 19.8	5.9 6.1 6.5 6.4 6.9 6.8 6.8 6.8 7.0 7.1 7.4 7.4 7.4 7.4	12.8 13.5 15.0 15.0 14.8 14.7 15.2 15.5 15.7 15.6 16.2	15.7 16.4 16.6 18.4 17.9 17.5 17.0 18.2 18.0 18.1 18.7 18.2	44.4 45.6 41.7 41.7 46.2 44.8 39.2 46.8 50.8 43.6 57.1 52.2	14 4 15 1 15 6 17 2 16 7 16 4 16 0 17 0 16 5 17 0 16 8 16 6	10.3 11.0 10.8 12.1 12.3 12.4 12.8 12.7 13.3 13.6 12.8 14.3	30.1 32.5 26.0 28.2 34.8 33.1 33.5 24.5 32.7 40.7 41.4 44.8	9.4 10.1 10.1 11.4 11.3 11.5 11.9 12.2 12.5 12.5 11.7 13.1

TABLE B-43. Civilian unemployment rate by demographic characteristic, 1968-2009

[Percent 1; monthly data seasonally adjusted]

¹ Unemployed as percent of civilian labor force in group specified.
 ² See footnote 1, Table B–37.

Note: Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B-35.

				Du	ration of u	nemployme	ent			R	eason for u	nemploym	ent	
Yea	r or month	Un- employ-	less i		15.00	27	Average	Median		Job losers	3			
		ment	than 5 weeks	veeks	weeks	weeks and over	(mean) duration (weeks)	duration (weeks)	Total	On layoff	Other	leavers	entrants	New entrants
1962 1963 1964 1965		3,911 4,070 3,786 3,366	1,663 1,751 1,697 1,628	1,134 1,231 1,117 983	534 535 491 404	585 553 482 351	14.7 14.0 13.3 11.8							
1966 . 1967 ² 1968 . 1969 .		2,875 2,975 2,817 2,832	1,573 1,634 1,594 1,629	779 893 810 827	287 271 256 242	239 177 156 133	10.4 8.7 8.4 7.8	2.3 4.5 4.4	1,229 1,070 1,017	394 334 339	836 736 678	438 431 436	945 909 965	396 407 413
1970 1971 1972 1973 1973		4,093 5,016 4,882 4,365 1 5,156	2,139 2,245 2,242 2,224 2,224 2,604	1,290 1,585 1,472 1,314 1,597	428 668 601 483 574	235 519 566 343 381	8.6 11.3 12.0 10.0 9.8	4.9 6.3 6.2 5.2 5.2	1,811 2,323 2,108 1,694 2,242	675 735 582 472 746	1,137 1,588 1,526 1,221 1,495	550 590 641 683 768	1.228 1.472 1.456 1.340 1.463	504 630 677 649 681
1975 1976 1977 1978 1979		7,929 7,406 6,991 6,202 6,137	2,940 2,844 2,919 2,865 2,950	2,484 2,196 2,132 1,923 1,946	1,303 1,018 913 766 706	1,203 1,348 1,028 648 535	14.2 15.8 14.3 11.9 10.8	8.4 8.2 7.0 5.9 5.4	4,386 3,679 3,166 2,585 2,635	1,671 1,050 865 712 851	2,714 2,628 2,300 1,873 1,784	827 903 909 874 880	1,892 1,928 1,963 1,857 1,806	823 895 953 885 817
1980. 1981 1982 1983 1984 1985 1986 1987 1988 1988	· · · · · · · · · · · · · · · · · · ·	7,637 8,273 10,678 10,717 8,539 8,312 8,312 8,312 8,237 7,425 6,701 6,528	3,295 3,449 3,883 3,570 3,350 3,498 3,246 3,084 3,174	2,470 2,539 3,311 2,937 2,451 2,509 2,557 2,196 2,007 1,978	1,052 1,122 1,708 1,652 1,104 1,025 1,045 943 801 730	820 1,162 1,776 2,559 1,634 1,280 1,187 1,040 809 646	11.9 13.7 15.6 20.0 18.2 15.6 15.0 14.5 13.5 11.9	6.5 6.9 10.1 7.9 6.9 6.9 6.9 5.9 4.8	3.947 4.267 6,268 6,258 4.421 4,139 4,033 3,566 3,092 2,983	1,488 1,430 2,127 1,780 1,171 1,177 1,090 943 851 851	2,459 2,837 4,141 4,478 3,250 2,982 2,982 2,943 2,623 2,623 2,241 2,133	891 923 840 830 823 877 1,015 965 983 1,024	1.927 2.102 2.384 2.412 2.184 2.256 2.160 1.809 1.843	872 981 1,185 1,216 1,110 1,039 1,029 920 816 677
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999		7,047 8,628 9,613 8,940 7,996 7,404 7,236 6,739 6,210 5,880	3,265 3,480 3,376 3,262 2,728 2,700 2,633 2,538 2,622 2,568	2,257 2,791 2,830 2,584 2,408 2,342 2,287 2,138 1,950 1,832	822 1.246 1.453 1.297 1.237 1.085 1.053 995 763 755	703 1,111 1,954 1,623 1,278 1,262 1,067 875 725	12.0 13.7 17.7 18.0 18.8 16.6 16.7 15.8 14.5 13.4	5.3 6.8 8.7 8.3 9.2 8.3 8.3 8.0 6.7 6.4	3,387 4,694 5,389 4,848 3,815 3,476 3,370 3,037 2,822 2,622	1,028 1,292 1,260 1,115 977 1,030 1,021 931 866 848	2,359 3,402 4,129 3,733 2,838 2,446 2,349 2,106 1,957 1,774	1,041 1,004 1,002 976 791 824 774 775 1 734	1.930 2.139 2.285 2.198 2.525 2.525 2.525 2.525 2.512 2.338 2.338 2.132	688 1 792 1 937 919 1 580 1 580 1 580 1 520 1 469
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009		5,692 6,801 8,378 8,774 8,149 7,591 7,001 7,078 8,924 14,265	2,558 2,853 2,893 2,785 2,696 2,667 2,614 2,542 2,932 3,165	1,815 2,196 2,580 2,612 2,382 2,304 2,121 2,232 2,804 3,828	669 951 1,369 1,442 1,293 1,130 1,031 1,061 1,427 2,775	649 801 1,535 1,936 1,779 1,490 1,235 1,243 1,761 4,496	12.6 13.1 16.6 19.2 19.6 18.4 16.8 16.8 16.8 17.9 24.4	59 6.8 9.1 10.1 9.8 8.9 8.3 8.5 9.4 15.1	2,517 3,476 4,607 4,838 4,197 3,667 3,321 3,515 4,789 9,160	852 1,067 1,124 1,121 998 933 921 976 1,176 1,630	1,664 2,409 3,483 3,717 3,199 2,734 2,400 2,539 3,614 7,530	780 835 866 818 858 872 827 1793 896 882	1,961 2,031 2,368 2,477 2,408 2,386 2,386 2,386 2,386 2,386 2,237 2,142 2,472 2,472 3,187	434 459 536 641 686 616 616 627 766 1,035
2008:	Jan Feb Mar May June July Aug Sept Oct Nov Dec	7,628 7,435 7,793 7,631 8,397 8,560 8,895 9,509 9,569 10,172 10,617 11,400	2,619 2,623 2,759 2,468 3,259 2,751 2,872 3,291 2,916 3,098 3,312 3,294	2,399 2,378 2,494 2,416 2,980 2,834 2,848 3,073 3,115 3,307 3,535	1,157 1,106 1,156 1,294 1,193 1,309 1,427 1,570 1,613 1,770 1,776 1,987	1,382 1,313 1,316 1,374 1,579 1,603 1,679 1,860 2,014 2,270 2,214 2,612	17.5 16.9 16.4 17.0 16.8 17.4 17.1 17.7 18.6 19.8 18.7 19.6	90 86 84 93 81 94 97 94 102 105 99 107	3,874 3,870 4,144 4,016 4,209 4,386 4,589 4,958 5,275 5,763 6,266 6,729	1,055 996 1,065 1,094 1,093 1,095 1,041 1,262 1,366 1,330 1,442 1,550	2,819 2,875 3,078 2,922 3,117 3,291 3,549 3,695 3,909 4,433 4,824 5,179	831 781 860 860 877 858 871 1,014 982 936 924 1,007	2.202 2.113 2.123 2.128 2.485 2.506 2.703 2.657 2.594 2.651 2.697 2.802	685 660 705 631 807 771 829 826 811 826 811 826 820
2009	Jan	11.919 12.714 13.310 13.816 14.518 14.721 14.534 14.993 15.159 15.612 15.340 15.267	3,633 3,364 3,314 3,284 3,152 3,181 2,992 3,131 2,774 2,929	3,622 3,961 4,032 3,962 4,300 3,994 3,539 4,093 3,838 3,671 3,517 3,517 3,486	2,073 2,405 2,574 2,571 2,983 3,404 2,847 2,825 2,958 3,184 3,075 2,840	2,689 2,964 3,241 3,725 4,030 4,440 4,972 5,024 5,447 5,620 5,901 6,130	19.9 20.0 20.8 21.8 22.9 24.4 25.3 25.2 26.5 27.2 28.6 29.1	106 11.4 11.9 13.1 14.9 18.2 15.9 15.5 17.8 19.0 20.2 20.5	7,251 7,878 8,434 9,428 9,562 9,549 9,814 10,236 10,261 9,965 9,701	1,468 1,519 1,581 1,638 1,842 1,741 1,670 1,704 1,918 1,671 1,548 1,558	5,784 6,359 6,853 7,229 7,586 7,821 7,880 8,110 8,318 8,590 8,418 8,143	912 820 884 887 909 822 882 835 869 909 929 929 932	2,792 2,912 3,017 3,200 3,322 3,306 3,294 3,255 3,461 3,221 3,334	1 792 1,016 881 919 977 969 994 1,096 1,134 1,114 1,270 1,270

TABLE B-44. Unemployment by duration and reason, 1962-2009

[Thousands of persons, except as noted; monthly data seasonally adjusted 1]

¹ Because of independent seasonal adjustment of the various series, detail will not sum to totals.

² For 1967, the sum of the unemployed categorized by reason for unemployment does not equal total unemployment ³ Beginning with 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–35.

	All pro	grams ¹			Reg	- ular State proj	jrams		
Year or month	Insured unemploy- ment tweekly	Total benefits paid Imillions of	Covered employ- ment ³	Insured unemploy- ment (weekly	Initial claims (weekly averanel	Exhaustions (weekly average) ⁴	Insured unemploy- ment as percent of	Benef Total (millions	its paid Average weekly
	average) 2	dollars)		average) ²	average;		covered employment	of dollars)	check (dollars) ⁵
1980	3.521 3.248 4.836 5.216 3.160 2.751 2.667 2.349 2.122 2.158	16,668 15,910 26,649 31,615 18,201 16,441 16,325 14,632 13,500 14,618	86.918 87,783 86,148 86,867 91,378 94,027 95,946 98,760 101,987 104,750	3,356 3,045 4,059 3,395 2,475 2,617 2,621 2,300 2,081 2,156	488 460 583 438 377 397 378 328 310 330	59 57 80 80 50 49 52 46 49 52 38 38	3.9 3.5 4.7 3.9 2.7 2.8 2.7 2.3 2.0 2.0 2.1	14,887 14,568 21,769 19,025 13,642 14,941 16,188 14,561 13,483 14,603	99 06 106.61 119 34 123 59 123 47 128 09 135.65 140 39 144 74 151 43
1990 1991 1992 1993 1993 1994 1995 1996 1997 1998 1998	2,527 3,514 4,906 4,188 2,941 2,648 2,648 2,372 2,264 2,272 2,264	18,452 27,004 39,669 34,649 24,261 22,026 22,397 20,333 20,091 21,037	106,325 104,642 105,187 107,263 110,526 113,504 116,078 119,159 122,427 125,280	2,522 3,342 3,245 2,751 2,670 2,572 2,595 2,323 2,222 2,188	388 447 408 341 340 357 356 323 321 298	45 67 74 52 57 51 53 48 44 44	2.4 3.2 3.1 2.6 2.4 2.3 2.2 1.9 1.8 1.7	18,413 25,924 26,048 22,599 22,338 21,925 22,349 20,287 20,017 21,001	161.20 169.56 173.38 179.41 181.91 187.04 189.27 192.84 200.58 212.10
2000 2001 2002 2003 2004 2005 2006 2006 2007 2008 2009	2,143 3,012 4,453 4,400 3,103 2,709 2,521 2,612 3,898 8,943	21,005 32,227 53,350 53,352 36,495 32,154 30,917 33,212 51,798 139,826	128,054 127,923 126,545 126,084 127,618 129,929 132,177 133,688 133,076 127,507	2,110 2,974 3,585 3,531 2,950 2,661 2,476 2,572 3,306 5,724	301 404 407 404 345 328 313 324 424 565	41 54 85 85 68 55 51 51 66 141	1.6 2.3 2.8 2.3 2.0 1.9 2.5 4.5	20,983 32,135 42,266 41,896 35,034 32,098 30,852 33,156 43,764 80,681	221.01 238.07 256.79 261.67 262.50 266.63 277.20 287.73 297.10 309.85
2008: Jan	3,764 3,422 3,735 3,346 2,938 3,269 3,839 4,789 5,075 4,562 4,693 7,245	3,873,8 3,558,2 3,781,6 3,568,6 2,996,2 3,149,2 3,844,8 4,737,2 5,289,3 4,719,4 4,515,6 7,763,9	131,879 132,366 132,979 133,635 134,678 134,871 132,182 132,707 133,449 133,279 132,740 132,740	3,712 3,378 3,689 3,304 2,901 3,228 3,421 3,301 3,441 3,387 3,778 5,441	516 359 381 349 392 459 375 424 506 558 838	65 56 63 71 64 65 76 76 78 75 99	2.8 2.6 2.8 2.5 2.2 2.4 2.6 2.5 2.6 2.5 2.8 3.8 4.1	3,867,8 3,551,3 3,774,8 3,560,6 2,989,6 3,143,0 3,467,2 3,199,2 3,494,5 3,494,5 3,432,1 3,623,0 5,660,6	297.86 300.02 299.60 298.80 293.66 290.97 290.65 294.80 297.24 297.88 302.32
2009: Jan	7,857 7,986 10,177 9,150 9,336 10,240 10,021 10,794 9,852 9,146 10,467 11,238	8,445,8 8,807.0 11,947.7 11,288.2 12,827.4 12,543.3 12,788.3 12,788.3 12,540.7 11,181.6 12,257.5 13,893.4	127,642 127,235 127,156 127,227 127,949 127,834	5,870 6,050 7,557 6,634 6,497 6,833 6,443 6,443 6,449 5,556 5,072 5,632 5,814	804 644 680 641 567 636 627 500 479 531 548 694	98 98 128 134 150 174 187 193 182 163 162 163	46 4.8 59 5.2 5.1 5.3	6,211.3 6,524.8 8,243.2 7,426.2 7,065.9 7,688.3 7,110.6 6,765.3 6,222.1 5,382.8 5,701.8 6,338.6	306.17 308.16 305.93 313.24 315.16 312.75 311.54 308.69 310.93 309.53 306.69 308.41

TABLE B-45. Unemployment insurance programs, selected data, 1980-2009

[Thousands of persons, except as noted]

Includes State Unemployment Insurance (State), Unemployment Compensation for Federal Employees (UCFE), Unemployment Compensation for Ex-service members (UCX), and Federal and State extended benefit programs. Also includes temporary Federal Employees (UCFE), Unemployment Compensation for Ex-service members (UCX), and Federal Additional Compensation (EUC, 1992-1993), Temporary Extended Unemployment Compensation (2002-2004), EUC 2008 (2008-2009), and Federal Additional Compensation (2009) 2 The number of people continuing to receive benefits 3 Workers covered by regular State Unemployment Insurance programs. 4 Individuals receiving final payments in benefit year. 5 For total unemployment only. Excludes partial payments.

Note: Includes data for the District of Columbia, Puerto Rico, and the Virgin Islands. Source: Department of Labor (Employment and Training Administration).

TABLE B-46. Employees on nonagricultural payrolls, by major industry, 1962-2009

[Thousands of persons; monthly data seasonally adjusted]

					Goods-produc	ng industries			Service	e-providing inc	lustries
Year	or month	Total	Total	Mining	Con-	I	Manufacturing		Total	Trade, tran and ut	sportation, ilities ¹
				logging	tion	Total	Durable goods	Nondurable goods	lotal	Total	Retail trade
1962 1963 1964 1965 1966 1967 1968 1969		55,659 56,764 58,391 60,874 64,020 65,931 68,023 70,512	19,203 19,385 19,733 20,595 21,740 21,882 22,292 22,893	709 694 697 694 690 679 671 683	2,997 3,060 3,148 3,284 3,371 3,305 3,410 3,637	15,498 15,631 15,888 16,617 17,680 17,897 18,211 18,573	9,099 9,226 9,414 9,973 10,803 10,952 11,137 11,396	6,399 6,405 6,674 6,644 6,878 6,945 7,074 7,177	36,455 37,379 38,658 40,279 42,280 44,049 45,731 47,619	11.215 11.367 11.677 12,139 12,611 12,950 13,334 13,853	5,672 5,781 5,977 6,262 6,530 6,711 6,977 7,295
1970 1971 1972 1973 1974 1975 1976 1977 1978 1978		71,006 71,335 73,798 76,912 78,389 77,069 79,502 82,593 86,826 89,932	22,179 21,602 22,299 23,450 23,364 21,318 22,025 22,972 24,156 24,997	677 658 672 693 755 802 832 865 902 1,008	3,654 3,770 3,957 4,167 4,095 3,608 3,662 3,940 4,322 4,562	17.848 17.174 17.669 18.589 18.514 16.909 17.531 18.167 18.932 19.426	10,762 10,229 10,630 11,414 11,432 10,266 10,640 11,132 11,770 12,220	7,086 6,944 7,039 7,176 7,082 6,643 6,891 7,035 7,162 7,206	48,827 49,734 51,499 53,462 55,025 55,751 57,477 59,620 62,670 64,935	14,144 14,318 14,788 15,349 15,606 16,128 16,765 17,658 18,303	7,463 7,657 8,038 8,371 8,536 8,600 8,966 9,359 9,879 10,180
1980 1981 1982 1983 1985 1985 1987 1988 1988 1989		90,528 91,289 89,677 90,280 94,530 97,511 99,474 102,088 105,345 108,014	24,263 24,118 22,550 23,435 23,585 23,318 23,470 23,909 24,045	1,077 1,180 1,163 997 1,014 974 829 771 770 750	4,454 4,304 4,024 4,065 4,501 4,793 4,937 5,090 5,233 5,309	18,733 18,634 17,363 17,048 17,920 17,819 17,552 17,609 17,906 17,985	11,679 11,611 10,610 10,326 11,054 10,795 10,767 10,969 11,004	7,054 7,023 6,753 6,722 6,870 6,784 6,757 6,842 6,938 6,981	66,265 67,172 67,127 68,171 71,095 73,926 76,156 78,618 81,436 83,969	18,413 18,604 18,457 18,668 19,653 20,379 20,795 21,302 21,974 22,510	10,244 10,364 10,372 10,635 11,223 11,733 12,078 12,419 12,808 13,108
1990 1991 1992 1993 1994 1995 1996 1997 1998 1998		109,487 108,375 108,726 110,844 114,291 117,298 119,708 122,776 125,930 128,993	23,723 22,588 22,095 22,219 22,774 23,156 23,409 23,886 24,354 24,354 24,465	765 739 669 659 641 637 654 654 654 598	5,263 4,780 4,608 4,779 5,095 5,274 5,536 5,813 6,149 6,545	17.695 17.068 16.799 16,774 17.020 17.241 17.237 17.419 17.560 17.322	10.737 10.220 9.946 9.901 10.132 10.373 10.486 10.705 10.911 10.831	6,958 6,848 6,853 6,872 6,889 6,868 6,751 6,751 6,649 6,491	85.764 85.787 86.631 88.625 91.517 94.142 96.299 98.890 101.576 104.528	22,666 22,281 22,125 22,378 23,128 23,834 24,239 24,700 25,186 25,771	13,182 12,896 12,828 13,021 13,491 13,897 14,143 14,389 14,609 14,970
2000 2001 2002 2003 2003 2006 2006 2007 2008 2009 2009		131,785 131,826 130,341 129,999 131,435 133,703 136,086 137,598 137,066 131,997	24,649 23,873 22,557 21,816 21,882 22,190 22,531 22,233 21,419 18,938	599 606 583 572 591 628 684 724 774 774 727	6,787 6,826 6,716 6,735 6,976 7,336 7,691 7,630 7,215 6,234	17.263 16.441 15.259 14.510 14.315 14.226 14.155 13.879 13.431 11.978	10.877 10.336 9,485 8,964 8,925 8,956 8,956 8,981 8,808 8,476 7,360	6,386 6,105 5,774 5,546 5,390 5,271 5,174 5,071 4,955 4,618	107,136 107,952 107,784 108,183 109,553 111,513 113,556 115,366 115,646 113,059	26,225 25,983 25,497 25,287 25,533 25,959 26,276 26,630 26,385 25,263	15,280 15,239 15,025 14,917 15,058 15,280 15,353 15,520 15,356 14,774
2008:	Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	138,080 137,936 137,814 137,617 137,356 137,228 137,053 136,732 136,352 135,755 135,074	21,981 21,887 21,800 21,679 21,612 21,507 21,432 21,351 21,247 21,063 20,814 20,532	748 750 756 763 770 777 787 794 794 793 793 789	7,489 7,445 7,401 7,293 7,293 7,201 7,177 7,131 7,066 6,939 6,841	13,744 13,692 13,643 13,586 13,556 13,555 13,454 13,387 13,322 13,203 13,082 12,902	8,710 8,673 8,637 8,587 8,567 8,533 8,502 8,439 8,392 8,300 8,300 8,216 8,085	5,034 5,019 5,006 4,999 4,989 4,972 4,952 4,948 4,930 4,903 4,866 4,817	116,099 116,049 116,014 115,975 115,905 115,849 115,796 115,796 115,289 114,941 114,542	26,717 26,655 26,629 26,503 26,467 26,425 26,354 26,257 26,157 26,157 26,005 25,843	15,572 15,526 15,506 15,458 15,420 15,420 15,380 15,335 15,278 15,217 15,126 15,038
2009:	Jan Feb Mar Apr May June July Aug Sept Oct Nov ^ρ Dec ^p	134,333 133,652 133,000 132,481 132,178 131,715 131,411 131,257 131,118 130,991 130,995 130,910	20,127 19,832 19,520 19,253 19,041 18,829 18,713 18,583 18,488 18,379 18,321 18,240	781 774 754 731 731 721 715 706 705 706 706 700 700 704 703	6,706 6,593 6,470 6,367 6,310 6,231 6,162 6,043 5,987 5,960 5,907	12,640 12,468 12,296 12,146 12,000 11,877 11,836 11,781 11,740 11,692 11,657 11,630	7,881 7,753 7,620 7,490 7,372 7,271 7,248 7,204 7,169 7,134 7,105 7,089	4,759 4,715 4,676 4,656 4,628 4,606 4,588 4,577 4,571 4,571 4,578 4,552 4,552 4,541	114,206 113,820 113,480 113,228 113,137 112,886 112,678 112,674 112,612 112,674 112,674	25,735 25,605 25,479 25,371 25,308 25,258 25,174 25,146 25,030 25,031 24,999 24,962	14,992 14,934 14,872 14,840 14,812 14,747 14,726 14,686 14,647 14,633 14,623

Includes wholesale trade, transportation and warehousing, and utilities, not shown separately.

Note. Data in Tables B–46 and B–47 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 that includes the 12th of the month. Not comparable with labor force data (Tables B–35 through B–44), which includes the 12th of the month. Not comparable with labor force data employed when they are not at work because of industrial disputes, bad weather, etc., even if they are not paid for the time off, which are based on a

See next page for continuation of table.

TABLE B-46. Employees on nonagricultural payrolls, by major industry, 1962-2009—Continued

[Thousands of persons; monthly data seasonally adjusted]

				Servic	e-providing in	dustries—Con	tinued			
Year or month	Information	Financial	Profes- sional and	Education and	Leisure	Other		Govern	ment	
		activities	business services	health services	hospitality	services	Total	Federal	State	Local
1962 1963 1964 1965 1965 1966 1967 1968 1968	1,723 1,735 1,766 1,824 1,908 1,955 1,991 2,048	2,656 2,731 2,811 2,878 2,961 3,087 3,234 3,404	3,885 3,990 4,137 4,306 4,517 4,720 4,918 5,156	3,172 3,288 3,438 3,587 3,770 3,986 4,191 4,428	3,557 3,639 3,772 3,951 4,127 4,269 4,453 4,670	1,243 1,288 1,346 1,404 1,475 1,558 1,638 1,731	9,004 9,341 9,711 10,191 11,525 11,972 12,330	2.455 2.473 2.463 2.495 2.690 2.852 2.871 2.893	1,669 1,747 1,856 1,996 2,141 2,302 2,442 2,533	4.881 5,121 5,392 5,700 6,080 6,371 6,660 6,904
1970 1971 1972 1973 1974 1974 1975 1976 1977 1978 1979	2.041 2.009 2.056 2.135 2.160 2.061 2.111 2.185 2.287 2.375	3,532 3,651 3,784 3,920 4,023 4,047 4,155 4,348 4,599 4,843	5.267 5.328 5.523 5.774 5.974 6.034 6.287 6.587 6.587 6.972 7.312	4,577 4,675 4,863 5,092 5,322 5,497 5,756 6,052 6,427 6,767	4,789 4,914 5,121 5,341 5,544 5,794 6,065 6,411 6,631	1,789 1,827 1,900 1,990 2,078 2,144 2,244 2,359 2,505 2,637	12,687 13,012 13,465 13,862 14,303 14,820 15,001 15,258 15,812 16,068	2,865 2,828 2,815 2,794 2,858 2,882 2,863 2,859 2,893 2,894	2.664 2.747 2.859 2.923 3.039 3.179 3.273 3.377 3.474 3.541	7,158 7,437 7,790 8,146 8,407 8,758 8,865 9,023 9,023 9,446 9,633
1980 1981 1981 1982 1983 1984 1985 1986 1987 1988 1988	2,361 2,382 2,317 2,253 2,398 2,437 2,445 2,507 2,585 2,622	5,025 5,163 5,209 5,334 5,553 5,815 6,128 6,380 6,562	7,544 7,782 7,848 8,039 8,464 8,871 9,211 9,608 10,090 10,555	7,072 7,357 7,515 7,766 8,193 8,657 9,061 9,0515 10,063 10,616	6,721 6,840 6,874 7,078 7,489 7,869 8,156 8,446 8,778 9,062	2,755 2,865 2,924 3,021 3,186 3,366 3,523 3,699 3,907 4,116	16,375 16,180 15,982 16,011 16,159 16,533 16,838 17,156 17,540 17,927	3,000 2,922 2,884 2,915 2,943 3,014 3,044 3,089 3,124 3,136	3,610 3,640 3,640 3,662 3,734 3,832 3,893 3,967 4,076 4,182	9,765 9,619 9,458 9,434 9,482 9,687 9,901 10,100 10,339 10,609
1990 1991 1992 1993 1994 1994 1995 1996 1997 1998 1999	2,688 2,677 2,641 2,668 2,738 2,843 2,940 3,084 3,218 3,419	6,614 6,558 6,540 6,709 6,867 6,867 6,827 6,969 7,178 7,462 7,648	10.848 10.714 10.970 11.495 12.174 12.844 13.462 14.335 15.147 15.957	10,984 11,506 11,891 12,303 12,807 13,289 13,683 14,087 14,446 14,798	9,288 9,256 9,437 9,732 10,100 10,501 10,777 11,018 11,232 11,543	4,261 4,249 4,240 4,350 4,428 4,572 4,690 4,825 4,976 5,087	18,415 18,545 18,787 18,989 19,275 19,432 19,539 19,664 19,909 20,307	3,196 3,110 3,111 3,063 3,018 2,949 2,877 2,806 2,772 2,769	4,305 4,355 4,408 4,488 4,576 4,635 4,606 4,582 4,612 4,709	10,914 11,081 11,267 11,438 11,682 11,849 12,056 12,276 12,525 12,829
2000 2001 2002 2003 2004 2005 2006 2007 2008 2008 2009 p	3.630 3.629 3.395 3.188 3.118 3.061 3.038 3.032 2.997 2.856	7,687 7,808 7,847 7,977 8,031 8,153 8,328 8,328 8,328 8,321 8,146 7,773	16,666 16,476 15,976 15,987 16,394 16,954 17,566 17,942 17,778 16,787	15,109 15,645 16,199 16,588 16,953 17,372 17,826 18,322 18,855 19,272	11,862 12,036 11,986 12,173 12,493 12,816 13,110 13,427 13,459 13,180	5,168 5,258 5,372 5,401 5,409 5,395 5,438 5,494 5,528 5,412	20,790 21,118 21,513 21,583 21,621 21,804 21,974 22,218 22,500 22,516	2,865 2,764 2,766 2,761 2,730 2,732 2,732 2,732 2,734 2,764 2,830	4,786 4,905 5,029 5,002 4,982 5,032 5,075 5,122 5,178 5,182	13,139 13,449 13,718 13,820 13,909 14,041 14,167 14,362 14,557 14,504
2008: Jan	3,022 3,025 3,023 3,017 3,013 3,006 2,995 2,990 2,986 2,982 2,965 2,940	8,229 8,211 8,204 8,179 8,162 8,154 8,141 8,141 8,083 8,043 8,010	18,069 18,018 17,954 17,950 17,887 17,824 17,788 17,727 17,675 17,612 17,488 17,356	18,613 18,657 18,698 18,752 18,758 18,843 18,843 18,843 18,950 18,957 18,957 18,981 19,044 19,080	13,534 13,529 13,528 13,490 13,490 13,473 13,454 13,342 13,344 13,344 13,344 13,344	5,524 5,533 5,537 5,542 5,542 5,535 5,535 5,535 5,535 5,509 5,477	22,391 22,421 22,441 22,451 22,488 22,522 22,537 22,556 22,535 22,535 22,533 22,543 22,543	2,737 2,746 2,751 2,758 2,765 2,776 2,765 2,776 2,776 2,778 2,771 2,775 2,783 2,778	5,157 5,153 5,152 5,167 5,167 5,175 5,184 5,204 5,192 5,194 5,197 5,196	14,497 14,522 14,538 14,534 14,584 14,582 14,577 14,584 14,572 14,570 14,563 14,558
2009 Jan Feb Арт June July Aug Sept Nov Р Dec Р	2,924 2,918 2,905 2,884 2,858 2,845 2,834 2,829 2,828 2,828 2,826 2,812 2,806	7,954 7,898 7,857 7,811 7,784 7,751 7,737 7,714 7,703 7,697 7,691 7,695	17,205 17,029 16,910 16,756 16,655 16,655 16,654 16,618 16,642 16,675 16,754 16,754 16,814	19,119 19,138 19,155 19,215 19,248 19,262 19,318 19,348 19,384 19,384 19,384 19,384	13,268 13,236 13,202 13,168 13,195 13,177 13,177 13,176 13,176 13,134 13,121 13,096	5,461 5,449 5,426 5,420 5,416 5,415 5,415 5,405 5,395 5,381 5,378 5,378 5,374	22,540 22,547 22,543 22,616 22,605 22,533 22,475 22,484 22,484 22,484 22,488 22,485	2,793 2,796 2,808 2,876 2,876 2,880 2,817 2,826 2,827 2,827 2,824 2,839 2,830	5,192 5,192 5,186 5,189 5,189 5,174 5,179 5,173 5,179 5,180 5,177	14,555 14,559 14,549 14,551 14,556 14,542 14,500 14,490 14,490 14,461 14,469 14,460

Note (cont'd): sample of the working-age population; and which count persons only once—as employed, unemployed, or not in the labor force. In the data shown here, persons who work at more than one inh are counted each time they aneer on a navroll.

shown here, persons who work at more than one job are counted each time they appear on a payroll. Establishment data for employment, hours, and earnings are classified based on the 2007 North American Industry Classification System (NAICS). For further description and details see *Employment and Earnings*.

				[N	Aonthly data	seasonally a	djusted]				
		Aver	age weekly ho	ours	Aver	age hourly ear	nings	Avera	ige weekly ea	mings, total p	ivate
Year	r or month	Tota.	Manufa	cturing	Total p	private	Manu-	Lev	vel	Percent from yea	change ir earlier
		private	Total	Overtime	Current dollars	1982 dollars ²	(current dollars)	Current dollars	1982 dollars ²	Current dollars	1982 dollars ²
1962			40.5	2.8			\$2.27				
1963 1964		38.5	40.6	2.8	\$2.53	\$7.86	2.34	\$97.41	\$302.52		
1965		38.6	41.2	3.6	2.63	8.04	2.49	101.52	310.46	4.2	2.6
1967		37.9	40.6	3.3	2.85	8.21	2.71	108.02	311.30	2.8	5
1968 . 1969 -		37.7 37.5	40.7	3.5 3.6	3.02 3.22	8.37 8.45	2.89 3.07	113.85 120.75	315.37	5.4 6.1	1.3
1970		37.0	39.8	2.9	3.40	8.46	3.23	125.80	312.94	4.2	-1.3
1971		36.8	39.9 40.6	2.9	3.63	8.64	3.45	133.58	318.05	6.2	1.6
1973		36.9	40.7	3.8	4.14	8.98	3.97	152.77	331.39	6.2	1
1974 1975		36.4 36.0	40.0 39.5	3.2	4.43	8.65	4.31	170.28	314.94	5.6	-5.0
1976		36.1 35.9	40 1	3.1	5.06	8.58 8.66	5.09	182.67	309.61 J 310.99 j	73	1.5
1978		35.8	40.4	3.6	5.88	8.69	6.05	210.50	310.93	78	.0
1979 .		35.6	40 2	3.3	6.34	8.41	6.5/1 7.15	225.70	299.34	6.8	-3.7
1980		35.2	39.8	2.8	7.44	7.89	7.86	261.89	277.72	8.6	-3.5
1982 1983		34.7	38 9 40 1	23	7 87	7.87	8.36 1	273.09 286.18	273.09 277.84	43	-1.7
1984		351	40.7	34	8 49	7.96	9.05	298.00	279 55	41	.6
1985		34.9	40.5	3.3 3.4	8.93	7.92	9.59	309.87	276 33	16	.0
1987 1988		34.7	40 9 i 41 0 i	37	9.14	7.87	9,771	317 16	273 18 270 60	24	-1.2
1989		34.5	40.9	3.8	9 80	7.75	10.35	338 10	267 27	3 Š	-1.2
1990 1991		34.3 [°] 34.1 i	40.5	39 38	10.20	7.66	10.78	349.75 358.51	262.77 258.67	3.4	1.7
1992		34.2	40.7	4.0	10.77	7.55	11.40	368.25	258 24	27	-2
1993 1994		34.3	41.1 \	4 4 5.0	11.05	7.54	12.04	378.91	258.47 260.29	2.9 3.2	
1995		34.3	41.3	47	11.65	7.54	12.34	400.07	258.78	2.3	6
1997		34.5	41.7	51	12.51	7.69	13.14	431.86	265.60	4.5	2.2
1998 1999		34.5	41.4 41.4	4.9	13.01	7.89	13.45	448.56 463.15	272.18	3.9	2.5 1.0
2000 .		34.3	41.3	4.7	14.02	8.04	14.32	481.01	275.97	3.9	.3
2001		34.0	40.3 40.5	4.0	14.54	8.12	14./b 15.29	493.79	275.71 279.20	2.7	1
2003		33.7	40.4	4.2	15.37	8.28	15.74	518.06	279 13	2.2	.0
2004		33.8	40.5	4.6	16.13	8.18	16.56	544.33	276.17	2.9	- 6
2006 .		33.9	41.1 41.2	4.4	17.43	8.24	15.81	567.87 590.04	279.19 281.97	4.3 3.9	F. 1 1.0
2008.		33.6	40.8	3.7	18.08	8.30	17 74 1 18 21	607.99 616.37	279.14	3.0	-1.0
2008:	Jan	33.7	41.1	4.1	17.77	8.27	17.52	598.85	278.60	3.5	-12
	Feb	33.8	412	4.1	17.83	8.28	17.58	602.65 605.02	279.85	3.8	7
	Apr	33.8	41.0	4.0	17.94	8.29	17.64	606.37	280.03	3.8	- 4
	May	33.7 *	40.9	3.9	17.99 i 18.04	8.27	17.68	606.26 606.14	278.56	3.1 2.6	-1.1 -2.5
	July	33.6	41.0	3.7	18.10	8.16	17.80	608.16	274.31	2.9	-29
	Sept	33.6	40.5	3.5	18.21	8.21	17.81	611.86	275.99	3.0	-2.2
	Oct Nov	33.5 33.4	40.4	3.5	18.28	8.33	17.89 17.94	612.38 612.56	279.11 (285.23	2.9 2.6	9 2.0
	Dec	33.3	39.9	2.9	18.40	8.65	17 96	612.72	288.12	2.4	3.1
2009	Jan Feb	33 3	39.8 39.5	2.9 2.7	18.43 18.46	8.64	17.99 18.07	613.72 614.72	287.60 286.80	2.5 2.0	3.2 2.5
	Mar	33.1	39.4	2.6	18.50	8.64	18 10	612.35	286.10	1.2	2.2
	Apr May	33.1	39.6 39.4	2.7	18.50 , 18.53	8.65	18.11	613.34	286.25	1.0	2.2
	June	33.0	39 5 39 6	2.8 2.0	18.54	8.57	18.13 18.27	611.82 615.33	282.94 284.48	.9 12	2.7
	Aug	33.1	39.9	3.0	18 66	8.58	18.27	617.65	283.98	8	2.7
	Sept Oct	i 33.1 (33.0	40.0 I 40.1	3.0	18.68	8.5/ 8.57	18.36 18.35	ыв.31 618.42	283.77 282.88	1.1 1 D	28
	Nov P	33.2	40.4	34	18.77	i 8.54	18.41	623.16	283.59	1.7	- 6
	UCL "	33.Z ;	40.4	3.4	10.00	0.04	10.40	024.10	200.00	1.3	-1.0

TABLE B-47. Hours and earnings in private nonagricultural industries, 1962-2009¹

¹ For production or nonsupervisory workers, total includes private industry groups shown in Table B–46.
² Current dollars divided by the consumer price index for urban wage earners and clerical workers on a 1982=100 base

Note: See Note, Table B-46.

	1	Total private		Go	ods-produc	ing	Ser	vice-providi	ng	N	Manufacturi	ng
Year and month	Tctal compen- sation	Wages and salaries	Benefits ²	Total compen- sation	Wages and salaries	Benefits ²	Total compen- sation	Wages and salaries	Benefits ²	Total compen- sation	Wages and salaries	Benefits ²
			·	Indexes or	SIC basis,	December 2	2005=100; n	ot seasonal	ly adjusted	u .		
December. 1995 1996 1997 1998 1999 2000	70.2 72 4 74.9 77 5 80.2 83 6	72 2 74.7 77.6 80 6 83.5 86.7	65 7 67.0 68 5 70 2 72.6 76.7	70 7 72.7 74.5 76 5 79.1 82.6	73 7 76 0 78 3 81 1 83 8 87.1	65 2 66 4 67 3 68 1 70 5 74 3 74 3	70 0 72 3 75 1 78 0 80 6 84 2 87 8	71.7 74.2 77.4 80.5 83.4 86.6	66.0 67.3 69.2 71.4 73.8 78.1 82.5	70 8 72 9 74 6 76 6 79 2 82 3	73 9 76 3 78 6 81 3 84 1 87 1	65 0 66 5 67.4 67.9 70.3 73.6 76 2
2001	07.1	30.0	00.0	Indexes on I	JULZ NAICS basi	s Decembe	r 2005=100:	not season	allv adjuste	d <u>00.0</u>	30.2	70.5
2001 3	87 3 90.0 93 6 97 2 100 0 103 2 106.3 108 9 110.2	89.9 92.2 95.1 97.6 100.0 103.2 106.6 109.4 110.9	81.3 84.7 90.2 96.2 100.0 103.1 105.6 107.7 108.8	86.0 89.0 92.6 96.9 100.0 102.5 105.0 107.5 108.6	90.0 92.6 94.9 97.2 100.0 102.9 106.0 109.0 110.0	78.5 82.3 88.2 96.3 100 0 101.7 103.2 104.7 105.8	87.8 90.4 94.0 97.3 100.0 103.4 106.7 109.4 110.8	89.8 92.1 95.2 97.7 100.0 103.3 106.8 109.6 111.1	82.4 85.8 91.0 96.1 100.0 103.7 106.6 108.9 109.9	85.5 88.7 92.4 96.9 100.0 101.8 103.8 105.9 107.0	90.2 92.8 95.1 97.4 100 0 102 3 104.9 107.7 108.9	77.2 81.3 87.3 96.0 100.0 100.8 101.7 102.5 103.6
June Sept Dec	109.5 109.6 110.0 110.2	110.8 110.1 110.6 110.9	108.2 108.4 108.7 108.8	108.2 108.4 108.6	109.2 109.5 109.8 110.0	105.4 105.7 105.7 105.8	110.1 110.5 110.8	110.3 110.8 111.1	109.5 109.9 109.9	106.5 106.7 106.8 107.0	108.4 108.6 108.9	103.5 103.6 103.6
				Indexes of	n NAICS ba	sis, Decemt	ber 2005=10	0; seasonal	ly adjusted			
2008: Mar Sept Dec 2009: Mar June Sept Dec	107 2 107 9 108 6 109 1 109 3 109 5 110 0 110 4	107.6 108.4 109.1 109.6 109.8 110.0 110.5 111.0	106.5 106.9 107.5 107.9 108.1 108.3 108.6 109.0	106.1 106.6 107.2 107.7 108.0 108.1 108.3 108.8	107.1 107.8 108.5 109.2 109.3 109.4 109.8 110.3	104.0 104.3 104.5 104.9 105.4 105.6 105.6 105.6 106.0	107.6 108.4 109.1 109.6 109.8 110.0 110.5 111.0	107.7 108.5 109.2 109.7 110.0 110.2 110.7 111.3	107.4 108.0 108.7 109.1 109.2 109.3 109.8 110.2	104.6 105.1 105.6 106.0 106.4 106.6 106.8 107.2	105 9 106.6 107.3 107.9 108.1 108.3 108.6 109.1	102.3 102.2 102.4 102.6 103.4 103.6 103.4 103.7
				Percent	change froi	m 12 months	s earlier, not	seasonally	adjusted	_		
December <i>SIC</i> : 1995 1996 1997 1998 1999 2000 2001	2.5 3.1 3.5 3.5 3.5 4.2 4.2	2.8 3.5 3.9 3.9 3.6 3.8 3.8	2.2 2.0 2.2 2.5 3.4 5.6 5.1	2.5 2.8 2.5 2.7 3.4 4.4 3.8	2.8 3.1 3.0 3.6 3.3 3.9 3.9 3.6	1.7 1.8 1.4 1.2 3.5 5.4 4.0	2.8 3.3 3.9 3.9 3.9 3.3 4.5 4.3	3.0 3.5 4.3 4.0 3.6 3.8 3.8	2.5 2.0 2.8 3.2 3.4 5.8 5.6	2.6 3.0 2.3 2.7 3.4 3.9 3.6	2.9 3.2 3.0 3.4 3.4 3.6 3.6 3.6	1.7 2.3 1.4 .7 3.5 4.7 3.7
NAICS: 2001 3	4.1 3.1 4.0 3.8 2.9 3.2 3.0 2.4 1.2 1.9 1.5 1.2	3.8 2.6 3.1 2.6 3.2 3.3 2.6 1.4 2.0 1.6 1.4	5.2 4.2 6.5 6.7 4.0 3.1 2.4 2.0 1.0 1.6 1.3 1.1	3.6 3.5 4.0 4.6 3.2 2.5 2.4 1.0 1.7 1.3 1.1	3.6 2.9 2.5 2.4 2.9 3.0 2.9 3.0 2.8 .9 2.0 1.4 1.1	3.7 48 7.2 92 38 1.7 1.5 1.5 1.5 1.1 1.3 1.2 1.1	4.4 3.0 4.0 3.5 2.8 3.4 3.2 2.5 1.3 1.9 1.5 1.3	3.8 2.6 3.4 2.6 2.4 3.3 3.4 2.6 1.4 2.1 1.6 1.4	5.6 4.1 5.6 4.1 3.7 2.8 2.2 9 1.6 1.3 1.1	3.4 3.7 4.2 3.2 3.2 1.8 2.0 2.0 1.0 1.0 1.7 1.5 1.1	3.6 2.9 2.5 2.4 2.7 2.3 2.5 2.7 1.1 2.1 1.6 1.1	35 5.3 7.4 10.0 4.2 .8 .9 .9 .8 1.1 1.2 1.2 1.4 1.4
Uec	1.2	1,4	1 1.0	j 1.0 Perce	.9 nt change f	rom 3 mont	<u>i 1.3</u> hs earlier se	asonally a	iusted .9	<u> 1.0</u>	<u> </u>	<u> I.</u>
2008: Mar June Sept Dec 2009 Mar June Sept Dec	0.7 .7 .6 .5 .2 .2 .5 .5 .4	0.8 .7 .5 .2 .2 .2 .5 .5	0.6 .4 .6 .4 .2 .2 .3 .4	0.9 .5 .6 .5 .3 .1 .2 .5	0.8 .7 .6 .6 .1 .1 .4 .5	0.6 3 .2 4 5 .2 .0 .0 .4	0.7 .7 .6 .5 .2 .2 .2 .5 .5	0.7 .7 .6 .5 .3 .2 .5 .5 .5	0.5 6 .6 .4 .1 .1 .5 .4	0.7 5 5 4 4 2 2 4	0.8 7 7 6 2 2 .2 .3 .5	0.6 1 .2 .2 .8 .2 -2 .3

TABLE B-48. Employment cost index, private industry, 1995-2009

¹ On Standard Industrial Classification (SIC) basis, data are for service-producing industries.
 ² Employer costs for employee benefits.
 ³ Data on North American Industry Classification System (NAICS) basis available beginning with 2001, not strictly comparable with earlier data shown on SIC basis.

Note: Changes effective with the release of March 2006 data (in April 2006) include changing industry classification to NAICS from SIC and rebasing data to December 2005=100. Historical SIC data are available through December 2005.

Data exclude farm and household workers.

	Output	per hour	0.0	rout ¹	Hour	s of all	Compe	ensation	F	leal	Uni	t labor	Impłi	cit price
Year or quarter	ofall	persons			pers	sons 2	per	hour ³	per	hour ⁴	CI	osts T	def	lator ⁵
	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector
1960 1961 1962 1963 1964 1965 1966 1967 1966 1967 1968	49.1 50.8 53.1 55.2 57.0 59.1 61.5 62.8 65.0 65.3	52.1 53.7 56.2 58.1 59.8 61.7 63.9 65.0 67.2 67.3	32 2 32 8 34 9 36 5 38 9 41 6 44 4 45 3 47 5 49 0	31.9 32.5 34.8 36.4 38.8 41.6 44.6 45.3 47.7 49.2	65.6 64.6 65.8 66.2 68.1 70.4 72.3 72.1 73.2 75.0	61 2 60.6 61.9 62.6 64.9 67.4 69.8 69.7 71.0 73.0	13.9 14.5 15.1 15.6 16.2 16.8 18.0 19.0 20.5 22.0	14.5 15.0 15.6 16.1 16.6 17.2 18.2 19.3 20.8 22.2	61.4 63.2 65.3 66.8 68.4 69.8 72.4 74.3 77.0 78.1	64.0 65.5 67.4 68.8 70.0 71.2 73.3 75.3 77.9 78.9	28.4 28.5 28.4 28.3 28.5 28.5 29.2 30.2 31.6 33.6	27.8 27.9 27.7 27.7 27.8 27.8 27.8 28.5 29.6 30.9 32.9	27 0 27 2 27 5 27 7 28 0 28 4 29 1 29 9 31 1 32 5	26.5 26.7 27.0 27.2 27.5 27.9 28.5 29.4 30.6 32.0
1970 1971 1972 1973 1974 1975 1976 1976 1977 1978 1979	66.6 69.3 71.6 73.7 72.5 75.1 77.5 78.8 79.6 79.6	68.3 71.1 73.4 75.7 74.5 76.6 79.1 80.4 81.4 81.4	49.0 50.8 54.1 57.9 57.0 56.5 60.2 63.6 67.6 69.8	49.1 51.0 54.4 58.3 57.5 56.6 60.5 63.9 68.1 70.2	73 5 73.3 75 6 78 5 78 7 75 3 77 8 80.7 84.9 87.7	71.9 71.7 74.0 77.0 77.2 73.9 76.5 79.5 83.7 86.6	23.6 25.1 26.7 29.0 31.8 35.0 38.0 41.1 44.6 48.9	23.8 25.3 26.9 29.1 31.9 35.2 38.1 41.2 44.9 49.1	79.6 81.0 83.5 85.2 84.1 85.0 87.3 88.5 89.9 89.9	80.0 81.5 84.1 85.6 84.6 85.4 87.5 88.9 90.4 90.2	35.5 36.2 37 3 39.3 43.8 46.6 49.1 52.1 56.0 61.4	34.8 35.6 36.7 38.4 42.9 45.9 48.2 51.3 55.1 60.5	33 9 35 4 36 6 38 5 42 3 46 4 48 8 51 8 55 4 60 1	33.4 34.8 35.9 37.2 41.0 45.4 47.9 51.0 54.4 59.0
1980 1981 1982 1983 1984 1985 1986 1987 1988 1987 1988	79.4 81.1 80.4 83.3 85.5 87.5 90.0 90.3 91.6 92.6	80.9 82.0 81.1 84.7 86.4 87.8 90.5 90.8 92.3 93.0	69 1 71.0 68 8 72.5 78 8 82 5 85.6 88.4 92 2 95.6	69 5 71 0 68 7 73 1 79 1 82 5 85.7 88 6 92.6 95 9	87.0 87.6 85.6 87.1 92.2 94.3 95.1 97.9 100.6 103.3	85.9 86.6 84.7 86.3 91.6 94.0 94.7 97.6 100.4 103.1	54.1 59.2 63.5 66.1 68.9 72.1 75.8 78.6 82.7 84.9	54 3 59 6 63 8 66 5 69 2 72 3 76 1 78 8 82 8 84 9	89.5 89.5 90.5 90.3 90.5 91.6 94.5 94.8 96.2 94.7	89 9 90 0 90 9 90 9 90 9 91 8 94 9 95 1 96 3 94.7	68.1 73.1 79.0 79.4 80.6 82.5 84.3 87.1 90.3 91.7	67 2 72 7 78 7 80 1 82 3 84 1 86 8 89 7 91 3	65 6 71 6 75 7 78 3 80 5 82 4 83 8 85 8 85 8 88 5 91 8	64.7 70 9 75 3 77 7 79 9 82 2 83.6 85 6 88.2 91.4
1990 1991 1992 1993 1994 1995 1996 1997 1997 1998 1999	94.5 96.0 100.0 100.5 101.4 101.5 104.4 106.3 109.4 113.3	94.7 96.2 100.0 100.6 101.6 102.0 104.6 106.2 109.4 113.0	97.1 96.2 100.0 103.2 108.3 111.3 116.4 122.4 128.6 135.7	97 3 96 4 100 0 103 5 108 3 111.8 116 7 122 6 128 9 136.1	102.7 100.2 100.0 102.7 106.8 109.7 111.5 115.2 117.5 119.8	102 7 100.2 100 0 102.9 106 6 109.6 111.5 115.4 117.9 120.5	90.3 95.0 100.0 102.2 103.8 105.9 109.5 113.1 120.0 125.4	90 2 94 9 100 0 102 0 103 8 106 0 109 5 112 9 119 7 124 8	96.0 97.4 100.0 99.8 99.2 98.8 99.5 100.6 105.3 107.8	95.8 97.3 100.0 99.6 99.2 98.9 99.5 100.4 105.0 107.3	95.6 98.9 100.0 101.7 102.3 104.4 104.9 106.4 109.6 110.7	95.2 98.7 100.0 101.4 102.2 103.9 104.6 106.3 109.4 110.5	95.0 98.1 100.0 102.0 103.7 105.6 107.3 109.0 109.7 110.6	94 7 98.1 100.0 102.0 103.8 105 7 107.1 109.1 110.0 111.0
2000 2001 2002 2003 2004 2005 2006 2006 2007 2008	117.2 120.7 126.2 131.0 134.9 137.1 138.5 141.0 143.6	116.8 120.2 125.7 130.3 134.0 136.2 137.5 140.1 142.6	141.9 143.0 145.8 150.3 156.5 161.8 166.8 170.5 170.5	142.2 143.4 146.2 150.6 156.8 162.0 167.1 171.0 170.7	121.0 118.4 115.6 114.7 116.1 118.0 120.4 120.9 118.7	121.7 119.3 116.3 115.5 117.0 118.9 121.5 122.1 119.7	134.6 140.9 145.3 152.3 157.6 163.8 170.1 177.3 182.1	134.1 140.1 144.5 151.4 156.6 162.8 169.0 176.0 181.0	111.9 114.0 115.6 118.6 119.5 120.2 120.8 122.4 121.1	111.5 113.3 115.0 117.9 118.7 119.4 120.0 121.6 120.4	114.8 116.7 115.1 116.2 116.9 119.5 122.8 125.7 126.8	114.8 116.5 115.0 116.2 116.8 119.5 122.9 125.7 126.9	112.6 114.6 115.5 117.1 120.2 124.1 127.7 131.0 133.0	113.2 115.1 116.1 117.6 120.4 124.7 128.5 131.5 133.5
2006: 1 II III IV	138.5 138.7 138.0 138.7	137.5 137.7 137.0 137.8	166.0 166.6 166.4 168.1	166.4 166.8 166.7 168.4	119.8 120.1 120.6 121.2	121.0 121.1 121.7 122.2	168.4 169.1 169.7 173.3	167.1 168.0 168.6 172.3	120.8 120.3 119.7 122.5	119.9 119.6 118.9 121.8	121.6 121.9 123.0 124.9	121.5 122.0 123.0 125.0	126.4 127.4 128.3 128.7	127 1 128.3 129 1 129 3
2007: 1 II III IV	139.0 140.2 142.1 142.6	138.2 139.2 141.1 141.8	168.4 169.8 171.4 172.3	168.8 170.3 172.0 172.8	121.2 121.2 120.6 120.8	122.1 122.4 121.9 121.9	175.2 176.5 177.8 179.6	174.2 175.1 176.3 178.5	122.7 122.4 122.6 122.1	122.1 121.4 121.5 121.3	126.0 125.9 125.1 125.9	126.0 125.8 125.0 125.9	130.0 130.9 131.4 131.9	130 5 131.4 131.7 132 2
2008: 1 II III IV	142.7 143.8 143.9 144.2	141.7 142.8 142.8 143.1	171.7 172.2 170.6 167.4	172.0 172.6 170.8 167.5	120.3 119.8 118.6 116.1	121.4 120.8 119.6 117.0	180.3 181.0 183.0 184.2	179.2 179.8 181.8 183.1	121.2 120.4 119.9 123.3	120.5 119.6 119.1 122.6	126.3 125.9 127.2 127.7	126.4 125.9 127.3 128.0	132.1 132.5 134.0 133.6	132.3 132.9 134.4 134.3
2009: I II III	144.3 146.7 149.7	143.2 145.6 148.5	163.6 163.2 164.5	163.7 163.2 164.4	113.4 111.3 109.9	114.3 112.1 110.7	182.0 184.9 187.6	180.9 183.9 186.4	122.6 124.1 124.8	121.9 123.5 124.0	126.1 126.1 125.3	126.3 126.3 125.5	134.3 134.2 134.3	135.2 135.1 135.3

Table B-49. Productivity and related data, business and nonfarm business sectors, 1960-2009

[Index numbers, 1992=100; quarterly data seasonally adjusted]

¹ Output refers to real gross domestic product in the sector.

² Hours at work of all persons engaged in sector, including hours of proprietors and unpaid family workers. Estimates based primarily on establishment data

³ Wages and salaries of employees plus employees 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 for recent quarters. The trend from 1978–2008 is based on the consumer price index research series (CPI-U-RS). ⁵ Current dollar output divided by the output index.

TABLE B-50. Changes in productivity and related data, business and nonfarm business sectors, 1960-2009

[Percent change from preceding period, quarterly data at seasonally adjusted annual rates]

									-						
Vaar or	quarter	Output of all	per hour persons	Out	put 1	Hour: pers	s of all sons ²	Compe per	ensation hour ³	e compe per	leal ensation hour ⁴	Unit	labor osts	impli def	cit price lator ⁵
Tedi Ur	quarter	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector
1960 1961 1962 1963		17 35 46 39	1.2 3.1 4.5 3.5	1.9 1.9 6.5 4.6	1.8 2.0 6.8 4.7	0.2 -15 1.8 7	0.6 -1.1 2.2 1.1	4.2 3.9 4.4 3.6	4.3 3.3 4.0 3.4	2.4 2.8 3.4 2.2	2.5 2.3 3.0 2.1	2.4 .4 1 3	3.1 _2 5 1	1.1 .8 1.0 .5	1.1 8 1.0 .7
1964 1965 1966 1967 1968 1968		3.4 3.5 41 2.2 3.4 .5	2.9 3.1 3.6 1.7 3.4 .2	6.3 7.1 6.8 1.9 5.0 3.1	6.7 7.1 7.1 1.7 5.2 3.0	2.9 34 3 1.5 2.5	3.7 3.9 3.5 .0 1.8 2.9	3.8 3.7 6.7 5.7 8.1 7.0	3.1 3.3 5.9 5.8 7.8 6.8	2.4 2.1 3.8 2.5 3.7 1.4	1.8 1.7 3.0 2.7 3.5 1.3	.4 2.6 3.4 4.5 6.5	.2 2.3 4.0 4.3 6.6	1.1 1.6 2.5 2.7 4.0 4.6	1.3 1.3 2.3 3.2 3.9 4.5
1970 1971 1972 1973 1974 1975 1976 1977 1978		2.0 4.1 3.2 3.1 -1.7 3.5 3.2 1.7 1.1	1.5 4.0 3.3 -1.6 2.8 3.3 1.6 1.3	0 3.8 6.4 70 -15 -9 6.6 5.6 6.3	1 3.8 6.6 7.3 -1.5 -1.6 7.0 5.6 6.6	-2.0 -3 3.1 3.8 2 -43 3.3 3.8 5.1	-1.6 -2 3.2 4.1 -4.3 3.6 3.9 5.2	7.7 6.3 6.3 8.4 9.6 10.2 8.6 8.0 8.0	7.2 6.4 6.5 8.1 9.8 10.1 8.4 8.1 8.8	1.9 1.8 3.0 2.1 -1.3 1.0 2.7 1.4 1.5	1.4 1.9 3.2 1.8 -1.2 .9 2.5 1.5 1.5	5.6 2.1 3.0 5.2 11.5 6.5 5.3 6.2 7.5	5.6 2.3 3.1 4.9 11.6 7.1 4.9 6.5 7.4	4.3 4.2 3.6 5.2 9.7 9.7 5.3 6.0 7.1	4.4 4.3 3.2 3.5 10.3 10.7 5.5 6.3 6.7
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988		3 2. 8 3.6 2.7 2.3 2.9 3 1.5 1.0	4 3 1.4 -1.1 4.4 2.0 1.6 3.1 .3 1.6 3.1 .3	3.3 -1.1 2.8 -3.0 5.4 8.7 4.6 3.7 3.3 4.3 4.3 3.7	3.2 -1.1 2.1 -3.2 6.4 8.2 4.3 3.9 3.3 4.6 3.5	3.4 -9 7 -23 1.8 58 2.3 8 3.0 2.7 2.6	3.6 8 .7 -22 1.9 6.1 2.6 .8 3.0 2.9 .27	96 107 95 72 41 42 47 51 36 52 27	9.4 10.7 9.7 7.1 4.2 4.1 5.2 3.6 5.0 2.6	4 .0 1.1 1 1.2 3.3 .2 1.5 -16	1 4 10 -1 0 10 3.4 1.3 -17	9.6 10.9 7.3 8.1 .5 1.5 2.4 2.2 3.3 3.7 1.6	9.9 11.0 8.1 8.3 -2 2.0 2.8 2.1 3.3 3.3 1.8	8.5 9.0 9.2 5.7 3.4 2.9 2.4 1.6 2.4 3.2 3.7	8.5 9.6 9.6 6.2 3.2 2.9 2.9 1.7 2.4 3.0
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999		2.1 1.5 4.2 .5 .0 2.9 1.8 3.0 3.5	1.8 1.5 4.0 .6 1.0 .4 2.6 1.5 2.9 3.3	1.5 -9 3.9 3.2 4.9 2.8 4.6 5.2 5.0 5.6	3.5 1.4 9 3.8 3.5 4.7 3.2 4.4 5.1 5.6		4 -2.4 -2.2 2.9 3.6 2.8 1.8 3.5 2.1 2.2	6.4 5.1 5.3 2.2 1.5 2.1 3.4 3.2 6.1 4.5	6.2 5.3 5.4 2.0 1.8 2.1 3.3 3.1 6.0 4.3	-1.0 1.4 1.5 2.7 2 6 3 .7 1.1 4.6 2.4	1.1 1.6 2.8 -5 -3 .6 .9 4.5 2.2	4.2 3.5 1.1 1.7 .6 2.0 .5 1.5 3.0 .9	4.3 3.7 1.3 1.4 .8 1.7 .7 1.6 3.0 .9	3.6 3.3 1.9 2.0 1.7 1.8 1.6 1.6 .7 .8	3.0 3.7 3.5 2.0 2.0 1.8 1.8 1.8 1.4 1.9 1.9 1.0
2000 2001 2002 2003 2004 2005 2006 2007 2008		3.5 3.0 4.5 3.8 2.9 1.7 1.0 1.8 1.9	3.4 2.9 4.6 3.7 2.8 1.7 .9 1.8 1.8	4.5 .8 2.0 3.1 4.2 3.4 3.1 2.2 .0	4.4 .9 1.9 3.0 4.1 3.4 3.1 2.3 1	10 -21 -24 -7 12 16 21 4 -19	1.0 -2.0 -2.5 -6 1.3 1.7 22 .5 -1.9	7.4 4.7 3.1 4.8 3.5 4.0 3.8 4.2 2.7	7.4 45 32 48 34 40 38 42 28	3.9 1.8 1.5 2.5 .8 .6 .5 1.3 -1.1	4.0 1.6 1.5 2.5 7 6 .5 1.3 -1.0	3.7 1.7 -1.3 .9 .6 2.2 2.8 2.4 .8	3.9 1.5 -1.3 1.1 5 2.3 2.8 2.3 1.0	1.8 1.8 1.4 2.6 3.2 2.9 2.6 1.5	1.9 1.7 .9 1.3 2.4 3.5 3.0 2.3 1.5
2006: 1 	I	2.8 .6 -2.2 2.1	2.8 .6 -1.9 2.4	6.5 1.4 4 4.0	6.8 1.0 1 4.2	3.6 8 1.9 1.9	3.9 .4 1.9 1.8	5.8 1.6 1.4 8.8	5.5 2.1 1.4 9.1	3.7 -1.6 -2.3 9.9	3.5 -1.1 -2.3 10.2	2.9 1.0 3.8 6.5	2.6 1.5 3.4 6.5	2.0 3.2 2.9 1.3	2.2 3.6 2.6 .9
2007: . \		.9 3.5 5.5 1.6	1.2 2.8 5.5 2.0	8 3.5 3.7 2.1	.9 3.7 3.9 1.8	-1 .0 -1.7 .5	3 .9 -1.5 2	4.4 3.1 3.0 4.3	4.7 2.0 2.7 5.0	-1.1 .6 -1.4	-2.1 .3 7	3.5 4 -2.4 2.6	3.5 7 -2.7 3.0	4.0 2.8 1.4 1.6	3.6 2.7 1.1 1.4
2008: I II II	 	2 3.1 .3 .8	1 3.1 1 .8	-1.3 1.1 -3.7 -7.2	-1.7 1.3 -4.0 -7.6	-1.5 -1.9 -4.0 -8.0	-1.6 -1.7 -3.9 -8.3	1.5 1.6 4.5 2.6	1.7 1.3 4.5 2.9	-3.0 -2.8 -1.6 12.0	-2.8 -3.0 -1.6 12.3	1.3 -1.5 4.2 1.8	1.7 -1.8 4.6 2.0	.6 1.4 4.3 –1.0	5 1.6 4.6 -2
2009: I II		.2 6.8 8.5	.3 6.9 8.1	-8.7 -1.0 3.1	-8.8 -1.1 2.9	-8.9 -7.4 -5.0	-9.0 -7.5 -4.8	-4.7 6.7 5.8	-4.7 6.9 5.4	-2.4 5.3 2.1	-2.4 5.5 1.8	-4.9 2 -2.4	-5.0 .0 -2.5	2.1 3 .2	2.7 3 .5

¹ Output refers to real gross domestic product in the sector.

² Hours at work of all persons engaged in the sector. See footnote 2, Table B--49.

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 a consumer price index. See footnote 4, Table B–49.
 ⁵ Course divided by the consumer price index. See footnote 4, Table B–49.

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-49.

PRODUCTION AND BUSINESS ACTIVITY TABLE B-51. Industrial production indexes, major industry divisions, 1962–2009

[2002=100; monthly data seasonally adjusted]

		Total		Manufa	acturing			
	Year or month	industrial production 1	Total ¹	Durable	Nondurable	Other (non-NAICS) 1	Mining	Utilities
1962		28.4	25.8					
1963		30.1 32.1	27.4					
1965		35.3	32.4					
1966		38.4	35.4					
1968		41.4	38.1					
1969		43.3	-39.8					
1970		41.9	38.0					
1972		46.6	42.6	31.4	60.9	68.3	107.8	50.3
1973		50.4	46.4	35.3	63.8	70.5	108.3	53.2
1974		50.2 45.8	4b.3 41.5	351	64.1 59.4	67.5	106.8	53 U 54 D
1976		49.4	45.2	33.4	64.9	69.6	105 0	56.4
1977		53.1	49.1 52.1	36.6	69.3 71.8	76.3	107.4	58.7 60.2
1979		57.7	53.7	41.5	72.2	80.6	114.1 (61.6
1980		56.3	51.8	39.7	70.0	83.4	116.2	62.0
1981		57.0	52.4	40.1	70.6	85.4	119.2	62.9
1983		55.6	51.9	38.5	72.8	88.8	107.3	61.4
1984		60.5	57 0	44.0	76 2	92.8	114.3	65.0
1985		61.3	5/9-592	44 9	766	96.5	103 9 i	67 0
1987		65.1	62.5	48.4	83.0	104.1	104.8	70.1
1988		68.4 69.1	65.9	52.0 52.6	85.8	103.6	107.5	/4.1 76.4
1990		69.7	67.0	52.8	87.7	100.9	107.8	78.4
1991		68.7	65.6	51.2	87.4	96.8	105 4	79.8
1992		70.6	68.0 j 70.4	53.8 j 56.8	89.6 90.9	94.8	103.1	79.7
1994		76.8	74.5	61.6	94.0	94.7	105.4	84.2
1995		80.4	78.5	66.9	95.7	94.7	105.3	87.2
1997		90.1	89.2	81.6	99.5	101.7	108.9	89.7
1998		95.4	95.1	90.2	101.0	107.8	107.2	92.0
1999		99.5	99.9	97.8	101.7	110.9	101.6	94.7
2000		103.7	104.4	105.2	98.9	105.7	104.2	97.4 97.0
2002		100.0	100.0	100.0	100.0	100.0	100.0	100.0
2003		101.3	101.3	102.7	100.1	97.1	100.2	101.9
2005		107.2	108.5	112.8	104.8	97.6	98.3	105.4
2006		109.7	111.2	117.8	105.7 106.7	96.6 95.3	101.5	104.8
2008		108.8	109.1	116.3	103.6	89.9	104.2	108.6
2009	0	98.2	96.7 ;	96.7	98.0	75.5	97.9	106.6
2008:	Jan Feh	112.3	113.4 *	121 9	106.6	93.9	104.2	110.9
	Mar	111.6	112.7	121.0	106.1	93.6	104 7	108.8
	Apr	111.0	111.7	119.3	105.8	91.8	104.9	109.7
	June	110.4	111.0	119.0	104.9	90.8	104.9	109.4
	July	110.4	110.8	119.0	104.5	89.3	106.9	107.9
	Aug. Sept.	109.2	109.7	113.7	99.3	88.1	96.4	104.3
	Oct	106.2	106.0	110.8	102.7	86.9	103.5	107.1
	Nov	104.8	103.6	108.2	97.0	85.4 84.6	105.4	109.1
2009	Jan	100 1	97.8	99.9	96.7	81.4	102.4	1115
	Feb	99.3	97.7	98.7	97.7	80.4	101.3	106.4
	Mar Anr	9/.7	96.1 95.7 i	96.4	96.9 97 N	76.1 75.1	98.7 . 96 1 .	106.1 106.4
	May	96.2	94.8	93.7	97.1	74.4	95 1	104.3
	June	95.8	94.4	92.9	97.2	74.4	93.7	103.8
	Aug ^p	98.3	97.3	97.5	98.6	74.5	97.0	102.8
	Sept p	98.9	98.0	98.5	99.0	75.0	96.8	104 1
	Nov P	99.1	97.8 98.7	98.1 98.8	99.2 100.3	73.5 74.7	98 B	106.8
	Dec ^p	100.3	98.7	98.9	100.2	73.4	98.8	110.4

¹ Total industry and total manufacturing series include manufacturing as defined in the North American Industry Classification System (NAICS) plus those industries—logging and newspaper, periodical, book, and directory publishing—that have traditionally been considered to be manufacturing and included in the industrial sector

Note: Data based on NAICS; see footnote 1.

Source. Board of Governors of the Federal Reserve System

TABLE B-52. Industrial production indexes, market groupings, 1962-2009

		_				Final p	roducts				Noning	dustrial su	pplies		Materials	;
		Total indus-	1		Consum	er goods		I	quipmen	t		_				
Yea	ar or month	pro- duc- tion	Total	Total	Auto- motive prod- ucts	Other dur- able goods	Non- dur- able goods	Total ¹	Busi- ness	De- fense and space	Total	Con- struc- tion	Busi- ness	Totai	Non- energy	Energy
1962 1963 1964 1965 1966 1967 1968 1969		28.4 30.1 32.1 35.3 38.4 39.2 41.4 43.3	27.5 29.1 30.7 33.7 36.9 38.4 40.3 41.6	34.8 36.7 38.8 41.8 44.0 45.0 47.7 49.5	24.2 26.5 27.8 34.2 34.1 29.9 35.7 35.8	22.1 23.8 26 0 29.5 32.5 32.9 35 2 37.5	41.3 43.2 45.3 47.2 49.5 52.0 54.1 55.9	18.6 19.7 20.8 23.5 27.4 29.1 30.0 30.8	12.8 13.5 15.1 17.3 20.0 20.4 21.3 22.7	57.1 61.5 59.6 65.9 77.5 88.4 88.6 84.3	28.9 30.5 32.5 34.6 36.7 38.2 40.4 42.6	39.3 41.1 43.6 46.3 48.2 49.5 52.1 54.3	24 5 26.1 28 0 29 8 32.1 33.8 35.9 38.2	28 3 30.1 32 5 36 2 39 5 39.1 41.7 44.1	32.3 34.6 36.8	54 3 57.5 59.8 62.6 66.5 68.8 72.0 75.6
1970 1971 1972 1973 1974 1975 1976 1977 1978 1979		41.9 42.5 46.6 50.4 50.2 45.8 49.4 53.1 56.0 57.7	40.1 40.4 43.9 47.3 47.2 44.6 47.7 51.6 54.7 56.6	49.0 51.8 56.0 58.5 56.8 54.5 59.0 62.7 64.6 63.7	30.2 38.4 41.4 45.0 38.9 37.5 42.7 48.3 48.0 43.2	36.4 38.5 44.1 47.1 44.3 38.8 43.6 48.7 50.9 51.2	56.9 58 5 62 2 64 1 64 2 63 1 67 0 69 4 71 9 71 5	28.6 26.8 29.3 33.4 35.1 32.1 33.7 37.7 41.9 46.8	21.8 20.8 23.6 27.4 29.0 25.9 27.6 31.9 36.0 40.5	71.4 64.2 62.4 68.4 70.6 71.2 69.1 61.9 63.0 67.5	41.9 43.2 48.2 51.6 51.1 45.9 49.0 53.2 56.2 57.9	52.4 54.1 61.4 66.6 65.0 55.1 59.3 64.6 68.3 70.0	38.3 39.5 43.5 46.2 46.1 42.5 45.3 49.1 51.7 53.5	42.6 43.2 47.6 51.9 51.8 46.1 50.1 53.6 56.3 57.8	34.6 35.3 39.5 43.8 43.7 37.5 41.8 45.2 48.2 49.5	79.4 80.1 83.1 85.2 84.8 84.0 85.9 88.6 89.7 92.1
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989		56.3 57.0 54.1 55.6 60.5 61.3 61.9 65.1 68.4 69.1	56.3 57.7 56.4 57.5 62.3 63.8 64.8 67.8 71.5 72.3	61.3 61.7 61.5 63.8 66.7 67.3 69.7 72.6 75.4 75.4 75.7	33.3 34.3 33.3 38.7 43.2 43.2 46.4 49.5 52.1 54.2	47.5 47.9 44.4 48.1 53.7 53.7 56.9 59.9 63.1 63.8	71.6 71.9 73.1 73.9 75.4 76.4 78.2 81.0 83.6 83.4	49.1 51.4 48.9 48.6 55.5 58.3 57.4 60.6 65.5 67.1	41.5 42.8 39.1 39.3 45.2 46.9 46.1 49.3 54.4 56.3	80.2 86.9 103.9 104.6 119.8 134.0 142.4 145.4 145.4 146.9 147.1	55.6 56.2 57.1 62.1 63.7 65.8 69.8 72.1 72.8	64.8 63.7 57.8 61.9 67.3 69.0 71.3 75.9 77.7 77.4	52.3 53.5 52.9 55.4 60.2 61.8 63.8 67.6 70.1 71.1	55.7 56.0 51.7 53.0 58.1 58.0 57.9 61.0 64.4 64.9	46.6 46.7 42.1 50.1 50.2 51.1 54.5 58.0 58.4	92.8 93.7 89.7 86.9 92.4 91.9 88.2 90.3 93.4 94.3
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999		69.7 68.7 70.6 72.9 76.8 80.4 84.0 90.1 95.4 99.5	73.1 72.2 73.9 76.2 79.4 82.8 85.9 91.6 96.9 99.6	76.0 75.9 78.2 80.7 84.3 86.9 88.6 91.8 95.2 97.1	50.8 47.4 55.5 61.3 68.7 70.8 73.0 78.5 83.7 91.7	63.7 61.9 64.7 69.2 74.9 79.4 83.1 88.5 95.5 100.5	84.8 86.0 86.6 87.8 90.0 92.2 93.4 95.6 97.6 97.6	68.6 66.3 67.0 69.1 71.7 76.4 82.2 92.5 101.8 106.0	58.4 57.4 59.6 62.3 66.0 71.7 78.5 90.3 100.5 106.4	142.0 131.5 122.0 115.3 108.3 105.2 102.0 100.7 105.1 102.2	73.9 72.1 74.1 76.7 80.3 83.3 86.7 92.3 97.5 101.2	76.8 72.6 75.7 79.0 84.7 86.7 90.5 95.0 100.1 102.7	72.8 71.8 73.5 75.8 78.8 82.1 85.2 91.3 96.5 100.6	65.3 64.3 66.4 68.6 73.1 77.2 81.2 87.8 93.1 98.7	58.5 57.2 60.0 62.7 67.7 72.4 76.9 85.0 91.4 98.5	96.2 96.3 95.4 95.7 97.2 98.7 100.2 100.0 100.4 99.9
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	p	103 7 100 1 100 0 101 3 103 8 107 2 109 7 111 3 108 8 98 2	102.8 100.8 100.0 101.3 103.4 107.6 110.3 111.9 109.7 101.6	99.1 98.1 100.0 101.4 102.7 105.4 105.8 106.8 106.8 104.0 98.8	93 7 90.8 100 0 105.6 105.2 103.0 99.5 101.5 87.7 71.1	104 5 98.8 100.0 101.0 104.4 107.7 109.0 107.9 100.9 85.1	99.2 99.4 100.0 100.6 101.8 105.3 106.2 107.4 106.9 104.9	111 9 107.7 100.0 101.0 105.5 113.5 122.5 125.8 125.4 109.1	114.7 108.0 100.0 105.3 112.6 123.2 126.4 125.0 108.9	91.3 100.0 100.0 106.7 104.7 115.8 113.4 117.6 120.6 120.9	105 2 100.7 100.0 101.1 103.3 107.1 108.7 108.9 104.6 91.5	105.0 100.1 100.0 99.7 102.0 106.6 109.0 106.9 100.1 82.2	105.2 101.0 100.0 101.7 103.8 107.3 108.5 109.9 106.7 95.9	104 0 99.1 100.0 101.3 104.5 107.0 109.5 111.7 109.6 97.6	104.8 98.7 100.0 101.8 106.4 110.7 113.7 116.0 111.8 94.5	101.5 100.3 100.0 99.6 98.4 100.0 101.8 103.6 100.9
2008:	Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	112.3 112.0 111.6 111.0 110.7 110.4 110.4 109.2 104.8 106.2 104.8 102.4	112.9 112.5 111.9 111.1 110.8 110.9 110.6 109.0 106.3 107.0 106.7 106.1	106.9 106.7 105.6 105.0 104.7 104.8 104.5 102.7 101.4 103.0 102.0 100.6	99.4 98.6 92.8 87.6 87.9 90.9 92.4 83.1 84.2 81.5 79.0 74.5	105.9 104.5 104.5 104.2 103.8 103.2 103.0 101.0 98.7 97.2 93.7 90.5	108.2 108.2 107.6 107.7 107.3 107.1 106.6 105.9 104.3 107.0 106.7 106.0	129.4 128.7 128.7 128.0 128.0 128.1 127.4 126.6 119.9 117.6 119.5 121.6	130.2 129.8 130.8 128.4 128.4 128.2 127.4 126.2 117.7 114.8 117.6 120.8	122.3 120.5 120.7 120.8 120.2 121.9 120.2 120.8 118.9 120.4 120.0 119.9	108.5 108.0 107.5 106.9 106.3 105.7 105.7 105.7 104.9 102.6 102.2 99.8 96.5	105.0 104.0 103.3 102.1 102.2 101.7 102.4 101.2 99.1 97.8 93.6 89.1	110.2 109.9 109.4 109.1 108.3 107.6 107.3 106.6 104.3 104.3 102.8 100.1	113.2 113.1 112.9 112.4 112.1 111.7 111.9 100.9 104.3 106.9 104.7 101.0	117.1 116.5 116.3 115.6 115.1 114.8 114.4 113.5 107.8 108.2 103.7 98.0	104.2 104.9 104.6 104.6 104.6 104.0 105.2 104.0 96.2 102.3 104.3 104.3
2009:	Jan	100.1 99.3 97.7 96.2 95.8 96.9 98.3 98.9 98.9 98.9 98.9 98.9 1 99.1 99.7 100.3	103 4 102 7 101 6 100.7 99 5 98 9 100.1 101 5 102 3 102.8 102.7 103 4	98.6 98.7 98.3 97.9 96.9 96.3 97.3 98.7 99.7 100.3 100.3	58.7 64.2 66.4 63.5 61.3 72.6 76.8 81.7 80.0 81.9 81.5	90.0 87.7 85.6 85.7 84.3 83.7 84.8 83.8 84.3 84.4 85.5 84.4	105.9 105.5 105.0 104.4 103.8 103.5 102.8 104.2 104.7 105.7 105.2 106.2	116.7 113.6 110.3 108.2 106.2 105.7 107.3 108.7 108.9 109.3 108.8 109.8	115.7 113.6 110.6 108.5 106.2 105.8 107.3 108.8 108.4 109.0 108.2 109.2	120.5 118.4 119.2 119.0 119.7 119.8 122.0 123.4 125.4 124.5 123.0 122.6	94.7 93.2 91.4 91.4 90.5 90.5 90.7 91.1 90.9 90.7 91.5 91.6	85.8 84.6 82.7 82.0 82.1 82.1 82.1 82.5 82.8 81.8 80.5 81.7 80.1	98.9 97.3 95.5 94.5 94.6 94.7 95.0 95.3 95.6 95.2 96.2 97.2	99.0 98.5 96.2 95.2 94.7 96.4 97.9 98.7 98.8 100.0 100.8	95.4 95.3 92.7 92.9 92.0 91.7 93.9 95.4 96.2 96.1 97.8 98.2	103.6 102.2 101.3 100.1 99.0 98.0 98.2 99.8 100.6 101.0 101.0 102.8

(2002=100; monthly data seasonally adjusted)

¹ Includes other items not shown separately.

Note: See footnote 1 and Note, Table B-51.

Source: Board of Governors of the Federal Reserve System.

TABLE B-53. Industrial production indexes, selected manufacturing industries, 1967-2009

[2002=100; monthly data seasonally adjusted]

Year or month	Durable manufacturing								Nondurable manufacturing					
	Primary metal		Fabri-		Computer and electronic products		Transportation equipment				Printing		Plastics	
	Total	Iron and steel prod- ucts	metal prod- ucts	Ma- chinery	Total	Se- lected high- tech- nology ¹	Total	Motor vehi- cles and parts	Apparel	Paper	and sup- port	Chem- ical	and rubber prod- ucts	Food
1967						0.3					1			
1969						.3					1			
1970						.3						1		
19/1 1972	122.0	129.1	69 1	68.0	1.4	.3	53.1	44.3	169.9	66.3	51.6	47.8	34.9	58 7
1973	142.0	154.8	763	78.5	1.7	4	60.7	507	175.1	716	54.2	52.3	39.2	58.8
1974	113.0	122.7	64.8	71.8	1.7	. 5	50.9	43.5	159.5	64.6	49.1	47.8	38.2	59.4 58.3
1976	120.0	127.3	69.4	74.9	2.0	6	56.8	48.5	168.5	71.4	52 7	53.5	36.2	630
1978	129.0	133.6	79.0	88.1	3.1	.0 10	65.7	57.4	184.3	74.5	60 4	61.1	42.0	66.1
1979	132.1	138 3	82 5	93.0	3.9	1.3	66.3	52.6	174.6	79.0	62.2	62.5	43.4	65.4
1980	116.1	117.3	77.3	88.5	4./	1.6 1.9	58.8 56.6	38.8	177.2	78.8	627	591 601	38.6	66.6 67.5
1982	82.2	74.7	69.2	73.3	6.1	22	52.1	34.1	178.5	78.6	691	56 2	40.2	70 1
1983	92.3	83.0	75.9	77.2	8.7	3.4	57.5 65.3	43.5	183.7	83.7	80.9	63.6	43.7	70.9
1985	85.2	77 1	77.0	77.4	9.3 0.6	3.6	68.7 70.3	54.2	179.0	86.2	84.2	63.1	52.5	74 9
1987	89.7	85.7	77.9	77.8	11.0	4.5	72.9	56.1	182.3	92.7	94.9	71.0	60.6	77 7
1988	100.2	i 99.7 96.2	819	85.7	123	54 57	774	59.9 59.3	179.1	96.4 97.4	98.0	75.1	63.2	797 799
1990	96.7	95.1	80.3	86.7	13.8	6.4	76.5	55.8	166.8	97.4	102.1	78.3	67.2	82.3
1991	90.8	86.9 90.9	76.6	81.4	14.3	6.9 8.2	73.4	53.3	167.7	97.6	98.9	78.0	66 5	83 8 85 4
1993	97.5	96.4	82.0	87.2	17.7	9.6	78.3	67.0	174.9	101.1	104.6	80.1	76.7	87.6
1994 1995	104.9	103.9	89.1 94.6	95.5 102.2	20.7	12.1 16.9	82.0 82.1	77.0	178.4	105.5	105.7	82.2	83.0 '	88 2 90 4
1996	1 108.6	108.1	98.0	105.8	34.5	24.1	83.6	79.9	173.6	103.7	108.0	85.3	87.9	88.6
1997	115.3	111.4	102.5	114.5	46.1 59.2	35.3 49.1	91.1	86.1 90.6	1/1.6	105.9	110.2	90.3	93.4	91.0 95.0
1999	115.1	111.9	106.4	112.0	77.2	70.0	104.6	100.5	155.6	107.6	112 4	93.6	101.9	96.0
2000	111.4	110.8	110.7	117.7	101.4	98.3 101.3	99.7 96.2	99.9 91.4	148.0	105.3	1131	95.0 93.4	102.9	97.7
2002	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
2003	110.0	118.2	98.9	103.7	129.9	137.9	101.0	103.5	92.8 79.8	90.8	96.2 96.9	101.3	100.3	101.0
2005	108.0	110.1	103.4	110.2	144.5	158.8	104.5	103.9	76.9	97.5	99.2	109.3	102.3	104.2
2007	110.0	115.8	112.1	116.4	176.7	213.7	106.1	97.4	76.5	95.9	100.6	114.1	104.7	109.5
2008 2009 P	102.4	105.2	110.1	109.4	192.9 172.9	238.0 204.1	96.1 79.6	83.3 59.9	72.6 62.3	92.1 82.1	93.9 80.2	108.8	99.1 84.2	111.1 110.7
2008: Jan	113.2	121.8	113.6	114.9	191.0	237.5	106.4	94.6	75.9	95.5	98.6	114.0	103.5	111.3
Feb Mar	111.9	123.4	113.5	113.6	194.0	242.2	105.2 101.6	94.2	75.3	94.0	97.1 98.0	113.2	102.9	111.4
Apr	109.7	118.0	112.6	111.2	199.2	251.2	98.2	83.9	73.1	94.1	96.9	112.2	100.9	112.2
May June	107.8	114.5	112.1	110.9	199.4	250.3 248.4	97.9 100.1	83.9 86.4	72.5	96.Z 94.3	96.4 (. 112.1 111.0	100.8	111.5
July	110.1	118.9	109.8	109.2	198.0	246.6	100.9	88.7	73.7	94.0	91.9	110.6	101.5	110.5
Sept	102.0	104.9	109.2	107.3	196.0	243.0	94.0 88.2	79.2	72.8	94.2 91.3	93.0	109.7	99.4 97.7	110.7
Oct	93.2	88.5	107.3	106.1	188.4	228.4	85.1	76.9	71.4	89.7 85 g	91.9	106.7	96.0	111.8
Dec	71.9	53.3	102.4	99.7	176.2	204 9	88.3	69.2	67.7	81.3	87.4	98.7	89.4	108.6
2009: Jan	67.3	48.4	98.2	96.2	174.9	204 2	75.3	51.2	65.5	80.1	85.3	99.8	88.2	108.3
Mar	60.7	49.0	95.6	94.0 88.7	171.0	200.4	78.0	56.7	64.5	82.9 78.9	82.7 81.6	101.3	80.0 83.4	109.5
Apr Mav	60.3 50.2	43.5	89.4 97.5	86.6	172.5	203 6	77.3	56.6 52.4	63.1	78.2 20.0	80.1 70.0	102.7	82.9	109.8
June	61.1	53.0	87.2	82.0	169.6	199.7	72.3	49.5	59.5	82.5	80.2	102.4	82.2	110.3
July Aug P	68.0	64.3	87.2	82.6 84.2	173.3	205.5 205.8	80.4	61.1 63.6	60.9	82.6 84.4	79.9	103.8	83.2 83.6	109.2
Sept p	73.4	737	88.2	83.1	173.8	204.4	86.2	69.0	61.4	83.7	794	106.5	84.2	111.7
Uct P Nov P	/4.3 77.8	/8.6 80.0	88.0	85.0	1/4.1	206.2	84.6 85.0	67.3 68.3	60.9 61.6	81.7 85.8	/9.2 79.0	106.5 108.3	853 862	113.0 112.9
Dec P	78.1	80.8	88.7	85.4	176.7	211.4	85.1	68.3	61.9	84 0	78.5	109.7	86.6	112.0

¹ Computers and peripheral equipment, communications equipment, and semiconductors and related electronic components.

Note: See footnote 1 and Note, Table B-51

Source: Board of Governors of the Federal Reserve System.
TABLE B-54. Capacity utilization rates, 1962-2009

[Percent 1; monthly data seasonally adjusted]

				facturing				Stage-of-process		
Year or month	Total industry ²	Total ²	Durable goods	Nondurable goods	Other (non-NAICS) ²	Mining	Utilities	Crude	Primary and semi- finished	Finished
1962 1963 1964 1965		81.4 83.5 85.6 89.5		 			· · · · · · · · · · · · · · · · · · ·		81 5 83.8 87.8 91 0 91 4	81.6 83.4 84.6 88.8 91.1
1966 1967 1968 1969	87.0 87.4 87.4	87.2 87.1 86.7	87 5 87.3 87.1	86.3 86.5 86.2		81.2 83.6 86.7	94.5 95.1 96.8	81.1 83.4 85.6	85.0 86.8 88.1	88.2 87.1 85.6
1970	81.3 79.7 84.7 88.3 85.1 75.7 79.7 83.4	79 5 78.0 83.4 87 6 84 4 73 5 78 2 82 4	77.7 75.5 82.1 88.5 84.6 71.6 76.3 81.2	82.2 81.9 85.3 86.6 84.2 76.3 81.0 84.2	85.8 84.7 82.8 77.2 77.5 83.3	89.1 87.8 90.7 91.6 90.9 89.0 89.0 89.4 89.5	96 3 94,7 95,3 93 3 86,9 85,1 85,5 86,6	85.1 84.3 88.5 90.4 91.1 83.9 86.9 88.9	81.5 81.7 92.1 87.4 75.1 80.0 84.5	78.2 75.7 79.7 83.1 80.1 73.5 76.7 79.9
1978 1979 1980 1981 1982	85.0 85.0 80.7 79.6 73.7	84.3 84.0 78.7 77.0 70.9	83.8 84.1 77.6 75.2 66.6	84.9 83.6 79.5 78.8 76.3	85.0 85.7 87.1 87.5 87.4	89.6 91.1 91.1 90.8 84.2	86.9 87.0 85.5 84.4 80.2	88.4 89.3 88.9 89.1 82.2	86.2 86.0 78.8 77.3 70.5	82.1 81.8 79.5 77.6 73.3 72.2
1983 1984 1985 1986 1987 1988 1988	74.9 80.5 79.3 78.6 81.2 84.3 83.7	73.5 79.4 78.2 78.4 81.0 84.0 83.2	68.7 76.8 75.7 75.3 77.6 82.0 81.6	79.5 82.4 80.8 81.9 84.8 86.1 85.0	88.1 89.5 90.3 88.9 90.7 88.6 85.3	79.8 85.7 84.3 77.6 80.3 84.3 84.3 85.3	79.6 82.1 81.8 81.0 83.6 86.6 86.6 86.8	79.8 85.6 83.9 79.3 83.1 86.8 87.3	74.5 81.1 79.7 79.7 82.8 85.8 84.7	73.3 77.4 76.8 77.1 78.7 81.6 81.4
1990 1991 1992 1992 1993 1994 1995 1996 1997 1998	83.4 80.4 81.5 83.4 83.4 83.4 83.4 83.4 83.4 83.4 83.0	81.7 78.4 79.5 80.4 82.7 83.2 82.2 83.2 83.2 81.8	79.4 75.1 76.9 78.6 81.7 82.5 81.8 82.7 81.2	83.6 84.4 82.7 82.6 84.3 84.3 84.3 82.9 83.6 82.9 83.6 82.2 82.9	83.8 83.8 81.0 80.0 81.2 81.1 82.0 80.7 84.9 85.6	86.9 86.9 85.1 84.6 85.9 87.7 88.1 90.4 91.4 89.2	86 5 87 8 86 3 88 3 88 4 89 3 90 8 90 3 90 8 90 3 92 7	88.2 85.6 85.6 85.9 88.2 89.0 88.8 90.7 87.7 87.7	82 7 79.8 81 5 83 5 86.5 86.6 85.8 86.2 84 3	80.6 78.0 77.9 78.0 79.0 79.7 79.2 80.2 80.4
1999 2000 2001 2002 2003 2004 2005 2006 2006 2007 2008	81.9 81.7 76.1 75.8 77.9 80.1 80.9 80.6 77.6 80.6 77.6	80.7 80.1 73.8 72.7 73.7 76.2 78.6 79.4 79.0 75.1 75.1	80.4 80.0 71.4 69.3 70.6 73.5 76.3 77.9 77.2 72.6	80.3 79.1 75.8 76.3 76.9 78.6 80.6 80.7 80.8 77, 7 80.8	86.1 87.9 83.4 80.8 82.0 84.5 84.4 83.0 81.3 76.0	96.1 90.7 90.4 86.1 88.0 88.3 88.6 90.4 89.2 90.1 89.2 90.1	94.1 93.8 89.6 87.7 86.0 84.8 85.2 83.4 85.4 83.4 85.4 83.8	86.5 88.5 85.3 82.7 84.4 86.1 86.5 88.3 87.8 86.5 88.3 87.8	84 2 84 4 77 4 76 6 77 7 79 8 81.7 81.7 81.0 77.3 81.0	78.3 77.1 72.5 70.7 71.6 73.3 76.0 77.1 77.5 74.1 68 5
2009 P 2008 Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	80.5 80.2 79.8 79.2 78.9 78.7 78.6 78.7 78.6 78.6 78.6 78.6 78.6	78.5 78.0 77.0 76.7 76.3 76.1 75.3 72.5 72.7 71.1 69.0	76.8 76.1 75.8 74.6 74.3 74.2 74.1 73.0 70.7 68.8 67.2 65.4	80 2 798 797 794 794 786 783 779 743 768 751 726	798 793 794 778 768 768 767 754 750 743 733 723 723 713	90 6 91 2 90 8 90 9 90 8 90 7 92 3 91 8 83 1 89 2 90 7 89 0	86.5 86.7 84.5 85.1 83.7 84.4 83.1 80.2 81.2 82.1 83.5 85.1	86.8 86.9 88.8 88.5 88.5 88.6 87.6 88.7 88.7 88.7 88.3 78.7 84.7 84.7 84.7 84.7	80.6 80.3 79.6 79.4 78.8 78.7 78.3 77.1 74.9 75.4 73.5 71.4	77.1 76.6 76.3 75.2 75.0 74.6 73.7 74.6 73.7 72.2 71.5 71.5 71.2 70.3
2009: Jan	71.1 706 695 695 685 685 685 682 685 682 682 702 702 708 708 71.0 715 720 720	67.1 67.1 66.0 65.8 65.3 65.1 66.2 67.2 67.8 67.8 67.8 67.8 67.8 67.8 67.8 67.8	62.0 61.2 59.9 59.4 58.2 57.8 59.9 60.7 61.2 61.2 61.2 61.2 61.7 61.8	72.4 732 72.8 72.9 732 733 734 74.6 75.1 75.4 76.4 76.4 76.5	68.7 67.8 64.2 63.4 62.9 63.0 62.9 63.0 63.2 63.2 63.7 62.5 63.6 63.6 63.6 63.6	83.4 88.4 87.1 84.9 82.7 81.9 80.7 82.0 83.8 83.7 83.6 83.7 83.6 85.5 85.7	85.1 81.1 80.8 80.9 79.2 78.7 77.8 78.2 78.5 80.5 78.4 80.5 78.4 82.9	81.5 81.7 79.5 79.5 79.5 81.0 82.7 83.9 83.8 85.6 86.1	69.7 68.5 67.1 67.0 65.9 65.8 66.5 67.1 67.6 67.9 68.2 68.2	68 5 68 6 68 6 67 6 67 6 67 6 68 9 69 3 69 3 69 5 69 9 70.2

¹ Output as percent of capacity. ² See footnote 1 and Note, Table B–51.

TABLE B-55. New construction activity, 1964-2009

						Priva	ate constru	ction		Public construction				
Υe	ar or month	Total new con-		Resid build	lential ings '		No	nresidentia other cor	l buildings	and				State
		struc- tion	Total	Total ²	New housing units ³	Total	Lodging	Office	Com- mer- cial ⁴	Manu- factur- ing	Other ⁵	Total	Federal	and local
1964 1965 1966 1967 1968 1969		75.1 81.9 85.8 87.2 96.8 104.9	54.9 60.0 61.9 61.8 69.4 77.2	30.5 30.2 28.6 28.7 34.2 37.2	24.1 23.8 21.8 21.5 26.7 29.2	24.4 29.7 33.3 33.1 35.2 39.9						20.2 21.9 23.8 25.4 27.4 27.8	3.7 3.9 3.8 3.3 3.2 3.2 3.2	16.5 18.0 20.0 22.1 24.2 24.6
1970 1971 1972 1973 1974 1975 1976 1977 1978 1979		105.9 122.4 139.1 153.8 155.2 152.6 172.1 200.5 239.9 272.9	78 0 92 7 109 1 121 4 117 0 109 3 128 2 157 4 189 7 216 2	35.9 48.5 60.7 65.1 56.0 51.6 68.3 92.0 109.8 116.4	27 1 38.7 50 1 54.6 43 4 36 3 50 8 72 2 85.6 89.3	42.1 44.2 48.4 56.3 61.1 57.8 59.9 65.4 79.9 99.8						27.9 29.7 30.0 32.3 38.1 43.3 44.0 43.1 50.1 56.6	3.1 3.8 4.2 4.7 51 6.1 6.8 7.1 8.1 8.6	24.8 25.9 25.8 27.6 33.0 37.2 37.2 36.0 42.0 48.1
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989		273 9 289 1 279 3 311 9 370 2 403 4 433 5 446.6 462 0 477 5	210.3 224.4 216.3 248.4 300.0 325.6 348.9 356.0 367.3 379.3	100.4 99.2 84.7 125.8 155.0 160.5 190.7 199.7 204.5 204.3	69.6 69.4 57.0 95.0 114.6 115.9 135.2 142.7 142.4 143.2	109.9 125.1 131.6 122.6 144.9 165.1 158.2 156.3 162.8 175.1						63 6 64 7 63 1 63 5 70 2 77 8 84 6 90 6 94 7 98 2	96 10.4 10.0 10.6 11.2 12.0 12.4 14.1 12.3 12.2	54.0 54.3 53 1 52.9 59.0 65.8 72 2 76 6 82.5 86 0
1990 1991 1992 1993 1994 1995 1995 1995 1997 1998 1999		476.8 432.6 463.7 485.5 531.9 548.7 599.7 631.9 688.5 744.6	369 3 322 5 347 8 358 2 401 5 408 7 453 0 478 4 533 7 575 5	191.1 166.3 199.4 208.2 241.0 228.1 257.5 264.7 296.3 326.3	132.1 114.6 135.1 150.9 176.4 171.4 198.1 224.0 251.3	178.2 156.2 148.4 150.0 160.4 180.5 195.5 213.7 237.4 249.2	4.6 4.7 7.1 10.9 12.9 14.8 16.0	20.0 20.4 23.0 26.5 32.8 40.4 45.1	34.4 39.6 44.1 49.4 53.1 55.7 59.4	23.4 28.8 35.4 38.1 37.6 40.5 35.1	67 7 66 9 70 9 70 6 77 3 86 0 93 7	107.5 110.1 115.8 127.4 130.4 140.0 146.7 153.4 153.4 154.8 169.1	12.1 12.8 14.4 14.4 15.8 15.3 14.1 14.3 14.0	95.4 97.3 101 5 112 9 116.0 124 3 131.4 139.4 140 5 155 1
2000 2001 2002 2003 2004 2005 2006 2007 2008		802.8 840.2 847.9 891.5 991.6 1,102.7 1,167.6 1,150.7 1,072.1	621.4 638.3 634.4 675.4 771.4 868.5 912.2 861.6 766.2	346.1 364.4 396.7 446.0 532.9 611.9 613.7 493.2 350.1	265.0 279.4 298.8 345.7 417.5 480.8 468.8 354.1 229.9	275 3 273 9 237 7 229 3 238 5 256 6 298 4 368 4 416 1	163 145 105 99 120 127 176 275 354	52.4 49.7 35.3 30.6 32.9 37.3 45.7 53.8 57.1	64 1 63 6 59 0 57 5 63 2 66 6 73 4 85 9 81.5	37 6 37 8 22 7 21 4 23 7 29 9 35 1 45 3 60.8	104.9 108.2 110.2 109.9 106.8 110.2 126.7 155.9 181.4	181.3 201.9 213.4 216.1 220.2 234.2 255.4 289.1 306.0	14.2 15.1 16.6 17.9 18.3 17.3 17.6 20.6 23.8	167 2 186.8 196.9 198.2 201.8 216.9 237.8 268.5 282.1
2008:	Jan Feb Mar Apr June July Aug Sept Oct Nov Dec	1,095 5 1,092 1 1,095 2 1,091 1 1,090 7 1,075 6 1,070 2 1,066 1 1,081 2 1,064 1 1,037 3 1,002 1	802.8 797.6 791.0 787.7 786.2 759.8 759.8 759.8 756.4 773.6 754.1 726.8 696.6	396.6 385.8 383.1 373.4 363.5 351.7 339.9 340.2 350.4 327.7 310.5 292.3	279.0 261.0 259.4 251.0 244.6 237.1 231.1 220.7 212.9 204.7 192.1 176.2	406 2 411.8 407.8 414.3 422.7 417.8 419.9 416.2 423.2 426.3 416.4 404.3	31.5 32.5 34.0 36.1 37.4 37.7 37.0 37.4 36.8 36.6 35.7 31.8	57.9 56.6 57.3 57.0 57.5 57.9 58.0 58.0 58.4 56.5 55.8 55.8	88.1 88.2 85.1 87.5 85.2 84.0 82.8 79.9 77.9 76.5 73.5 71.0	52 9 54 3 53 6 55 3 57 1 58 4 57 3 61 1 65 8 71 0 70 6 70 2	175.9 178.8 178.5 178.1 186.0 180.2 185.0 179.8 184.3 185.8 180.7 179.7	292.7 294.5 304.2 303.4 304.5 306.1 310.4 307.6 310.0 310.5 305.6	21.4 21.7 21.1 22.7 22.8 22.7 24.9 24.9 24.8 23.6 25.0 26.2 28.3	271 3 272 8 283 1 280 7 281.6 283 4 285 5 284 9 283 9 285.1 284 3 285.1 284 3 277.3
2009:	Jan Feb Mar May June July Aug Sept Oct ^p Nov ^p	974.3 970.4 966.7 971.4 958.3 945.1 934.2 925.5 910.5 905.6 900.1	673.8 660.9 650.4 654.1 639.8 619.5 608.4 605.2 590.5 585.5 585.5 581.2	278.8 260.8 248.9 252.7 241.4 237.0 237.3 244.7 243.2 254.9 250.7	162.6 147.9 139.2 130.7 123.4 125.4 131.0 133.4 134.0 135.2 135.7	395.1 400.1 401.5 398.4 382.6 371.2 360.5 347.2 330.6 330.5	29 2 29.1 31.2 30.2 28.4 27.4 24.3 23.2 21.6 19.6 19.3	49.0 48.4 48.1 43.7 44.1 42.1 40.0 39.3 35.3 34.8 34.0	66.7 66.5 65.0 62.1 58.8 53.5 51.8 48.8 48.8 48.0 44.2 43.7	77 3 81.3 82 0 84.1 85.4 78.6 77.6 72.6 67.9 65.6 65.7	172.9 174.7 175.3 181.3 181.8 180.9 177.4 176.6 174.3 166.4 167.8	300.4 309.5 316.3 317.2 318.5 325.6 325.8 320.4 320.0 320.1 318.8	27.0 27.5 27.2 25.5 27.0 29.1 29.9 27.7 27.7 27.7 27.0 27.3	273.4 282.1 289.1 291.7 291.5 296.5 295.9 292.7 292.3 293.1 291.6

[Value put in place, billions of dollars; monthly data at seasonally adjusted annual rates]

Includes farm residential buildings. 2 Includes residential improvements, not shown separately. 3 New single- and multi-family units.

⁴ Including farm

² including farm 5 Health care, educational, religious, public safety, amusement and recreation, transportation, communication, power, highway and street, sewage and waste disposal, water supply, and conservation and development.

Note: Data beginning with 1993 reflect reclassification.

Source: Department of Commerce (Bureau of the Census)

TABLE B-56. New private housing units started, authorized, and completed and houses sold, 1962-2009

		New housing	units started		N	ew housing ur	nits authorized	1	New	
Year or month		Type of s	structure			Type of s	structure		housing	New houses
	Total	1 unit	2 to 4 units ²	5 units or more	Total	1 unit	2 to 4 units	5 units or more	completed	sold
1962 1963 1964 1965 1966 1967 1968 1969	1,462,9 1,603,2 1,528,8 1,472,8 1,164,9 1,291,6 1,507,6 1,466,8	991.4 1.012.4 970.5 963.7 778.6 843.9 899.4 810.6	47 599 108.3 86.7 61.2 71.7 80.7 85.1	1.5 0.8 450.0 422.5 325.1 376.1 527.3 571.2	1,186.6 1,334.7 1,285.8 1,240.6 971.9 1,141.0 1,353.4 1,322.3	716.2 750.2 720.1 709.9 563.2 650.6 694.7 624.8	87.1 118.9 100.8 84.8 61.0 73.0 84.3 85.2	383.3 465.6 464.9 445.9 347.7 417.5 574.4 612.4	1,319.8 1,399.0	560 565 575 461 487 490 490 448
1970 1971 1972 1973 1974 1975 1976 1976 1977 1978 1978	1,433.6 2,052.2 2,356.6 2,045.3 1,337.7 1,160.4 1,537.5 1,987.1 2,020.3 1,745.1	812.9 1,151.0 1,309.2 1,132.0 888.1 892.2 1,162.4 1,450.9 1,433.3 1,194.1	84.9 120.5 141.2 118.2 68.0 64.0 85.8 121.7 125.1 122.0	535.9 780.9 906.2 795.0 381.6 204.3 289.2 414.4 462.0 429.0	1,351.5 1,924.6 2,218.9 1,819.5 1,074.4 939.2 1,296.2 1,690.0 1,800.5 1,551.8	646.8 906.1 1,033.1 882.1 643.8 675.5 893.6 1,126.1 1,182.6 981.5	88.1 132.9 148.6 117.0 64.3 63.9 93.1 121.3 130.6 125.4	616.7 885.7 1,037.2 820.5 366.2 199.8 309.5 442.7 487.3 444.8	1,418.4 1,706.1 2,003.9 2,100.5 1,728.5 1,317.2 1,377.2 1,657.1 1,867.5 1,870.8	485 656 718 634 519 549 646 819 817 709
1980 1981 1982 1983 1984 1985 1986 1987 1986 1987 1988	1,292.2 1,084.2 1,062.2 1,703.0 1,749.5 1,741.8 1,805.4 1,620.5 1,488.1 1,376.1	852.2 705.4 662.6 1,067.6 1,084.2 1,072.4 1,179.4 1,146.4 1,081.3 1,003.3	109.5 91.2 80.1 113.5 121.4 93.5 84.0 65.1 55.3	330.5 287.7 319.6 522.0 543.9 576.0 542.0 408.7 348.0 317.6	1,190.6 985.5 1,000.5 1,605.2 1,681.8 1,733.3 1,769.4 1,534.8 1,455.6 1,338.4	710.4 564.3 546.4 901.5 922.4 956.6 1.077.6 1.024.4 993.8 931.7	114.5 101.8 88.3 133.6 142.6 120.1 108.4 89.3 75.7 67.0	365.7 319.4 365.8 570.1 616.8 656.6 583.5 421.1 386.1 339.8	1,501.6 1,265.7 1,005.5 1,390.3 1,652.2 1,703.3 1,756.4 1,668.8 1,529.8 1,422.8	545 436 412 623 639 688 750 671 671 676 650
1990 1991 1992 1993 1994 1995 1995 1996 1997 1998 1998	1,192.7 1,013.9 1,199.7 1,287.6 1,457.0 1,354.1 1,476.8 1,474.0 1,616.9 1,640.9	894.8 840.4 1,029.9 1,125.7 1,198.4 1,076.2 1,160.9 1,133.7 1,271.4 1,302.4	37.6 35.6 30.9 29.4 35.2 33.8 45.3 445.3 42.6 31.9	260.4 137.9 139.0 132.6 223.5 244.1 270.8 295.8 302.9 306.6	1,110.8 948.8 1,094.9 1,199.1 1,371.6 1,332.5 1,425.6 1,441.1 1,612.3 1,663.5	793.9 753.5 910.7 986.5 1,068.5 997.3 1,069.5 1,062.4 1,187.6 1,246.7	54.3 43.1 45.8 52.3 62.2 63.7 65.8 68.5 69.2 65.8	262.6 152.1 138.4 160.2 241.0 271.5 290.3 310.3 355.5 351.1	1,308.0 1,090.8 1,157.5 1,192.7 1,346.9 1,312.6 1,412.9 1,400.5 1,474.2 1,604.9	534 509 610 666 670 667 757 804 886 886 880
2000	1,568.7 1,602.7 1,704.9 1,847.7 1,955.8 2,068.3 1,800.9 1,355.0 905.5 553.8	1,230.9 1,273.3 1,358.6 1,499.0 1,610.5 1,715.8 1,465.4 1,046.0 622.0 443.5	38.7 36.6 38.5 33.5 42.3 41.1 42.7 31.7 17.5 11.4	299.1 292.8 307.9 315.2 303.0 311.4 292.8 277.3 266.0 98.8	1,592.3 1,636.7 1,747.7 1,889.2 2,070.1 2,155.3 1,838.9 1,398.4 905.4 572.2	1,198.1 1,235.6 1,332.6 1,460.9 1,613.4 1,682.0 1,378.2 979.9 575.6 435.1	64.9 66.0 73.7 82.5 90.4 84.0 76.6 59.6 34.4 19.9	329.3 335.2 341.4 345.8 366.2 389.3 384.1 359.0 295.4 117.2	1,573,7 1,570,8 1,648,4 1,678,7 1,841,9 1,931,4 1,979,4 1,502,8 1,119,7 796,0	877 908 973 1,086 1,203 1,283 1,283 1,051 776 485 374
2008 Jan Feb Mar Apr June June July Aug Sept Oct Nov Dec	1,083 1,100 993 1,001 971 1,078 933 849 822 763 655 556	764 722 717 676 679 655 632 612 549 534 457 393	27 29 16 15 19 22 14 15 19 10 18 9	292 349 260 310 273 401 287 222 254 219 180 154	1,102 1,015 968 991 978 1,174 924 857 806 729 630 564	711 665 634 647 629 605 575 548 529 470 470 422 370	41 39 36 39 35 35 34 38 33 33 21 20	350 311 298 305 314 533 314 275 239 226 187 174	1,338 1,266 1,195 1,028 1,139 1,131 1,089 1,018 1,148 1,045 1,084 1,028	608 576 509 533 509 488 500 444 436 409 390 374
2009 Jan	488 574 521 479 551 590 593 581 586 524 580 580 557	357 357 361 388 409 478 506 481 508 471 490 456	13 13 31 11 15 6 9 4 10 9 9	118 204 129 80 133 101 72 94 69 49 80 80 92	531 550 511 498 518 570 564 580 575 551 551 589 653	342 381 360 378 406 433 463 463 464 452 449 469 505	20 17 20 18 18 23 18 19 19 19 19 25 25 18	169 152 131 102 94 114 83 97 104 86 95 130	778 828 833 846 812 794 785 785 723 750 865 768	329 354 332 345 371 399 419 408 391 408 391 391 392 342

[Thousands; monthly data at seasonally adjusted annual rates]

¹ Authorized by issuance of local building permits in permit-issuing places: 20,000 places beginning with 2004; 19,000 for 1994–2003; 17,000 for 1984–93; 16,000 for 1978–83; 14,000 for 1972–77; 13,000 for 1967–71; 12,000 for 1963–66, and 10,000 prior to 1963. ² Monthly data derived.

Note: Data beginning with 1999 for new housing units started and completed and for new houses sold are based on new estimation methods and are not directly comparable with earlier data.

Source: Department of Commerce (Bureau of the Census).

Year or month Sales ²	l manufactur and trade	ing	м	anufacturir	ıg	w	Merchant holesalers	1	Retail trade			Retail	
rear or month	Sales ²	Inven- tories ³	Ratio ⁴	Sales ²	Inven- tories ³	Ratio ⁴	Sales ²	Inven- tories ³	Ratio ⁴	Sales ^{2, 5}	Inven- tories ³	Ratio ⁴	services sales
SIC: 6 1968 1969 1970 1971 1972 1973 1974 1975 1976 1976	98,685 105,690 108,221 116,895 131,081 153,677 177,912 182,198 204,150 229,513	156,611 170,400 178,594 188,991 203,227 234,406 287,144 288,992 318,345 350,706	1.59 1.61 1.65 1.62 1.55 1.53 1.61 1.59 1.56 1.53	50.229 53,501 52,805 55,906 63,027 72,931 84,790 86,589 98,797 113,201	90.560 98.145 101.599 102.567 108.121 124.499 157.625 159.708 174.636 188.378	1.80 1.83 1.92 1.83 1.72 1.71 1.86 1.84 1.77 1.66	21,012 22,818 24,167 26,492 29,866 38,115 47,982 46,634 50,698 56,136	27,166 29,800 33,354 36,568 40,297 46,918 58,667 57,774 64,622 73,179	1.29 1.31 1.38 1.38 1.35 1.23 1.22 1.24 1.27 1.30	27,445 29,371 31,249 34,497 38,189 42,631 45,141 48,975 54,655 54,655 60,176	38,885 42,455 43,641 49,856 54,809 62,989 70,852 71,510 79,087 89,149	1.42 1.45 1.40 1.45 1.44 1.48 1.57 1.46 1.45 1.48	
1978 1979 1980 1981 1982 1983 1983 1984 1985 1986 1986 1987 1988 1987 1988	260,320 297,701 327,233 355,822 347,625 369,286 410,124 422,583 430,419 457,735 497,157 527,039 545,900	400,931 452,640 508,924 545,786 573,908 590,287 649,780 662,738 709,848 767,222 840,564	1.54 1.52 1.56 1.53 1.67 1.56 1.53 1.56 1.55 1.50 1.49 1.52	126,905 143,936 154,391 168,129 163,351 172,547 190,682 194,538 194,657 206,326 224,619 236,698	211,691 242,157 265,215 283,413 311,852 312,379 339,516 334,749 322,654 338,109 369,374 391,212	1.67 1.68 1.72 1.95 1.78 1.73 1.73 1.68 1.59 1.57 1.63	66,413 79,051 93,099 101,180 95,211 99,225 112,199 113,459 114,960 122,968 134,521 143,760	86,934 99,679 122,631 129,654 127,428 130,075 142,452 147,409 153,574 163,903 178,801 187,009	1.31 1.26 1.32 1.28 1.36 1.28 1.23 1.28 1.23 1.28 1.32 1.29 1.30 1.28 1.28	67,002 74,713 79,743 86,514 89,062 97,514 107,243 114,586 120,803 128,442 138,017 146,581	102,306 110,804 121,078 132,719 134,628 147,833 167,812 181,881 186,510 207,836 219,047 237,234	1.53 1.48 1.52 1.53 1.49 1.44 1.49 1.52 1.56 1.55 1.54 1.58	
1991 1992 <i>NAICS:</i> 6 1992	542,815 567,176 540,573 567,580	834,609 842,809 836,992 864,028	1.53 1.53 1.48 1.53	242,080 239,847 250,394 242,002 251,708	403.073 390,950 382,510 378,709	1.65 1.54 1.57	149,506 148,306 154,150 147,261	195,633 200,448 208,302 196,914 204,942	1.29 1.33 1.32 1.31	153,718 154,661 162,632 151,310	239,086 243,211 251,997 261,369 279,526	1.50 1.54 1.52 1.67	168,261
1994 1995 1996 1997 1997 1998	610,253 655,097 687,350 723,879 742,837 786,634	927,330 986,089 1,005,506 1,046,750 1,078,738 1,138,982	1 46 1 48 1 46 1 42 1 43 1 40	269,843 289,973 299,766 319,558 324,984 335,991	399,910 424,772 430,446 443,566 449,065 463,625	1.44 1.44 1.43 1.37 1.39 1.35	164,575 179,915 190,362 198,154 202,260 216,597	221,978 238,392 241,050 258,575 272,404 290,318	1.29 1.29 1.27 1.26 1.31 1.30	175,835 185,209 197,222 206,167 215,592 234,046	275,526 305,442 322,925 334,010 344,609 357,269 385,039	1.66 1.72 1.67 1.64 1.62 1.59	173,836 194,638 204,677 217,463 227,670 238,278 257,797
2000	834,325 818,615 823,714 853,596 923,319 1,000,368 1,064,187 1,102,196 1,136,984	1,198,022 1,120,422 1,140,904 1,147,981 1,239,685 1,306,598 1,390,670 1,446,313 1,455,753	1.41 1.43 1.36 1.34 1.30 1.27 1.28 1.28 1.28 1.32	350,715 330,875 326,227 334,616 359,081 395,173 418,330 423,423 431,929	481,673 427,720 422,724 407,967 440,330 472,398 510,865 529,957 541,767	1.35 1.38 1.28 1.24 1.19 1.16 1.19 1.23 1.28	234,546 232,096 236,294 246,857 274,710 297,915 323,396 345,871 375,059	309,462 297,927 301,891 307,642 337,983 362,451 392,291 416,632 429,572	1.29 1.32 1.26 1.23 1.18 1.18 1.17 1.16 1.17	249,063 255,644 261,194 272,123 289,528 307,280 322,461 332,902 329,996	406,887 394,775 416,289 432,372 461,372 471,749 487,514 499,724 484,414	1.59 1.58 1.55 1.56 1.56 1.51 1.50 1.49 1.52	274,518 282,131 288,845 301,264 320,526 340,057 357,284 369,385 367,741
2008: Jan Feb Mar Apr June July Aug Sept Oct Nov Dec	1,156,058 1,143,322 1,156,608 1,171,292 1,177,041 1,187,363 1,185,470 1,160,374 1,134,171 1,090,431 1,026,879 996,571	1,463,157 1,472,661 1,474,830 1,484,308 1,488,099 1,495,812 1,510,101 1,511,167 1,506,344 1,495,342 1,475,847 1,455,753	1.27 1.29 1.28 1.27 1.26 1.26 1.27 1.30 1.33 1.37 1.44 1.46	439,923 434,265 439,275 448,658 449,729 452,979 457,116 440,921 429,156 412,885 384,413 373,446	537,072 541,454 546,023 547,716 550,178 554,737 558,252 561,150 559,091 556,012 551,297 541,767	1.22 1.25 1.24 1.22 1.22 1.22 1.22 1.27 1.30 1.35 1.43 1.45	377,100 372,986 379,712 384,205 388,406 396,296 392,275 386,097 377,364 360,753 335,256 325,672	422,416 426,580 426,601 432,149 435,311 439,195 443,913 446,873 444,618 438,760 433,890 429,572	1.12 1.14 1.12 1.12 1.12 1.11 1.13 1.16 1.18 1.22 1.29 1.32	339,035 336,071 337,621 338,429 338,906 338,088 336,079 333,356 327,651 316,793 307,210 297,453	503,669 504,627 502,206 504,443 502,610 507,936 503,144 502,635 500,570 490,660 484,414	1.49 1.50 1.49 1.48 1.48 1.51 1.51 1.53 1.58 1.60 1.63	376,262 373,140 374,845 376,009 376,652 376,055 374,103 371,311 365,855 354,744 345,175 335,016
2009: Jan	985,402 986,065 969,020 968,183 967,835 977,786 981,770 993,217 994,916 1,006,760 1,027,359	1,437,899 1,417,350 1,399,094 1,381,276 1,364,131 1,344,127 1,329,165 1,308,296 1,303,701 1,307,801 1,313,168	1.46 1.44 1.43 1.41 1.37 1.35 1.32 1.31 1.30 1.28	363,750 362,685 357,240 357,324 354,190 360,117 362,611 362,269 366,882 370,294 374,174	535,486 527,872 521,501 515,642 511,305 505,009 500,593 496,549 492,559 494,397 495,143	1.47 1.46 1.44 1.44 1.40 1.38 1.37 1.34 1.34 1.34	317,731 318,491 310,723 310,742 312,050 312,941 314,709 318,069 322,169 326,645 337,396	425,915 418,539 411,092 405,599 400,795 392,493 386,330 381,146 378,281 380,574 386,263	1.34 1.31 1.32 1.31 1.28 1.25 1.23 1.20 1.17 1.17 1.14	303,921 304,889 301,057 300,117 301,595 304,728 304,450 312,879 305,865 309,821 315,789	476,498 470,939 466,501 460,035 452,031 446,625 442,242 430,601 432,861 432,830 431,762	1.57 1.54 1.55 1.53 1.50 1.47 1.45 1.38 1.42 1.40 1.37	342,017 343,438 339,228 338,344 339,873 342,912 342,489 350,800 343,687 347,641 353,951

TABLE B-57. Manufacturing and trade sales and inventories, 1968-2009

[Amounts in millions of dollars: monthly data seasonally adjusted]

¹ Excludes manufacturers' sales branches and offices.

¹ ZANIUDES internated were states trainings and uncess. ² Annual data are averages of monthly not essonally adjusted figures. ³ Seasonally adjusted, end of period. Inventories beginning with January 1982 for manufacturing and December 1980 for wholesale and retail trade are not

³ Seasonary application, end or period, inventories beginning with January 1992 for manufacturing and becomes 1996 for the manufacturing and becomes 1996 for manufacturing and becomes 19

last column for retail and food services sales. ⁶ Effective in 2001, data classified based on NAICS. Data on NAICS basis available beginning with 1992. Earlier data based on SIC. Data on both NAICS and

SIC basis include semiconductors.

Source: Department of Commerce (Bureau of the Census).

IVINIOUS OF QUITARS, MONTHIN DATA SEASONALIN ADJUSTE	[Millions of dolla	s: monthly data	seasonally	adjusted
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	:	Shipments 1						Inventories	2			
Year or month		- · · ·	Non-			Durable goo	ds industrie	s	N	ondurable g	ods industi	ies
Year or month	Total	goods indus- tries	durable goods indus- tries	Totał	Total	Materi- als and supplies	Work in process	Finished goods	Total	Materi- als and supplies	Work in process	Finished goods
SIC: 3	50.000		20.005	00.500	50 300		07.010			12 000	4.050	
1969	53,501	27,624 29,403	22,605	90,560 98,145	58,732 64,598	18,636	30,282	14,175	31,828 33,547	12,328	4,852 5,120	14,648
1970	52,805 55,906	28,156 29,924	24,649 25,982	101,599 102,567	66,651 66,136	19,149 19,679	29,745	17,757	34,948 36,431	13,158	5,271	16,509
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	84,790	44,173	33,290 40,617	157,625	101,493	25,944 35,070	42,530	23,893	43,307 56,132	23,744	8,189	24,199
1975 1976	86,589 98,797	43,598 50,623	42,991 48 174	159,708 174,636	102,590	33,903 37,457	43,227	25,460 28,457	57,118 62 648	23,565	8,834 9,929	24,719 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
1979	143,936	75,927	68,009	242,157	160,734	52,670	69,325	34,135	81,423	32,814	13,910	31,800
1980	154,391	77,419	76,972	265,215	174,788	55,173	76,945 80 998	42,670	90,427 96,970	36,606	15,884	37,937
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 1984	1/2,54/ 190,682	85,481 97,940	87,066 92,742	312,379 339,516	221,330	60,325 66,031	98,251	52,630 57,048	112,525	44,816	18,691	49,018
1985	194,538 194,657	101,279	93,259 91 419	334,749 322,654	218,193	63,904 61,331	98,162	56,127	116,556	44,106	19,442 18,124	53,008 50,198
1987	206,326	108,128	98,198	338,109	220,799	63,562	102,393	54,844	117,310	45,319	19,270	52,721
1989	236,698	123,158	113,540	391,212	257,513	72,435	122,251	62,827	133,699	50,674	21,653	61,372
1990	242,686	123,776	118,910	405,073	263,209	73,559	124,130	65,520 64,225	141,864	52,645 53,011	22,817	66,402 65,105
1992	250,394	128,489	121,905	382,510	238,105	69,459	104,424	64,222	144,405	54,007	23,532	66,866
1992	242,002	126,572	115,430	378,709	238,102	69,737	104,211	64,154	140,607	53,179	23,304	64,124
1993 1994	251,708 269,843	133,712	117,996	379,560 399,910	238,737	72,657 78,573	101,999	64,081 68,012	140,923	54,289 57,161	23,305 24,383	63,329 65,225
1995	289,973	158,568	131,405	424,772	267,358	85,473	106,658	75,227	157,414	60,725	25,755	70,934
1997	319,558	178,949	140,610	443,566	281,074	92,292	109,960	78,822	162,492	60,160	28,478	73,854
1998 1999	324,984 335,991	193,895	142,096	449,065 463,625	290,700 296,553	93,629 97,959	115,235	81,836	167,072	58,223 61,098	27,044 28,741	73,098
2000	350,715	197,807	152,908	481,673	306,727	106,214	111,196	89,317	174,946	61,509 55,709	30,015	83,422
2002	326,227	176,968	149,259	422,724	260,265	88,512	92,231	79,522	162,459	56,593	27,793	78,073
2004	334,616 359,081	1/8,549	156,067	407,967 440,330	246,712	82,301 92,129	90,932	81,733	175,536	56,899 61,760	26,965 29,821	83,955
2005	395,173 418,330	202,070 213,408	193,103 204,923	472,398 510,865	283,220	98,134 108,592	98,590 104,910	86,496 95,818	189,178 201 545	66,502 69,816	32,668	90,008 95,761
2007	423,423	213,572	209,851	529,957	319,923	109,057	113,569	97,297	210,034	73,222	38,106	98,706
2008: Jan	439,923	215,887	224,036	537,072	321,132	109,728	114,690	96,714	215,940	75,588	40,448	99,904
Feb Mar	434,265	212,974	221,291 227,105	541,454 546,023	323,203	110,129	116,281	96,793 97,026	218,251 219 176	75,794 75,691	41,745	100,712
Apr	448,658	214,371	234,287	547,716	329,380	112,303	120,140	96,937	218,336	75,688	40,883	101,765
June	449,729	212,691	230,537	554,737	333,786	113,958	122,319	97,509	210,053	76,356	42,147	103,563
July Aug	457,116 440,921	214,430 206,941	242,686 233,980	558,252 561,150	336,804 339,813	115,823 116,182	123,246	97,735 98,995	221,448	76,073 75.837	42,417 42,223	102,958
Sept	429,156	206,450	222,706	559,091	340,723	116,712	125,223	98,788	218,368	76,113	41,480	100,775
Nov	384,413	190,015	194,398	551,297	341,207	116,702	127,358	97,147	210,090	71,562	38,404	100,124
2009: Jan	363,750	177.696	186,054	535.486	342,099	115,800	129,265	93,970	199,068	66,897	36,423	94,507
Feb	362,685	176,094	186,591	527,872	334,112	114,345	127,694	92,073	193,760	65,599 64 949	36,648	91,513
Apr	357,324	173,480	183,844	515,642	324,569	110,135	125,256	89,178	191,073	64,050	37,212	89,811
May June	354,190 360,117	169.440 169.672	184,750	511,305 505,009	320,714 315,984	108,234 106,139	124,856 124,091	87,624 85,754	190,591 189,025	64,106 63,838	37,160 36,685	89,325 88,502
July Aun	362,611 362,269	174,982	187,629 189,903	500,593 496 549	312,367 308 133	103,840 102 920	123,880 121 442	84,647 83,771	188,226 188,416	64,118 63,832	36,454 36 872	87,654 87,712
Sept	366,882	174,914	191,968	492,559	305,056	102,367	120,306	82,383	187,503	63,632	37,166	86,705
Nov P	374,174	175.747	198,427	495,143	304,023	100.262	120,971	81,597	192.023	65.850	38,465	87.708

¹ Annual data are averages of monthly not seasonally adjusted figures. ² Seasonally adjusted, end of period. Data beginning with 1982 are not comparable with earlier data. ³ Effective in 2001, data classified based on North American Industry Classification System (NAICS). Data on NAICS basis available beginning with 1992. Earlier data based on Standard Industrial Classification (SIC). Data on both NAICS and SIC basis include semiconductors.

Source: Department of Commerce (Bureau of the Census).

			New o	rders '		L	Infilled orders	2	Unfilled or	ders to shipm	ents ratio ²
Yea	ar or month	_	Durable indus	e goods stries	Nondurable		Durable	Nondurable	_	Durable	Nondurable
		lotal	Total	Capital goods, nondefense	goods industries	Total	goods industries	goods industries	Total	goods industries	goods industries
SIC: 3											
1968 . 1969 .		50,657 53,990	28,051 29,876	6,314	22,606	108,377	104,393	3,984 4,180	3.79	4.58	0.69
1970 .		52,022	27,340	6,072	24,682	105,008	100,412	4,596	3.61	4.36	.76
1971. 1972.		55,921 64,182	29,905	6,682	26,016	105,247	100,225	6,022	3.32	4.00	.86
1973		76,003	42,627	9,926	33,376	156,561	149,204	7,357	3.80	4.51	.91
1975		85,139	40,802	9,886	40,465 43,181	169,546	161,664	7,882	3.69	4.93	.82
1976 . 1977 -		99,513 115,109	51,307	11,490	48,206	178,128 202 024	169,857	8,271	3.24	3.88	.74
1978		131,629	72,278	17,588	59,351	259,169	248,281	10,888	3.57	4.20	.81
1979. 1980		147,004	79,483	21,104	76 967	303,593	291,321	12,272	3.85	4.6Z 4.58	.82
1981		168,025	83,654	21,806	84,371	326,547	314,707	11,840	3.87	4 68	69
1982 . 1983 .		162,140	78,064 88,140	19,213	84,077	311,887 347,273	300,798	11,089	3.84	4.74	.62
1984		192,879	100,164	23,669	92,715	373,529	359,651	13,878	3.60	4.37	64
1986		195,204	103,647	23,982	91,557	393,515	376,699	16,816	3.59	4 41	70
1987. 1988		209,389 228,270	110,809	26,094	98,579 106 194	430,426 474,154	408,688 452,150	21,738	3.63	4 43 4 46	83 76
1989		239,572	126,055	32,988	113,516	508,849	487,098	21,751	3.96	4 85	77
1990. 1991 -		244,507 238,805	125,583 119,849	33,331 30,471	118,924 118,957	531,131 519,199	509,124 495,802	22,007 23,397	4.15	5 15 5 07	.76
1992	n. 3	248,212	126,308	31,524	121,905	492,893	469,381	23,512	3.51	4 30	.75
1992). ^v						451,273			5.14	
1993 . 1994 -		246,668	128,672	40,681			425,979			4.66	
1995		285,542	154,137	51,011			447,411			3 97	
1996. 1997.		297,282 314,986	162,399 174,377	54,066 60,697			488,726 512,916			4.14 4.04	
1998		317,345	178,327	62,133			496,083			3.97	
2000		346,789	193.881	69.278			549 445			3.87	
2001.		322,746	173,072	58,246			514,262			421	
2002 .		330,369	174,302	52,894			402,030			3.92	
2004 . 2005 -		354,619 395,401	184,261 202,298	56,094 65,770			496,395 572 827		••• • • • • • • • • • • • • •	3.88 3.84	
2006		419,793	214,871	71,725			660,243			4.17	
2007. 2008.		427,597 429,343	205,216	69,132			798,967			4.80 5.45	
2008:	Jan	442,055	218,019	75,327			780,822			5 14	
	reb Mar	438,780 445,319	217,489 218,214	75,574			790,370 801,204			5.24	
	Apr May	449,119	214,832	73,624			807,250			5.27	
	June	454,835	214,547	70,983			819,087			5.31	
	July Aug	455,354 436,596	212,668 202,616	67,788			822,963 823,183			5.32 5.50	
	Sept	425,853	203,147	66,885			823,768			5.53	
	Nov	374,334	179,936	60.071			810,059		·····	5 93	
2000-	Uec	357,472	1/3,279	54,895			798,967			5.87	
1003	Feb	345,503 347,187	160,596	49,783			772,059			6.04	
	Mar Anr	341,319 343,818	157,963 159,974	49,773 48 324			759,101 749 752			6.01 6.04	····
	May	348,109	163,359	52,945			747,473			6.13	
	July	350,431	159,986	52,369 57,030			740,349 739,445			5.99 5.90	
	Aug	353,923	164,020	52,185			735,313			5.93	
	Oct	363,047	168,098	55,458			729,336			5.75	
	Nov ^p	365,295	166,868	53,819			724,534			5.69	

TABLE B-59. Manufacturers' new and unfilled orders, 1968-2009

[Amounts in millions of dollars; monthly data seasonally adjusted]

¹ Annual data are averages of monthly not seasonally adjusted figures

² Unfilled orders are seasonally adjusted, end of period. Aatios are unfilled orders at end of period to shipments for period (excludes industries with no unfilled orders). Annual ratios relate to seasonally adjusted data for December.

³ Effective in 2001, data classified based on North American Industry Classification System (NAICS) Data on NAICS basis available beginning with 1992 Earlier data based on the Standard Industrial Classification (SIC) Data on SIC basis include semiconductors. Data on NAICS basis do not include semiconductors.

Note: For NAICS basis data beginning with 1992, because there are no unfilled orders for manufacturers' nondurable goods, manufacturers' nondurable new orders and nondurable shipments are the same (see Table B–58).

Source: Department of Commerce (Bureau of the Census)

PRICES TABLE B-60. Consumer price indexes for major expenditure classes, 1965-2009

[For all urban consumers; 1982-84=100, except as noted]

Very or month	Allitoms	Food bevera	and ages	Annarol	Housing	Transpor-	Medical	Recre-	Education and	Other goods	Eneroy 3
Tear of month	Airiteins	Total '	Food	Аррагсі	riousing	tation	care	ation ²	communi- cation ²	and services	Lincigy
1965 1966 1967 1968 1968	31.5 32.4 33.4 34.8 36.7	35.0 36.2 38.1	32.2 33.8 34.1 35.3 37.1	47.8 49.0 51.0 53.7 56.8	30.8 32.0 34.0	31.9 32.3 33.3 34.3 35.7	25.2 26.3 28 2 29.9 31.9	······	· · · · · · · · · · · · · · · · · · ·	35 1 36.9 38.7	22.9 23.3 23.8 24.2 24.8
1970	38.8 40.5 41.8 44.4 49.3 53.8 56.9 60.6 65.2 72.6	40.1 41.4 43.1 48.8 55.5 60.2 62.1 65.8 72.2 79.9	39.2 40.4 42.1 48.2 55.1 59.8 61.6 65.5 72.0 79.9	59 2 61.1 62.3 64.6 69.4 72.5 75.2 78.6 81.4 84.9	36.4 38.0 39.4 41.2 45.8 50.7 53.8 57.4 62.4 70.1	37.5 39.5 39.9 41.2 45.8 50.1 55.1 59.0 61.7 70.5	34 0 36 1 37.3 38.8 42.4 47.5 52.0 57.0 61.8 67.5			40 9 42 9 44 7 46 4 49.8 53 9 57 0 60 4 64 3 68 9	25.5 26.5 27.2 29.4 38.1 42.1 45.1 49.4 52.5 65.7
1980 1981 1982 1983 1984 1985 1986 1987 1988	82.4 90.9 96.5 99.6 103.9 107.6 109.6 113.6 118.3 124.0	86.7 93.5 97.3 99.5 103.2 105.6 109.1 113.5 118.2 124.9	86.8 93.6 97.4 99.4 103.2 105.6 109.0 113.5 118.2 125.1	90.9 95.3 97.8 100.2 102.1 105.0 105.9 110.6 115.4 118.6	81.1 90.4 96.9 99.5 103.6 107.7 110.9 114.2 118.5 123.0	83.1 93.2 97.0 99.3 103.7 106.4 102.3 105.4 108.7 114.1	74.9 82.9 92.5 100.6 106.8 113.5 122.0 130.1 138.6 149.3			75.2 82.6 91.1 107.9 114.5 121.4 128.5 137.0 147.7	86.0 97.7 99.2 99.9 100.9 101.6 88.2 88.6 89.3 94.3
1990 1991 1992 1993 1993 1994 1995 1996 1997 1998 1998	130.7 136.2 140.3 144.5 148.2 152.4 156.9 160.5 163.0 166.6	132.1 136.8 138.7 141.6 144.9 148.9 153.7 157.7 167.7 161.1 164.6	132.4 136.3 137.9 140.9 144.3 148.4 153.3 157.3 160.7 164.1	124.1 128.7 131.9 133.7 133.4 132.0 131.7 132.9 133.0 131.3	128.5 133.6 137.5 141.2 144.8 148.5 152.8 156.8 160.4 163.9	120.5 123.8 126.5 130.4 134.3 139.1 143.0 144.3 141.6 144.4	162.8 177.0 190.1 201.4 211.0 220.5 228.2 234.6 242.1 250.6	90.7 92.7 94.5 97.4 99.6 101.1 102.0	85.5 88.8 92.2 95.3 98.4 100.3 101.2	159.0 171.6 183.3 192.9 198.5 206.9 215.4 224.8 237.7 258.3	102.1 102.5 103.0 104.2 104.6 105.2 110.1 111.5 102.9 106.6
2000 2001 2002 2003 2004 2005 2006 2007 2006 2007 2008 2009	172.2 177.1 179.9 184.0 188.9 195.3 201.6 207.342 215.303 214.537	168.4 173.6 176.8 180.5 186.6 191.2 195.7 203.300 214.225 218.249	167.8 173.1 176.2 180.0 186.2 190.7 195.2 202.916 214.106 217.955	129.6 127.3 124.0 120.9 120.4 119.5 119.5 118.998 118.907 120.078	169.6 176.4 180.3 184.8 189.5 195.7 203.2 209.586 216.264 217.057	153.3 154.3 152.9 157.6 163.1 173.9 180.9 184.682 195.549 179.252	260.8 272.8 285.6 297.1 310.1 323.2 351.054 364.065 375.613	103.3 104.9 106.2 107.5 108.6 109.4 110.9 111.443 113.254 114.272	102.5 105.2 107.9 109.8 111.6 113.7 116.8 119.577 123.631 127.393	271 1 282 6 293 2 298 7 304 7 313 4 321 7 333 328 345 381 368 586	124.6 129.3 121.7 136.5 151.4 177.1 196.9 207.723 236.666 193.126
2008: Jan	211.080 211.693 213.528 214.823 216.632 218.815 219.964 219.086 218.783 216.573 212.425 210.228	208 837 209 462 209 692 211 365 212 251 212 383 215 326 216 419 217 672 218 705 218 752 218 752 218 839	208.618 209.166 209.385 211.102 212.054 213.243 215.299 216.422 217.696 218.738 218.738 218.805	115.795 117.839 120.881 122.113 120.752 117.019 114.357 116.376 121.168 122.243 121.262 117.078	212.244 213.026 214.389 215.809 217.941 219.610 219.148 218.184 218.184 217.383 216.467 216.073	190.839 190.520 195.189 205.262 211.787 212.806 206.739 203.861 192.709 173.644 164.628	360.459 362.155 363.000 363.184 363.396 363.616 363.963 364.477 365.036 365.746 366.613 367.133	112 083 112.365 112 731 112 874 112 987 112 997 113 297 113 786 114 032 114.169 114.078 113.674	121.762 121.766 121.832 122.073 122.348 122.828 123.445 124.653 125.505 125.686 125.758 125.758	339.052 340.191 341.827 343.410 344.709 345.885 346.810 346.990 348.166 349.276 349.040 349.220	219.465 219.311 230.505 240.194 257.106 275.621 280.833 266.283 258.020 231.561 189.938 171.158
2009 Jan Feb Apr May June July Aug Sept Oct Nov Dec	211.143 212.193 212.709 213.240 213.856 215.693 215.351 215.834 215.969 216.177 216.330 215.949	219 729 219 333 218 794 218 364 218 076 218 030 217.608 217 701 217 617 217 957 217 733 218.049	219.675 219.205 218.600 218.162 217.826 217.740 217.257 217.350 217.218 217.526 217.265 217.637	114,764 118,825 122,545 123,208 121,751 118,799 115,620 117,130 122,476 123,998 122,465 119,357	216.928 217.180 217.374 217.126 216.971 218.071 218.085 217.827 217.178 216.612 215.808 215.523	166,738 169,542 169,647 171,987 175,997 183,735 182,798 184,386 183,932 185,362 188,587 188,318	369 830 372.405 373.189 374.170 375.026 375.093 376.537 377.727 378.552 379.516	113 822 114.461 114 625 114.261 114 264 114 643 114 619 114 755 114 629 114 157 113 820 113 212	126,151 126,190 126,187 126,273 126,467 126,519 126,914 128,128 129,035 129,128 128,845 128,883	350.259 351.223 361.156 370.606 369.901 370.595 372.894 372.699 374.219 375.444 376.702 377.330	174,622 178,741 177,454 179,704 186,909 205,408 201,938 204,971 202,243 199,198 204,026 202,301

Includes alcoholic beverages, not shown separately.
 December 1997=100.
 Household energy—gas (piped), electricity, fuel oil, etc.—and motor fuel. Motor oil, coolant, etc. also included through 1982.

Note: Data beginning with 1983 incorporate a rental equivalence measure for homeowners' costs. Series reflect changes in composition and renaming beginning in 1998, and formula and methodology changes beginning in 1999.

Food Shelter Fuels and utilities Household energy Year or month **Owners** Total Total ² Away Rent of equivalent At Gas Total² Total from primary rent of Tota! 2 (piped) home home residence primary Total ² and residence 3 electricity 28.4 29.7 31.3 32.9 27.0 27.8 28.8 30.1 23.5 23.6 23.7 23.9 1965 32.2 33.5 35.2 40.9 26.6 26.7 41.5 42.2 43.3 1966 33.8 34.1 35.3 35.1 36.3 27.1 21.4 35.0 30.8 1967 36.2 32.0 1968 1969 38.1 37 1 38.0 34.9 34.0 32.6 44.7 28.0 22.1 24.3 35.5 37.0 25.4 27.1 1970 40.1 39.2 39.9 37.5 36.4 46.5 29.1 23.1 1971 41.4 40 4 40.9 39.4 38.0 48.7 31.1 247 41.0 28.5 29.9 34.5 1977 43.1 42.1 39.4 41.2 38.7 50 4 325 25.7 27.5 48.8 48 2 497 40.5 34.3 40.7 52.5 55.2 1973 45.8 50.7 53.8 57.4 62.4 55.5 60.2 57.1 44.4 34.4 1974 55.1 49.8 61.8 63.1 54.5 58.2 48.8 51.5 59.8 58.0 454 39.4 40.1 1975 61.6 65.5 72.0 1976 62.1 61.1 49.4 43.3 447 50.5 55.0 65.8 72.2 66.8 73.8 62.6 68.3 1977 54 9 64.8 547 49 N 60.5 69.3 58.5 1978 53.0 1979 79.9 79.9 818 75.9 70 1 68.9 74.3 64.8 61.3 61.0 1980 86.7 88.4 83.4 81.1 81.0 80.9 75.4 74.8 87.2 71.4 86.8 1981 93.5 93.6 97.4 94.8 90.9 95.8 90.4 90.5 96.9 87.9 86.4 81.9 97.3 98.1 96.9 94.6 94.9 95 6 100 5 93 2 101.5 1982 99.5 100.0 99.5 99.1 100 1 102.5 107.3 100.2 1983 99.4 99.1 102.8 104.3 103.6 107.7 1984 1032 103.2 104.2 104.0 105.3 104.8 104.0 105.4 108.3 104.5 1985 105.6 105.6 109.8 1118 113.2 106.5 107.1 107.3 115.8 121.3 127.1 119.4 198F 109.1 113.5 109.0 112.5 117.0 110.9 114.2 118.3 104 1 103 0 99 2 97 3 105.7 113.5 198 124.8 103.8 118.2 118.2 118.5 127.8 104.4 98.0 104.6 1988 116.6 121.8 124.9 125 1 124 2 127.4 123.0 132.8 132.8 137.4 107.8 100 9 107 5 1980 132.3 1990 132.1 132.4 133.4 128.5 140.0 138.4 144.8 111.6 104.5 109.3 135.8 136.8 140.1 136.8 138.7 136.3 137.9 137.9 140.7 133.6 137.5 141.2 143.3 150.4 155.5 160.5 1153 106.7 108.1 111.2 112.6 1991 146.3 1992 151.2 143.2 145.7 155.7 150.3 118.5 993 141.6 140.9 121 3 1994 144.9 144.3 144 1 144.8 160.5 165.7 154.0 157.8 165.8 122.8 111.7 119.2 111 5 115 2 117 9 149.0 152.7 148.5 123.7 1005 148.9 148.4 148.8 171.3 119.2 171.0 1537 153 3 154 3 162.0 176.8 122.1 1996 157.7 161.1 157.3 160.7 158.1 157.0 156.8 176.3 166.7 181.9 199 130.8 172.1 160.4 187.8 128.5 1998 161 182.1 1137 121.2 1999 164.6 164.1 164.2 165.1 163.9 187.3 192.9 1288 1135 120.9 168.4 173.6 167.8 173 1 183.9 198.7 206.3 214.7 137.9 2000 167.9 169.6 193.4 122.8 169.0 128.0 173.9 2001 173.4 135.4 127.2 138.2 176.4 200.6 1921 150.2 142.4 180.3 208.1 199.7 143.6 2002 176.8 176.2 175.6 182.1 213.1 218.8 224.4 205.5 211.0 217.3 154.5 2003 180.5 180.0 179.4 184.8 219.9 145.0 2004 186.6 186.2 190.7 186.2 189.5 224.9 161.91 144 4 150.6 189.8 2005 193.4 166.5 182.1 1912 195.7 161.6 177.1 179.0 2006 195.7 195 2 193.1 199.4 203.2 232.1 225.1 238.2 194.7 246.235 252.426 2007 203.300 202.916 201.245 206.659 209.586 240.611 234.679 200.632 181.744 186.262 202.212 2008 214 225 214.106 217.955 214 125 215.769 216.264 217.057 246 666 243.271 220.018 200.808 2009 218.249 215.124 249.354 248.812 256.610 210.696 188.113 193.563 212.244 2008 208.837 208.618 207.983 211.070 243.871 239 850 250.106 204.796 185.107 186.475 .lan Feb 209.462 209 166 208 329 211.878 213.026 214.389 244.786 245.995 240.325 250.481 205.795 185 994 187.376 250.966 251.418 Mar 209.692 209.385 208.203 212 537 240.874 209.221 189.693 190 105 Apr May 211.365 211.102 210.851 213 083 214.890 246.004 241.474 213.302 194.121 194 379 212.054 215.809 212 251 211.863 246.069 247.083 241 803 251.576 219.881 231.412 201.212 213.762 200.999 213.967 213.383 213.243 213,171 215.015 242 640 June 215.326 215 299 215.785 248.075 243.367 252 504 239.039 221.742 221 805 July 216 376 219.610 216.422 217.696 218.738 216.419 217.672 217.259 Auġ 217.063 219.148 247.985 244.181 252.957 235.650 217.455 218 656 218.225 219.290 218.184 217.383 244 97F 210.950 Sept 218 629 247 73 253 493 228.450 209.501 Öct 218,705 219 660 247.844 245.855 253 902 221.199 216.285 201.176 218.749 219.086 220.043 218.752 247.463 254.669 199.435 Nov 216.467 246.681 195 599 218.805 Dec 218.839 218.683 220.684 216.073 247.085 247.278 254.875 215.184 194.335 199.487 219.744 219.729 219.675 216.928 248.292 247.974 255.500 2009 Jan 221.319 215.232 194.149 199.791 213.520 210.501 207.175 192.168 188.736 184.903 Feb 219.333 219.205 218.389 217.110 221.968 217.180 217.374 248 878 248 305 255.779 256.321 197.886 218,794 249.597 Mar 248 639 194 752 215.783 215.088 Apr May 218.162 222.905 256.622 218.364 217.126 249.855 248.899 190.686 217 826 217.740 218.076 223 023 216.971 249.779 249.069 256.875 206.358 183.783 189 619 June 218.030 214.824 223.163 223.345 218.071 250.243 249.092 256.981 212.677 190.647 96.754 217.257 250.310 250.248 190.534 217 608 213.815 256.872 257 155 212.961 . Iniv 218 085 248 994 196 767 217.701 217.350 213 722 223.675 217.827 249 029 Aug 195 475

TABLE B-61. Consumer price indexes for selected expenditure classes, 1965-2009

[For all urban consumers; 1982-84=100, except as noted]

Housion

Food and beverages

218.049 ¹ Includes alcoholic beverages, not shown separately

217.218

217.526

217.637

213.227

213.605

212 816

213.359

224.003

224 224

224 633

224 789

217.178

216.612

215 808

215.523

249.501

249.474

248 211

247.863

248.965

248 888

248 886

248.999

256.865

256.890

256.731

256.727

211.518

207.937

208 955

208,760

188 509

184,146

185 165

184,886

194,176

188 963

189.166

188.724

217.617

217.957

2 includes other items not shown separately

3 December 1982=100

Sept

Oct

Nov

Dec

See next page for continuation of table

TABLE B-61. Consumer price indexes for selected expenditure classes, 1965-2009-Continued

Medical care Transportation Private transportation Public Medical Year or month Medical New vehicles Used transcare Total Total care Motor porta comcars Total ² services tion modifies New and fuel Total 2 trucks cars 31.9 32.3 32.5 32.9 49.8 48.9 22.7 23.9 1965 497 29.8 29.0 25.1 25.6 25.2 26.1 25.2 26.3 45.0 45.1 48.8 1966 26.4 26.8 27.6 33.3 33.8 49.3 29.9 27.4 28.2 44.9 26.0 27.9 967 49.3 34.3 35.7 1968 34.8 50.7 50.7 28.7 29.9 45.0 30.9 31.9 30.Ž 1969 36.0 51.5 51.5 30.9 45.4 27.9 28.1 28.4 35.2 37.8 39.3 37.5 39.5 53.1 53.0 55.2 31.2 33.0 46.5 47.3 32.3 34.7 1970 37.5 34.0 39.4 55.3 36.1 1971 39.9 41.2 45.8 50.1 33.1 35.2 36.7 1972 39.7 54.8 54.7 37.3 47.4 35.9 54.8 58.0 63.0 54.8 57.9 62.9 31.2 42.2 45.1 47.5 49.2 53.3 1973 1974 37.5 41.4 41.0 39.7 38.8 46.2 50.6 40.6 474 43.8 1975 47.5 46.6 55.1 55.6 67.0 66.9 50.3 47.0 47.8 52.0 56.5 51.3 1976 59.0 59.7 70.5 70.4 54.7 49.7 50.0 57.0 60.2 56.4 1977 62.5 71.7 75.9 81.9 55.8 60.2 51.8 70.1 51.5 54.9 61.2 67.2 1978 61.7 75.8 61.8 64.4 70.5 81.8 69.0 1979 67.5 75.4 83.7 1980 83.1 84.2 88.5 88.4 62.3 97.4 69.0 74.9 74.8 1981 93.2 93.8 93.9 93.7 76.9 108.5 85.6 82.9 82.8 88.8 98.7 112.5 113.7 97.0 99.3 103.7 92.3 100.2 1982 97.1 97.5 99.9 97.4 102.8 94.9 92.5 92.6 100.7 99.5 105.7 1983 99.3 99.9 99.4 100.6 103.6 102.6 102.8 97.9 106.8 113.5 107.5 1984 106.7 98.7 1985 106.4 106.2 106.1 110.5 113.2 106.1102.3 110.6 77.1 117.0 122.0 121.9 1986 110.6 108.8 122.8 121.1 1987 105.4 104.2 114.4 114.6 113.1 80.2 130.1 131.0 130.0 1988 108.7 107.6 116.5 119.2 116.9 119.2 118.0 80.9 88.5 123.3 129.5 138.6 149.3 139.9 150.8 138.3 120.4 112.9 148.9 1989 114 1 1990 120.5 118.8 121.4 121.0 117.6 101.2 142.6 162.8 163.4 162.7 118.1 148.9 177.0 1991 123.8 121.9 126.0 125.3 99.4 176.8 177.1 129.2 132.7 137.6 123.2 133.9 141.7 1992 126.5 130.4 124.6 128.4 99.0 151.4 190.1 188.1 190.5 98.0 98.5 100.0 127.5 167.0 172.0 201.4 1993 131.5 195.0 202.9 1994 134.3 139.1 136.0211.0 200.7 204.5 213.4 136.3 141.0 156.5 175.9 220.5 1995 139.0 224.2 140.0 143.7 157.0 181.9 228.2 210.4 232.4 1996 143.0 141.4 106.3 106.2 92.2 100.7 1997 144.3 141.0 144.3 141.7 151.1 186.7 234.6 215.3 239.1 141.6 143.4 221.8 230.7 1998 137.9 140.7 150.6 190.3 197.7 242.1 246.8 152.0 140.5 142.9 139.6 250.6 255.1 1999 153.3 149.1 142.8 139.6 155.8 129.3 209.6 260.8 238.1 2000 266.0 142.1 138.9 158.7 124.7 210.6 278.8 2001 154.3 150.0 272.8 247.6 2002 152.9 148.8 140.0 137.3 152.0 116.6 207.4 285.6 256.4 142.9 133.3 209.3 209.1 297.1 310.1 2003 2004 153.6 159.4 134.7 135.8 160.4 262.8 269.3 306.0 321.3 157.6 137.9 163.1 137.1 133.9 2005 173.9 170.2 137.9 135.2 139.4 195.7 217.3 323.2 276.0 336.7 2006 180.9 177.0 137.6 136.4 140.0 135.747 221.0 226.6 336.2 285.9 350.6 184.682 195.549 180.778 136.254 134.194 135.865 239.070 230.002 351.054 289 999 369.302 2007 133.951 279.652 250.549 364.065 384.943 2008 191.039 296.045 135.401 174.762 305.108 179.252 135.623 136.685 126.973 236.348 375.613 397.299 2009 201.978 137.203 137.248 137.225 136.787 186.978 2008 Jan 190.839 136.827 136.363 260.523 234.334 360.459 295.355 380.135 136.279 135.727 135.175 259.242 278.739 294.291 Feb 190.520 195.189 186.571 136.009 235.724 362.155 296.130 382.196 Mar 191 067 135.645 135.329 242 929 363 000 297 308 382 872 244.164 363.184 296.951 198.608 194.574 Anr 383 292 May 201.133 134.669 135.144 322.124 251.600 294.896 205.262 136.325 363.396 384 505 295.194 384.685 June 211.787 207.257 134.516 135.235 135.980 347 418 264.681 363.616 349.731 323.822 315.078 212.806 294 777 . lulv 208 038 134 397 135 800 135 840 270 002 363 963 385 361 295.003 Aug 206.739 133,404 135.405 268.487 364.477 385 990 201.779 135.481 203.861 199.153 132.399 134.994 132.916 261.318 365.036 295.461 386.579 Sept..... Oct 192.709 187.976 132.264 134.837 129.733 268.537 252.323 365.746 295.791 387,440 Nov 173 644 168 527 132 359 135.041 134.930 126 869 187 189 243.385 366.613 297 317 387 992 159.411 132,308 164.628 149,132 237.638 367.133 Dec 125.883 298.361 388.267 166.738 161.788 133.273 135.637 124.863 156.604 234 394 369.830 299.998 391 365 2009 Jan 164.871 134.186 122.837 167.395 231.529 372.405 302.184 394.047 Feb 169.542 135.984 Mar 169.647 165.023 134.611 135.947 121.061 168.404 230.735 373.189 302,908 394.837 Apr May 167.516 171 987 134 863 136.037 121.213 177 272 229 827 374.170 303 979 395.753 228 878 175 997 135 162 136 172 122 650 193 609 375 026 304 697 396 648 June 183.735 179.649 135.719 136.486 124.323 225.021 232.540 375.093 304.683 396.750 304.229 305.797 307.671 July 182.798 178.330 136.055 136.844 125.061 217.860 238.932 375.739 397.868 134.080 134.576 137.268 134.666 Aug 184.386 179.987 128.028 225.089 220.690 238.997 239.855 376.537 398.303 Sept 183 932 179 466 135.041 129 369 399 160 137.851 219.015 378.552 Õct 180.896 132.689 241.060 185 362 308 379 400.015 188.587 138.831 134.173 228.050 244.226 379.575 308.546

[For all urban consumers; 1982-84=100, except as noted]

188.318 Source: Department of Labor (Bureau of Labor Statistics)

184 099

183.76E

138.857

139.821

139.728

137.406

224.730

245.203

379.516

Νον

Dec

308 221

401 392

401 452

TABLE B-62. Consumer price indexes for commodities, services, and special groups, 1965-2009

		Comm	odities			Special	indexes			All items	
Year or month	All items (CPI-U) ¹	All com- modities	Com- modities less food	Services	All items less food	All items less energy	All items less food and energy	All items less medical care	CPI-U-X1 (Dec. 1982 = 97.6) ²	CPI-U-RS (Dec. 1977 = 100) ³	C-CPI-U (Dec. 1999 = 100) ⁴
1965 1966 1967 1968 1969	31.5 32.4 33.4 34.8 36.7	35.2 36.1 36.8 38.1 39.9	37.2 37.7 38.6 40.0 41.7	26.6 27.6 28.8 30.3 32.4	31.6 32.3 33.4 34.9 36.8	32.5 33.5 34.4 35.9 38.0	32.7 33.5 34.7 36.3 38.4	32.0 33.0 33.7 35.1 37.0	34.2 35.2 36.3 37.7 39.4		
1970 1971 1973 1973 1973 1974 1975 1976 1977 1978 1978	38.8 40.5 41.8 44.4 49.3 53.8 56.9 60.6 65.2 72.6	41.7 43.2 44.5 53.5 58.2 60.7 64.2 68.8 76.6	43.4 45.1 47.7 52.8 57.6 60.5 63.8 67.5 75.3	35.0 37.0 38.4 40.1 43.8 48.0 52.0 56.0 60.8 67.5	39.0 40.8 42.0 43.7 48.0 52.5 56.0 59.6 63.9 71.2	40.3 42.0 43.4 50.6 55.1 58.2 61.9 66.7 73.4	40.8 42.7 45.6 49.4 53.9 57.4 61.0 65.5 71.9	392 408 421 448 543 572 608 654 729	41.3 43.1 44.4 47.2 51.9 56.2 59.4 63.2 67.5 74.0	104.4	
1980	82 4 90.9 96 5 99.6 103.9 107.6 109.6 113.6 118.3 124.0	86.0 93.2 97.0 99.8 103.2 105.4 104.4 107.7 111.5 116.7	85.7 93.1 96.9 100.0 103.1 105.2 101.7 104.3 107.7 112.0	77.9 88.1 96.0 99.4 104.6 109.9 115.4 120.2 125.7 131.9	81.5 90.4 96.3 99.7 104.0 108.0 109.8 113.6 118.3 123.7	81.9 90.1 96.1 104.3 108.4 112.6 117.2 122.3 128.1	80.8 89.2 95.8 99.6 104.6 109.1 113.5 118.2 123.4 129.0	82.8 91.4 96.8 99.6 103.7 107.2 108.8 112.6 117.0 122.4	82.3 90.1 95.6 99.6 103.9 107.6 109.6 113.6 118.3 124.0	127.1 139.2 147.6 153.9 160.2 165.7 168.7 174.4 180.8 188.6	
1990 1991 1992 1993 1993 1995 1995 1995 1997 1998 1999	130.7 136.2 140.3 144.5 148.2 152.4 156.9 160.5 163.0 166.6	122.8 126.6 129.1 131.5 133.8 136.4 139.9 141.8 141.9 144.4	117.4 121.3 124.2 126.3 127.9 129.8 132.6 133.4 132.0 134.0	139.2 146.3 152.0 157.9 163.1 168.7 174.1 179.4 184.2 188.8	130.3 136.1 140.8 145.1 149.0 153.1 157.5 161.1 163.4 167.0	134.7 140.9 145.4 150.0 154.1 158.7 163.1 167.1 170.9 174.4	135.5 142.1 147.3 152.2 156.5 161.2 165.6 169.5 173.4 177.0	128 8 133.8 137.5 141.2 144.7 148.6 152.8 156.3 158.6 162.0	130.7 136.2 140.3 144.5 148.2 152.4 156.9 160.5 163.0 166.6	198.0 205.1 210.3 215.5 220.1 225.4 231.4 236.4 239.7 244.7	
2000 2001 2002 2003 2003 2004 2005 2005 2005 2007 2008 2007 2008	172.2 177.1 179.9 184.0 188.9 195.3 201.6 207.342 215.303 214.537	149.2 150.7 149.7 151.2 154.7 160.2 164.0 167.509 174.764 169.698	139.2 138.9 136.0 136.5 138.8 144.5 148.0 149.720 155.310 147.071	195.3 203.4 209.8 216.5 222.8 230.1 238.9 246.848 255.498 255.498 259.154	173.0 177.8 180.5 184.7 189.4 196.0 202.7 208.098 215.528 214.008	178.6 183.5 187.7 190.6 194.4 198.7 203.7 208.925 214.751 218.433	181.3 186.1 190.5 193.2 196.6 200.9 205.9 210.729 215.572 219.235	167.3 171.9 174.3 178.1 182.7 188.7 194.7 200.080 207.777 206.555	172 2 177.1 179.9 184.0 188.9 195.3 201.6 207.342 215.303 214.537	252.9 260.0 264.2 270.1 277.4 286.7 296.1 304.5 316.2 315.0	102.0 104.3 105.6 107.8 110.5 113.7 117.0 119.957 123.880
2008: Jan Feb Apr June July Aug Sept Nov Dec	211.080 211.693 213.528 214.823 216.632 218.815 219.964 219.086 219.086 218.783 216.573 212.425 210.228	171.179 171.530 173.884 175.838 178.341 180.534 181.087 179.148 179.148 179.117 175.257 167.673 163.582	152 531 152 799 155 881 157.870 160.880 163 385 163 364 160 341 159 825 154 250 144 055 138 536	250.648 251.527 252.817 253.426 254.509 256.668 258.638 258.638 258.059 257.559 256.967 256.731	211.512 212.136 214.236 215.462 217.411 219.757 220.758 219.552 218.991 216.250 211.421 208.855	211.846 212.545 213.420 213.851 214.101 214.600 215.335 215.873 216.837 216.695 216.417 215.930	213.138 213.866 214.866 215.059 215.180 215.553 216.0476 216.862 217.023 216.690 216.100	203.569 204.136 205.992 207.317 209.170 211.408 212.576 211.653 211.321 209.021 204.721 202.442	211.080 211.693 213.528 214.823 216.632 218.815 219.964 219.086 218.783 216.573 216.573 212.425 210.228	310.0 310.9 313.6 315.5 318.1 323.0 321.3 323.0 321.7 321.3 318.0 311.9 318.0 311.9 308.7	121.868 122.224 123.177 124.617 125.554 126.088 125.815 125.746 124.757 122.257 120.634
2009: Jan Feb Apr June July Aug Sept Oct Nov Dec	211.143 212.193 212.709 213.240 213.856 215.693 215.351 215.834 215.969 216.177 216.330 215.949	164.360 165.891 166.645 167.816 169.060 171.593 170.483 171.081 171.559 172.252 173.061 172.572	139.258 141.491 142.728 144.464 146.261 149.697 148.386 149.155 149.846 150.663 151.847 151.052	257.780 258.328 258.597 258.466 258.433 259.544 259.992 260.355 260.136 259.844 259.323 259.055	209.777 211.076 211.775 212.464 213.236 215.389 215.069 215.617 215.795 215.986 216.207 215.703	216.586 217.325 218.033 218.388 218.323 218.440 218.421 218.642 219.076 219.624 219.291 219.048	216.719 217.685 218.639 219.143 219.128 219.283 219.283 219.596 220.137 220.731 220.384 220.025	203 281 204 265 204 766 205 275 205 876 207 764 207 788 207 855 207 949 208 131 208 250 207 860	211.143 212.193 212.709 213.856 215.693 215.351 215.834 215.969 216.177 216.330 215.949	310.1 311.6 312.4 313.1 314.0 316.7 316.2 316.9 317.1 317.5 317.7 317.7	121.208 121.901 122.182 122.506 122.838 123.967 123.711 123.955 124.021 124.179 124.231 123.965

[For all urban consumers; 1982-84=100, except as noted]

¹ Consumer price index, all urban consumers. ² CPI-U-X1 reflects a rental equivalence approach to homeowners' costs for the CPI-U for years prior to 1983, the first year for which the official index incorporates such a measure. CPI-U-X1 is rebased to the December 1982 value of the CPI-U [1982–84–100] and is identical with CPI-U data from December 1982 forward. Data prior to 1967 estimated by moving the series at the same rate as the CPI-U for each year.

³ Consumer price index research series (CPI-U-RS) using current methods introduced in June 1999. Data for 2009 are preliminary. All data are subject to

revision annually. ⁴ Chained consumer price index (C-CPI-U) introduced in August 2002. Data for 2008 and 2009 are subject to revision

				in consumer	s, percent c	nangej				
	All it	ems	All iten for	ns less od	All iten ene	ns less rgy	All item food and	is less energy	All item medica	is less I care
Year or month	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
1965 1966 1967 1968 1968	1.9 3.5 3.0 4.7 6.2	1 6 2.9 3.1 4.2 5.5	1.6 3.5 3.3 5.0 5.6	1.6 2.2 3.4 4.5 5.4	19 3.4 3.2 4.9 6.5	1.6 3.1 2.7 4.4 5.8	1.5 3.3 3.8 5.1 6.2	1.2 2.4 3.6 4.6 5.8	1.9 3.4 2.7 4.7 6.1	1.6 3.1 2.1 4.2 5.4
1970	5.6 3.3 3.4 8.7 12.3 6.9 4.9 6.7 9.0 13.3	57 44 32 62 11.0 9.1 5.8 6.5 76 11.3	6.6 3.0 2.9 5.6 12.2 7.3 6.1 6.4 8.3 14.0	6.0 4.6 2.9 4.0 9.8 9.4 6.7 6.4 7.2 11.4	5.4 3.4 3.5 8.2 11.7 6.6 4.8 6.7 9.1 11.1	6.1 42 33 62 98 89 56 64 78	66 31 30 47 111 67 61 65 85 11.3	63 47 30 3.6 83 9.1 65 63 7.4 9.8	5.2 32 34 9.1 12.2 6.7 4.5 6.7 9.1 13.4	5.9 4.1 3.2 6.4 11.2 9.0 5.3 6.3 7.6 11.5
1980	12.5 8.9 3.8 3.9 3.8 1.1 4.4 4.4 4.4 4.6	13.5 10.3 6.2 3.2 4.3 3.6 1.9 3.6 4.1 4.8	13.0 98 4.1 3.9 4.1 5 4.6 4.2 4.5	14.5 10.9 6.5 3.5 4.3 3.8 1.7 3.5 4.1 4.1 4.6	11.7 8.5 4.2 4.5 4.4 4.0 3.8 4.1 4.7 4.6	11.6 10.0 6.7 3.6 4.7 3.9 3.9 4.1 4.4 4.4 4.7	12.2 9.5 4.5 4.8 4.7 4.3 3.8 4.2 4.7 4.4	12.4 10.4 7.4 4.0 5.0 4.3 4.0 4.1 4.4 4.5	12.5 8.8 3.6 3.9 3.5 .7 4.3 4.2 4.5	13.6 10.4 5.9 2.9 4.1 3.4 1.5 3.5 3.9 4.6
1990 1991 1992 1993 1994 1995 1996 1997 1998 1998	6.1 3.1 2.9 2.7 2.5 3.3 1.7 1.6 2.7	5.4 4.2 3.0 2.6 2.8 3.0 2.3 1.6 2.2	6.3 3.3 3.2 2.7 2.6 2.7 3.1 1.8 1.5 2.8	53 45 35 31 27 28 29 23 14 22	5.2 3.9 3.0 2.6 2.9 2.9 2.1 2.4 2.0	5.2 4.6 3.2 2.7 3.0 2.8 2.5 2.3 2.0	5.2 4.4 3.3 2.6 3.0 2.6 2.2 2.4 1.9	50 49 37 33 28 30 27 24 23 21	59 27 26 25 33 16 15 26	52 39 28 27 25 27 25 27 28 23 15 21
2000	3.4 1.6 2.4 1.9 3.3 4.1 2.5 4.1 .1 2.7	3.4 2.8 1.6 2.3 2.7 3.4 3.2 2.8 3.8 .8 .8	3.5 1.3 2.6 1.5 3.4 3.6 2.6 4.0 -8 3.3	3.6 2.8 1.5 2.3 2.5 3.4 2.7 3.6 - 7	2.6 2.8 1.5 2.2 2.2 2.5 2.8 2.4 1.4	2.4 2.7 2.3 1.5 2.0 2.2 2.5 2.6 2.8 1.7	2.6 2.7 1.9 1.1 2.2 2.2 2.6 2.4 1.8 1.8	2.4 2.6 2.4 1.4 1.8 2.2 2.5 2.3 2.3 2.3 2.3 1.7	3.3 1.4 2.2 1.8 3.2 3.3 2.5 4.0 1 2.7	33 27 14 22 26 33 32 32 38 38 - f

TABLE B-63. Changes in special consumer price indexes, 1965-2009

[For all urban consumers; percent change]

		Percent change from preceding month											
		Unad- justed	Seasonally adjusted	Unad- justed	Seasonally adjusted	Unad- justed	Seasonally adjusted	Unad- justed	Seasonally adjusted	Unad- justed	Seasonally adjusted		
2008:	Jan	0.5 .3 .6 .8 1.0 .5 .5 4 1 .10	0.4 2 4 2 5 5 .9 7 0 0 0 0 17	0.4 .3 1.0 .6 .9 1.1 .5 .5 .5 .3 -1.3 22	0.3 .1 .4 0 5 1.0 .7 -1 .0 -1.0 .20	0.5 .3 .4 .2 .1 .2 .3 .2 .2 .2 .1	03 1 2 2 2 3 4 2 2 1	0.4 33 51 1 2 2 2 2 2 2 2 2 2 2 2 2	0.3 1 2 3 3 2 1 0	0.5 .3 .9 .6 .9 1.1 .6 4 2 1.1 2	0.3 .2 .2 .5 1.0 .8 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0		
2009:	Nov	1.9 1.0 .4 .2 .2 .2 .3 .9 .9 .9 .9 .2 .2 .1 .1 .1 .1	-1.7 -8 3 4 -1 0 1 7 7 4 2 3 4 4 2 3	-2.2 -1.2 .4 .6 .3 .3 .3 .4 10 -1 .3 .1 .1	-2.0 -9 35 -1 0 29 0 55 -2 35 -1	1 2 .3 .3 .3 .2 .0 .1 .1 .1 .2 .3 .2 .3 .2 .1	0 2 1 1 2 1 2 0 1 1 2 0 1 1 2 0	2 3 .4 .4 .2 .0 .1 .1 .2 .3 .2 .2 .2	0 2 2 2 3 1 1 2 1 1 2 2 0 1	-2.1 -1.1 	-1.6 9 .4 .0 .0 .1 .5 .2 .3 .4 .5 .2 .3 .1		

¹ Changes from December to December are based on unadjusted indexes.

		[For all urban consumers:) All items Commodities								ers: percent change]					
		All items Commodities						Serv	rices		Medica	l care ²	Ene	rgy ³	
	Voor			To	tal	Fo	bd	To	tal	Medic	al care				
	rear	to Dec. 1	to year	Dec. to Dec. 1	Year to year	Dec. to Dec. 1	Year to year	Dec. to Dec. 1	Year to year	Dec. to Dec.1	Year to year	Uec to Dec.1	Year to year	Dec. to Dec. ¹	Year to year
1933 .		0.8	-5.1			6.9	-2.8								
1939.		0	-1.4	-0.7	-2.0	-2.5	-2.5	0.0	0.0	1.2	1.2	1.0	0.0		
1940.		9.9	5.0	13.3	6.7	15.7	9.2	.8 2.4	.8	1.2	.0	1.0	1.0		
1942 . 1943 .		9.0	6.1	4.2	14.5 9.3	17.9	17.6	2.3 2.3	2.3	3.5 5.6	3.5 4.5	3.8 4.6	2.9 4.7		
1944 . 1945 .		2.3	1.7	2.0	1.0 3.0	.0 3.5	-1.2 2.4	2.2	2.2	3.2 3.1	4.3 3.1	2.6	3.6 2.6		
1946		18.1	8.3	24.8	10.6	31.3	14.5	3.6	1.4	9.0 6.4	5.1	83	5.0		
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.		5.9	1.3	-4.1	-2.7	-3.9 9.8	-4.2 1.6	3.6	5.1 3.0	4.0	3.3 2.4	34	2.8		
1951 1952		60	7.9	5.9	9.0 1.3	7.1	11.0	5.2	5.3	53	4.7	5.8	5.3		
1953		7	.8	-3	3	-1.1	-1.4	4.2	4.3	3.4	3.5	3.5	3.6		
1955		4	- 4	-3	9	-7	-1.4	2.0	2.0	3.2	2.6	33	2.2		
1950.		2.9	3.3	2.8	3.2	2.9	3.2	3.4 4.2	4.3	3.8 4.8	3.8 4.3	47	3.8 4.2		
1958		18	2.8	1.2	21 0	2.4 -1.0	4.5 -1.7	2.7	37	4.6 4.9	5.3	45	46	47	00
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
1962		13	10	9	.9	1.3	.7	1.6	2.0	2.9	3.5	22	26	2.2	.4
1964		10	1.3	.9	1.2	1.3	1.3	1.6	2.0	2.8	2.9	2.5	2.6	- 9	4
1965 . 1966 .		1.9	1.6 2.9	14 2.5	11 2.6	3.5 4.0	2.2 5 0	2.7 4.8	2.3	3.6 8.3	3.2 5.3	2.8	24	1.8 1.7	1.8 1.7
1967 . 1968 .		3.0	31 4.2	2.5 4.0	1.9 3.5	1.2 4.4	.9 3.5	4.3 5.8	4.3 5.2	8.0 7.1	8.8 7.3	6.3 6.2	72	1.7	2.1
1969 . 1070		62	55	5.4	4.7	7.0	5.1	7.7	6.9	7.3	8.2	6.2	67	2.9	25
1971 .		3.3	4.4	2.8	4.5 3.6	4.3	3.1	4.1	6.0 5.7	5.4	7.4	4.6	6.2	4.8	2.8
1972 .		3.4 8.7	5.2 6.2	10.4	3.0 7.4	20.3	4.2 14.5	3.4 6.2	3.8 4.4	3.7 6.0	3.5 4.5	3 3 5.3	3.3	2.6	2.6 8.1
1974 . 1975 .		12.3	11.0 9.1	12.8	11.9 8.8	12.0	14.3	11.4 8.2	9.2 9.6	13.2	10.4 12.6	12.6 9.8	9.3 12.0	21.6 11.4	29.6 10.5
1976 . 1977 .		4.9 6.7	5.8 6.5	3.3 6.1	4.3 5.8	.5 8.1	3.0 6.3	7.2 8.0	8.3 7.7	10.8 9.0	10.1 9.9	10.0 8.9	9.5 9.6	7.1	7.1 9.5
1978. 1979		9.0 13.3	7.6 11.3	8.8 13.0	7.2	11.8 10.2	9.9 11 0	9.3 13.6	8.6 11 0	9.3 10.5	8.5	8.8 10.1	8.4	7.9	6.3 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 3.8	6.2	6.U 3.6	8.4 4.1	4.3	7.8 4.1	4.3	13.1 9.0	12.6	10.7	12.5	107	11.9	13.6
1983 . 1984		3.8 3.9	3.2 4.3	2.9 2.7	2.9 3.4	2.7	2.1 3.8	4.8 5.4	3.5 5.2	6.2 5.8	8.7 6.0	6.4 61	8.8 6.2	5 2	.7
1985 1986		3.8 1.1	3.6 1.9	2.5	21	2.6 3.8	2.3 3.2	5.1 4.5	5.1 5.0	6.8 7.9	6.1 7.7	68 77	6.3	1.8	.7
1987 1988		44	36	4.6	32	3.5	41	4.3	4.2	5.6	6.6	5.8	6.6	82	.5
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 1991		6.1 3.1	5.4 4.2	6.6 1.2	5.2 3 1	5.3 1.9	5.8 2.9	5.7 4.6	5.5 5.1	9.9 8.0	9.3 8.9	9.6 7.9	9.0 8.7	18.1 -7.4	8.3 _4
1992 . 1993 .		2.9 2.7	3.0 3.0	2.0 1.5	2.0	1.5 2.9	1.2	3.6 3.8	3.9 3.9	7.0	76 65	6.6 5.4	74 59	2.0	5 12
1994 . 1995 -		2.7	2.6	2.3	1.7	2.9	2.4	2.9	3.3	5.4	5.2	49	4.8	22	.4
1996		3.3	30	32	2.6	4.3	3.3	3.3	3.2	3.2	3.7	30	3.5	8.6	4.7
1998		1.6	2.3	.4	.1	2.3	2.2	2.6	3.0	3.2	3.2	3.4	3.2	-3.4	-7.7
1999 2000		2./	2.2	27	1.8	1.9 2.8	2.1	Z.6 3.9	2.5	3.6	3.4	3.7 4.2	3.5 4 1	13 4 14 2	3.6 16.0
2001		1.6	2.8	-1.4	1.0	2.8	3.2	3.7	41	4.8	4.8	4.7	4.6	-13.0	3.8
2003		1.9	23	5	1.0	3.6	2.2	2.8	3.2	4.2	4.5	3.7	4.0	6.9	12.2
2004		3.3 3.4	3.4	2.7	2.3 3.6	2.3	2.4	3.1	3.3	4.9	5.U 4.8	4.2	4.4	17.1	10.9
2006 2007		2.5 4.1	3.2 2.8	1.3 5.2	2.4	4.9	2.4	3.4 3.3	3.8 3.3	4.1 59	4.1 5 3	3.6 5.2	4.0 4.4	2.9 17.4	11.2 5.5
2008 2009		.1 2.7	3.8 4	4.1 5.5	4.3 -2.9	5.9 5	5.5 1.8	3.0 .9	3.5 1.4	3.0 3.4	4.2 3.2	2.6 3.4	3.7 3.2	-21.3 18.2	13.9 -18.4

TABLE B-64. Changes in consumer price indexes for commodities and services, 1933-2009

 1 Changes from December to December are based on unadjusted indexes. 2 Commodities and services.

³ Household energy—gas (piped), electricity, fuel oil, etc.—and motor fuel. Motor oil, coolant, etc. also included through 1982.

						Finishe	d goods				
Vea	r or month	Tatal	C	onsumer food	s		Finished good	s excluding co	onsumer foods		Total
Tea		finished	Total	Crudo	Processed	Total	C	onsumer good	ls	Capital	finished consumer
		yuuus	lutai	trude	Processed	lotai	Total	Durable	Nondurable	equipment	goods
1965 - 1966 1967		34.1 35.2 35.6	36.8 39.2 38.5	39.0 41.5 39.6	36.8 39.2 38.8	35.0	33.6 34.1 34.7	43.2 43.4 44.1	28.8 29.3 30.0	33.8 34.6 35.8	34.2 35.4 35.6
1968 1969		36.6 38.0	40.0 42.4	42.5 45.9	40.0 42.3	35.9 36.9	35.5 36.3	45.1 45.9	30.6 31.5	37.0 38.3	36.5 37.9
1970. 1971 1972		39.3 40.5	43.8 44.5	46.0 45.8 48.0	43.9 44.7	38.2	37.4 38.7 29.4	47.2 48.9	32.5 33.5 24.1	40.1	39.1
1973 1974 -		45.6 52.6	56.5 64.4	63.6 71.6	55.8 63.9	42.0 48.8	41.2 48.2	50.9 55.5	36.1 44.0	44.2 50.5	46.0
1975. 1976. 1977		58.2 60.8	69.8 69.6 72.2	71.7 76.7 79 5	70.3 69.0	54.7 58.1	53.2 56.5	61.0 63.7	48.9 52.4	58.2 62.1	58.2
1978 1979		69.8 77.6	79.9	85.8 92.3	79.4 86.8	66.7 74.6	64.9 73.5	73.6 80.8	60.0 69.3	71.3	69.4 69.4
1980 1981		88.0 96.1	92.4 97.8	93.9 104.4	92.3 97.2	86.7 95.6	87.1 96.1	91.0 96.4	85.1 95.8	85.8 94.6	88.6 96.6
1982 . 1983 . 1984 .		100.0 101.6 103.7	100.0 101.0 105.4	100.0 102.4 111.4	100.0 100.9 104.9	100.0 101.8 103.2	100.0 101.2 102.2	100.0 102.8 104.5	100.0 100.5 101.1	100.0 102.8 105.2	100.0
1985 1986		104.7 103.2	104.6 107.3	102.9 105.6	104.8 107.4	104.6 101.9	103.3 98.5	106.5 108.9	101.7 93.3	107.5 109.7	103.8 101.4
1987. 1988 1989		105.4 108.0 113.6	109.5 112.6 118.7	107.1 109.8 119.6	109.6 112.7 118.6	104.0 106.5 111.8	100.7 103.1 108.9	111.5 113.8 117.6	94.9 97.3 103.8	111.7 114.3 118.8	103.6 106.2 112.1
1990 . 1991 .		119.2 121.7	124.4 124.1	123.0 119.3	124.4 124.4	117.4 120.9	115.3 118.7	120.4 123.9	111.5 115.0	122.9 126.7	118.2 120.5
1992 1993		123.2 124.7	123.3 125.7	107.6 114.4	124.4 126.5	123.1	120.8 121.7	125.7 128.0	117.3 117.6	129.1 131.4	121.7 123.0
1994 . 1995 . 1996		127.9	129.0 133.6	118.8 129.2	129.8	127.5	124.0 127.6	132.7 134.2	118.8 123.3	136.7 138.3	123.3 125.6 129.5
1997 . 1998 1999		131.8 130.7 123.0	134.5 134.3 135.1	126.6 127.2 125.5	135.1 134.8 125.9	130.9 129.5	128.2 126.4 120 5	133.7 132.9	124.3 122.2	138.2 137.6	130.2 128.9
2000 2001		138.0 140.7	137.2 141.3	123.5	138.3 142.4	138.1 140.4	138.4 141.4	133.9 134.0	138.7 142.8	138.8 139.7	138.2
2002		138.9 143.3	140.1 145.9	128.5 130.0	141.0 147.2	138.3 142.4	138.8 144.7	133.0 133.1	139.8 148.4	139.1 139.5	139.4 145.3
2004 2005 2006		148.5 155.7 160.4	152.7 155.7 156.7	138.2 140.2 151.3	153.9 156.9 157.1	147.2 155.5 161.0	150.9 161.9 169.2	135.0 136.6 136.9	156.6 172.0 182.6	141.4 144.6 146.9	151.7 160.4 166.0
2007 . 2008 .		166.6 177.1	167.0 178.3	170.2 175.5	166.7 178.6	166.2 176.6	175.6 189.1	138.3 141.2	191.7 210.5	149.5 153.8	173.5 186.3
2009 P 2008:	Jan	172.6	175.5 174.5	157.8 199.3	177.3	1/1.2	179.6	144.3 140.1	194.3 200.3	156.8 151.4	179.2
	Mar Apr	175.1 176.5	176.0 175.5	194.3 177.6	173.0 174.2 175.3	174.6 176.4	182.7 187.1 189.6	139.9 140.5	201.4 208.2 211.7	151.8 151.8 152.4	180.4 184.2 185.8
	May June	179.8 182.4	177.6 180.0	172.1 183.0	178.2 179.7	180.1 182.8	195.0 199.0	140.3 139.7	220.0 226.4	152.7 152.7	190.3 193.8
	Aug Sept	182.2	181.3 181.5	159.8 168.9	183.5 182.8	182.2	197.5 197.2	140.2 140.3	233.1 223.9 223.4	153.3 153.9 154.3	197.2 193.2 193.0
	Oct Nov Dec	177.4 172.0 168.8	180.7 179.8 177.7	170.0 175.2 161.7	181.8 180.3 179.4	176.3 169.6 166.1	187.0 177.0 171.5	144.8 144.2 144.4	205.4 190.6 182.1	157.0 156.9 157.2	185.5 178.2 173.7
2009:	Jan Feb	170.4 169.9	177.7 175.0	169.7 155.6	178.4 177.0	168.0 168.0	174.4 174.5	144.3 144.3	186.5 186.6	157.4 157.2	175.8
	Mar Apr May	169.1 170.3	173.8 175.9	155.0 165.4	175.8	167.2 168.3	173.5 175.2	144.1 144.4	185.2 187.7	156.9 156.8	174.2
	June July	174.3 172.4	176.1 173.5	134.0 156.2 141.8	178.2 177.0	173.1 171.3	177.5 182.7 180.2	144.2 144.7 143.3	191.2 198.7 195.7	156.3 156.6 155.9	177.3 181.7 179.2
	Aug Sept 1	174.2 173.4	173.9 173.9	145.5 145.0	177.0 177.0	173.4	183.3 181.9	143.8 143.1	200.1 198.4	156.4 156.1	181.6 180.6
	Nov ¹ Dec ¹	174.1 176.2 176.2	175.9 176.8 179.7	165.4 173.4 186.6	176.9 177.0 178.7	172.9 175.2 174.6	182.0 185.3 184.6	145.0 145.6 144.9	202.2 201.4	157.2 157.6 157.2	181 2 183.9 184.1

TABLE B-65. Producer price indexes by stage of processing, 1965-2009

[1982=100]

¹ Data have been revised through August 2009; data are subject to revision four months after date of original publication.

		Inte	rmediate r	ediate materials, supplies, and componer				onents		ude materi	als for furth	er processi	ing
Year or month				Materia compo	als and inents	Proc- essed				Food		Other	
rear of month	Total	feeds ²	Other	For manu- factur- ing	For con- struc- tion	fuels and lubri- cants	Con- tainers	Supplies	Total	and feed- stuffs	Totai	Fuel	Other
1965 1966 1967 1968 1969	31.2 32.0 32.2 33.0 34.1	41.8 41.5 42.9	30.7 31.3 31.7 32.5 33.6	33.6 34.3 34.5 35.3 36.5	32.8 33.6 34.0 35.7 37.7	16.5 16.8 16.9 16.5 16.6	33.5 34.5 35.0 35.9 37.2	35.0 36.5 36.8 37.1 37.8	31_1 33_1 31_3 31_8 31_8 33_9	39 2 42.7 40 3 40.9 44 1	21.1 21.6 22.5	10.6 10.9 11.3 11.5 12.0	27.7 28.3 26.5 27.1 28.4
1970 1971 1972 1973 1974 1975 1976 1976 1977 1978 1978	35.4 36.8 38.2 42.4 52.5 58.0 60.9 64.9 69.5 78.4	45.6 46.7 49.5 70.3 83.6 81.6 77.4 79.6 84.8 94.5	34.8 36.2 37 7 40.6 50 5 56.6 60.0 64 1 68.6 77 4	38.0 38.9 40.4 41.1 56.0 61.7 61.7 64.0 67.4 72.0 80.9	38.3 40.8 43.0 46.5 55.0 60.1 69.3 76.5 84.2	17.7 195 20.1 22.2 33.6 39.4 42.3 47.7 49.9 61.6	39.0 40.8 42.7 45.2 53.3 60.0 63.1 65.9 71.0 79.4	39.7 40.8 42.5 51.7 56.8 61.8 65.8 69.3 72.9 80.2	35.2 36.0 39.9 54.5 61.4 61.6 63.4 65.5 73.4 85.9	45.2 46.1 51.5 72.6 76.4 77.4 76.8 77.5 87.3 100.0	23.8 24.7 27.0 34.3 44.1 43.7 48.2 51.7 57.5 69.6	13.8 15.7 16.8 18.6 24.8 30.6 34.5 42.0 48.2 57.3	29.1 29.4 32.3 42.9 54.5 50 0 54.9 56.3 61.9 75 5
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989	90.3 98.6 100.0 100.6 103.1 102.7 99.1 101.5 107.1 112.0	105.5 104.6 100.0 103.6 105.7 97.3 96.2 99.2 109.5 113.8	89.4 98.2 100.0 100 5 103 0 99.3 101 7 106 9 111 9	91.7 98.7 100.0 101.2 104.1 103.3 102.2 105.3 113.2 118.1	91.3 97.9 100.0 102.8 105.6 107.3 108.1 109.8 116.1 121.3	85.0 100.6 100.0 95.4 95.7 92.8 72.7 73.3 71.2 76.4	89.1 96.7 100.0 100.4 105.9 109.0 110.3 114.5 120.1 125.4	89.9 96.9 100.0 101.8 104.1 104.4 105.6 107.7 113.7 113.7	95.3 103.0 100.0 101.3 103.5 95.8 87.7 93.7 96.0 103.1	104.6 103.9 100.0 101.8 104.7 94.8 93.2 96.2 106.1 111.2	84.6 101.8 100 0 100 7 102 2 96 9 81 6 87 9 85 5 93 4	69.4 84.8 100 0 105.1 105.1 102 7 92.2 84.1 82.1 85.3	91.8 109.8 100.0 98.8 101.0 94.3 76.0 88.5 85.9 95.8
1990 1991 1992 1993 1994 1995 1996 1997 1998 1998	114.5 114.4 114.7 116.2 118.5 124.9 125.7 125.6 123.0 123.2	113.3 111.1 110.7 112.7 114.8 114.8 128.1 125.4 116.2 111.1	114.5 114.6 114.9 116.4 118.7 125.5 125.6 125.7 123.4 123.9	118.7 118.1 117.9 118.9 122.1 130.4 128.6 128.3 126.1 124.6	122.9 124.5 126.5 132.0 136.6 142.1 143.6 146.5 146.8 148.9	85.9 85.3 84.5 83.1 84.2 90.0 89.3 81.1 84.6	127 7 128 1 127.7 126 4 129.7 148.8 141.1 136.0 140.8 142.5	119.4 121.4 122.7 125.0 127.0 132.1 135.9 135.9 134.8 134.2	108.9 101.2 100.4 102.4 101.8 102.7 113.8 111.1 96.8 98.2	113 1 105 5 105 1 108 4 106 5 105 8 121 5 112 2 103 9 98 7	101.5 94.5 94.7 94.8 96.8 104.5 106.4 88.4 94.3	84.8 82.9 84.0 87.1 82.4 72.1 92.6 101.3 86.7 91.2	107 3 97 5 94.2 94.1 97.0 105.8 105 7 103.5 84.5 91 1
2000 2001 2002 2003 2004 2005 2006 2007 2008 2008 2009 p	129.2 129.7 127.8 133.7 142.6 154.0 164.0 170.7 188.3 172.6	111.7 115.9 115.5 125.9 137.1 133.8 135.2 154.4 181.6 165.9	130.1 130.5 128.5 134.2 143.0 155.1 165.4 171.5 188.7 173.1	128.1 127.4 126.1 129.7 137.9 146.0 155.9 162.4 177.2 162.8	150.7 150.6 151.3 153.6 166.4 176.6 188.4 192.5 205.4 205.4 202.9	102.0 104.5 96.3 112.6 124.3 150.0 162.8 173.9 206.2 162.3	151.6 153.1 152.1 153.7 159.3 167.1 175.0 180.3 191.8 195.8	136.9 138.7 138.9 141.5 146.7 151.9 157.0 161.7 173.8 172.2	120.6 121.0 108.1 155.3 159.0 182.2 184.8 207.1 251.8 175.0	100.2 106.1 99.5 113.5 127.0 122.7 119.3 146.7 163.4 134.4	130.4 126.8 111.4 148.2 179.2 223.4 230.6 246.3 313.9 197.1	136.9 151.4 117.3 185.7 211.4 279.7 241.5 236.8 298.3 165.6	118 0 101.5 101.0 116.9 149.2 176.7 210.0 238.7 308.5 211.0
2008 Jan Feb	177.8 179.1 184.5 187.3 192.8 197.2 203.1 199.4 198.6 189.0 179.2 171.6	170 6 175.0 180.3 180.5 184.5 186.6 195.5 194.3 190.0 179.9 174.7 167.9	178.2 179.4 184.7 193.3 197.8 203.6 199.7 199.1 189.5 179.4 171.8	168 4 170 1 173 1 175 5 179 1 182 4 187 4 188 7 186 7 186 7 180 3 171 1 163 7	194 4 195 7 197 3 200 2 203 3 206 5 209 8 212 9 214.0 214.0 212 2 210 2 210 2 210 2 207 9	188.6 189.0 206.1 211.8 227.3 238.4 250.1 225.2 224.5 193.9 168.7 151.2	185.1 185.7 185.9 187.6 187.6 189.2 191.9 195.0 198.4 199.1 199.0 198.1	166.8 168.1 170.0 171.3 173.1 174.6 178.3 178.9 179.0 177.0 175.3 173.4	235 5 245 5 262 1 274 6 293 1 301 2 313 3 274 6 254 2 254 2 212 0 183 3 172 6	162 6 165 4 169 2 168 1 173 2 178 1 178 9 170 6 167 6 147 9 144 2 135 5	283 8 299 9 327 7 352 4 382 4 393 0 414.9 350.0 314.2 253 9 203 2 191 6	253 9 283 5 306.9 329.1 369.2 378 5 410.3 309.5 273.1 235.7 205.7 205.7 223.8	288.0 295.6 324.6 349.6 372.4 383.3 398.5 357.2 323.5 252.8 192.4 164.2
2009 Jan Feb Apr June July Aug Sept 1 Oct 1 Nov 1 Der 1	171.4 169.7 168.0 168.6 170.2 172.7 172.3 174.8 175.3 174.8 176.3 176.3	165.8 164.6 163.5 164.5 167.3 169.3 166.5 166.1 165.7 165.7 165.5 167.8	171 8 170.1 168 4 168.9 170.4 172.9 172.7 175.5 176.1 175.6 177.2 177.3	162.7 161.0 159.5 158.9 160.1 160.9 161.6 163.8 165.6 165.1 166.4 167.4	207 0 204 8 204 2 203 2 202 8 202 0 201 9 201 5 201 8 201 9 201 9 201 9 201 9 201 4 201 2	153 4 150 7 146 5 151 4 156 5 167 0 164 1 172 2 170 0 169 3 173 8 172 1	200.8 199.5 198.4 197.6 196.1 195.4 193.5 193.5 193.8 193.1 193.0	172.9 172.3 171.9 172.0 172.3 172.8 172.2 171.9 172.1 171.7 171.8 172.5	170 2 160 7 160 1 163 9 171 5 179 8 178 4 178 4 174 1 182 2 193 8	136 1 133 3 131 0 136 5 140 5 141 0 133 2 130 2 127 3 131 6 133 7 138 6	186.5 171 5 172 6 174 6 184.7 199.8 194.5 207 5 202.3 213.2 229.6 228.3	217.1 178.9 158.3 152.8 147.7 150.6 159.8 156.0 138.7 154.6 182.8 190.5	160 3 160 9 176 2 182 9 202 6 225 1 210 2 234 1 237 6 244 6 252 2 244 7

TABLE B-65. Producer price indexes by stage of processing, 1965-2009—Continued [1982=100]

² Intermediate materials for food manufacturing and feeds.

TABLE B-66. Producer price indexes by stage of processing, special groups, 1974-2009

						(1982=	100]							
			Finis goi	shed ods			interm	ediate ma and corr	terials, su ponents	pplies,	Cru	de materi proce	als for furt assing	ther
				Excludin	g foods ar	d energy								
Year or month	Total	Foods	Energy	Total	Capital equip- ment	Con- sumer goods exclud- ing foods and energy	Total	Foods and feeds ¹	Energy	Other	Total	Food- stuffs and feed- stuffs	Energy	C
74 75 76 77 78 79	52.6 58.2 60.8 64.7 69.8 77.6	64.4 69.8 69.6 73.3 79.9 87.3	26.2 30 7 34.3 39.7 42.3 57.1	53.6 59.7 63.1 66.9 71.9 78.3	50.5 58.2 62.1 66.1 71.3 77.5	55.5 60.6 63.7 67.3 72.2 78.8	52.5 58.0 60.9 64.9 69.5 78.4	83.6 81.6 77.4 79.6 84.8 94.5	33.1 38.7 41.5 46.8 49.1 61.1	54.0 60.2 63.8 67.6 72.5 80.7	61.4 61.6 63.4 65.5 73.4 85.9	76.4 77.4 76.8 77.5 87.3 100.0	27.8 33.3 35.3 40.4 45.2 54.9	
80 81 82 83 84 85 86 87 88 88 89 89 89 89 89 89 89 80 80 80 80 80 80 80 80 80 80	88.0 96.1 100.0 101.6 103.7 104.7 103.2 105.4 108.0 113.6	92.4 97.8 100.0 101.0 105.4 104.6 107.3 109.5 112.6 118.7	85.2 101.5 100.0 95.2 91.2 87.6 63.0 61.8 59.8 65.7	87.1 94.6 100.0 103.0 105.5 108.1 110.6 113.3 117.0 122.1	85.8 94.6 100.0 102.8 105.2 107.5 109.7 111.7 114.3 118.8	87.8 94.6 100.0 103.1 105.7 108.4 111.1 114.2 118.5 124.0	90.3 98.6 100.0 100.6 103.1 102.7 99.1 101.5 107.1 112.0	105.5 104.6 100.0 103.6 105.7 97.3 96.2 99.2 109.5 113.8	84.9 100.5 100.0 95.3 92.6 72.6 73.0 70.9 76.1	90.3 97.7 100.0 101.6 104.7 105.2 104.9 107.8 115.2 120.2	95.3 103.0 100.0 101.3 103.5 95.8 87.7 93.7 96.0 103.1	104.6 103.9 100.0 101.8 104.7 94.8 93.2 96.2 106.1 111.2	73.1 97.7 100.0 98.7 98.0 93.3 71.8 75.0 67.7 75.9	
90	119.2 121.7 123.2 124.7 125.5 127.9 131.3 131.8 130.7 133.0	124.4 124.1 123.3 125.7 126.8 129.0 133.6 134.5 134.3 135.1	75.0 78.1 77.8 78.0 77.0 78.1 83.2 83.4 75.1 78.8	126.6 131.1 134.2 135.8 137.1 140.0 142.0 142.4 143.7 146.1	122.9 126.7 129.1 131.4 134.1 136.7 138.3 138.2 137.6 137.6	128.8 133.7 137.3 138.5 139.0 141.9 144.3 145.1 147.7 151.7	114.5 114.4 114.7 116.2 118.5 124.9 125.7 125.6 123.0 123.2	113.3 111.1 110.7 112.7 114.8 114.8 128.1 125.4 116.2 111.1	85.5 85.1 84.3 84.6 83.0 84.1 89.8 89.0 80.8 80.8 84.3	120.9 121.4 122.0 123.8 127.1 135.2 134.0 134.2 133.5 133.1	108.9 101.2 100.4 102.4 101.8 102.7 113.8 111.1 96.8 98.2	113.1 105.5 105.1 108.4 106.5 105.8 121.5 112.2 103.9 98.7	85.9 80.4 78.8 76.7 72.1 69.4 85.0 87.3 68.6 78.5	
00 01 02 03 04 05 05 07 07 08 09 <i>p</i>	138.0 140.7 138.9 143.3 148.5 155.7 160.4 166.6 177.1 172.6	137.2 141.3 140.1 145.9 152.7 155.7 156.7 167.0 178.3 175.5	94.1 96.7 88.8 102.0 113.0 132.6 145.9 156.3 178.7 147.2	148.0 150.0 150.2 150.5 152.7 156.4 158.7 161.7 167.2 171.5	138.8 139.7 139.1 139.5 141.4 144.6 146.9 149.5 153.8 156.8	154.0 156.9 157.6 157.9 160.3 164.3 166.7 170.0 176.4 181.6	129.2 129.7 127.8 133.7 142.6 154.0 164.0 170.7 188.3 172.6	111.7 115.9 115.5 125.9 137.1 133.8 135.2 154.4 181.6 165.9	101.7 104.1 95.9 111.9 123.2 149.2 162.8 174.6 208.1 162.8	136.6 136.4 135.8 138.5 146.5 154.6 163.8 168.4 180.9 173.4	120.6 121.0 108.1 135.3 159.0 182.2 184.8 207.1 251.8 175.0	100.2 106.1 99.5 113.5 127.0 122.7 119.3 146.7 163.4 134.4	122.1 122.3 102.0 147.2 174.6 234.0 226.9 232.8 309.4 176.3	
08: Jan Feb Apr May June July Aug Sept Oct Nov Dec	172.0 172.3 175.1 176.5 179.8 182.4 185.1 182.2 182.2 182.2 182.2 177.4 177.0 168.8	174.5 173.6 176.0 175.5 177.6 180.0 181.0 181.3 181.5 180.7 179.8 177.7	166.6 167.2 177.5 182.4 194.8 204.6 214.0 198.6 197.0 167.8 167.8 144.1 130.6	164.4 165.0 165.1 165.7 166.1 166.0 166.7 167.4 167.9 170.8 170.6 170.8	151.4 151.8 152.4 152.7 152.7 153.3 153.9 154.3 157.0 156.9 157.2	173.2 174.0 174.1 174.8 175.2 175.2 175.9 176.6 177.2 180.2 180.0 180.1	177.8 179.1 184.5 187.3 192.8 197.2 203.1 199.4 198.6 189.0 179.2 171.6	170.6 175.0 180.3 180.5 186.6 195.5 194.3 190.0 179.9 174.7 167.9	190.5 191.5 208.6 213.4 228.7 240.3 253.5 231.3 227.5 197.4 167.3 147.7	172.5 173.7 175.8 178.3 181.2 183.8 187.5 188.7 188.8 184.8 184.8 180.2 175.9	235.5 245.5 262.1 274.6 293.1 301.2 313.3 274.6 254.2 212.0 183.3 172.6	162.6 165.4 169.2 168.1 173.2 178.1 178.9 170.6 167.6 147.9 144.2 135.5	273.6 291.7 325.4 346.1 386.1 400.4 426.5 339.1 303.7 244.4 194.9 181.1	

1 Intermediate materials for food manufacturing and feeds.

170.4

169.9

1691

170.3

171.1

174.3 172.4 174.2

173.4

174.1

176.2

176.2

177.7

175.0 173.8

175.9

174.0

176.1 173.5 173.9

173.9

175.9

1768

1797

136.4

136.3 133.2

137.2

142.9

154.4 149.6

156.1

153.5

152.0

158.4

156.8

1974

1975

1976

1977

1978 1979 1980

1981

1982

1983

1984 1985

1986

1987 1988

1989

1990 1991 1992

1993

1994 1995

1997 1998

1999

2003

2004

2005

2008

2009 P

1996

2000

2001 2002

2006 2007

2008: Jan

Nov Dec

Feb

Mar Apr

May

June

July Aug

Sept 2

Öct 2

Nov²

Dec 2

2009 Jan

² Data have been revised through August 2009, data are subject to revision four months after date of original publication

171.3 171.3 171.4

171.4

171.1

1714

170.8

170.9

172.0

172.6

172.4

180.7

181.0 181.4

181.5

181.3

181.7

181 1

181.5

181.1

182.3

183.1

183.0

171.4

169.7

168.0

168.6

170.2

172.7 172.3 174.8

175.3

174.8

176.3

176.7

165.8

164.6

164.5

167.3

169.3 166.5 166.1

165.7

164.8

165.5

167.8

157.4

157.2

156.8

156.3

156.6 155.9 156.4

156 1

157.2

1576

157.2

152.2 149.3 144.1

149.5 157.2

167.8 165.3 174.5

172.0

171.1

176.4

174.5

174.6

173.4 172.6 171.8

171.6

171.9 172.3 173.3

174.7

174.5

174.9

175.7

170.2 160.7 160.1

163.9

171.5

179.8 172.9 178.4

174.1

182.2

192.0

193.8

136.1

133.3 131.0

136.5

140.5

140.5 141.0 133.2 130.2 127.3

131.6

133.7

138.6

Source: Department of Labor (Bureau of Labor Statistics).

181.1

173.0

152.1 153.3

155.0

164.2 181.2 173.0 184.1

174.3

188.5

211.4

205.2

Other

83.3

69.3 80.2

79.8

87.8 106.2

113.1

1117

100.0

105.3

104.9

103.1

115.7

133.0

137.9

136.3 128.2 128.4

140.2 156.2 173.6

155.8

156.5 142.1

135.2

145.2 130.7

135.7

152.5 193.0

202.4

282.6

324.4

248.6

307.3

319.7

332.1

366.7 372.4 373.8

386.1

374.2

337.5 276.7

224.8

221.3

225.2

224.9

222.9

224.4

234.9

242.6 247.1 263.6

271.1

272.3

270.4

284.2

Table B-67.	Producer price indexes fo	r major commodity groups,	1965-2009
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[1982=100]

	Farm	products and proc foods and feeds	essed			Industrial commodities		
Year or month	Total	Farm products	Processed foods and feeds	Totai	Textile products and apparel	Hides, skins, leather, and related products	Fuels and related products and power	Chemicals and allied products ¹
1965 1966 1967 1968 1968	39.0 41.6 40.2 41.1 43.4	40.7 43.7 41.3 42.3 45.0	38.0 40.2 39.8 40.6 42.7	30.9 31.5 32.0 32.8 33.9	48.8 48.9 48.9 50.7 51.8	35.9 39.4 38.1 39.3 41.5	13.8 14.1 14.4 14.3 14.6	33.9 34.0 34.2 34.1 34.2
1970	44.9 45.8 49.2 63.9 71.3 74.0 73.6 75.9 83.0 92.3	45.8 46.6 51.6 72.7 77.4 77.0 78.8 79.4 87.7 99.6	44.6 45.5 48.0 58.9 68.0 72.6 70.8 74.0 80.6 88.5	35.2 36.5 37.8 40.3 49.2 54.9 58.4 62.5 67.0 75.7	52.4 53.3 55.5 60.5 68.0 67.4 72.4 75.3 78.1 82.5	42.0 43.4 50.0 54.5 55.2 56.5 63.9 68.3 76.1 96.1	15.3 16.6 17.1 19.4 30.1 35.4 38.3 43.6 46.5 58.9	35.0 35.6 37.6 50.2 62.0 64.0 65.9 68.0 76.0
1960	98.3 101.1 100.0 102.0 105.5 100.7 101.2 103.7 110.0 115.4	102.9 105.2 100.0 102.4 105.5 95.1 92.9 95.5 104.9 104.9	95.9 98.9 100.0 101.8 105.4 103.5 105.4 107.9 112.7 117.8	88.0 97.4 100.0 101.1 103.3 103.7 100.0 102.6 106.3 111.6	89.7 97.6 100.0 100.3 102.7 102.9 103.2 105.1 109.2 112.3	94.7 99.3 100.0 103.2 109.0 108.9 113.0 120.4 131.4 136.3	82.8 100.2 100.0 95.9 94.8 91.4 69.8 70.2 66.7 72.9	89.0 98.4 100.0 100.3 102.9 103.7 102.6 106.4 116.3 123.0
1990 1991 1992 1993 1994 1995 1996 1996 1997 1998	118.6 116.4 115.9 118.4 119.1 120.5 129.7 127.0 127.0 122.7 120.3	112.2 105.7 103.6 107.1 106.3 107.4 122.4 112.9 104.6 98.4	121.9 121.9 122.1 124.0 125.5 127.0 133.3 134.0 131.6 131.1	115.8 116.5 117.4 119.0 120.7 125.5 127.3 127.7 124.8 126.5	115.0 116.3 117.8 118.0 118.3 120.8 122.4 122.6 122.9 121.1	141.7 138.9 140.4 143.7 148.5 153.7 150.5 154.2 148.0 146.0	82 3 81.2 80.4 80.0 77.8 78.0 85.8 86.1 75.3 80.5	123.6 125.6 125.9 128.2 132.1 142.5 142.1 143.6 143.9 144.2
2000 2001 2002 2003 2004 2005 2006 2006 2006 2007 2008 2008 2008	122.0 126.2 123.9 132.8 142.0 141.3 141.2 157.8 173.8 161.4	99.5 103.8 99.0 111.5 123.3 118.5 117.0 143.4 161.3 161.3	133.1 137.3 136.2 143.4 151.2 153.1 153.8 165.1 180.5 176.2	134.8 135.7 132.4 139.1 147.6 160.2 168.8 175.1 192.3 174.9	121.4 121.3 119.9 119.8 121.0 122.8 124.5 125.8 128.9 128.9 128.9	151.5 158.4 157.6 162.3 164.5 165.4 168.4 173.6 173.1 156.7	103.5 105.3 93.2 112.9 126.9 156.4 166.7 177.6 214.6 158.9	151.0 151.8 151.9 161.8 174.4 192.0 205.8 214.8 245.5 279.7
2008: Jan	169.8 171.1 174.5 174.0 177.1 180.4 182.6 179.4 178.0 169.3 166.9 169.3	164.2 164.4 169.6 166.7 169.7 176.2 174.3 164.7 163.5 145.3 143.1 143.1	172.7 174.6 176.9 177.8 180.8 182.4 187.0 187.3 185.9 182.5 180.0 187.3	182 8 184 6 190 2 193 8 200 0 204 0 209 5 202 4 200 1 189 3 178 4 177 3	126.9 127.1 127.2 127.6 128.2 128.2 128.1 130.1 130.1 130.7 130.7 130.7	172.2 172.5 172.5 172.9 172.9 174.8 175.0 174.9 175.2 175.1 169.6 169.0	195.9 199.5 217.1 224.7 243.2 254.8 268.7 237.9 230.2 194.5 162.6 162.6	229.2 231.3 235.6 240.4 246.5 252.7 262.8 263.3 264.2 252.5 239.3 275.6
2009: Jan. Feb. Mar May. June July Aug. Sept ² Nov ² Dec ²	102.2 162.4 160.4 158.9 161.8 165.2 160.3 159.6 158.1 160.5 161.6 164.8	133.9 136.4 132.8 130.6 136.8 137.8 142.1 131.6 130.1 125.3 133.0 135.6 141.1	177.7 176.8 175.5 177.4 175.5 177.4 177.9 176.2 175.9 175.7 175.6 175.9 175.7 175.6 175.9 175.7	1723 1726 1708 1695 1703 1720 1755 1746 177.7 1775 1779 1805 180.4	130.2 130.2 129.9 129.4 129.7 129.1 129.6 129.1 129.4 129.5 129.4 129.5 129.5 129.6	108 9 157 0 157 0 157 9 153 6 153 8 151 9 153 1 155 2 159 0 160 1 159 2 162 2	149.7 148.5 143.6 140.2 144.8 152.2 165.0 160.7 169.6 165.8 166.9 175.8 173.3	227.b 226.b 226.5 225.8 225.2 225.8 227.8 230.0 231.1 234.1 231.9 234.5 237.1

¹ Prices for some items in this grouping are lagged and refer to one month earlier than the index month ² Data have been revised through August 2009, data are subject to revision four months after date of original publication.

See next page for continuation of table.

TABLE B-67. Producer price indexes for major commodity groups, 1965-2009—Continued

[1982=100]

					Ind	ustrial commo	dities—Contir	iued			
Variation	ooth	Rubber	Lumber	Pulp,	Metals		Furniture	Non-	Transpo equip	ortation ment	
real or n	nomun	and plastic products	and wood products	paper, and ailied products	and metal products	and equipment	and household durables	metallic mineral products	Total	Motor vehicles and equip- ment	Miscel- laneous products
1965 1966 1967 1968 1968		39.7 40.5 41.4 42.8 43.6	33.7 35.2 35.1 39.8 44.0	33.3 34.2 34.6 35.0 36.0	32.0 32.8 33.2 34.0 36.0	33.7 34.7 35.9 37.0 38.2	46.8 47.4 48.3 49.7 50.7	30.4 30.7 31.2 32.4 33.6	40.4	39.2 39.2 39.8 40.9 41.7	34.7 35.3 36.2 37.0 38.1
1970 1971 1972 1973 1974 1975 1976 1977 1978 1979		44.9 45.2 45.3 46.6 56.4 62.2 66.0 69.4 72.4 80.5	39.9 44.7 50.7 62.2 64.5 62.1 72.2 83.0 96.9 105.5	37 5 38.1 39.3 42 3 52 5 59.0 62 1 64 6 67 7 75 9	38.7 39.4 40.9 44.0 57.0 61.5 65.0 69.3 75.3 86.0	40.0 41.4 42.3 43.7 50.0 57.9 61.3 65.2 70.3 76.7	51 9 53 1 53 8 55 7 61 8 67 5 70 3 73 2 77 5 82 8	35.3 38.2 39.4 40.7 47.8 54.4 58.2 62.6 69.6 77.6	41.9 44.2 45.5 46.1 50.3 56.7 60.5 64.6 69.5 75.3	43 3 45.7 47.0 47.4 51.4 57.6 61.2 65.2 70.0 75.8	39.8 40.8 41.5 43.3 48.1 53.4 55.6 59.4 66.7 75.5
1980 1981 1982 1983 1984 1985 1986 1987 1988 1988		90.1 96.4 100.0 102.3 101.9 101.9 103.0 109.3 112.6	101 5 102.8 100.0 107.9 108.0 106.6 107.2 112.8 118.9 125.7	86.3 94.8 100.0 103.3 110.3 113.3 116.1 121.8 130.4 137.8	95.0 99.6 100.0 101.8 104.8 104.4 103.2 107.1 118.7 124.1	86.0 94.4 100.0 102.7 105.1 107.2 108.8 110.4 113.2 117.4	90.7 95.9 100.0 103.4 105.7 107.1 108.2 109.9 113.1 116.9	88.4 96.7 100.0 101.6 105.4 108.6 110.0 110.0 111.2 112.6	82.9 94.3 100.0 102.8 105.2 107.9 110.5 112.5 112.5 114.3 117.7	83 1 94.6 100.0 102.2 104.1 106.4 109.1 111.7 113.1 116.2	93.6 96.1 100.0 104.8 107.0 109.4 111.6 114.9 120.2 126.5
1990 1991 1992 1993 1994 1995 1995 1996 1997 1998 1999		113.6 115.1 115.1 116.0 117.6 124.3 123.8 123.2 122.6 122.5	129.7 132.1 146.6 174.0 180.0 178.1 176.1 183.8 179.1 183.6	141.2 142.9 145.2 147.3 152.5 172.2 168.7 167.9 171.7 174.1	122.9 120.2 119.2 124.8 134.5 131.0 131.8 127.8 124.6	120.7 123.0 123.4 124.0 125.1 126.5 126.5 125.9 124.9 124.3	119 2 121.2 122.2 123.7 126.1 128 2 130.4 130.8 131.3 131.7	114.7 117.2 117.3 120.0 124.2 129.0 131.0 133.2 135.4 138.9	121.5 126.4 130.4 133.7 137.2 139.7 141.7 141.6 141.2 141.8	118 2 122.1 124.9 128.0 131.4 133.0 134.1 132.7 131.4 131.7	134.2 140.8 145.3 145.4 141.9 145.4 147.7 150.9 156.0 166.6
2000 2001 2002 2003 2004 2005 2006 2006 2007 2008 2008 2009 <i>p</i>		125.5 127.2 126.8 130.1 133.8 143.8 153.8 155.0 165.9 165.1	178.2 174.4 173.3 177.4 195.6 196.5 194.4 192.4 191.3 183.0	183.7 184 8 185.9 190.0 195.7 202.6 209.8 216.9 226.8 225.5	128.1 125.4 125.9 129.2 149.6 160.8 181.6 193.5 213.0 186.9	124.0 123.7 122.9 121.9 122.1 123.7 126.2 127.3 129.7 131.3	132 6 133 2 133 5 133 9 135 1 139 4 142 6 144 7 148 9 153 1	142 5 144 3 146 2 148 2 153 2 164 2 179 9 186 2 197 1 202 4	143.8 145.2 144.6 145.7 148.6 151.0 152.6 155.0 158.6 162.2	132.3 131.5 129.9 129.6 131.0 131.5 131.0 132.2 134.1 137.0	170.8 181.3 182.4 179.6 183.2 195.1 205.6 210.3 216.6 217.4
2008: Jan Feb Mar Apr June July Aug Sept Oct. Nov Dec		1592 159.9 160.6 161.3 162.8 164.0 167.4 169.7 171.6 172.5 172.1 169.8	189.3 189.1 190.5 193.8 194.6 193.5 193.5 193.7 193.7 191.1 188.9 188.0	222 3 223 4 224 0 224 9 225 7 225 7 227 0 229 6 231 1 230 9 228 8 228 0	197.5 201.8 208.0 217.6 223.4 226.9 231.8 230.9 223.7 209.1 195.9 189.7	127.8 128.3 128.5 128.7 129.6 130.4 130.5 130.7 130.7 130.9 131.1 131.0	145.7 146.1 146.4 147.2 147.3 148.0 149.3 150.3 151.0 151.8 152.1	188.5 188.8 189.5 191.0 192.1 194.4 198.8 202.7 204.4 205.0 205.3 204.6	157.5 157.5 156.8 157.6 157.5 156.7 156.7 157.6 157.8 162.8 162.8	133.7 133.7 132.9 133.6 133.3 132.1 131.8 132.4 132.4 132.4 132.4 132.4 132.4 137.5 137.6	212.7 213.3 214.8 214.9 216.4 217.1 218.3 218.4 218.3 218.8 218.8 218.1 218.0
2009: Jan Feb Mar Apr June July Aug Sept Oct ² Nov Dec	2	167 5 165.3 164 9 164 5 163 9 163.7 163.9 164.5 165.7 165.9 165.6 165.6	185.3 183.5 181.7 181.2 180.9 180.8 182.8 183.0 184.1 183.6 184.4 184.9	228.0 227.0 226.7 225.8 224.8 224.5 224.0 224.4 225.5 224.7 225.0 225.1	187 0 183.9 181.7 179.9 180 5 181.7 183 5 189.1 192 8 193.3 193.3 196.0	131.4 131.3 131.5 131.3 131.3 131.1 131.2 131.2 131.4 131.2 131.4	152.9 153.3 153.4 153.3 153.1 153.1 153.1 152.6 152.9 153.3 153.2 153.2	205.8 203.8 203.9 203.7 203.4 202.5 202.1 201.2 200.8 200.6 200.0 200.6	162.8 162.7 162.2 162.3 161.8 161.8 160.9 161.6 161.0 163.0 163.4 162.8	137 2 137 0 136 6 136 9 136 8 137 5 135 7 136 4 135 7 138 1 138 1 138 5 137 6	218.0 219.0 220.0 217.9 216.6 216.4 216.2 215.9 216.7 216.9 216.7 216.9 217.5 217.5

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	To finis goo	tal shed ods	Finis consi foc	ihed umer ids		Finished g	oods exclu	iding const	umer foods	5	Fini ena go	shed ergy ods	Finisher exclu foods an	d goods Iding d energy
Year or month	Dec.	Year	Dec.	Year	То	tal	Cons goi	umer ods	Cap equip	oital oment	Dec.	Year	Dec.	Year
	Dec. 1	year	Dec. 1	year	Dec. to Dec. 1	Year to year	Dec. to Dec. ¹	Year to year	Dec. to Dec. 1	Year to year	Dec.1	year	Dec. 1	year
1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1982 1984 1985 1986 1991 1992 1993 1994 1995 1996 1997 1998 1990 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 P	$\begin{array}{c} 4.9\\ 2.1\\ 3.3\\ 3.3\\ 3.6\\ 6.6\\ 3.8\\ 9.3\\ 9.3\\ 12.8\\ 13.6\\ 6.6\\ 1.7\\ 1.8\\ 2.2\\ 4.9\\ 5.7\\ 1.6\\ 2.2\\ 2.9\\ 4.9\\ 5.7\\ 1.6\\ 2.2\\ 2.9\\ 3.6\\ -1.6\\ 2.2\\ 1.7\\ 2.3\\ 2.2\\ 3.6\\ -1.6\\ 1.6\\ 1.6\\ 1.6\\ 1.6\\ 1.6\\ 1.6\\ 1.6\\ $	3.8 3.4 3.1 3.2 9.1 15.4 10.6 4.5 6.4 4.5 6.4 4.5 6.4 4.7 9.1 1.2 1.3 4.9 2.1 1.2 5.2 4.9 2.1 2.1 1.2 5.2 4.9 2.1 2.1 1.2 5.2 4.9 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1	$\begin{array}{c} 81\\ -23\\ 5.8\\ 7.9\\ 227\\ 12.8\\ 5.6\\ -25\\ 6.9\\ 7.4\\ 7.5\\ 2.0\\ 3.5\\ 6\\ 2.8\\ -2\\ 2.6\\ -1.5\\ 2.6\\ 2.4\\ 1.9\\ 3.4\\ -8\\ 8\\ 1.7\\ 1.8\\ -7.7\\ 3.1\\ 1.7\\ 7.6\\ 3.2\\ 1.1\end{array}$		$\begin{array}{c} 3.3\\ 4.3\\ 2.0\\ 2.3\\ 6.6\\ 2.1.1\\ 7.2\\ 6.2\\ 6.8\\ 8.3\\ 14.8\\ 13.4\\ 8.7\\ 4.2\\ -4.0\\ 11\\ 2.2\\ 4.8\\ 6.9\\ 2.3\\ 2.4\\ 8.7\\ 1.9\\ 2.3\\ 2.4\\ 1.9\\ 2.3\\ 2.6\\ 1.2\\ -1.1\\ 3.0\\ 2.4\\ 1.9\\ 2.3\\ 2.6\\ 1.0\\ 1.0\\ 1.0\\ 1.0\\ 1.0\\ 1.0\\ 1.0\\ 1.0$	$\begin{array}{c} 2 \ 8 \\ 3.5 \\ 3.7 \\ 2 \ 0 \\ 4 \\ 0 \\ 4 \\ 0 \\ 12.1 \\ 1.2 \\ 12.1 \\ 1.2 \\ 12.1 \\ 1.2 \\ 12.1 \\ 1.2 \\ 10.3 \\ 1.4 \\ 1.4 \\ 1.4 \\ -2.6 \\ 1.4 \\ 5 \\ 0 \\ 5 \\ 0 \\ 3 \\ 0 \\ 1.8 \\ 1.1 \\ .6 \\ 1.9 \\ 2 \\ 4 \\ 4 \\ 1.7 \\ -1.1 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 4.4 \\ 1.7 \\ -3 \\ 3 \\ 3 \\ 5 \\ 5$	$\begin{array}{c} 2 \ 8 \\ 3 \ 8 \\ 2 \ 1 \\ 7 \ 5 \\ 2 \ 0 \ 3 \\ 6 \\ 8 \\ 6 \\ 7 \\ 7 \\ 6 \\ 8 \\ 5 \\ 1 \\ 6 \\ 6 \\ 6 \\ 6 \\ 7 \\ 1 \\ 6 \\ 6 \\ 6 \\ 1 \\ 4 \\ 1 \\ 3 \\ 1 \\ 5 \\ 3 \\ 8 \\ 7 \\ 1 \\ 6 \\ 6 \\ 6 \\ 1 \\ 4 \\ 1 \\ 3 \\ 1 \\ 5 \\ 3 \\ 8 \\ 7 \\ 1 \\ 6 \\ 6 \\ 6 \\ 1 \\ 4 \\ 1 \\ 3 \\ 1 \\ 5 \\ 3 \\ 1 \\ 5 \\ 5 \\ 5 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8$	$\begin{array}{c} 2.3\\ 3.0\\ 3.5\\ 1.8\\ 4.6\\ 17.0\\ 10.4\\ 6.2\\ 7.3\\ 7.1\\ 13.3\\ 18.5\\ 10.3\\ 7.1\\ 13.3\\ 18.5\\ 10.3\\ 7.1\\ 13.3\\ 18.5\\ 10.3\\ 7.1\\ 13.3\\ 4.1\\ 1.2\\ 2.2\\ 2.4\\ 5.6\\ 5.9\\ 2.9\\ 2.9\\ 2.9\\ 2.9\\ 2.9\\ 2.9\\ 2.9\\ 2$	$\begin{array}{c} 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 2 \\ 4 \\ 2 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1$	$\begin{array}{c} 3 \ 5 \\ 4 \ 7 \\ 4 \ 0 \\ 2 \ 6 \\ 3 \ 3 \\ 14 \ 3 \\ 14 \ 3 \\ 14 \ 3 \\ 16 \ 7 \\ 6 \ 7 \\ 7 \\ 9 \\ 3 \ 5 \\ 2 \ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2$	$\begin{array}{c} 16.3\\ 11.6\\ 11.6\\ 12.79\\ -2.\\ -38.1\\1\\2\\42\\38.1\\ 11.2\\42\\38.1\\ 11.2\\42\\38\\2\\38\\42\\38\\2\\38\\2\\38\\20\\2\\2\\20\\2\\20\\$	$\begin{array}{c} 17.2\\ 117\\ 157\\ 65\\ 35.0\\ 492\\ 191\\ -15\\ -39\\ -32\\ 191\\ -15\\ -39\\ -32\\ -39\\ -281\\ -13\\ 3\\ -13\\ 3\\ -13\\ 3\\ -13\\ 3\\ -13\\ 108\\ -82\\ -82\\ -82\\ -10.0\\ 9\\ 42\\ -8\\ -82\\ -10.0\\ 9\\ -82\\ -82\\ -10.0\\ -1$	$\begin{array}{c} 17.7\\ 6\ 0\\ 5.7\\ 6\ 2\\ 8.4\\ 9.4\\ 9.4\\ 9.4\\ 9.4\\ 9.4\\ 9.4\\ 9.4\\ 9$	1114 114 157 60 75 89 1126 89 1126 85 7 7 0 2 4 4 2 5 2 3 2 4 4 4 4 3 3 3 2 4 4 4 4 4 3 3 2 4 4 4 4
						Percent o	hange fror	n precedin	g month		r			
	Unad- justed	Season- ally ad- justed	Unad- justed	Season- ally ad- justed	Unad- justed	Season- ally ad- justed	Unad- justed	Season- ally ad- justed	Unad- justed	Season- ally ad- justed	Unad- justed	Season- ally ad- justed	Unad- justed	Season- ally ad- justed
2008 Jan Feb Mar Apr July Aug Sept Oct Nov Dec Z009 Jan Feb Mar June July Aug Sept 2 Oct Nov 2 Dec 2	0.9 0.2 1.6 8 1.9 1.4 1.5 -1.6 -2.6 -3.0 5 .5 .5 .5 .5 .5 .5 .5 .5 .5	0.9 .4 9 2 1.5 1.3 -5 -27 -27 -18 9 .4 -27 -18 -27 -19 .4 2 19 .4 2 -27 -12 1.9 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3	$\begin{array}{c} 1.3\\5\\ 1.4\\3\\ 1.2\\ 1.4\\ 6\\12\\14\\5\\12\\15\\1$	$\begin{array}{c} 1.5 \\5 \\ 1.2 \\$	0.8 .4 1.7 1.7 1.5 1.7 -2.0 -3.2 -3.8 -2.1 1.1 5 .7 .8 2.0 -10 1.2 .2 1.2 .2 1.3 3 .3 .3 .3 .3	0.7 8 7 .2 1.7 .1 .1 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3	1.0 .4 2.4 1.3 2.8 2.1 2.2 -52 -52 -53 -51 1.7 1.0 1.3 2.9 -52 -53 -51 1.7 1.0 1.3 2.9 -1.4 1.7 1.7 -1.4 1.7 -1.4 1.7 -1.4 1.3 2.9 -1.4 1.3 2.9 -1.4 1.3 2.9 -1.4 -52 -52 -52 -53 -1.1 -1.1 -1.1 -1.1 -1.1 -1.1 -1.1 -1.	08 99 10 123 18 199 -12 -30 166 4 -14 -14 -14 30 -25 -14 30 -8 30 -25 -14 30 -25 -14 30 -25 -14 30 -25 -14 30 -25 -14 -15 -14 -15 -14 -15 -14 -15 -14 -15 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14	0.5 3 0 4 4 3 1.7 -1 -2 -1 -2 -1 -2 -1 -2 -1 -2 -1 -2 -1 -2 -3 -3 -3	0.5 4 5 3 3 5 4 4 6 0 4 1 1 -1 1 -2 4 -1 7 -4 1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -	1.7 .4 62 28 68 50 50 50 50 50 50 50 50 -72 -8 -14 1 -14 1 -9.4 44 -14 1 -23 30 42 42 80 -31 1 -77 -77 -72 -72 -72 -74 80 -148 -148 -72 -72 -74 -148 -148 -148 -148 -148 -148 -148 -14	$ \begin{array}{c} 1 & 3 \\ 1 & 4 \\ - & 4 \\ 5 & 2 \\ 5 & 3 \\ - & 3 \\ 3 & 8 \\ - & -34 \\ - & -128 \\ - & -128 \\ - & -128 \\ - & -128 \\ - & -11 \\ - & 9 \\ - & 4 \\ - & 7 \\ - & -38 \\ 8 \\ - & -38 \\ 8 \\ - & -3$	$\begin{array}{c} 0.6 \\ 4 \\ 1 \\ 4 \\ 2 \\ -1 \\ 4 \\ 4 \\ 3 \\ 1.7 \\ -1 \\ 1 \\ .1 \\ .3 \\ 0 \\ 1 \\ 0 \\2 \\ 2 \\4 \\2 \\2 \\5 \\ 6 \\ 3 \\ -1 \end{array}$	0 5 5 3 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5

TABLE B-68. Changes in producer price indexes for finished goods, 1969-2009 [Percent change]

¹ Changes from December to December are based on unadjusted indexes. ² Data have been revised through August 2009; data are subject to revision four months after date of original publication.

-1 -2 -3 -1 -6 5

Source: Department of Labor (Bureau of Labor Statistics)

Money Stock, Credit, and Finance TABLE B-69. Money stock and debt measures, 1970-2009

[Averages of daily figures, except debt end-of-period basis; billions of dollars, seasonally adjusted]

	M1	M2	Deht 1	P	ercent chanr	
Year and month	Sum of currency, demand deposits, travelers checks,	M1 plus retail MMMF balances, savings deposits	Debt of domestic	From ye 6 months	ear or earlier ³	From previous period ⁴
	and other checkable deposits (OCDs)	(including MMDAs), and small time deposits ²	nonfinancial sectors	M1	M2	Debt
December						
1970	214.4	626.5	1,420.2			
1971	228.3	710.3	1.555.2	6.5	13.4	9.5
1972	249.2	8U2.3	1,/11.2	9.2	13.0	100
1973	202.9	800.0 902.1	1,895.5	0.0 ≰3	0.0 5.4	9.2
1975	287 1	1 016 2	2 261 8	47	12.6	93
1976	306.2	1,152.0	2,505.3	6.7	13.4	10.8
1977	330.9	1,270.3	2,826.6	8.1	10.3	12.8
1978	357.3	1,366.0	3,211.2	8.0	7.5	13.8
1979	301.0	1,4/3./	3,003.0	0.9	7.9	12.2
1980	408.5	1,599.8	3,953.5	7.0	8.6	9.5
1092	430.7	1,/00.0	4,301.7	0.9	9.7	10.4
1983	521.4	2 125 7	5 359 2	98	11.3	12.0
1984	551.6	2,308.8	6,146.2	5.8	8.6	14.8
1985	619.8	2,494.6	7,123.1	12.4	8.0	15.6
1986	724.7	2,731.4	7,966.3	16.9	9.5	11.9
1000	/ 50.2	2,830.8	0,0/0.1	3.0	3.0	9.0
1989	792.9	3,158.4	10,152,1	.8	5.5	72
1990	824.7	3 276 8	10,834.9	4.0	37	65
1991	897.0	3.377.0	11.301.4	8.8	3.1	4.3
1992	1,024.9	3,430.2	11,816.5	14.3	1.6	4.5
1993	1,129.6	3,480.7	12,391.4	10.2	1.5	4.7
1994	1,150.6	3,496.5	12,973.6	1.9	.5	4.6
1995	1,127.51	3,040.3	13,007.5	-Z.U	4.1	5.2
1997	1.072.8	4.033.0	15,210.8	-8	5.6	56
1998	1,095.8	4,376.3	16,216.4	2.1	8.5	6.6
1999	1,122.7	4,634.6	17,291.6	2.5	5.9	6.4
2000	1,087 7	4,917.9	18,167.3	-3.1	6.1	5.0
2001	1,182.2	5,434.1	19,302.3	8.7	10.5	0.3
2002	1 306 9	6 073 7	22 420 4	5.2	5.0	81
2004	1,377.1	6,415.2	24,426.9	5.4	5.6	8.9
2005	1,375.3	6,679.2	26,756.1	1	4.1	9.5
2007	1,357.9	7,079.5	29,151.3	5 C	6.0	9.0
2007	1,573.6	8 241 6	31,054.0	15 9	9.8	0.7 5 Q
2009	1,693,3	8,524.3	00,004.0	6.2	3.4	0.0
2008: Jan	1 381 1	7 542 3		18	63	
Feb	1,387.0	7,631.7		2.2	7.1	
Mar	1,389.7	7,691.6	32,131.5	2.5	7.6	5.5
Apr	1,392.1	/,/16.3	1	1.9	7.3	
June	1 398 1	7,751.0	32 395 8	2.3	6.4	33
July	1,415.1	7,802.7	02,000.0	4.9	6.9	
Aug	1,400.0	7,790.6		1.9	4.2	
Sept	1,459.5	7,898.2	33,062.1	10.0	5.4	8.2
Nov	1,972.7	8,014.7		18.2	8.4	
Dec	1,594.7	8,241.6	33,564.9	28.1	12.7	6.1
2009: Jan	1 573 8	8 302 6		22.4	12.8	
Feb	1,562.1	8,340.7		23.2	14.1	
Mar	1,564.3	8,392.7	33,932.0	14.4	12.5	4.3
Apr	1,592.7	8,343.7		16.3	8.2	
ividy	1,093.0	8,410.1 8,442.7	34 310 5	9.9 5.9	8./	4.5
July	1.649.9	8,436.5	57,510.5	9.7	3.2	4.5
Aug	1,648.3	8,413.2		11.0	1.7	
Sept	1,660.8	8,452.3	34,551.9	12.3	1.4	2.8
UCT	1,6/3.8	8,481.3		10.2	3.3	
Dec	1,693.3	8,524.3		6.4	19	

¹ Consists of outstanding credit market debt of the U.S. Government, State and local governments, and private nonfinancial sectors. ² Money market mutual fund (MMMF). Money market deposit account (MMDA). ³ Annual changes are from December to December, monthly changes are from six months earlier at a simple annual rate. ⁴ Annual changes are from fourth quarter to fourth quarter. Quarterly changes are from previous quarter at annual rate.

Note: The Federal Reserve no longer publishes the MS monetary aggregate and most of its components. Institutional money market mutual funds is published as a memorandum item in the H.6 release, and the component on large-denomination time deposits is published in other Federal Reserve Board

releases. For details, see H.6 release of March 23, 2006.

TABLE B-70. Components of money stock measures, 1970-2009

[Averages of daily figures; billions of dollars, seasonally adjusted]

		Nochani		Other	checkable deposits	(OCDs)
Year and month	Currency	travelers checks	Demand deposits	Total	At commercial banks	At thrift institutions
December:						
1970 1971 1972 1973 1973 1974 1975 1976 1976	48.6 52.0 56.2 60.8 67.0 72.8 79.8 79.4	0.9 1.0 1.2 1.4 1.7 2.1 2.6 2.6	164.7 175.1 191.6 200.3 205.1 211.3 221.5 236.4	0.1 2 2 3 4 9 2.7 42	00 0 0 2 4 13	0.1 .2 .3 .4 .5 1.4 2 3
1978 1979	96.0 104.8	33 35	249.5 256.6	8.5 16.8	5.3 12.7	3.1 4.2
1980 1981 1982 1983 1984 1985 1986 1987 1989 1990 1991 1992 1993 1994 1995 1996 1991 1992 1993 1994 1995 1994 1995 1996 1997 1997 1998	$\begin{array}{c} 13.3\\ 115.3\\ 122.5\\ 132.5\\ 132.5\\ 146.2\\ 156.1\\ 167.7\\ 180.4\\ 196.7\\ 212.0\\ 222.3\\ 246.5\\ 267.1\\ 222.1\\ 324.6\\ 354.5\\ 372.8\\ 337.8\\ 337.8\\ 339.7\\ 425.4\\ 450.5\\ \end{array}$	39 41 41 47 50 56 61 69 77 77 82 80 86 90 88 84 84 84 5	203 2 261 2 231 4 234 1 238 5 243 4 266 9 207 9 20	28 1 78 7 104 1 132 1 147 1 235 2 259 2 280 6 285 1 233 7 332 5 384 6 414 6 404 0 356 6 275 9 245 2 250 0	208 630 805 973 1047 1247 1610 1782 1925 1974 2087 2416 2008 2026 20274 2490 1721 1483 31433	7 3 156 236 234 8 424 549 742 810 881 877 850 909 1038 1120 1066 1038 969 960 9061
1999 2000 2001 2002 2003 2004 2004 2005 2005 2005 2007 2008 2009 2009	517 9 531 2 581 1 626 3 662 5 697 7 724 1 749 6 7598 815 3 815 3	86 83 80 7.8 7.5 7.2 6.3 55 5.1	352 9 309 9 335.7 326.4 343 5 326 4 343 5 325 0 305 3 301 9 459 7 441.7	243 3 238 4 257 4 279 6 310 3 328 3 319 1 306 3 307 8 314 3 348 5	1397 1332 1420 1543 1752 1870 1809 1777 1744 1802 2339	103 7 105 2 115 4 125 3 135 0 141 3 138 2 128 6 133 5 134 1 150 6
2008 Jan Feb Feb Mar Apr Apr June June July Aug Sept Oct Nov Dec Dec	757.2 757.0 759.1 758.8 762.7 768.4 776.7 781.1 796.6 806.3 815.3	6.2 6.2 6.1 5.9 5.8 5.7 5.5	306.7 310 8 311.8 314.4 309.1 311.7 320 8 359.6 359.6 359.6 359.2 399.7	311 0 313 0 312 6 312 8 313 4 312 0 313 5 306 0 313 0 310 2 306 6 314 3	175.6 177.2 177.5 175.2 176.3 175.8 175.8 175.8 175.1 175.7 175.2 171.5 180.2	135 4 135 9 135 1 135 5 138 2 135 7 137 7 137 7 137 9 137 3 135 0 135 1 135 1 135 1
2009 Jan Feb Mar Apr June July Aug Sept Oct Nov Dec Dec	827.2 8368 842 9 847 8 849 2 852 3 854 2 857.7 861 4 862 6 861 7 862 1	5.5 5.4 5.3 5.3 5.1 5.1 5.1 5.1 5.1	428 4 397 3 390 5 406 2 401 9 434 0 435 7 426 9 430 4 432 2 434 5 431 7	312.7 322.4 325.6 333.3 336.7 349.5 358.6 363.9 373.9 373.9 384.3 384.5	177.0 182.2 184.5 191.6 210.4 215.2 219.1 222.2 226.2 236.3 233.9	135 7 140,3 141,0 141 6 141 5 139 1 139 8 139 5 141 7 147 6 148 0 150 6

See next page for continuation of table.

	S	- avings deposits	1	Small-der	omination time	deposits ²		
Year and month	Total	At commercial banks	At thrift institutions	Total	At commercial banks	At thrift institutions	Retail money funds	Institutional money funds 3
December								
1970	261 0	98.6	162.3	151.2	79.3	71 9	0.0	0.0
1971	292 2	112.8	179.4	189.7	94.7	95.1		0.
1972	321 4	124.8	196.6	231.6	108.2	123 5		0
1973	326 8	128.0	198.7	265.8	116.8	149.0	1	0
1974	338 6	136.8	201.8	287.9	123.1	164.8	1 4	2
1975	388 9	161.2	227.6	337.9	142.3	195.5	2.4	.5
1976	453.2	201.8	251.4	390.7	155.5	235.2	1.8	6
1977	492.2	218.8	273.4	445.5	167.5	278.0	1.8	1.0
1978	481.9	216.5	265.4	521.0	185.1	335.8	5.8	3.5
1979	423.8	195.0	228.8	634.3	235.5	398.7	33.9	10.4
1980	400.3	185.7	214.5	728.5	286.2	442.3	62.5	16.0
1981	343.9	159.0	184.9	823.1	347.7	475.4	151.7	38.2
1982	400.1	190.1	210.0	850.9	379.9	471.0	183.4	48.8
1983 1984 1985 1986 1986 1987	684.9 704.7 815.3 940.9 937.4	363.2 389.3 456.6 533.5 534.8	321.7 315.4 358.6 407.4 402.6	784.1 888.8 885.7 858.4 921.0	350.9 387.9 386.4 369.4 391.7	433.1 500.9 499.3 489.0 529.3	135.3 163.8 173.8 207.5 222.1	40.9 63.7 66.7 87.5 94.6
1988	926.4	542.4	383.9	1,037.1	451.2	585.9	243.7	94.7
1989	893.7	541.1	352.6	1,151.3	533.8	617.6	320.4	112.4
1990	922.9	581.3	341.6	1,173.3	610.7	562.6	356.0	141.6
1991	1,044.5	664.8	379.6	1,065,3	602.2	463.1	370.2	190.9
1992	1,187.2	754.2	433.1	867,7	508.1	359.7	350.4	215.4
1993	1,219.3	785.3	434.0	781,5	467.9	313.6	350.3	219.9
1994	1,151.3	752.8	398.5	817,5	503.6	313.9	377.0	214.8
1995	1,135.9	774.8	361.0	932,4	575.8	356.5	444.7	268.0
1996	1,275.2	906.4	368.9	947.9	594.2	353.7	514.8	328.6
1997	1,402.1	1,023.2	378.9	967.6	625.5	342.2	590.4	403.1
1998	1,605.3	1,188.7	416.6	951.3	626.4	324.9	723.9	555.2
1998	1,739.2	1,288.2	451.0	955.2	636.9	318.3	817.5	660.7
2000 2001 2002 2003 2004 2004 2005 2006 2006	1,878.4 2,309.2 2,773.6 3,162.9 3,507.2 3,604.9 3,697.8 3,876.2	1,424.4 1,738.5 2,060.0 2,338.1 2,631.7 2,775.9 2,913.7 3,047.4	454.0 570.7 713.6 824.8 875.5 829.0 784.0 828.8	1,046.0 974.6 894.7 817.9 827.7 992.0 1,203.7 1,272.7	700.8 636.1 591.3 551.4 645.2 778.8 856.2	345.3 338.5 303.5 276.1 276.3 346.8 425.0 416.5	905.8 968.1 897.1 786.0 703.2 706.9 810.2 984.7	814.8 1,216.4 1,266.7 1,127.5 1,079.8 1,151.3 1,357.7 1,913.9
2008	4,112.0	3,339.2	772.7	1,452.7	1,074.2	378.5	1,082.2	2,409.7
2009	4,849.0	4,006.9	842.2	1,168.4	851.5	316.9	813.5	2,219.7
2008. Jan Feb Mar Apr June July July Aug Sept Oct	3,876.7 3,914.9 3,965.8 3,969.2 4,018.0 4,018.0 4,037.3 4,018.5 4,045.2 4,050.0	3,043,2 3,076,5 3,113,0 3,112,6 3,121,5 3,121,4 3,134,2 3,126,3 3,180,8 3,180,8 3,263,3	833 5 838.3 852.9 856.6 882.2 896.6 903.1 892.0 864.3 786.7	1,279.6 1,285.6 1,277.3 1,276.6 1,274.1 1,285.2 1,312.6 1,336.3 1,397.1	858.9 863.4 859.2 858.0 859.6 862.9 878.4 903.9 932.0 1,024.6	420.7 422.2 418.8 419.3 417.0 411.3 406.8 408.7 404.3 372.5	1,004.8 1,044.2 1,058 1 1,077.7 1,067.2 1,060.7 1,065.0 1,059.4 1,057.3 1,094.8	1,933 5 2,059.8 2,130 5 2,173 1 2,201 3 2,232 7 2,248.3 2,272 3 2,272 3 2,233 9 2,233 9 2,225 4
Nov	4 031 8 4,112.0 4 207 3	3,260 5 3,339.2 3,428 8	771 <u>2</u> 772.7 778.5	1,430,4 1,452,7 1,445,6	1,052.6 1,074.2	377.8 378.5 379.7	1,085.0 1,082.2	2,331.4
2003 Jan Feb Mar Apr June July Aug	4,207,3 4,284,8 4,356,1 4,326,4 4,438,4 4,466,8 4,506,5 4,546,0	3,420,8 3,495,1 3,552,1 3,520,9 3,621,3 3,640,9 3,671,9 3,715,5	7783.8 789.8 804.0 805.4 817.2 825.9 834.6 830.5	1,443.6 1,437.6 1,424.9 1,404.9 1,384.3 1,361.5 1,333.9 1,303.9	1,056,0 1,042,6 1,027,9 1,021,4 1,003,2 980,5 961,9	375.7 381.6 382.4 377.0 362.9 358.4 353.4 342.0	1,075 9 1,056 2 1,047 4 1,019 8 1,000 4 972 8 946 3 915 0	2,4/2.3 2,494.7 2,501.6 2,514.2 2,528.5 2,511.3 2,492.2 2,447.0
Sept	4,632.3	3,789.6	842.7	1,268 0	935.6	332.4	891.1	2,407.3
Oct	4,716.5	3,861.1	855.4	1,229.2	901.8	327.4	861.8	2,339.2
Nov	4,787.9	3,952.1	835.8	1,197.6	876.8	320.7	837.9	2,281.0
Dec	4,849.0	4,006.9	842.2	1,168 4	851.5	316.9	813.5	2,219.7

TABLE B-70. Components of money stock measures, 1970-2009-Continued

[Averages of daily figures; billions of dollars, seasonally adjusted]

¹ Savings deposits including money market deposit accounts (MMDAs); data prior to 1982 are savings deposits only

² Small-demination deposits are those issued in amounts of less than \$100,000.
³ Institutional money funds are not part of non-M1 M2.

Note: See also Table B 69.

	Adjus	ted for chan	ges in reser	ve requirem	nents ²		В	orrowings	from the Feo	deral Reserve (N	SA) ³	
	Reser	ves of depos	sitory institu	itions				0	ther borrow	ings from the Fe	deral Reserve	5
Year and month	Total	Non- borrowed	Required	Excess (NSA) ³	Monetary base	Total ⁴	Term auction credit	Primary	Primary dealer and other broker- dealer credit ⁶	Asset-backed commercial paper money market mutual fund liquidity facility	Credit extended to American Inter- national Group, Inc., net 7	Term asset- backed securities loan facility, net ⁸
December: 1979	20.720	19,248	20,279	442	131,143	1,473						
1980 1981 1982 1983 1984 1985 1986 1986 1987 1988 1989 1989	22,015 22,443 23,600 25,367 26,913 31,569 38,840 38,913 40,453 40,453 40,486 41,766	20,325 21,807 22,966 24,593 23,727 30,250 38,014 38,135 38,738 40,221 41,440	21,501 22,124 23,100 24,806 26,078 30,505 37,667 37,893 39,392 39,545 40,101	514 319 500 561 835 1,063 1,173 1,019 1,061 941 1,665	142,004 149,021 160,127 175,467 187,252 203,555 223,416 239,829 256,897 267,774 293,278	1.690 636 634 774 3,186 1.318 827 777 1.716 265 326						
1991 1992 1993 1994 1995 1996 1997 1998 1999	45,516 54,421 60,566 59,466 56,483 50,185 46,875 45,172 42,173	45,324 54,298 60,484 59,257 56,226 50,030 46,551 45,055 41,852	44,526 53,267 59,497 58,295 55,193 48,766 45,189 43,659 40,879	990 1,154 1,069 1,171 1,290 1,418 1,687 1,512 1,294	317,543 350,882 386,586 418,313 434,610 452,088 479,996 513,954 593,740	192 124 82 209 257 155 324 117 9320						
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	38,724 41,428 40,339 42,630 46,540 45,089 43,220 43,214 820,306 1,138,633	38,515 41,361 40,259 42,585 46,478 44,920 43,029 27,783 166,740 968,706	37,399 39,785 38,331 41,583 44,631 43,188 41,357 41,429 52,972 63,187	1,325 1,643 2,008 1,047 1,909 1,901 1,863 1,784 767,333 1,075,446	584,984 635,567 681,648 720,391 759,378 787,579 812,411 824,373 1,654,068 2,017,698	210 67 80 46 63 169 191 15,431 653,565 169,927	11,613 438,327 82,014	17 11 97 111 3,787 88,245 19,025	47,631	32,102	47,206 22,023	46,310
2008 Jan Feb Apr June July Aug Sept Oct Nov Dec	42,289 43,397 45,119 44,789 45,674 45,674 45,274 46,258 103,583 315,458 609,305 820,306	-3,371 -16,760 -49,405 -90,620 -110,073 -125,604 -120,390 -121,821 -186,522 -332,861 -89,480 166,740	40,641 41,782 42,474 43,052 43,869 43,449 43,361 44,382 44,101 48,299 50,484 52,972	1,648 1,615 2,644 1,737 1,838 2,225 1,913 1,876 59,483 267,159 558,821 767,333	820,299 820,953 824,824 823,692 827,435 833,059 839,687 843,236 905,225 1,130,444 1,435,013 1,654,068	45,659 60,157 94,524 135,410 155,780 171,278 165,664 168,078 290,105 648,319 698,786 653,565	44,516 60,000 75,484 100,000 127,419 150,000 150,000 150,000 149,814 244,778 393,088 438,327	1,137 155 1,617 9,624 14,076 14,225 15,204 17,980 32,632 94,017 95,839 88,245	16,168 25,764 14,238 6,908 255 0 53,473 114,953 60,655 47,631	31,877 117,457 71,009 32,102	22,187 77,047 78,070 47,206	
2009: Jan Feb Mar Apr June July Aug Sept Nov Dec	856,993 699,935 779,497 881,019 900,866 809,196 794,995 828,466 922,473 1,056,405 1,140,488 1,138,633	293,496 117,438 167,385 322,825 375,418 370,473 428,033 497,017 615,646 791,347 923,181 968,706	58,813 56,486 54,891 56,658 56,797 57,840 62,015 62,639 62,639 62,408 61,673 63,200 63,187	798,180 643,449 724,605 824,362 844,068 751,355 732,980 765,827 860,065 994,732 1,077,288 1,075,446	1,702,465 1,555,039 1,640,732 1,747,298 1,768,832 1,679,687 1,666,475 1,703,377 1,800,961 1,936,564 2,018,813 2,017,698	563,496 582,497 612,111 558,194 525,448 438,722 366,961 331,450 306,827 265,058 217,307 169,927	403,523 438,822 477,049 444,933 403,970 316,868 255,119 224,490 196,731 155,396 110,049 82,014	70.436 65.463 62.513 47.324 40.124 37.302 34.366 32.147 29.243 25,163 20,434 19,025	33,061 26,250 20,292 10,918 701 0 0 0 0 0 0 0 0 0	17,745 13,533 7,857 4,267 23,347 18,891 6,230 184 79 28 0 0	38,690 38,414 43,328 45,057 44,915 43,057 43,108 40,021 39,074 41,222 43,222 22,023	1,061 5,649 12,367 22,552 27,993 33,898 41,036 42,765 43,497 46,310

TABLE B-71. Aggregate reserves of depository institutions and the monetary base, 1979-2009 [Averages of daily figures 1; millions of dollars; seasonally adjusted, except as noted]

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 see Federal Reserve Bulletin.

3 Not seasonally adjusted (NSA).

⁴ Includes secondary, seasonal, other credit extensions, and adjustment not shown separately.

⁵ Does not include credit extensions made by the Federal Reserve Bank of New York to Maiden Lane LLC, Maiden Lane II LLC, Maiden Lane III LLC, and Commercial Paper Funding Facility LLC.

⁶ Includes credit extended through the Primary Dealer Credit Facility and credit extended to certain other broker-dealers.

⁷ Includes outstanding principal and capitalized interest net of unamortized deferred commitment fees and allowance for loan restructuring. Excludes credit extended to consolidated LLCs as described in footnote 5.

⁸ Includes credit extended by Federal Reserve Bank of New York to eligible borrowers through the Term Asset-Backed Securities Loan Facility, net of unamortized deferred administrative fees.

⁹ Total includes borrowing under the terms and conditions established for the Century Date Change Special Liquidity Facility in effect from October 1, 1999 through April 7, 2000.

TABLE B-72. Bank credit at all commercial banks, 1972-2009

[Monthly average; billions of dollars, seasonally adjusted 1]

		Securities in bank credit ²					Loans and leases in bank credit				
	Total		U.S.		Total	Com-	Re	al estate loa	ans		Other
Year and month	bank credit	Total secu- rities	and agency secu- rities	Other secu- rities	loans and leases ³	mercial and industrial loans	Total ⁴	Revolving home equity loans	Com- mercial Ioans ⁵	Con- sumer Ioans ⁶	loans and leases 7
December. 1972 1973 1974 1975 1976 1976 1977 1977 1977 1979	561.8 643 1 707.5 737.8 798.6 885.6 1,003.8 1 119.0	159 7 166 9 172 1 204.9 226.7 234 3 240.2 258 5	86.9 90.1 88.2 118.1 137.5 137.5 138.3 146.8	72.8 76.8 83.9 86.8 89.1 96.8 101.9 111.7	402.0 476.2 535.4 532.9 571.9 651.3 763.6 860.5	133.1 161.2 191.3 183.4 185.2 204.7 237.2 279.6	96.9 117.0 129.8 134.1 148.5 175.1 210.5 241.7	-		85.3 98.4 102.1 104.3 115.8 138.0 164.4 183.7	86.8 99.7 112.2 111.1 122.3 133.5 151.5 155.5
1960 1961 1962 1963 1963 1964 1965 1965 1966 1967 1968 1968	1,217.8 1,298.6 1,398.5 1,550.2 1,715.4 1,902.2 2,084.7 2,229.3 2,405.7 2,569.7	294 2 307.6 334.5 398.7 401.3 450.0 503.0 527.7 547.7 569.4	172 2 180 5 203 2 261 2 260 5 271 5 309 7 335 6 359 5 400 6	121.9 127.0 131.3 137.5 140.7 178.5 193.3 192.0 188.2 168.8	923.7 991.1 1,063.9 1,151.5 1,314.1 1,452.1 1,581.7 1,701.6 1,858.0 2,000.3	312 0 350 2 392 0 413 8 472 8 499 8 536 5 566 6 604 4 635 5	262.3 283.6 299.7 330.4 376.1 425.4 493.3 585.9 665.0 760.0	30.8 40.0 50.4		178.6 182.0 187.6 212.7 253.5 294.4 315.2 327.8 355.3 373.5	170.8 175.2 184.6 194.7 211 6 232 5 236.6 221.4 233.3 231.3
1990 1991 1992 1993 1993 1994 1995 1995 1995 1996 1997 1998	2,704.9 2,815.8 2,916.1 3,070.5 3,238.2 3,470.8 3,635.7 3,959.8 4,359.6 4,605.7	615.8 724.5 821.0 891.3 889.1 891.3 887.6 984.8 1,089.6 1,147.6	458 5 560.0 661 3 725 0 713 6 693 4 692 3 746 4 790 7 805 2	157.3 164.5 159.7 166.3 175.5 197.9 195.3 238.4 298.9 342.4	2,089.1 2,091.3 2,095.1 2,179.2 2,349.1 2,579.5 2,748.1 2,975.0 3,270.0 3,458.1	638 2 617.6 598.0 585.4 643.6 715.2 778.4 845.2 938.1 999.6	841.7 869.1 887.9 929.9 986.6 1.062.0 1.121.9 1.220.4 1.308.4 1.456.8	62 2 70.5 73.8 73.3 75.2 79.1 85 4 98.1 96 2 99.5		375.6 363.6 354.7 386.4 443.7 484.4 505.4 498.8 497.3 485.9	233.6 241.1 254.4 277.5 275.1 317.9 342.4 410.6 526.3 515.8
2000 2001 2002 2003 2004 2005 2005 2005 2006 2007 2008 2008	5,027.0 5,210.2 5,642.7 6,010.5 6,563.6 7,258.6 8,037.8 8,843.5 9,372.5 9,082.1	1,191.6 1,319.6 1,509.6 1,636.3 1,728.2 1,825.0 1,962.6 2,083.2 2,109.4 2,342.5	781.6 840.6 1,007.0 1,092.1 1,151.1 1,139.8 1,188.6 1,107.6 1,240.3 1,424.8	410.0 479.0 502.5 544.3 577.0 685.2 774.0 975.6 869.1 917.7	3,835.5 3,890.6 4,133.1 4,374.2 4,835.5 5,433.6 6,075.3 6,760.3 7,263.1 6,739.6	1,083.7 1,021.8 960.2 918.5 1,041.6 1,181.2 1,424.4 1,617.7 1,343.0	1,637.1 1,754.3 2,007.2 2,209.7 2,547.8 2,916.0 3,355.8 3,588.4 3,823.2 3,809.0	129.5 152.3 211.7 278.4 395.2 442.9 466.8 483.2 588.0 601.7	1,077.7 1,266.6 1,454.3 1,589.5 1,726.8 1 648.1	532.4 550.4 579.0 635.6 685.9 697.6 732.1 793.4 861.4 832.6	582.3 564.1 586.7 630.7 683.3 778.5 806.2 954.0 954.0 954.0 954.0
2008 Jan	8,926.2 8,965.3 9,035.4 8,976.6 9,001.6 8,992.9 9,021.5 9,038.2 9,195.1 9,511.2 9,406.2 9,372.5	2,075.8 2,081.2 2,082.3 2,072.7 2,080.0 2,084.9 2,085.1 2,072.4 2,072.4 2,112.7 2,231.5 2,166.8 2,109.4	1,093,7 1,090,0 1,097,6 1,096,5 1,105,5 1,117,5 1,122,0 1,130,1 1,149,5 1,217,6 1,252,5 1,240,3	982.0 991.2 984.7 976.2 974.5 967.4 963.1 942.3 963.2 1,013.9 914.3 869.1	6,850.4 6,884.1 6,953.1 6,903.9 6,921.6 6,908.0 6,936.4 6,965.8 7,082.4 7,309.7 7,239.4 7,263.1	1,450.7 1,468.9 1,497.6 1,512.6 1,518.7 1,531.5 1,544.3 1,557.7 1,581.4 1,645.6 1,636.9 1,617.7	3,612.5 3,628.8 3,670.9 3,649.5 3,645.8 3,634.3 3,622.3 3,622.3 3,623.7 3,664.1 3,822.0 3,820.4 3,823.2	487.0 491.6 496.8 503.0 508.6 514.5 521.6 526.4 539.8 578.4 582.6 588.0	1,603.6 1,618.4 1,631.6 1,640.4 1,648.3 1,659.6 1,663.6 1,664.9 1,719.2 1,723.6 1,726.8	791.7 794.2 799.5 804.8 808.3 813.4 823.7 829.5 834.9 852.6 858.1 861.4	995 6 992 3 985 2 937 0 948.7 928 8 946.1 954.9 1,002 0 969 5 923 9 960.8
2009 Jan	9,337.1 9,347.6 9,328.6 9,266.9 9,338.1 9,319.6 9,249.6 9,210.4 9,126.9 9,046.3 9,046.3 9,046.3	2,145.7 2,162.6 2,187.2 2,185.0 2,210.7 2,252.5 2,268.1 2,304.0 2,314.1 2,305.0 2,309.8 2,342.5	1.273.0 1.261.7 1.273.0 1.263.8 1.263.2 1.293.5 1.325.5 1.353.1 1.379.4 1.372.1 1.382.9 1.424.8	872.7 900.8 914.2 921.2 947.5 959.0 942.6 940.8 934.7 932.8 926.9 917.7	7,191.4 7,185.0 7,141.4 7,081.9 7,127.4 7,067.1 6,981.5 6,906.5 6,812.8 6,741.4 6,793.8 6,733.6	1,601.1 1,587.1 1,564.1 1,545.0 1,525.4 1,499.0 1,482.8 1,450.7 1,414.7 1,383.5 1,366.0 1,343.0	3,805.0 3,818.2 3,836.1 3,831.4 3,875.6 3,862.5 3,846.8 3,825.5 3,781.9 3,757.3 3,823.0 3,809.0	593.0 595.7 600.2 605.1 613.1 610.9 608.3 606.9 604.0 601.8 604.6 604.6 601.7	1,720,8 1,721,6 1,720,3 1,715,6 1,712,2 1,704,6 1,697,8 1,690,5 1,679,8 1,667,1 1,660,6 1,648,1	869.8 879.9 870.6 859.7 858.3 856.2 852.6 850.5 848.0 846.6 842.2 832.6	915.6 899.7 870.6 845.8 868.1 849.4 799.3 779.8 768.2 754.0 762.7 755.0

¹ Data are 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. ² Includes securities held in trading accounts, held-to-maturity, and available for sale. Excludes all non-security trading assets, such as derivatives with a positive fair value or loans held in trading accounts. ³ Excludes unearned income. Includes the allowance for loan and lease losses. Excludes Federal funds sold to, reverse repurchase agreements (RPs) with,

and loans to commercial banks. Includes all loans held in trading accounts under a fair value option. ⁴ Includes closed-end residential loans, not shown separately.

⁵ Includes construction, land development, and other land loans, and loans secured by farmland, multifamily (5 or more) residential properties, and nonfarm nonresidential properties.

⁶ Includes credit cards and other consumer loans

7 Includes other items, not shown separately.

Note: Data in this table are shown as of January 22, 2010.

		U.S. Ti	reasury sec	urities		C		High-			0		
Year and	Bi (at aud	(Is ction) 1		Constant maturities	2	bon (Moo	nate ids idy's)	grade muni- cipal	New- home mort-	Prime rate charoed	(Federal Re of New	t window eserve Bank York) ^{5, 6}	Federal funds
month	3-month	6-month	3-year	10-year	30-year	Aaa ³	Baa	Stand- ard & Poor's)	gage yields ⁴	by banks ⁵	Primary credit	Adjust- ment credit	rate ⁷
1929						4.73	5.90	4.27		5.50-6.00		5.16	
1933	0.515					4.49	7.76	4.71		1.50-4.00		2.56	
1939	.023					3.01	4.96	2.76		1.50		1.00	
1940	.014					2.84	4.75	2.50		1.50		1.00	
1941 1942	103					2.77	4.33	2.10		1.50		1.00 81.00	
1943	.373					2.73	3.91	2.06		1.50		⁸ 1.00	
1944 1945	375					2.72	3.61	1.86		1.50		81.00 81.00	
1946	375		·····			2.53	3.05	1.64		1.50		81.00	
1947 1948	1 040					2.61	3.24	2.01		1.50-1.75		1.00	
1949	1.102					2.66	3.42	2.21		2.00		1.50	
1950	1.218					2.62	3.24	1.98		2.07		1.59	
1951 1952	1.552				•••••	2.86	3.41 3.52	2.00		2.56		1/5	
1953	1.931		2.47	2.85		3.20	3.74	2.72		3.17		1 99	: ··· ···
1954	1.753		2.47	2.40		2.90	3.51	2.37		3.05		1.60	1 79
1956	2.658		3.19	3.18		3.36	3.88	2.93		3.77		2.77	2.73
1957	1.839		2.84	3.65		3.89	4.71	3.50		4.20		2.12	3.11
1959	3 405	3 832	4 46	4.33		4 38	5.05	3.95		4 48		3.36	3.31
1960	2.93	3.25	3.98	4 12		4.41	5.19	3.73		4.82		3.53	3.21
1962	2.38	2.91	3.54	3.88		4.35	5.08	3.40		4.50		3.00	2.71
1963	3.16	3.25	3.67	4.00		4.26	4.86	3.23	5.89	4.50		3.23	3.18
1965	3.50	4.05	4.03	4.19		4.40	4.83	3.22	5.83	4.50		3 DD 4 04	i 3.50 - 4.07
1966	4.88	5.08	5.23	4.93		5.13	5.67	3.82	6.25	5.63		4.50	5.11
1967	5.34	4.03 5.47	5.03	5.64		6.18	6.94	3.98 4.51	6.97	5.63		4 19	4.22
1969	6.68	6.85	7.02	6.67		7.03	7.81	5.81	7.81	7.96		5 87	8.21
1970	6.43	6.53	7.29	7.35		8.04	9.11	6.51 5.70	8.45	7.91		5 95 4 88	7.17
1972	4.07	4.47	5.72	6.21		7.21	8.16	5.27	7.60	5.25		4 50	4.07
1973	7.04	7.18	6.96	6.85		7.44	8.24	5.18	7.96	8.03		645	8.74
1975	5.84	6.12	7.50	7.99		8.83	10.61	6.89	9.00	7.86		6.25	5.82
1976 1977	4.99	5.27	6.77	7.61	7 75	8.43	9.75	6.49 5.56	9.00	6.84		5.50	5.05
1978	7.22	7.58	8.29	8.41	8.49	8.73	9.49	5.90	9.56	9.06		7.46	7.94
1979	10.05	10.02	9.70	9.43	9.28	9.63	10.69	6.39	10.78	12.67		10.29	11.20
1980	14.03	13.78	14.46	13.92	13.45	11.94	16.04	11.23	14.70	15.26		13.42	13.35
1982	10.69	11.08	12.93	13.01	12.76	13.79	16.11	11.57	15.14	14.85		11.01	12.24
1983	9.53	9.77	11.92	12.46	12.41	12.04	14.19	9.47	12.57	12.04		8.5U 8.80	9.09
1985	7.47	7.64	9.64	10 62	10 79	11.37	12.72	9.18	11.55	9.93		7.69	8.10
1980	5.98	6.05	7.06	8.39	8.59	9.02	10.58	7.38	9.31	8.33		5.66	6.60 6.66
1988	6.69	6.92	8.26	8.85	8.96	9.71	10.83	7.76	9.19	9.32		6.20	7.57
1000	7.61	7.04	0.00	0.49	0.40	9.20	10.10	7.24	10.13	10.67		0.93	9.21
1991	5.42	5.49	6.82	7.86	8.14	8.77	9.80	6.89	9.32	8.46		5.45	5.69
1992	3.45	3.57	5.30	7.01	7.67	8.14	8.98	6.41 5.63	8.24	6.25	·	3.25	3.52
1994	4.29	4.66	6.27	7.09	7.37	7.96	8.62	6.19	7.49	7.15		3.60	4.21
1995	5.51	5.59	6.25	6.57	6.88	7.59	8.20	5.95 5.75	7.87	8.83 8.27		5.21	5.83 5.20
1997	5.07	5.18	6.10	6.35	6.61	7.26	7.86	5.55	7.71	8 44		5.00	5.46
1998 1999	4.81	4.85	5.14	5.26 5.65	5.58 5.87	6.53 7.04	7.22 7.87	5.12 5.43	7.07	8.35 8.00		4 92 4 62	5.35 4.97
2000	5.85	5.92	6.22	6.03	5.94	7.62	8.36	5.77	7.52	9.23		5.73	6.24
2001	3.44	3.39	4.09	5 U2 4 61	5.49	7.08 6.49	7.95 7.80	5.19	6.43	6.91 4.67		3.40	3.88
2003	1.01	1.06	2.10	4.01		5.67	6.77	4.73	5.80	4.12	2.12		1.13
2004	3.16	3.40	3.93	4.27		5.24	6.06	4.63	5.77	4.34 6.19	2.34		1.35
2006	4.73	4.80	4.77	4.80	4 91	5.59	6.48	4.42	6.63	7.96	5.96		4.97
2007	4.41	4.48	4.35	4 63	4.84	5.63	0.48 7.45	4.42 4.80	6.05	8.05 5.09	5.86 2.39		5.02
2009	.16	.29	1.43	3.26	4.08	5.31	7.30	4.64	5.14	3.25	.50		.16

TABLE B-73. Bond yields and interest rates, 1929-2009 [Percent per annum]

¹ High bill rate at auction, issue date within period, bank-discount basis. On or after October 28, 1998, data are stop yields from uniform-price auctions. Before that date, they are weighted average yields from multiple-price auctions.

See next page for continuation of table.

			U.S. Ti	reasury sec	curities		Согр	orate	High-			Discount	window	
Y	ear and	B (at au	ills ction) ¹		Constant maturities	2	bor (Moc	nds idy's)	cipal bonds	New- home mort-	Prime rate charged	(Federal Re of New	serve Bank York) ^{5, 6}	Federal fundş
		3-month	6-month	3-year	10-year	30-year	Aaa ³	Ваа	(Stand- ard & Poor's)	gage yields ⁴	by banks ⁵	Primary credit	Adjust- ment credit	rate /
											High-low	High-low	High-low	
2005:	Jan Feb Mar June July Aug Sept Oct Dec	2.32 2.53 2.75 2.85 2.98 3.21 3.45 3.46 3.70 3.90 3.89	2.60 2.76 3.00 3.06 3.10 3.13 3.41 3.67 3.68 3.98 4.16 4.19	3.39 3.54 3.91 3.79 3.69 3.91 4.08 3.96 4.29 4.43 4.39	4.22 4.17 4.50 4.34 4.14 4.00 4.18 4.26 4.20 4.46 4.54 4.54		5.36 5.20 5.33 5.15 4.96 5.09 5.13 5.35 5.42 5.37	6.02 5.82 6.06 6.05 5.86 5.95 5.96 6.03 6.30 6.39 6.32	4.28 4.14 4.42 4.31 4.15 4.08 4.15 4.21 4.28 4.49 4.53 4.43	6.01 5.75 5.82 5.84 5.82 5.76 5.76 5.83 5.99 6.03 6.20 6.39	5.25-5.25 5.50-5.25 5.75-5.50 5.75-5.75 6.25-6.00 6.25-6.25 6.25-6.25 6.75-6.50 6.75-6.75 7.00-7.00 7.25-7.00	$\begin{array}{c} 3.25 - 3.25\\ 3.50 - 3.25\\ 3.75 - 3.50\\ 3.75 - 3.75\\ 4.00 - 3.75\\ 4.25 - 4.00\\ 4.25 - 4.25\\ 4.50 - 4.25\\ 4.75 - 4.50\\ 4.75 - 4.50\\ 4.75 - 4.50\\ 5.00 - 5.00\\ 5.25 - 5.00\\ \end{array}$		2 28 2 50 2 63 3 00 3 04 3 26 3 30 3 50 3 50 3 62 3 78 4 00 4 16
2006:	Jan Feb Apr June July Aug Sept Oct Dec	4.20 4.41 4.59 4.72 4.79 4.96 4.98 4.82 4.89 4.82 4.89 4.95 4.84	4.29 4.51 4.61 4.71 4.81 4.95 5.09 4.99 4.99 4.90 4.91 4.95 4.87	4.35 4.64 4.74 4.89 4.97 5.09 5.07 4.85 4.69 4.72 4.64 4.58	4.42 4.57 4.72 4.99 5.11 5.11 5.09 4.88 4.72 4.73 4.60 4.56	4.54 4.73 5.06 5.20 5.15 5.13 5.00 4.85 4.85 4.69 4.68	5.29 5.35 5.84 5.95 5.89 5.85 5.51 5.51 5.33 5.32	6.24 6.27 6.41 6.68 6.75 6.78 6.76 6.59 6.43 6.42 6.20 6.22	4.31 4.41 4.60 4.61 4.64 4.64 4.32 4.30 4.32 4.17 4.17	6.12 6.40 6.53 6.64 6.69 6.79 6.81 6.87 6.72 6.69 6.55 6.37	7 50-7.25 7.50-7.50 7.75-7.50 7.75-7.75 8.00-7.75 8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25	5.50-5.25 5.50-5.50 5.75-5.50 5.75-5.75 6.25-6.00 6.25-6.25 6.2		4.29 4.49 4.59 4.79 4.94 5.24 5.25 5.25 5.25 5.25 5.25 5.25 5.2
2007:	Jan Feb Mar Apr June June July Aug Sept Oct Dec	4.96 5.02 4.96 4.87 4.63 4.83 4.34 4.01 3.96 3.49 3.08	4.93 4.96 4.90 4.87 4.80 4.77 4.85 4.56 4.13 4.08 3.63 3.29	4.79 4.75 4.51 4.60 4.69 5.00 4.82 4.34 4.06 4.01 3.35 3.13	4.76 4.72 4.56 4.69 4.75 5.10 5.00 4.67 4.52 4.53 4.15 4.10	4.85 4.82 4.72 4.87 4.90 5.20 5.11 4.93 4.79 4.77 4.52 4.53	5 40 5 39 5 47 5 47 5 79 5 74 5 66 5 66 5 44 5 49	6.34 6.28 6.27 6.39 6.39 6.65 6.65 6.65 6.48 6.40 6.65	4.29 4.21 4.18 4.32 4.37 4.64 4.64 4.73 4.57 4.41 4.41 4.45 4.22	6.35 6.31 6.22 6.21 6.22 6.54 6.70 6.73 6.55 6.55 6.42 6.21	825-825 825-825 825-825 825-825 825-825 825-825 825-825 825-825 825-825 825-75 7.75-7.50 7.50-7.50 7.50-7.25	$\begin{array}{c} 6.25-6.25\\ 6.25-6.25\\ 6.25-6.25\\ 6.25-6.25\\ 6.25-6.25\\ 6.25-6.25\\ 6.25-6.25\\ 6.25-6.25\\ 5.25-5.75\\ 5.25-5.75\\ 5.25-5.00\\ 5.00-5.00\\ 5.00-4.75\\ \end{array}$		5.25 5.26 5.25 5.25 5.25 5.25 5.25 5.26 5.26
2008:	Jan Feb Mar Apr June June July Aug Sept Oct Dec	2.86 2.21 1.38 1.32 1.71 1.89 1.72 1.79 1.46 .84 .30 .04	2.84 2.09 1.53 1.54 1.82 2.15 1.99 1.96 1.78 1.39 .86 .32	2.51 2.19 1.80 2.23 2.69 3.08 2.87 2.70 2.32 1.86 1.51 1.07	3.74 3.74 3.51 3.68 3.88 4.10 4.01 3.89 3.69 3.81 3.53 2.42	4.33 4.52 4.39 4.44 4.60 4.69 4.57 4.50 4.27 4.17 4.00 2.87	5.33 5.53 5.55 5.57 5.68 5.67 5.64 5.65 6.28 6.12 5.05	6.54 6.82 6.89 6.97 6.93 7.07 7.16 7.15 7.31 8.88 9.21 8.43	4.00 4.35 4.67 4.43 4.34 4.48 4.88 4.90 5.03 5.68 5.28 5.53	6.02 5.96 5.92 5.98 6.01 6.13 6.29 6.33 6.09 6.10 6.10 5.67	$\begin{array}{c} 7.25-6.00\\ 6.00-6.00\\ 6.00-5.25\\ 5.25-5.00\\ 5.00-5.00\\ 5.00-5.00\\ 5.00-5.00\\ 5.00-5.00\\ 5.00-5.00\\ 5.00-5.00\\ 5.00-4.00\\ 4.00-4.00\\ 4.00-3.25 \end{array}$	$\begin{array}{c} 4.75 - 3.50\\ 3.50 - 3.50\\ 3.50 - 2.50\\ 2.50 - 2.25\\ 2.25 - 2.25\\ 2.25 - 2.25\\ 2.25 - 2.25\\ 2.25 - 2.25\\ 2.25 - 2.25\\ 2.25 - 1.25\\ 1.25 - 1.25\\ 1.25 - 0.50\\ \end{array}$		3.94 2.98 2.61 2.28 1.98 2.00 2.01 2.00 1.81 97 39 16
2009:	Jan Feb Mar Apr June July Aug Sept Oct Dec	.12 .31 .25 .17 .19 .17 .19 .18 .13 .08 .06 .07	31 46 43 37 31 32 29 27 27 22 27 17 16 17	1.13 1.37 1.31 1.32 1.39 1.76 1.55 1.65 1.48 1.46 1.32 1.38	2.52 2.87 2.82 2.93 3.29 3.72 3.56 3.59 3.40 3.39 3.40 3.59	3.13 3.59 3.64 4.23 4.52 4.41 4.37 4.19 4.19 4.31 4.49	5.05 5.27 5.50 5.39 5.54 5.61 5.26 5.13 5.15 5.19 5.26	8.14 8.08 8.42 8.39 8.06 7.50 7.09 6.58 6.31 6.29 6.32 6.37	5.13 5.00 5.15 4.88 4.60 4.84 4.69 4.58 4.13 4.20 4.35 4.16	5.11 5.09 5.10 4.96 4.92 5.17 5.40 5.32 5.26 5.14 5.08 5.01	325-325 325-325 325-325 325-325 325-325 325-325 325-325 325-325 325-325 325-325 325-325 325-325 325-325 325-325	$\begin{array}{c} 0.50-0.50\\ 0.50$.15 .22 .18 .15 .18 .21 .16 .16 .15 .12 .12 .12

TABLE B-73. Bond yields and interest rates, 1929-2009-Continued

[Percent per annum]

² Yields on the more actively traded issues adjusted to constant maturities by the Department of the Treasury. The 30-year Treasury constant maturity series was discontinued on February 18, 2002, and reintroduced on February 9, 2006.
 ³ Beginning with December 7, 2001, data for corporate Aaa series are industrial bonds only.

4 Effective area (in the primary market) no conventional mortgages, reflecting fees and charges as well as contract rate and assuming, on the average, repayment at end of 10 years. Rates beginning with January 1973 not strictly comparable with prior rates. For monthly data, high and low for the period. Prime rate for 1929–1933 and 1947–1948 are ranges of the rate in effect during the period.

⁶ Primary credit replaced adjustment credit as the Federal Reserve's principal discount window lending program effective January 9, 2003.

⁷ 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.

⁸ 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 one year or less.

Sources: Department of the Treasury, Board of Governors of the Federal Reserve System, Federal Housing Finance Agency, Moody's Investors Service, and Standard & Poor's.

TABLE B-74. Credit market borrowing, 2001-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Item	2001	2002	2003	2004	2005	2006	2007	2008
NONFINANCIAL SECTORS								
Domestic By instrument Commercial paper Treasury securities Agency- and GSE-backed securities ¹ Municipal securities Corporate bonds Bank Ioans n.e. Other Ioans and advances Mortgages Home Multifamily residential Commercial	1,151.9 1,151.9 -83.1 -0.5 122.8 343.4 -87.5 6.1 705.4 552.0 40.6 109.1	1,408.0 -57.9 257.1 159.4 -108.2 29.6 888.9 754.7 37.3 90.1	1,677.7 -,37.3 398.4 -,2.4 137.6 152.2 -,76.3 10.2 989.9 812.3 71.4 118.5	1,991.7 1,991.7 15.3 362.5 6 130.5 5.2 60.0 1,226.3 1,014.7 49.6 149.5	2,329.2 2,329.2 -7.7 307.3 4 195.0 56.7 134.5 120.1 1,423.6 1,108.6 70.9 235.0	2,398.5 2,398.5 22.4 183.7 3 177.4 215.6 175.3 142.4 1,386.7 1,059.8 55.1 268.5	2,536.7 2,536.7 11.3 237.5 - 4 215.6 311.2 240.2 318.4 1,066.0 695.7 103.0 262.7	1,870.4 1,870.4 7.7 1,239.0 .2 65.4 204.6 192.6 40.6 80.2 -115.7 58.8 119.1
Farm	3.8 150.6	6.9 105.2	-12.2 105.5	12.5 117.0	9.1 100.3	3.3 95.3	4.6 136.9	18.0 40.2
By sector Household sector Nonfinancial business Corporate Nonfarm noncorporate Farm State and local governments Federal Government	1,151.9 672.0 380.0 211.9 161.7 6.4 105.5 -5.6	1,408.0 825.3 181.0 23.0 150.8 7.1 144.1 257.6	1,677.7 995.9 165.7 86.8 91.5 -12.6 120.1 396.0	1,991.7 1,049.6 464.7 203.8 245.2 15.8 115.4 361.9	2,329.2 1,168.1 682.5 333.7 331.6 17.3 171.7 306.9	2,398.5 1,176.0 887.9 465.1 408.6 14.2 151.2 183.4	2,536.7 861.3 1,252.3 783.0 454.8 14.6 185.9 237.1	1,870.4 37.0 551.0 347.7 202.2 1.1 43.3 1,239.2
Foreign borrowing in the United States Commercial paper Bonds Bank loans n e c Other loans and advances	-11.2 18.3 -18.5 -7.3 -3.8	93.4 58.8 31.6 5.3 -2.3	43.0 18.9 28.7 -2.5 -2.1	155.3 69.2 85.8 3.8 -3.6	113.0 38.6 64.5 14.5 -4.6	332.6 98.4 227.8 13.8 -7.4	170.3 69.3 218.7 24.1 3.2	-129.5 -71.0 -62.1 5.1 -1.5
Nonfinancial domestic and foreign borrowing	1,140.8	1,501.3	1,720.7	2,146.9	2,442.3	2,731.1	2,707.0	1,740.9
FINANCIAL SECTURS By instrument Open market paper GSE issues 1 Agency- and GSE-backed mortgage pool securities 1 Corporate bonds Bank loans n e c Other loans and advances Mortgages	874.7 -126.9 304.1 338.5 310.2 21.0 25.5 2.2	876.5 -99.9 219.8 326.8 388.7 23.1 6.8 11.2	1,066.7 -63.5 250.9 330.6 487.1 21.4 31.2 8.9	979.8 21.7 75.0 47.9 669.6 66.0 74.1 25.5	1,118.5 214.2 84.0 167.3 743.8 18.8 44.4 14.1	1,291.0 196.3 35.6 295.4 798.2 -62.3 21.2 6.6	1,791.9 111.4 626.3 693.3 70.9 225.8 4.7	888.5 -125.6 271.7 497.3 -291.1 496.1 33.3 6.8
By sector Commercial banking U.S. chartered commercial banks Foreign banking offices in the United States Bank holding companies Savings institutions Credit unions Life insurance companies Government-sponsored enterprises Agency- and GSE-backed mortgage pools ¹ Asset-backed securities issuers Finance companies REIIs ² Brokers and dealers Funding corporations ALL SECTORS BY INSTRUMENT	874.7 52.9 -0.9 23.6 0.0 1.5 0.6 304.1 338.5 264.5 10.9 3.8 1.4 -103.6	876.5 49.7 29.9 -4 20.3 -23.1 2.0 219.8 326.8 218.4 66.2 27.0 -1.7 -10.7	1,066.7 48.5 13.2 1 35.4 35.3 2.2 2.9 250.9 330.6 249.7 111.1 32.3 6.4 -3.2	979.8 78.4 18.7 91.4 2.3 3.0 75.0 47.9 440.7 134.3 94.6 15.2 -2.9	1,118.5 85.1 36.9 0 48.2 22.5 3.3 4 84.0 167.3 730.2 33.5 55.4 1 104.7	$\begin{array}{c} 1,291.0\\ 177.4\\ 107.5\\ -3\\ 70.2\\ -108.2\\ 4.2\\ 2.7\\ 35.6\\ 295.4\\ 798.7\\ 34.8\\ 15.5\\ 6.4\\ 28.3\\ \end{array}$	1,791.9 263.2 131.8 0 131.3 104.1 13.4 14.5 282.4 626.3 335.2 34.9 10.2 -4.0 111.6	888.5 161.1 79.1 - 2 82.3 -67.1 83.3 26.2 271.7 497.3 -425.2 -79.4 -48.6 77.7 466.4
ALL SECTORS, DETINSTRUMENT Total Open market paper Treasury securities Agency- and GSt-backed securities ¹ Municipal securities Corporate and foreign bonds Bank loans n.e.c. Other loans and advances Mortgages Consumer credit	2,015.5 -191.6 -5.1 642.1 122.8 635.2 -73.9 27.8 707.6 150.6	2,377.8 -99.1 257.1 547.2 159.4 553.7 -79.8 34.1 900.1 105.2	2,787.4 -82.0 398.4 579.1 137.6 668.0 -57.4 39.3 998.8 105.5	3,126.8 106.2 362.5 122.3 130.5 830.9 75.1 130.5 1,251.8 117.0	3,560.7 245.1 307.3 82.8 195.0 865.0 167.8 159.8 1,437.7 100.3	4,022.0 317.1 183.7 330.6 177.4 1,241.6 126.8 156.2 1,393.3 95.3	4,498.8 -169.4 237.5 908.3 215.6 1,223.2 335.1 541.0 1,070.7 136.9	2,629.4 -189.0 1,239.0 769.2 65.4 -148.6 693.8 72.4 87.0 40.2

¹ Government-sponsored enterprises (GSE). ² Real estate investment trusts (REITs).

See next page for continuation of table.

TABLE B-74. Credit market borrowing, 2001-2009-Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

		200	18			2009	
Item	l.	1	11	IV	I		III
NONFINANCIAL SECTORS							
Domestic	1,748.3	1,056.8	2,665.5	2,011.2	1,430.0	1,514.1	965.6
By instrument	1,748.3	1,056.8	2,665.5	2,011.2	1,430.0	1,514.1	965.6
Commercial paper	42.9	-77.3	62.8	2.2	-151.9	-145.9	-11.0
Agency- and GSE-backed securities 1	1.3	.3	-1.7	2,104.2	-3.2	-1.1	3.7
Municipal securities	95.5	61.2	98.2	6.9	120.5	117.3	158.6
Bank loans n.e.c	256.2	354.9	92.4 368.0	190.1 60.6	-3531	-297.3	-282.0
Other loans and advances	114.4	95.1	83.0	-130.0	-50.9	-48.5	-20.2
Mortgages	530.6	121.5	-134.2	-197.3	-64.8	-282.0	-545.2
Multifamily residential	70.4	69.8	59.6	35.3	2.0	1.6	-5.2
Commercial	169.4	147.2	116.5	43.1	-7.4	-60.3	-89.3
Farm	17.9	105.4	18.1	-76.4	-88.7	-120.8	-81.6
By sector	1 748 3	1.056.8	2 665 5	2 011 2	1 430 0	1 514 1	965.6
Household sector	431.4	31.8	-62.1	-253.3	-160.7	-214.2	-351.3
Nonfinancial business	825.6	689.9	575.7	112.8	52.9	-248.9	-283.9
Nonfarm noncorporate	380.6	195.8	190.4	42.0	-195.1	-299.9	-368.3
Farm	-22.7	32.8	-20.3	14.5	7.5	-5.8	-9.8
State and local governments	/8.61 412.7	24.8	73.3 2 078 5	<u>3.5</u> 2 155 2	98.Z	1 895 3	1 484 9
Foreign horrowing in the United States	325.3	103.8	-517.5	-429.8	179.7	192.0	291.4
Commercial paper	212.0	41.7	-276.4	-261.5	63.1	-23.5	200.3
Bonds	79.9	73.2	-261.8	-139.7	137.5	220.7	99.0
Other loans and advances	-2.0	-2.1	8	-1.3	-1.5	-0.0	.3
Nonfinancial domestic and foreign borrowing	2,073.6	1,160.7	2,148.0	1,581.4	1,609.6	1,706.1	1,257.0
FINANCIAL SECTORS							
By instrument	884.5	947.9	1,167.3	554.3	-1,781.3	-2,134.4	-1,532.6
Open market paper	-231.5	-232.6	-380.6	342.3	-573.7	-565.8	-430.5
Agency- and GSE-backed mortgage pool securities 1	533.8	666.4	202.4	285.5	-204.0	-000.9	-590.3
Corporate bonds	83.6	-109.7	-540.4	-597.7	-431.0	-448.0	-227.7
Bank loans n.e.c. Other loans and advances	180.8	-39.6	986.6 390.0	806.7 	-484.1	-627.9 -377.2	-511.b -251.5
Mortgages	20.4	-2.6	5.9	3.4	5.6	9.5	-2.1
By sector	884.5	947.9	1,167.3	554.3	-1,781.3	-2,134.4	-1,532.6
Commercial banking	228.8	299.2	259.2 512.3	-142./	-298.7	-42.4	-152.4 -231.2
Foreign banking offices in the United States	-0.6	1	.0	.0	.0	.0	.0
Bank holding companies	137.4	290.1	-253.1	154.7	9.1	17.0	78.8
Credit unions	-15.2	27.6	32.4	-11.6	-41.2	-330.2	
Life insurance companies	9.6	9.2	38.0	48.0	-9.6	-8.0	-12.0
Government-sponsored enterprises Agency- and GSE-backed mortgage pools [†]	533.8	655.8 666.4	202.4	285.5	-254.5	-080.9	-590.3 481.1
Asset-backed securities issuers	-255.1	-454.2	-384.7	-606.6	-617.4	-556.9	-573.6
Finance companies	129.7 69.8	-24.9	-169.9	-278.0	-168.3	-168.9	-142.5
Brokers and dealers	221.2	-136.7	762.9	-536.4	-159.9	5	7.6
Funding corporations	-111.4	-19.0	157.8	1,838.3	-419.1	843.0	-433.9
ALL SECTORS, BY INSTRUMENT						400.0	
lotal Open market paper	2,958.1	2,108.6	3,315.3	2,135.7	171.7 662.5 i	-428.3	-2/5.6 -241.2
Treasury securities	411.4	310.1	2,080.2	2,154.2	1,442.8	1.896.4	1,481.2
Agency- and GSE-backed securities ¹	646.7	1,322.5	704.1	403.5	46.7	-126.1	-105.5
Corporate and foreign bonds	344.5	318.3	-709.7	-547.3	285.7	168.6	133.3
Bank loans n.e.c.	472.4	86.8	1,376.1	839.9	-856.6	-931.1	-801.7
Utter loans and advances	298.1 551.1	53.5 118 9 i	4/2.2	-534.2	-400.5 -59.2	-424.9	-2/1.3 -547.3
Consumer credit	115.0	105.4	16.6	-76.4	-88.7	-120.8	-81.6

				Nonfarm p	properties			Nonfarm	properties	by type of m	ortgage	
	A.11	r					G	overnment	underwritter	n	Conven	tional ²
End of year or quarter	All proper-	Farm proper-	Tetel	1- to 4-	Multi- family	Com- mercial		1. to	4-family ho	uses		1 4
	nes	ues	iotai	houses	proper- ties	proper- ties	Total ¹	Total	FHA- insured	VA- guar- anteed	Total	l - to 4- family houses
1950 1951 1952 1953 1954 1955 1956 1956 1956 1957 1958 1959	72.7 82.1 91.3 101.1 113.6 129.9 144.5 156.5 171.8 191.6	6.0 6.6 7.2 7.7 8.2 9.0 9.8 10.4 11.1 12.1	66.6 75.6 84.1 93.4 105.4 120.9 134.6 146.1 160.7 179.5	45.1 51.6 58.4 65.9 75.7 88.2 99.0 107.6 117.7 131.6	10.1 11.5 12.3 12.9 13.5 14.3 14.9 15.3 16.8 18.7	11.5 12.5 13.4 14.5 16.3 18.3 20.7 23.2 26.1 29.2	22.1 26.6 29.3 32.1 36.2 42.9 47.8 51.6 55.2 59.3	18.8 22.9 25.4 28.1 32.1 38.9 43.9 47.2 50.1 53.8	8.5 9.7 10.8 12.0 12.8 14.3 15.5 16.5 19.7 23.8	10.3 13.2 14.6 16.1 19.3 24.6 28.4 30.7 30.4 30.0	44.6 49.0 54.8 61.3 69.3 78.0 86.8 94.6 105.5 120.2	26.2 28.8 33.1 37.9 43.6 49.3 55.1 60.4 67.6 77.7
1960 1961 1962 1963 1964 1965 1966 1965 1966 1967 1968	208.3 229.1 252.7 280.0 307.4 334.7 357.9 382.5 412.1 442.5	12.8 13.9 15.2 16.8 18.9 21.2 23.1 25.0 27.3 29.2	195.4 215.1 237.5 263.1 288.4 313.5 334.8 357.4 384.8 413.3	142.7 155.8 170.5 187.9 204.8 221.9 234.4 248.7 266.1 283.9	20.3 23.0 25.8 29.0 33.6 37.2 40.3 43.9 47.3 52.3	32.4 36.4 41.1 46.2 50.0 54.5 60.1 64.8 71.4 77.1	62 3 65 6 69 4 73 4 77 2 81 2 84 1 88 2 93 4 100 2	56.4 59.1 62.2 65.9 73.1 76.1 79.9 84.4 90.2	26.7 29.5 32.3 35.0 38.3 42.0 44.8 47.4 50.6 54.5	29.7 29.6 29.9 30.9 31.1 31.3 32.5 33.8 35.7	133.1 149.5 168 1 189 7 211 3 232 4 250 7 269 3 291 4 313.1	86.3 96.7 108.3 122.0 135.6 148.8 158.3 168.8 181.6 193.7
1970	474.5 525.0 598.2 673.9 734.0 793.9 881.1 1.013.0 1.165.5 1.331.5	30.5 32.4 35.4 39.8 44.9 55.4 63.8 72.8 86.8	444 0 492 7 562 9 634 1 689 1 744 0 825 7 949 2 1,092 8 1 244 7	298.0 326.4 367.0 408.7 441.5 483.2 546.4 642.5 753.7 870.8	60.1 70.1 82.8 93.2 100.0 100.7 105.9 114.3 125.2 135.0	85.8 96.2 113.1 132.3 147.5 160.1 173.4 192.3 213.9 238.8	109 2 120 7 131.1 135 0 140 2 147 0 154 0 161 7 176 4 199 0	97.3 105.2 113.0 116.2 121.3 127.7 133.5 141.6 153.4 172.9	59 9 65 7 68 2 66 1 66 5 68 0 71 4 81 0	37 3 39 5 44 7 50 0 56 2 61 6 67 0 73 6 82 0 92 0	334 7 371 9 431 7 499 1 548 8 597 0 671 6 787 4 916 4 1 045 7	200.8 221.2 254.1 292.4 320.2 355.5 412.9 500.9 600.3 697.9
1980	1,467,6 1,591,5 1,676,1 1,871,7 2,120,6 2,370,3 2,657,9 2,996,2 3,313,1 3,585,4	97.5 107.2 111.3 113.7 112.4 94.1 84.0 75.8 70.8 68.8	1,370,1 1,484,3 1,564,8 1,757,9 2,008,2 2,276,2 2,573,9 2,920,4 3,242,3 3,516,6	969.7 1,046.5 1,091.1 1,214.9 1,358.9 1,528.8 1,732.8 1,960.9 2,194.7 2,428.1	141.1 139.2 141.1 154.3 177.4 205.9 239.3 262.1 279.0 289.9	259.3 298.6 332.6 388.6 471.9 541.5 601.7 697.4 768.6 798.6	225.1 238.9 248.9 279.8 294.8 328.3 370.5 431.4 459.7 486.8	195.2 207.6 217.9 248.8 265.9 288.8 328.6 387.9 414.2 440.1	93.6 101.3 108.0 127.4 136.7 153.0 185.5 235.5 258.8 282.8	101 6 106 2 109 9 121 4 129 1 135 8 143 1 152 4 155 4 155 4	1,145.1 1,245.4 1,315.9 1,478.1 1,713.4 1,947.8 2,203.4 2,489.0 2,782.6 3,029.8	774.5 838.9 873.3 966.1 1,093.0 1,240.0 1,240.0 1,780.5 1,988.0
1990 1991 1991 1992 1993 1994 1994 1995 1996 1997 1998 1999	3,788.2 3,929.8 4,043.4 4,174.8 4,339.2 4,524.9 4,792.5 5,104.5 5,589.6 6,195.4	67.6 67.5 67.9 68.4 69.9 71.7 74.4 78.5 83.1 87.2	3,720.6 3,862.4 3,975.5 4,106.4 4,269.3 4,453.2 4,718.1 5,026.0 5,506.5 6,108.2	2,613 6 2,771 9 2,942 0 3,100 9 3,278 2 3,445 4 3,668 4 3,902 5 4,259 0 4,683 0	288.3 284.9 272.0 269.1 269.5 275.4 287.6 299.4 333.5 374.3	818 8 805 6 761 5 736 4 721 6 732 4 762 1 824 1 914 0 1,051 0	517.9 537.2 533.3 513.4 559.3 584.3 620.3 656.7 674.1 731.5	470.9 493.3 489.8 469.5 514.2 537.1 571.2 605.7 623.8 678.8	310.9 330.6 326.0 303.2 336.8 352.3 379.2 405.7 417.9 462.3	160.0 162.7 163.8 166.2 177.3 184.7 192.0 200.0 205.9 216.5	3,202 7 3,325 2 3,442 2 3,592 9 3,710.0 3,869 0 4,097 8 4,369,4 4,832,4 5,376,8	2,142 7 2,278.6 2,452.2 2,631.4 2,764.0 2,908.3 3,097.3 3,296.8 3,635.2 4,004.2
2000 2001 2002 2003 2004 2005 2006 2007 2008	6,754.2 7,461.8 8,361.9 9,365.5 10,627.4 12,065.1 13,458.4 14,529.0 14,616.0	84.7 88.5 95.4 83.2 95.7 104.8 108.0 112.7 130.7	6,669,4 7,373,2 8,266,5 9,282,3 10,531,8 11,960,3 13,350,3 14,416,4 14,485,3	5,107.8 5,659.7 6,414.4 7,223.6 8,248.4 9,357.0 10,416.8 11,112.5 11,005.3	403.5 445.5 484.5 564.3 617.5 688.2 743.6 844.3 909.9	1,158.2 1,268.0 1,367.6 1,494.4 1,665.9 1,915.1 2,189.9 2,459.6 2,570.2	773.1 772.7 759.3 709.2 661.5 606.6 600.2 609.2 807.2	720.0 718.5 704.0 653.3 605.4 550.4 543.5 552.6 750.7	499.9 497.4 486.2 438.7 398.1 348.4 336.9 342.6 534.0	220.1 221.2 217.7 214.6 207.3 202.0 206.6 210.0 216.7	5,896.3 6,600.6 7,507.2 8,573.1 9,870.3 11,353.7 12,750.2 13,807.2 13,678.1	4,387.8 4,941.2 5,710.4 6,570.3 7,643.0 8,806.6 9,873.3 10,559.9 10,254.6
2008 II IV	14,661,5 14,699,8 14,684,8 14,616,0	117.2 121.6 126.1 130.7	14,544.4 14,578.2 14,558.7 14,485.3	11,180.3 11,160.3 11,107.8 11,005.3	863.1 880.5 900.4 909.9	2,501.0 2,537.4 2,550.4 2,570.2	640.7 683.9 742.7 807.2	583.8 627.2 686.1 750.7	372.3 412.2 474.4 534.0	211.5 215.0 211.7 216.7	13,903.7 13,894 3 13,815.9 13,678 1	10,596.5 10,533.0 10,421.6 10,254.6
2009: 1 II III.P	14,598.1 14,537.4 14,418.7	131.2 131.7 132.3	14,466.9 14,405.7 14,286.5	10,990.8 10,942.7 10,850.0	912.6 912.9 911.6	2,563.6 2,550.0 2,524.8	863.6 921.5 940.8	806.7 863.1 881.0	577.8 628.0 697.3	228.9 235.2 183.7	13,603.4 13,484.2 13,345.7	10,184.1 10,079.6 9,969.1

TABLE B-75. Mortgage debt outstanding by type of property and of financing, 1950–2009 [Billions of dollars]

¹ Includes Federal Housing Administration (FHA)-insured multi-family properties, not shown separately

² Derived figures Total includes multi-family and commercial properties with conventional mortgages, not shown separately

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations

TABLE B-76. Mortgage debt outstanding by holder, 1950-2009

[Billions of dollars]

			Major financi	al institutions		Other I	olders
End of year or quarter	Totai	Total	Savings institutions ¹	Commercial banks ²	Life insurance companies	Federal and related agencies ³	Individuals and others ⁴
1950 1951 1952 1953 1954 1955 1956 1957 1956 1957 1958	72.7 82.1 91.3 101.1 113.6 129.9 144.5 156.5 171.8 191.6	51.7 59.5 66.9 75 0 85.7 99.3 111.2 119.7 131.5 145.5	21 9 25.5 29 8 34 8 41 1 48.9 55 5 61 2 68 9 78 1	137 147 159 169 186 210 227 233 255 28.1	16 1 19.3 21.3 26 0 29 4 33 0 35 2 37 1 39.2	26 33 39 44 47 53 62 7.7 80 102	18 4 19 3 20 4 21 7 23 2 25 3 27 1 29 1 32 3 35 9
1960	208.3 229.1 252.7 280.0 307.4 334.7 357.9 382.5 412.1 442.5	157.5 172.6 192.5 217.1 241.0 264.6 280.7 298.7 319.7 338.9	86.9 98.0 111.1 127.2 141.9 154.9 161.8 172.3 184.3 196.4	28.8 30.4 34.5 39.4 44.0 49.7 54.4 58.9 65.5 70.5	41.8 44.2 46.9 50.5 55.2 60.0 64.6 67.5 70.0 72.0	11.5 12.2 12.6 11.8 12.2 13.5 17.5 20.9 25.1 31.1	39 3 44.2 47.6 51.0 54.1 56 6 59.7 62 8 67.3 72 4
1970	474 5 525 0 598 2 673 9 734 0 793 9 881 1 1,013.0 1,165 5 1,331.5	355 9 394 2 449 9 505 4 542 6 581 2 647 5 745 2 848 2 938 2	208 3 236 2 273 6 305 0 324 2 355 8 404 6 469 4 528 0 574 6	73 3 82 5 99 3 119 1 132 1 136 2 151 3 179 0 214 0 245 2	74.4 75.5 76.9 81.4 86.2 89.2 91.6 96.8 106.2 118.4	38.3 46.3 54.5 64.7 82.2 101.1 116.7 140.5 170.6 216.0	80.2 845 93.8 103.9 109.2 111.5 116.9 127.3 146.8 177.3
1980 1981 1982 1983 1984 1985 1985 1986 1987 1988 1988	1,467.6 1,591.5 1,676.1 1,871.7 2,120.6 2,370.3 2,657.9 2,996.2 3,313.1 3,585.4	996.8 1,040.5 1,021.3 1,108.1 1,247.8 1,363.5 1,667.5 1,667.6 1,834.3 1,935.2	603.1 618.5 578.1 626.6 709.7 760.5 778.0 860.5 924.5 910.3	262.7 284.2 301.3 330.5 381.4 431.2 504.7 594.8 676.9 770.7	131.1 137.7 142.0 151.0 156.7 171.8 193.8 212.4 232.9 254.2	266 8 289 4 355 4 433.3 490.6 580.9 733 7 857 9 9337 8 1,067 3	214 0 261.6 299.4 330.2 382.3 425.8 447.7 470.7 541.1 582.9
1990 1991 1992 1993 1994 1995 1996 1996 1997 1998 1999 1999	3,788.2 3,929.8 4,043.4 4,174.8 4,339.2 4,524.9 4,782.5 5,104.5 5,589.6 6,195.4	1,918.8 1,846.2 1,770.4 1,770.1 1,824.7 1,900.1 1,981.9 2,084.0 2,194.6 2,394.3	801.6 705.4 627.9 598.4 596.2 596.8 628.3 631.8 644.0 668.1	849 3 881 3 900 5 947 8 1,090 2 1,145 4 1,245 3 1,337 0 1,495 4	267.9 259.5 242.0 223.9 215.8 213.1 208.2 206.8 213.6 233.6 233.8	1,258.9 1,422.5 1,558.1 1,682.8 1,788.0 1,878.7 2,006.1 2,111.4 2,310.9 2,613.3	610.5 661.2 714.9 721.8 726.6 746.2 804.6 909.1 1.084.2 1.187.9
2000 2001 2002 2003 2004 2004 2005 2006 2007 2007	6 754 2 7,461 8 8,361 9 9,365 5 10,627 4 12,065 1 13,458 4 14,529.0 14,616.0	2,619,0 2,790,9 3,089,3 3,387,3 3,397,3 4,396,2 4,780,8 5,065,8 5,044,0	723.0 758.0 781.0 1,057.4 1,152.7 1,074.0 1,095.3 860.2	1,660,1 1,789,8 2,058,3 2,255,8 2,595,6 2,958,0 3,403,1 3,644,4 3,644,4	235.9 243.0 250.0 260.9 273.3 285.5 303.8 326.2 342.4	2,834.4 3,205.0 3,592.2 4,026.8 4,079.1 4,208.5 4,525.9 5,190.2 5,759.3	1,300 8 1,465 9 1,680 4 1,951 4 2,622 0 3,460 4 4,151 6 4,273 0 3,812.7
2008: I	14,661.5 14,699.8 14,684.8 14,616.0 14,598.1 14,537.4 14,418.7	5,127.2 5,112.7 5,077.9 5,044.0 5,041.7 4,988.1 4 857.2	1,111.8 1,115.6 883.6 860.2 849.8 755.5 728.7	3,684.5 3,660.7 3,853.4 3,841.4 3,853.3 3,897.6 3,795.5	330.9 336.4 340.9 342.4 338.6 335.0 335.0	5,344.5 5,518.2 5,651.1 5,759.3 5,858.8 5,981.5 6,112.2	4,189.8 4,068.9 3,955.9 3,812.7 3,697.6 3,567.8

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 with 1988.

Icans in process for 1987 and exclude loans in process beginning with 1988 ² Includes loans held by nondeposit trust companies but not loans held by bank trust departments ³ Includes Government National Mortgage Association (ISNMA or Ginnie Mael, Federal Housing Administration, Veterans Administration, Farmers Home Administration (FmHA), Federal Deposit Insurance Corporation, Resolution Trust Corporation, Housing Administration, Also includes U.S. sponsored agencies such as Federal National Mortgage Association (FMMA or Farme Mae), Federal Land Banks, Federal Home Loan Mortgage Corporation (FMMA or Farme Mae), Federal Home Loan Banks (beginning 1997), and mortgage pass-through securities issued or guaranteed by (SMMA, FMLMA, FmHA, or Farmer Mac, Deginning 1994), Federal Home Loan Banks (beginning 1997), and mortgage pass-through securities issued or guaranteed by (SMMA, FMLMA, FmHA, or Farmer Mac, Other U.S. agencies lamounts small or current separate data not readily available) includes private mortgage pools

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations.

TABLE B-77. Consumer credit outstanding, 1959-2009

[Amount outstanding (end of month); millions of dollars, seasonally adjusted]

Year and month	Total consumer credit 1	Revolving	Nonrevolving ²
December	FC 010 00		
1959	55,010.58		56,010.68
1961	62,248,53		62 248 53
1962	68,126.72		68,126.72
1963	76,581.45		76,581.45
1965	95 954 72		95,959.57
1966	101,788.22		101,788.22
1967	106,842.64	2041.54	106,842.64
1968	17,399.09	2,041.04	115,357.55 123,551,35
1970	131 551 55	4 961 46	126,590,09
1971	146,930.18	8,245.33	138,684.84
1972	166,189.10	9,379 24	156,809.86
1973	190,086.31	11,342.22	178,744.09
1975	204,002.00	14,495.27	189,506.73
1976	225.721.59	16,489.05	209,232.54
19//	260,562.70	37,414 82	223,147.88 260,409,43
1979	348,589.11	53,596,43	294,992.67
1980	351 920 05	54 970 05	296 950 00
1981	371,301 44	60,928 00	310,373.44
1982	389,848.74	66,348.30	323,500.44
1983	437,000.00 517,278,98	100 385 63	416 893 35
1985	599,711.23	124,465.80	475,245.43
1986	654,750.24	141,068.15	513,682.08
1987	585,318.77 731,917,76	184 593 12	525,464.86 547 324 64
1989	794,612.18	211,229.83	583,382.34
1990	808,230.57	238,642.62	569,587.95
1991	798,028.97	263,768.55	534,260.42
1992	805,118,69	278,449.67	527,669.02
1994	997,301.74	365,569.56	631,732.19
1995	1,140,744.36	443,920.09	696,824.27
1996	1,253,437,09	507,516.57 540,005.56	/45,920 52 794 751 77
1998	1,420,996,44	581,414,78	839,581.66
1999	1,531,105.96	610,696.47	920,409.49
2000	1,716,507.37	683,457.38	1,033,049.99
2001	1,866,189.74	715,219.04	1,150,970.71
2002	2 076 111 26	767 737 39	1 308 373 87
2004	2,191,505,71	799,175.76	1,392,329.96
2005	2,290,975.48	829,785.83	1,461,189.65
2008	2,504,612.00	939 625 71	1,515,456.55
2008	2,559,121.52	957,341.01	1,601,780.51
2008: Jan	2,527,135.88	945,175.89	1,581,959.99
Feb	2,536,333,46	949,645.39	1,586,688.07
Apr	2,548,117.70	955,308.35	1,592,809.34
May	2,563,619.01	961,352.90	1,602,266 11
June	2,574,328,52	967,194.29	1,607,134.23
Δuo	2,581,550.22	973,000.07	1,607,949 55 1,601,056 63
Sept	2,578,348.57	975,160.71	1,603,187.86
Oct	2,574,966.66	970,840.41	1,604,126.25
	2,564,503.55	963,952.69	1,600,550.85
2009: Jan	2,553,121.52	955 399 01	1,001,700.01
Feb	2.551.383.40	942.695.36	1.608.688.04
Mar	2,536,960.22	934,256.97	1,602,703.25
Apr May	2,522,327.21	925,910,25	1,596,416.96
June	2,515,208.82	910,003.24	1,098,700.08
July	2,498,526.68	911,018,08	1,587,508.60
Aug	2,495,162.27	902,981.36	1,592,180.91
Oct	2,480,293,30 2,487,101,94	890,046.05	1,591,245.25 1,594,440.60
Nov P	2,464,608.21	873,995.62	1,590,612.59

¹ Covers most short- and intermediate-term credit extended to individuals. Credit secured by real estate is excluded.

2 Includes automobile loans and all other loans not included in revolving credit, such as loans for mobile homes, education, boats, trailers, or vacations. These loans may be secured or unsecured. Beginning with 1977, includes student loans extended by the Federal Government and by SLM Holding Corporation. ³ Data newly available in January 1989 result in breaks in these series between December 1988 and subsequent months.

GOVERNMENT FINANCE

TABLE B-78. Federal receipts, outlays, surplus or deficit, and debt, fiscal years, 1943-2011

[Billions of dollars; fiscal years]

					-							
		Total			On-budget			Off-budget		Feder (end of	al debt period)	Adden-
Fiscal year or period	Receipts	Outlays	Surplus or deficit (-)	Receipts	Outlays	Surplus or deficit (-)	Receipts	Öutlays	Surplus or deficit (-)	Gross Federal	Held by the public	dum. Gross domestic product
1943 1944 1945 1946 1946 1947 1948 1949	24.0 43.7 45.2 39.3 38.5 41.6 39.4	78.6 91.3 92.7 55.2 34.5 29.8 38.8	-54.6 -47.6 -47.6 -15.9 4.0 11.8 .6	22.9 42.5 43.8 38.1 37.1 39.9 37.7	78.5 91.2 92.6 55.0 34.2 29.4 38.4	-55.6 -48.7 -48.7 -17.0 2.9 10.5 7	1 1 1.3 1.2 1.5 1.6 1.7	0.1 .1 .2 .3 .4 .4	1.0 1.2 1.2 1.0 1.0 1.2 1.2 1.3	142.6 204.1 260.1 271.0 257.1 252.0 252.6	127.8 184.8 235.2 241.9 224.3 216.3 216.3 214.3	180.3 209.2 221.4 222.6 233.2 256.6 271.3
1950 1951 1952 1953 1954 1955 1955 1955 1956 1957 1958 1959	39.4 51.6 66.2 69.6 69.7 65.5 74.6 80.0 79.6 79.2	42.6 45.5 67.7 76.1 70.9 68.4 70.6 76.6 82.4 92.1	-31 6.1 -15 -65 -12 -30 39 34 -28 -128	37 3 48.5 62 6 65 5 65 1 60 4 68 2 73 2 71.6 71.0	42.0 44.2 66.0 73.8 67.9 64.5 65.7 70.6 74.9 83.1	-4.7 4.3 -3.4 -8.3 -2.8 -4.1 2.5 2.6 -3.3 -12.1	2.1 3.6 4.1 6.4 6.8 8.0 8.0 8.3	5 1.3 1.7 2.3 2.9 4.0 5.0 5.0 6.0 7.5 9.0	1.6 1.8 1.9 1.8 1.7 1.1 1.5 8 5 -7	256.9 255.3 259.1 266.0 270.8 274.4 272.7 272.3 279.7 287.5	219.0 214.3 214.8 218.4 224.5 226.6 222.2 219.3 226.3 226.3 234.7	273 1 320 2 348 7 372 5 377 0 395 9 427 0 450 9 460 0 490 2
1960 1961 1962 1963 1964 1965 1966 1967 1968 1969	92.5 94.4 99.7 106.6 112.6 116.8 130.8 148.8 153.0 186.9	92.2 97.7 106.8 111.3 118.5 118.2 134.5 157.5 178.1 183.6	3 -3.3 -7.1 -4.8 -5.9 -1.4 -3.7 -8.6 -25.2 3.2	81.9 82.3 87.4 92.4 96.2 100.1 111.7 124.4 128.1 157.9	81.3 86.0 93.3 96.4 102.8 101.7 114.8 137.0 155.8 158.4	-3.8 -5.9 -4.0 -6.5 -1.6 -3.1 -12.6 -27.7 5	10.6 12.1 12.3 14.2 16.4 16.7 19.1 24.4 24.9 29.0	10.9 11.7 13.5 15.0 15.7 16.5 19.7 20.4 22.3 25.2	-2 -13 -8 2 -6 40 26 37	290.5 292.6 302.9 310.3 316.1 322.3 328.5 340.4 368.7 365.8	236.8 238.4 248.0 254.0 256.8 260.8 260.8 266.6 289.5 278.1	518.9 529.9 567.8 599.2 641.5 687.5 755.8 810.0 868.4 948.1
1970 1971 1972 1973 1974 1975 1976 1976 Transition quarter 1977 1978	192.8 187.1 207.3 230.8 263.2 279.1 298.1 81.2 355.6 399.6 463.3	195.6 210.2 230.7 245.7 269.4 332.3 371.8 96.0 409.2 409.2 504.0	-28 -230 -234 -149 -61 -532 -737 -147 -537 -59.2 -407	159.3 151.3 167.4 184.7 209.3 216.6 231.7 63.2 278.7 314.2 265.2	168.0 177.3 193.5 200.0 216.5 270.8 301.1 77.3 328.7 369.6 404.0	-8.7 -26.1 -26.1 -15.2 -7.2 -54.1 -69.4 -14.1 -49.9 -55.4	33.5 35.8 39.9 46.1 53.9 62.5 66.4 18.0 76.8 85.4 85.4	27.6 32.8 37.2 45.7 52.9 61.6 70.7 18.7 80.5 89.2	5.9 3.0 2.7 .3 1.1 .9 -4.3 7 -3.7 -3.7 -3.8	380.9 408.2 435.9 466.3 483.9 541.9 629.0 643.6 706.4 776.6 220.5	283.2 303.0 322.4 340.9 343.7 394.7 477.4 495.5 549.1 607.1	1,012.7 1,080.0 1,176.5 1,310.6 1,438.5 1,560.2 1,738.1 459.4 1,973.5 2,217.5 2,217.5
1980 1981 1982 1982 1983 1984 1985 1986 1986 1987 1988 1988	517.1 599.3 617.8 600.6 666.4 734.0 769.2 854.3 909.2 991.1	590.9 678.2 745.7 808.4 851.8 946.3 990.4 1,004.0 1,064.4 1,143.7	-73.8 -79.0 -128.0 -207.8 -185.4 -212.3 -221.2 -149.7 -155.2 -152.6	403.9 469.1 474.3 453.2 500.4 547.9 568.9 660.7 727.4	404.3 477.0 594.9 660.9 685.6 769.4 806.8 809.2 860.0 932.8	-73.1 -73.9 -120.6 -207.7 -185.3 -221.5 -237.9 -168.4 -192.3 -205.4	113.2 130.2 143.5 147.3 166.1 186.2 200.2 213.4 241.5 263.7	113.9 135.3 150.9 147.4 166.2 176.9 183.5 194.8 204.4 210.9	7 -5.1 -7.4 1 9.2 16.7 18.6 37.1 52.8	909.0 994.8 1,137.3 1,371.7 1,564.6 1,817.4 2,120 5 2,346.0 2,601.1 2,867.8	711.9 789.4 924.6 1,137.3 1,307.0 1,507.3 1,740.6 1,889.8 2,051.6 2,190.7	2,301,4 2,724,2 3,057,0 3,223,7 3,844,7 4,146,3 4,403,9 4,651,4 5,008,5 5,399,5
1990	1,032,0 1,055,0 1,091,2 1,154,3 1,258,6 1,351,8 1,453,1 1,579,2 1,721,7 1,827,5	1,253,0 1,324,2 1,381,5 1,409,4 1,461,8 1,515,8 1,560,5 1,601,1 1,652,5 1,701,8	-221 0 -269 2 -290 3 -255 1 -203 2 -164.0 -107 4 -21 9 69 3 125 6	750.3 761.1 788.8 842.4 923.6 1,000.7 1,085.6 1,187.3 1,305.9 1,383.0	1,027,9 1,082,5 1,129,2 1,142,8 1,182,4 1,227,1 1,259,6 1,290,5 1,335,9 1,381,1	-277.6 -321.4 -340.4 -258.8 -226.4 -174.0 -103.2 -29.9 1.9	281.7 293.9 302.4 311.9 335.0 351.1 367.5 392.0 415.8 444.5	225.1 241.7 252.3 266.6 279.4 288.7 300.9 310.6 316.6 320.8	56.6 52.2 50.1 45.3 55.7 62.4 66.6 81.4 99.2 123.7	3,206,3 3,598,2 4,001,8 4,351,0 4,643,3 4,920,6 5,181,5 5,369,2 5,478,2 5,605,5	2,411.6 2,689.0 2,999.7 3,248.4 3,433.1 3,604.4 3,734.1 3,772.3 3,721.1 3,632.4	5,734.5 5,930.5 6,242.0 6,587.3 6,976.6 7,341.1 7,718.3 8,211.7 8,663.0 9,208.4
2000 2001 2002 2003 2004 2005 2006 2007 2008 2007 2008 2009 2009	2,025,2 1,991,1 1,853,1 1,782,3 1,880,1 2,153,6 2,406,9 2,568,0 2,524,0 2,105,0 2,105,0	1,789,0 1,862,9 2,010,9 2,159,9 2,292,9 2,472,0 2,655,1 2,728,7 2,982,6 3,517,7 2,720,7	236.2 128.2 -157.8 -377.6 -412.7 -318.3 -248.2 -160.7 -458.6 -1,412.7	1,544,6 1,483,6 1,337,8 1,258,5 1,345,4 1,576,1 1,798,5 1,932,9 1,866,0 1,451,0	1,458 2 1,516 1 1,655 2 1,796 9 1,913 3 2,069 8 2,233 0 2,275 1 2,507 8 3,000 7 2,153 7	86.4 -32.4 -317.4 -538.4 -568.0 -493.6 -434.5 -342.2 -641.9 -1,549.7	480.6 507.5 515.3 523.8 534.7 577.5 608.4 635.1 658.0 654.0	330 8 346 8 355 7 363 0 379 5 402 2 422 1 453 6 474 8 517 0	149.8 160.7 159.7 160.8 155.2 175.3 186.3 181.5 183.3 137.0	5,628,7 5,769,9 6,198,4 6,760,0 7,354,7 7,905,3 8,451,4 8,950,7 9,986,1 11,875,9	3,409.8 3,319 6 3,540.4 3,913.4 4,295.5 4,592.2 4,829.0 5,035.1 7,544.7	9,821 0 10,225 3 10,543 9 10,979 8 11,685 6 12,445 7 13,224 9 13,896 0 14,439 0 14,237 2
2010 (estimates) 2011 (estimates)	2,165.1 2,567.2	3,833.9	-1,255.5	1,893.1	3,163.7 3,255.7	-1,033.8	674.1	557.U 578.2	78.2 95.9	15,144.0	9,297.7 10,498.3	14,623.9

Note: Fiscal years through 1976 were on a July 1 June 30 basis; beginning with October 1976 (fiscal year 1977); the fiscal year is on an Octuber 1– September 30 basis. The transition quarter is the three-month period from July 1, 1976 through September 30, 1976.

See Budget of the United States Government, Fiscal Year 2011, for additional information.

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

TABLE B-79. Federal receipts, outlays, surplus or deficit, and debt, as percent of grossdomestic product, fiscal years 1937-2011

[Percent; fiscal years]

		Out	lays	Surplus	Federal debt	end of period)
Fiscal year or period	Receipts	Total	National defense	deficit ()	Gross Federal	Held by public
1937	6.1	8.6		-2.5		
1938	7.6 7.1	/./ 10.3		-32	54.0	46.5
1940	6.8	9.8	1.7	-3.0	52.4	44.2
1941	7.6	12.0	5.6	-4.3	50.4	42.3
1942	10.1	24.3	17.8	-14.2	54.9	4/.0
1943	20.9	43.6	37.8	-22.7	97.6	88.3
1945	20.4	41.9	37.5	-21.5	117.5	106.2
1946 1947	17.7	24.8	192	-7.2	110.3	96.2
1948	16.2	11.6	3.5	4.6	98.2	84.3
1949	14.5	14.3	4.8	.2	93.1	/9.0
1950	14.4	15.6	5.0	-1.1	94.1	80.2
1951	19.0	19.4	13.2	4	74.3	61.6
1953	18.7	20.4	14.2	-1.7	71.4	58.6
1954	18.5	10.0	10.8	3	69.3	57.2
1956	17.5	16.5	10.0	.9	63.9	52.0
1957	17.7	17.0	10.1	8. 8_	60.4	48.b 49.2
1959	16.2	18.8	10.0	-2.6	58.6	47.9
1960	17.8	17.8	9.3	.1	56.0	45.6
1961	17.8	18.4	9.4	6	55.2	45.0 43.7
1963	17.8	18.6	8.9	8	51.8	42.4
1964	17.6	18.5	8.5	9	49.3	40.0
1965	17.0	17.8	7.7	5	43.5	34.9
1967	18.4	19.4	8.8	-1.1	42.0	32.9
1968	17.6	20.5	9.4	-2.9	42.5	29.3
1970	19.0	19.3	8.1	3	37.6	28.0
1971	17.3	19.5	7.3	-2.1	37.8	28.1
1972	17.6	19.6	6.7	-2.0	37.1	27.4
1974	18.3	18.7	5.5	- 4	33.6	23.9
1975	17.9	21.3	5.5	-3.4	34.7	25.3
Transition quarter	17.7	20.9	4.8	-3.2	35.0	27.0
1977	18.0	20.7	4.9	-2.7	35.8	27.8
1978	18.0	20.7	4.7	-1.6	33.2	25.6
1980	19.0	21.7	4.9	-2.7	33.4	26.1
1981	19.6	22.2	5.2	-2.6	32.5	25.8
1982	19.2	23.1	5.7 6.1	-4.0	39.9	33.1
1984	17.3	22.2	5.9	-4.8	40.7	34.0
1985	17.7	22.8	b.1 62	-5.1	43.8	30.4
1987	18.4	21.6	6.1	-3.2	50.4	40.6
1988	18.2	21.3	5.8	-3.1	51.9	41.0
1909	18.4	21.2	5.0	-2.0	55.1 55.0	40.0 // // //
1990	17.8	22.3	4.6	4.5	60.7	45.3
1992	17.5	22.1	4.8	-4.7	64.1	48.1
1993	17.5	21.4	4.4	-3.9	66.6	49.3
1995	18.4	20.6	3.7	-2.2	67.0	49.1
1996	18.8	20.2	3.4	-1.4	654	48.4
1998	19.9	19.1	3.1	.8	63.2	43.0
1999	19.8	18.5	3.0	1.4	60.9	39.4
2000	20.6	18.2	3.0	2.4	57.3	34.7
2001	19.5	19.1	3.3	-1.5	58.8	33.6
2003	16.2	19.7	3.7	-3.4	61.6	35.6
2004	16.1	19.6	3.9	-3.5	63.5	36.8
2006	18.2	20.1	3.9	-1.9	63.9	36.5
2007	18.5	19.6	4.0	-1.2	64.4	36.2
2008	14.8	20.7	4.3	-3.2	83.4	53.0
2010 (estimates)	14.8	25.4	4.9	-10.6	94.3	63.6
2011 (estimates)	16.8	25.1	4.9	-8.3	99.0	68.6

Note: See Note, Table B-78.

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

TABLE B-80. Federal receipts and outlays, by major category, and surplus or deficit, fiscal years1943-2011

	Rec	eipts (on-	budget a	nd off-bud	get)			0	lutlays (c	on-budge	t and off	-budget)				Surplus
Fiscal year or period	Total	Indi- vidual income taxes	Corpo- ration income taxes	Social insur- ance and retire- ment receipts	Other	Total	Na de Total	tional fense Depart- ment of Defense, military	Inter- na- tional affairs	Health	Medi- care	In- come secu- rity	Social secu- rity	Net inter- est	Other	or deficit (-) (on- budget and off- budget)
1943 1944 1945 1945 1946 1947 1947 1948 1949	24.0 43.7 45.2 39.3 38.5 41.6 39.4	65 197 184 161 179 193 156	9.6 14.8 16.0 11.9 8.6 9.7 11.2	3.0 3.5 3.5 3.1 3.4 3.8 3.8	4.9 5.7 7.3 8.2 8.5 8.8 8.9	78.6 91.3 92.7 55.2 34.5 29.8 38.8	66.7 79.1 83.0 42.7 12.8 9.1 13.2		1.3 1.4 1.9 1.9 5.8 4.6 6.1	0.1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		1.7 1.5 1.1 2.4 2.8 2.5 3.2	0.2 .2 .3 .4 .5 .6 .7	1.5 2.2 3.1 4.1 4.2 4.3 4.5	7.0 6.6 3.1 3.6 8.2 8.5 11.1	-54.6 -47.6 -47.6 -15.9 4.0 11.8 .6
1950 1951 1952 1953 1954 1955 1955 1955 1957 1957 1958 1959	39.4 51.6 66.2 69.6 69.7 65.5 74.6 80.0 79.6 79.2	15.8 21.6 27.9 29.8 29.5 28.7 32.2 35.6 34.7 36.7	10.4 14.1 21.2 21.2 21.1 17.9 20.9 21.2 20.1 17.3	4.3 5.7 6.4 6.8 7.2 7.9 9.3 10.0 11.2 11.7	8.9 10.2 10.6 11.7 11.9 11.0 12.2 13.2 13.6 13.5	42.6 45.5 67.7 76.1 70.9 68.4 70.6 76.6 82.4 92.1	13.7 23.6 46.1 52.8 49.3 42.7 42.5 45.4 46.8 49.0		4.7 3.6 2.7 2.1 1.6 2.2 2.4 3.1 3.4 3.1	.3 .3 .3 .3 .3 .3 .3 .3 .3 .4 .5 .5 .7	· · · · · · · · · · · · · · · · · · ·	4.1 3.4 3.7 3.8 4.4 5.1 4.7 5.4 7.5 8.2	.8 1.6 2.1 2.7 3.4 4.4 5.5 6.7 8.2 9.7	4.8 4.7 5.2 4.8 4.9 5.1 5.4 5.6 5.8	14.2 8.4 9.1 7.1 8.9 10.1 10.1 10.3 15.5	-3.1 6.1 -1.5 -6.5 -1.2 -3.0 3.9 3.4 -2.8 -12.8
1960 1961 1962 1963 1964 1965 1966 1967 1968 1967 1968	92.5 94.4 99.7 106.6 112.6 116.8 130.8 148.8 153.0 186.9	40.7 41.3 45.6 47.6 48.7 48.8 55.4 61.5 68.7 87.2	21.5 21.0 20.5 21.6 23.5 25.5 30.1 34.0 28.7 36.7	14.7 16.4 17.0 19.8 22.0 22.2 25.5 32.6 33.9 39.0	15.6 15.7 16.5 17.6 18.5 20.3 19.8 20.7 21.7 23.9	92.2 97.7 106.8 111.3 118.5 118.2 134.5 157.5 178.1 183.6	48.1 49.6 52.3 53.4 54.8 50.6 58.1 71.4 81.9 82.5	50.1 51.1 52.6 48.8 56.6 70.1 80.4 80.8	3.0 3.2 5.6 5.3 4.9 5.3 5.6 5.6 5.6 5.3 4.6	.8 .9 1.2 1.5 1.8 2.5 3.4 4.4 5.2	0.1 2.7 4.6 5.7	7.4 9.7 9.2 9.3 9.7 9.5 9.7 10.3 11.8 13.1	11.6 12.5 14.4 15.8 16.6 17.5 20.7 21.7 23.9 27.3	6.9 6.7 6.9 7.7 8.2 8.6 9.4 10.3 11.1 12.7	14.4 15.2 17.2 18.3 22.6 25.0 28.5 32.1 35.1 32.6	.3 -3.3 -7.1 -4.8 -5.9 -1.4 -3.7 -8.6 -25.2 3.2
1970 1971 1972 1973 1974 1975 1976 <i>Transition quarter</i> 1977 1978	192.8 187.1 207.3 230.8 263.2 279.1 298.1 81.2 355.6 399.6 463.3	90.4 86.2 94.7 103.2 119.0 122.4 131.6 38.8 157.6 181.0 217.8	32.8 26.8 32.2 36.2 38.6 40.6 41.4 8.5 54.9 65.7	44.4 47.3 52.6 63.1 75.1 84.5 90.8 25.2 106.5 121.0 138.9	25.2 26.8 27.8 28.3 30.6 31.5 34.3 8.8 36.6 37.7 40.8	195.6 210.2 230.7 245.7 269.4 332.3 371.8 96.0 409.2 458.7 504.0	81.7 78.9 79.2 76.7 79.3 86.5 89.6 22.3 97.2 104.5 116.3	80.1 77.5 77.6 75.0 77.9 84.9 87.9 21.8 95.1 102.3 113.6	4.3 4.2 4.8 4.1 5.7 7.1 6.4 2.5 6.4 7.5 7.5	5.9 6.8 8.7 9.4 10.7 12.9 15.7 3.9 17.3 17.3 18.5 20.5	6.2 6.6 7.5 8.1 9.6 12.9 15.8 4.3 19.3 22.8 26 5	15.7 22.9 27.7 28.3 33.7 50.2 60.8 15.0 61.1 61.5 66.4	30.3 35.9 40.2 49.1 55.9 64.7 73.9 19.8 85.1 93.9	14.4 14.8 15.5 17.3 21.4 23.2 26.7 6.9 29.9 35.5	37.2 40.0 47.3 52.8 52.9 74.8 82.7 21.4 93.0 114.7 120.2	-2.8 -23.0 -23.4 -14.9 -6.1 -53.2 -73.7 -14.7 -53.7 -53.7
1980 1980 1981 1982 1983 1984 1984 1985 1986 1986 1987 1988 1989	517.1 599.3 617.8 600.6 666.4 734.0 769.2 854.3 909.2 991.1	244.1 285.9 297.7 288.9 298.4 334.5 349.0 392.6 401.2 445.7	64.6 61.1 49.2 37.0 56.9 61.3 63.1 83.9 94.5 103.3	157.8 182.7 201.5 209.0 239.4 265.2 283.9 303.3 334.3 359.4	50.6 69.5 69.3 65.6 71.8 73.0 73.2 74.5 79.2 82.7	590.9 678.2 745.7 808.4 851.8 946.3 990.4 1,004.0 1,064.4 1,143.7	134.0 157.5 185.3 209.9 227.4 252.7 273.4 282.0 290.4 303.6	130.9 153.9 180.7 204.4 220.9 245.1 265.4 273.9 281.9 294.8	12.7 13.1 12.3 11.8 15.9 16.2 14.1 11.6 10.5 9.6	20.3 23.2 26.9 27.4 28.6 30.4 33.5 35.9 40.0 44.5 48.4	32.1 39.1 46.6 52.6 57.5 65.8 70.2 75.1 78.9 85.0	86.6 100.3 108.2 123.0 113.4 129.0 120.6 124.1 130.4 137.4	104.1 118.5 139.6 156.0 170.7 178.2 188.6 198.8 207.4 219.3 232.5	42.0 52.5 68.8 85.0 89.8 111.1 129.5 136.0 138.6 151.8 169.0	120.2 131.3 133.0 125.0 121.8 117.9 131.0 141.4 125.2 138.7 158.3	-40.7 -73.8 -79.0 -128.0 -207.8 -185.4 -212.3 -221.2 -149.7 -155.2 -152.6
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999	1,032.0 1,055.0 1,091.2 1,154.3 1,258.6 1,351.8 1,453.1 1,579.2 1,721.7 1,827.5	466.9 467.8 476.0 509.7 543.1 590.2 656.4 737.5 828.6 879.5	93.5 98.1 100.3 117.5 140.4 157.0 171.8 182.3 188.7 184.7	380.0 396.0 413.7 428.3 461.5 484.5 509.4 539.4 571.8 611.8	91.5 93.1 101.3 98.8 113.7 120.1 115.4 120.1 132.6 151.5	1,253.0 1,324.2 1,381.5 1,409.4 1,461.8 1,515.8 1,560.5 1,601.1 1,652.5 1,701.8	299.3 273.3 298.3 291.1 281.6 272.1 265.7 270.5 268.2 274.8	289.7 262.3 286.8 278.5 268.6 259.4 253.1 258.3 255.8 261.2	13.8 15.8 16.1 17.2 17.1 16.4 13.5 15.2 13.1 15.2	57.7 71.2 89.5 99.4 107.1 115.4 119.4 123.8 131.4 141.0	98.1 104.5 119.0 130.6 144.7 159.9 174.2 190.0 192.8 190.4	148.7 172.5 199.6 210.0 217.2 223.8 229.7 235.0 237.8 242.5	248.6 269.0 287.6 304.6 335.8 349.7 365.3 379.2 390.0	184.3 194.4 199.3 198.7 202.9 232.1 241.1 241.1 244.0 241.1 229.8	202.5 223.5 172.1 157.9 171.5 160.2 167.2 157.3 188.9 218.1	-221.0 -269.2 -290.3 -255.1 -203.2 -164.0 -107.4 -21.9 69.3 125.6
2000 2001 2002 2003 2004 2005 2006 2006 2007 2008 2008 2008 2008 2008 2009 2010 (estimates)	2,025.2 1,991.1 1,853.1 1,782.3 1,880.1 2,153.6 2,406.9 2,568.0 2,524.0 2,524.0 2,105.0 2,165.1 2,567.2	1,004.5 994.3 858.3 793.7 809.0 927.2 1,043.9 1,163.5 1,145.7 915.3 935.8 1,121.2	207.3 151.1 148.0 131.8 189.4 278.3 353.9 370.2 304.3 138.2 156.7 296.9	652.9 694.0 700.8 713.0 733.4 794.1 837.8 869.6 900.2 890.9 875.8 875.8	160.6 151.8 146.0 143.9 148.4 154.0 171.2 164.7 173.8 160.5 196.9 213.9	1,789.0 1,862.9 2,010.9 2,159.9 2,292.9 2,472.0 2,655.1 2,728.7 2,982.6 3,517.7 3,720.7	294.4 304.7 348.5 404.7 455.8 495.3 521.8 551.3 616.1 661.0 719.2 749.7	281.0 290.2 331.8 387.1 436.4 474.1 499.3 528.5 594.6 636.7 692.0 731.2	17.2 16.5 22.3 21.2 26.9 34.6 29.5 28.5 28.9 37.5 51.1	154.5 172.2 196.5 240.1 250.5 252.7 266.4 280.6 334.3 372.3	197.1 217.4 230.9 249.4 269.4 298.6 329.9 375.4 390.8 430.1 457.2	253.7 269.8 312.7 334.6 333.1 345.8 352.5 366.0 431.3 533.2 685.9 505.0	409.4 433.0 456.0 474.7 495.5 523.3 548.5 586.2 617.0 683.0 721.5 726.5	222.9 206.2 170.9 153.1 160.2 184.0 226.6 237.1 252.8 186.9 187.8 250.7	239.7 243.2 273.1 302.6 311.8 339.8 393.5 317.9 365.2 651.6 525.8	236.2 128.2 -157.8 -377.6 -412.7 -318.3 -248.2 -160.7 -458.6 -1,412.7 -1,555.6

[Billions of dollars; fiscal years]

Note: See Note, Table B-78.

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

TABLE B-81. Federal receipts, outlays, surplus or deficit, and debt, fiscal years 2006-2011

Description		Actu	Actual				
Description	2006	2007	2008	2009	2010	2011	
RECEIPTS, OUTLAYS, AND SURPLUS OR DEFICIT							
Total				0 404 005	2 407 440	0 507 404	
Receipts	2,406,876	2,568,001	2,523,999	2,104,995	2,165,119	2,567,181 3,833,861	
Surplus or deficit ()	-248,181	-160,701	-458,555	-1,412,686	-1,555,582	-1,266,680	
On-budget Becoints	1 708 404	1 932 912	1 865 953	1 450 986	1 529 936	1 893 113	
Outlays	2,232,988	2,275,065	2,507,803	3,000,665	3,163,742	3,255,668	
Surplus or deficit (-)	-434,494	-342,153	-641,850	1,549,679	1,633,806	1,362,555	
Receipts	608,382	635,089	658,046	654,009	635,183	674,068	
Outlays	422,069	453,637	474,751	517,016	556,959	578,193	
	100,313	101,432	103,233	130,333	/0,224	33,073	
OUTSTANDING DEBT, END OF PERIOD	0.451.050	0.050.744	0.000.002	11.075.051	10 700 010	16 144 020	
Gross Federal Gebt	3 622 378	3,950,744	9,960,062 4 183 032	4.331.144	4.488.962	4.645.704	
Held by the public	4,828,972	5,035,129	5,803,050	7,544,707	9,297,653	10,498,325	
Other	4,060,048	4,255,497	491,127 5,311,923	6,775,547			
BECEIPTS BY SOURCE					1		
Total: On-budget and off-budget	2,406,876	2,568,001	2,523,999	2,104,995	2,165,119	2,567,181	
Individual income taxes	1,043,908	1,163,472	1,145,747	915,308	935,771	1,121,296	
Corporation income taxes	353,915	370,243	304,346	138,229	156,741	296,902	
On-budget	229,439	234,518	242,109	236,908	240,573	261,048	
Off-budget	608,382	635,089	658,046	654,009	635,183	674,068	
Excise taxes	73,961	65,069 26.044	67,334 28.844	62,483 23,482	/3.204 17.011	/4,288 25,035	
Customs duties and fees	24,810	26,010	27,568	22,453	23,787	27,445	
Miscellaneous receipts	44,584 20 045 i	47,556	50,005	52,123	82,849	87,099	
Allowances 1	23,343	32,043			-12,000	-9,000	
All other	14,639	15,513	16,407	17,805	17,766	16.758	
OUTLAYS BY FUNCTION							
Total: On-budget and off-budget	2,655.057	2,728,702	2,982,554	3,517,681	3,720,701	3,833,861	
National defense	521,827	551,271	616,073	661,049	719,179	749,748	
International affairs	29,499 23 584	28,482 25,525	28,857	37,529 29,449	51,138 33,032	54,192 31,554	
Energy	782	-860	628	4,749	18,952	24,863	
Natural resources and environment	33,028	31,732	31,825	35,5/4	47,039 26,610	42,537 25,590	
Commerce and housing credit	6,187	487	27,870	291,535	-25,319	22,127	
On-budget	7,262	-4,606	25,453	291,231	-31,745	17,901	
Transportation	70 244	72 905	77.616	84 289	106 458	104 189	
Community and regional development	54,465	29,567	23,952	27,650	28,469	31,973	
Education, training, employment, and social services	118,482	91,656 266,382	91,287 280,599	79,746	142,521	126,399	
Medicare	329,868	375,407	390,758	430,093	457,159	497,341	
Income security	352,477	365,975	431,313	533,224	685,870	595,005	
On-budget	16,058	19,307	17,830	34,071	37,629	27,664	
Off-budget	532,491	566,846	599,197	648,892	683,867	708,620	
Veterans benefits and services	69,811	72,818	84,653	95,429 51 549	124,655	124,539	
General government	18,177	17,425	20,325	22,026	29,290	27,670	
Net interest	226,603	237,109	252,757	186,902	187,772	250,709	
Off-budget	524,325 -97,722	-106,003	-113,718	-117,954	-118,404	-119,080	
Allowances					18,750	21,676	
Undistributed offsetting receipts	-68,250	-82,238	-86,242	-92.639	-79,731	-90,476	
on-budget	-20,025	-09,939	-13,031	-/0,413	-04,001	-74,503	

[Millions of dollars; fiscal years]

¹ Includes Allowances for Health Reform and the Jobs Bill.

Note: See Note, Table 8-78.

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

TABLE B-82. Federal and State and local government current receipts and expenditures, national income and product accounts (NIPA), 1960–2009

	Total government			Federal Government			State and local government			Adden-
Year or quarter	Current receipts	Current expendi- tures	Net govern- ment saving (NIPA)	Current receipts	Current expendi- tures	Net Federal Govern- ment saving (NIPA)	Current receipts	Current expendi- tures	Net State and local govern- ment saving (NIPA)	dum. Grants- in-aid to State and local govern- ments
1960	134.4 139.0 150.6 162.2 166.6 180.3 202.8 217.7 252.1 283.5 298.9	123 0 132 2 142 9 151 2 159 3 170 6 192 8 220 0 247 0 267 0 295 2	11 4 68 77 11.0 98 100 -23 51 165	93.9 95.5 103.6 111.8 121.0 138.0 146.9 171.3 192.7	86.8 92.9 101.2 106.5 110.9 117.7 135.7 156.2 173.7 184.1	7.1 2.6 2.4 5.3 9 3.2 2.3 -2.4 8.6	44.5 48.1 52.0 61.3 66.5 74.9 82.5 93.5 105.5	40 2 43.8 46.8 50.3 54.9 60.0 67.2 75.5 86.0 97.5 112.0	4.3 5.2 5.7 6.4 6.5 7.8 7.0 7.5 8.0	4.0 4.5 5.0 5.6 6.5 7.2 10.1 11.7 12.7 14.6
1970 1971 1972 1973 1974 1975 1975 1976 1977 1978 1979 1979	280 9 303 6 347 0 390 4 431 8 442 1 505 9 567 3 646 1 728 9	295.2 325.8 356.3 386.5 436.9 510.2 552.2 600.3 656.3 729.9	8.4 22.2 9.3 3.9 5.2 68.2 46.3 33.0 10.2 1.0	186.1 191.9 220.3 250.8 280.0 277.6 323.0 364.0 424.0 486.9	201.6 220.6 245.2 262.6 294.5 348.3 376.7 410.1 452.9 500.5	-15.5 -28.7 -24.9 -11.8 -14.5 -70.6 -53.7 -46.1 -28.9 -14.0	120.1 134.9 158.4 174.3 188.1 209.6 233.7 259.9 287.6 308.4	113.0 128 5 142.8 158.6 178.7 207.1 226.3 246.8 268.9 295.4	7 1 65 156 157 93 25 7 4 13.1 187 13.0	19.3 23.2 31.7 34.8 36.3 45.1 50.7 56.6 65.5 66.3
1980 1981 1982 1983 1984 1985 1986 1986 1987 1988 1989	/98./ 917.7 939.3 1,000.3 1,113.5 1,214.6 1,290.1 1,403.2 1,502.4 1,627.2	846.5 966.9 1,076.8 1,171.7 1,261.0 1,370.9 1,464.0 1,540.5 1,623.6 1,741.0	-47.8 -49.2 -137.5 -171.4 -147.5 -156.3 -173.9 -137.4 -121.2 -113.8	532.8 619.9 617.4 643.3 710.0 774.4 816.0 896.5 958.5 1,038.0	589.5 676.7 752.6 819.5 953.0 1,010.7 1,045.9 1,096.9 1,172.0	-56.6 -56.8 -135.3 -176.2 -171.5 -178.6 -194.6 -149.3 -138.4 -133.9	338 2 370 2 391.4 428 6 480 2 521.1 561.6 590.6 635.5 687.5	329.4 362.7 393.6 423.7 456.2 498.7 540.9 578.6 618.3 667.4	8.8 7.6 -2.2 4.9 23.9 22.4 20.7 12.0 17.2 20.1	72.3 72.5 69.5 71.6 76.7 80.9 87.6 83.9 91.6 98.3
1990	1,709,3 1,759,7 1,845,1 1,948,2 2,091,9 2,215,5 2,380,4 2,557,2 2,729,8 2,902,5	1,879,5 1,984,0 2,149,0 2,229,4 2,304,0 2,412,5 2,505,7 2,581,1 2,649,3 2,761,9	-170.3 -224.2 -303.9 -281.2 -212.2 -197.0 -125.3 -23.8 80.5 140.6	1,082.8 1,101.9 1,148.0 1,224.1 1,322.1 1,407.8 1,526.4 1,526.4 1,656.2 1,777.9 1,895.0	1,259.2 1,320.3 1,450.5 1,504.3 1,542.5 1,614.0 1,674.7 1,716.3 1,744.3 1,796.2	-176.4 -218.4 -302.5 -280.2 -220.4 -206.2 -148.2 -60.1 33.6 98.8	738.0 789.4 846.2 944.8 991.9 1,045.1 1,099.5 1,164.5 1,240.4	731.8 795.2 847.6 889.1 936.6 982.7 1,022.1 1,063.2 1,117.6 1,198.6	6.2 -5.8 -1.4 9 8.2 9.2 23.0 36.3 46.9 41.8	111.4 131.6 149.1 164.0 175.1 184.2 191.1 198.4 212.6 232.9
2000 2001 2002 2003 2004 2004 2005 2005 2005 2006 2007 2008 2009 <i>p</i>	3,132,4 3,118,2 2,967,9 3,043,4 3,265,7 3,659,3 3,995,2 4,209,2 4,057,6	2,906.0 3,093.6 3,274.7 3,458.6 3,653.5 3,916.4 4,147.9 4,424.0 4,740.3 4,993.0	226.5 24.6 -306.9 -415.2 -387.8 -257.1 -152.7 -214.8 -682.7	2,057 1 2,020.3 1,859.3 1,885.1 2,013 9 2,290.1 2,524.5 2,660 8 2,475 0	1,871,9 1,979,8 2,112,1 2,261,5 2,393,4 2,573,1 2,728,3 2,897,2 3,117,6 3,454,5	185.2 40.5 -252.8 -376.4 -379.5 -283.0 -203.8 -203.8 -236.5 -642.6	1,322,6 1,374,0 1,412,7 1,496,3 1,601,0 1,730,4 1,829,7 1,927,3 1,974,2	1,281,3 1,389,9 1,466,8 1,535,1 1,609,3 1,704,5 1,778,6 1,905,6 2,014,4 2,015,1	41.3 15.9 54.1 38.8 8.4 25.9 51.0 21.7 40.2	247.3 276.1 304.2 338.0 349.2 361.2 3590 378.9 391.7 476.6
2006: V	3,919.8 3,971.1 4,024.8 4,064.9	4,064.5 4,137.3 4,197.8 4,192.0	-144.7 -166.2 -173.1 -127.0	2,473.8 2,501.8 2,547.4 2,575.1	2,681.1 2,731.2 2,762.9 2,738.1	-207.3 -229.4 -215.5 -163.0	1,800.6 1,830.3 1,842.5 1,845.3	1,738.0 1,767.0 1,800.1 1,809.4	62.6 63.2 42.4 35.9	354.6 361.0 365.1 355.5
2007. T II IV	4,167.4 4,202.8 4,212.3 4,254.2	4,335.5 4,389.1 4,450.7 4,520.5	-168.1 -186.3 -238.4 -266.3	2,640.1 2,660.1 2,659.9 2,682.9	2,841.0 2,881.3 2,918.7 2,947.9	-200.9 -221.3 -258.8 -265.0	1,902.3 1,923.4 1,932.1 1,951.6	1,869.5 1,888.4 1,911.7 1,952.9	32.8 34.9 20.3 -1.3	375.0 380.7 379.7 380.3
2008: 1 II III IV	4,172.0 3,974.5 4,087.0 3,996.8	4,625.5 4,797.0 4,811 7 4,726.9	-453.5 -822.5 -724.8 -730.2	2,590.7 2,372.1 2,489.5 2,447.8	3,024.2 3,169.0 3,155.2 3,121.9	-433.5 -796.9 -665.7 -674.1	1,963.7 1,994.2 1,987.5 1,951.4	1,983.8 2,019.8 2,046.5 2,007.5	20.1 25.5 59.0 56.1	382.5 391.8 390.0 402.4
2009: 1 II III IV P	3,775.0 3,728.4 3,735.0	4,780.6 5,021.9 5,077.0 5,092.3	-1,005.7 -1,293.5 -1,342.0	2,251.3 2,237.0 2,215.1	3,220.3 3,505.9 3,542.1 3,549.7	-969.1 -1,268.9 -1,327.0	1,961.4 1,989.3 2,003.6	1,998.0 2,013.9 2,018.6 2,029.8	36.6 24.6 14.9	437.7 497.9 483.7 487.2

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Note: Federal grants-in-aid to State and local governments are reflected in Federal current expenditures and State and local current receipts. Total government current receipts and expenditures have been adjusted to eliminate this duplication.

Source: Department of Commerce (Bureau of Economic Analysis).

TABLE B-83. Federal and State and local government current receipts and expenditures,
national income and product accounts (NIPA), by major type, 1960–2009

Current receints Current expenditures Current tax receipts Contri Current Net butions Income Current surplus Con-Current govern Year or Taxes for sumptrans Interest Sub Taxes retrans-. ment quarter govern Per on fer Total ² fer Total ceipts govern tion pay si-٥n savino sonal produc ment Total ¹ corpo ог re ment expenpay ments dies curren: tion social rate assets ceipts enter ditures ments and insur taxes income prises mports ance 22.7 22.8 24.0 26.2 2.7 2.9 3.2 10.4 10.2 11.1 44.5 47.0 16.5 17.1 0.9 123.0 83.3 88.2 28.1 31.9 1960 134.4 113.4 46.1 0.9 1.1 11.4 6.8 139 N 47.3 2.0 1961 1171 8 51.6 50.4 142.9 32.8 150.6 126.1 19.2 21.7 12 96.8 2.3 2.2 2.7 3.0 1962 54.6 52.1 3.4 3.7 1963 162.2 134.4 53.4 1.3 1.4 151.2 102.7 34.3 12.0 11.0 22.5 23.5 31.4 1.3 1.3 1.0 1964 166.6 137.5 57.3 607 28.0 1.6 159.3 108.6 35.1 12.9 38.0 149.5 163.5 173.8 170.6 192.8 1965 180.3 577 30.9 33.7 41 19 98 664 63.2 47 131.8 42.0 15.1 3.9 10.0 202.8 1966 67.9 76.4 2.5 2.6 2.7 35.0 5.5 6.4 50.3 16.4 -2.3 32.7 220.0 149.5 3.8 1967 252.1 87.0 39.4 38.8 247 N 165.7 58.4 18.8 4.2 203 1 1968 64 1 20.2 283.5 228.4 104.5 83.9 39.7 44.3 7.0 1.0 267.0 178.2 4.5 16.5 1969 -8.4 229.2 240.3 103.1 34.4 37.7 46.6 51.5 8.2 9.0 2.9 3.1 295.2 190.1 77.3 23.1 4.8 4.7 286.9 91.4 .0 1970 24.5 26.3 31.3 100.5 325.8 356.3 204 7 92.2 -22.2 303.6 347.0 1971 41.9 103.0 -9.3 3.9 273.8 123.6 59.6 9.5 3.6 220.8 6.6 5.2 1972 390.4 132.4 76.0 11.6 3.9 4 386.5 234.8 299.3 1172 49.3 1973 431.8 328.1 151.0 124.9 51.8 85.8 14.4 4.5 -9 436.9 510.2 261.7 294.6 135.9 171.3 35.6 40.0 3.3 -5.2 1974 -68.2 1975 147.6 172.3 50.9 64.2 334 3 125.3 89 Q 16.1 -3.2 -1.8 -2.7 -2.2 -2.9 102.0 5.8 5.1 383.6 146.4 16.3 552.2 316.6 1843 46.3 46 3 505.9 1976 6.8 346.6 50.8 60.2 1977 567.3 431.0 197.5 159.7 73.0 113.9 18.4 600.3 195.9 -33.0 1978 646 484.8 2294 170.9 83.5 132.1 23.2 656.3 376.5 210.9 89 -10.2236 0 8.5 30.8 9.4 729.9 72.9 1979 728.9 537.9 268.7 180.1 88.0 153.7 412.3 -10 84.8 798.7 200.3 167.2 39.9 ~51 846.5 465.9 281.7 89.1 98 -47.8 585.6 298.9 11.1 1980 663.5 345.2 235.6 81.1 196.9 50.2 12.7 -5.6 966.9 520.6 318.1 116.7 11.5 -49.2 1981 -3.2 -1.9 .6 659 5 354 1 63.1 77.2 210.1 58.9 15.3 1,076.8 354.7 38.9 15.0 137.5 1982 939.3 240.9 568.1 352.3 377 4 16.9 19.7 1.171.7 382.5 395.3 156.9 187.3 21.3 21.1 1.000.3 694.1 263.3 227.2 65.3 610.5 171.4 1983 94.0 258.8 282.8 74 3 -147.5 1984 113.5 762.5 289.8 1 261 0 657.6 23.4 25.9 27.0 96.5 720.1 823.9 417.3 84.0 1 370 9 420.4 208.8 2' 156.3 1985 1 214 6 308.1 1,290.1 868.8 437.2 323.4 106.5 304.9 89.7 1,464.0 776 1 446.6 216.3 24.9 173.9 1986 9 987 1,403.2 965.7 489.1 347.5 127.1 324.6 85.6 1,540.5 815 464.4 230.8 30.3 -137.41988 1,502.4 018.9 504.9 374 5 137.2 363.2 89.9 93.7 27 9 26 1,623.6 852.8 493.6 538.1 247.7 29.5 27.4 121.2 141.5 32.5 4.9 1.741.0 -113.8 398.9 1989 1.627.2 1.109.2 566.1 386.9 902.9 294.2 311.7 -170.3 1 709 3 425.0 140.6 412.1 98.0 36.3 1.879.5 966.0 592.4 27.0 1990 1 161 3 592.7 1.6 759.7 457.1 44.9 5.7 1,984.0 .015.8 628.9 27.5 1,179.9 586.6 133.6 432.2 97.0 -224.2 1991 8.2 312.3 312.7 1992 ,845.1 1,239.7 610.5 483.4 143.1 457 1 89.6 50.5 2,149.0 1,050.4 756.3 30.1 303.9 479.6 86.8 55.3 60.0 1993 1,948.2 1 317 8 646.5 503.1 165.4 2,229.4 1 075 4 804 6 36.7 -281.2212.2 2,091.9 96 2 304 0 1 108 9 322.7 1,425.6 690.5 545.2 186.7 510.7 839.9 32.5 1994 557.9 58.4 13.1 2,412.5 1,141.4 882.4 353.9 34.8 197.0 1995 743.9 211.0 535.5 91.8 380.4 223.6 557.9 99.9 66.8 14.4 2.505.7 1,176.7 364.6 35.2 1996 2,380.4 1 641.5 832.0 580.8 929.2 -125 1,780.0 926.2 1 026.4 611.6 590.3 627.8 103.6 69.3 75.3 14.1 13.3 2,581.1 2.649.3 1,222.1 954.6 370.6 371.6 33.8 -23.8 1997 239.2 80.5 19108 1 263 2 978 1 36.4 1998 27298 639.5 2,902.5 81.7 2,761.9 1,343.9 357.9 45.2 2,035.8 1,107.5 673.6 248.8 664.6 106.4 14.1 1,014.9 140.6 1999 9.1 4.0 1,071.5 362.0 341.5 1,232.3 708.6 254.7 709.4 118.8 92.3 2,906.0 1,426.6 45.8 226.5 2000 3,132.4 2,202.8 3,118.2 2,967.9 2.163.7 24.6 2001 1,234.8 727.7 193.5 736.9 114.6 98.9 3,093.6 1,524.4 1 169 0 58.7 312.6 298.0 41.4 2002 1.050.4 762.8 181.3 755 2 qqq 104 3 6.3 7.0 3 274 7 1,639.9 1 280 9 -306.9 -415.2 96.8 3,458.6 108.9 1.354.8 49.1 3 043 4 2,047.9 782.8 2003 1 000.3 806.8 231.8 1.2 -3.5 -4.2 -6.6 2004 3.265.7 1.047.8 863.4 292.0 831.7 100.3 119.3 3,653.5 1,860.4 1 440.1 306.6 342.7 46.4 387.8 2005 3,659.3 546.8 930.2 395.9 877 4 1119 126.7 3,916.4 1,977.9 1,534.9 60.9 257 208.6 3,995.2 4,209.2 372.2 2,807.4 1.352 4 454.2 2,093.3 1,631.0 51.4 54.8 2006 986.8 926.4 129.6 136.0 4 147 9 152.7 2,960.6 1,490.9 1.028.7 143.3 1477 4,424.0 -214.8 2007 964.2 53.5 4.057.6 1,047.3 995.6 144.2 166.7 -6.9 4,740.3 2,386.9 904.0 395.9 -682.7 263.3 2008 2,136.4 2009 4 1,107.6 1,023.9 978.3 164.3 189.0 -8.1 4,993.0 2,417.8 379.1 59.7 2,747.6 1,321.5 971.5 443.4 920.0 122.2 132.4 -2.4 4,064.5 2,064.8 1,590.0 354.1 55.6 -144 7 2006 3,919.8 3,971.1 1,340.2 983.3 456.4 921.9 127.4 134.5 137.0 -3.8 -4.7 4,137.3 2,083.1 627.3 375.4 51.4 166.2 11 991.6 41 4 024 8 2 835 1 1 354 3 477 2 925 3 132 N 391.1 49.8 -173.1 1,000.7 439.7 136.9 2,119.7 4.064.9 2,855.7 1,393.5 938.4 139.9 -6.0 4,192.0 1,655.5 368.2 48.7 IV 957.3 2,152.2 143.0 4,335.5 2007 4,167.4 2,935.1 1,459.5 1,015.3 447.4 140.4 -8.4 1.730.7 403.3 49.2 -168.11,481.8 1,500.7 4,202.8 2,963.1 1,025.2 442.0 958.5 142.8 145.3 -6.9 4,389. 714.4 419.1 58.3 -186.3 2,234.3 1,744.5 Ш 4,212.3 2,960.4 1 032 2 414.3 963.4 144.9 148 5 -4.9 4 450 7 415.8 56.0 238.4 153.9 IV 4,254,2 2,983.6 1,521.9 1.042.3 403.2 977 5 145.1 -6.0 4,520.5 405.5 55.4 266.3 4,172.0 1,531.8 2 884 1 1 042 5 295.0 990.3 143.7 159.4 -5.6 4,625.5 2.332.5 1.825.2 414.6 53.1 -453.5 2008 1 52.9 52.9 3,974.5 1,050.8 288.4 162.0 -6.3 4,797.0 2,381.5 1,966.7 -822.5 -724.8 2.679.8 993.9 145.1 395.9 Ш 1,058.5 2,786.2 437.3 275.7 999.9 143.2 164.5 -6.9 4,811.7 2,436.4 1,898.7 423.8 Ш IV 3,996.8 2,681.8 1,434.3 1,037.3 194.2 998.4 144.6 181.0 -8.9 4,726.9 2,397.1 1.925.3 349.3 55.2 -730.2 156.5 166.5 165.7 55.5 54.9 67 7 3,775.0 1,187.3 1,018.8 244.2 281.2 974.8 190.7 -10.7 4,780.6 2,378.6 2,009.2 337.3 382.8 ~1,005.7 2009: I 2,463.7 -8.8 -6.3 199.3 37284 2,395.4 2,416.7 1,082.6 1.019.6 976.0 П -12935296.7 979.0 180.0 5,077.0 2,431.0 2.174.4 403.8 -1.342.0 3,735.0 Ш IV P 1.034.3 983.4 168.5 186.1 -6.6 5 092 3 2,452.4 2,186.8 392.6 60.5 1 074 4

[Billions of dollars; guarterly data at seasonally adjusted annual rates]

1 Includes taxes from the rest of the world, not shown separately.

² 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. Federal Government current receipts and expenditures, national income and product accounts (NIPA), 1960-2009

				Cu	irrent rece	receipts					Current expenditures				
Year or quarter	Total	Total 1	Current ta Per- sonal current	Taxes on produc- tion	Taxes on corpo- rate	Contri- butions for govern- ment social	income re- ceipts on assets	Current trans- fer re- ceipts	Current surplus of govern- ment enter-	Total ²	Con- sump- tion expen- ditures	Current trans- fer pay- ments ³	interest pay- ments	Sub- si- dies	Net Federal Govern- ment saving
		1	taxes	and imports	income	ance			prises		Una co				
1960 1961 1962 1963 1964 1965 1966 1966 1967 1968 1968	93.9 95.5 103.6 111.8 121.0 138.0 146.9 171.3 192.7	76.5 77.5 83.3 88.6 87.7 95.6 104.7 109.8 129.7 146.0	41.8 42.7 46.5 49.1 51.1 58.6 64.4 76.4 91.7	13.1 13.2 14.1 15.4 15.4 15.4 15.2 16.9 17.8	21 4 21.5 22.5 24.6 26.1 28.9 31.4 30.0 36.1 36.1	16.0 16.6 21.1 21.8 22.7 30.6 34.1 37.9 43.3	1.4 1.5 1.7 1.8 1.9 2.1 2.5 2.9 2.7	0.4 5 .6 7 1.1 1.2 1.1 1.1 1.1	-0.3 5 3 3 3 6 6 3 4	86.8 92.9 101.2 106.5 110.9 117.7 135.7 156.2 173.7 184.1	49.7 51.6 57.8 60.8 62.8 65.7 75.7 87.0 95.3 98.3	27.6 31.4 32.5 34.2 35.4 38.5 44.4 52.8 59.7 65.5	8.4 7.9 8.6 9.3 10.0 10.6 11.6 12.7 14.6 15.8	1.1 2.0 2.3 2.2 2.7 3.0 3.9 3.8 4.1 4.5	7 1 2.6 2.4 5.3 9 3.2 2.3 -9.3 -2.4 8.6
1970 1971 1972 1973 1974 1975 1975 1976 1977 1978 1978	186.1 191.9 220.3 250.8 280.0 277.6 323.0 364.0 424.0 486.9	137.9 138.6 158.2 173.0 192.1 186.8 217.9 247.2 286.6 325.9	88.9 85.8 102.8 109.6 126.5 120.7 141.2 162.2 188.9 224.6	18.1 19.0 18.5 19.8 20.1 21.4 22.7 25.3 25.7	30.6 33.5 36.6 43.3 45.1 43.6 54.6 61.6 71.4 74.4	45.5 50.3 58.3 74.5 88.1 99.8 111.1 128.7 149.8	3.1 3.5 3.6 3.8 4.2 4.9 5.9 6.7 8.5 10.7	1.1 1.3 1.3 1.4 1.5 1.6 2.0 2.7 3.1	-1.5 -1.6 -1.1 -1.8 -3.6 -2.2 -3.0 -2.5 -2.5 -2.6	201.6 220.6 245.2 262.6 294.5 348.3 376.7 410.1 452.9 500.9	98.6 101.9 107.6 108.8 117.9 129.5 137.1 150.7 163.3 178.9	80.5 96.1 112.7 125.9 146.9 185.6 200.9 215.5 235.7 258.0	17.7 17.9 18.8 22.8 26.0 28.9 33.8 37.1 45.3 55.7	4.8 6.6 5.1 3.2 4.3 4.9 6.9 8.7 8.2	-15.5 -28.7 -24.9 -11.8 -14.5 -70.6 -53.7 -46.1 -28.9 -14.0
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989	532.8 619.9 617.4 643.3 710.0 774.4 816.0 896.5 958.5 1,038.0	355.5 407.7 386.3 393.2 425.2 460.2 479.2 543.6 566.2 621.2	250.0 290.6 295.0 286.2 301.4 336.0 350.0 392.5 402.8 451.5	33.7 49.9 41.0 44.4 47.3 46.1 43.7 45.9 49.8 49.7	70.3 65.7 49.0 61.3 75.2 76.3 83.8 103.2 111.1 117.2	163.6 193.0 206.0 223.1 254.1 277.9 298.9 317.4 354.8 378.0	13.7 18.3 22.2 23.8 26.6 29.1 31.3 27.5 29.4 28.0	3.9 4.1 5.7 6.1 7.4 9.7 8.5 11.0 10.5 12.7	-3.9 -3.2 -2.9 -3.0 -3.4 -2.6 -1.9 -3.0 -2.3 -2.3 -1.7	589.5 676.7 752.6 819.5 881.5 953.0 1,010.7 1,045.9 1,096.9 1,172.0	207.4 238.3 263.3 286.4 309.9 338.3 358.0 373.7 381.7 398.5	302.9 333.5 363.0 387.2 400.8 424.0 449.9 457.6 486.8 527.1	69.7 93.9 111.8 124.6 150.3 169.4 178.2 184.6 199.3 219.3	9.4 11.1 14.6 20.9 20.7 21.0 24.6 30.0 29.2 27.1	-56.6 -56.8 -135.3 -176.2 -171.5 -178.6 -194.6 -149.3 -138.4 -133.9
1990 1991 1992 1993 1994 1995 1996 1996 1997 1998 1998	1,082.8 1,101.9 1,148.0 1,224.1 1,322.1 1,407.8 1,526.4 1,656.2 1,777.9 1,895.0	642.2 635.6 659.9 713.0 781.4 844.6 931.9 1.030.1 1,115.8 1,195.4	470.1 461.3 475.2 505.5 542.5 585.8 663.3 744.2 825.2 893.0	50.9 61.8 63.3 66.4 79.0 75.6 72.9 77.8 80.7 83.4	118.1 109.9 118.8 138.5 156.7 179.3 190.6 203.0 204.2 213.0	402.0 420.6 444.0 465.5 496.2 521.9 545.4 579.4 617.4 654.8	29.6 29.1 24.8 25.5 22.7 23.3 26.5 25.4 21.2 20.6	14.2 18.2 19.4 21.3 22.8 18.4 23.8 21.3 22.6 23.4	-5.3 -1.6 0 -1.3 9 3 -1.2 1 8 .8	1,259.2 1,320.3 1,450.5 1,504.3 1,542.5 1,614.0 1,674.7 1,716.3 1,744.3 1,796.2	419.0 438.3 444.1 441.2 440.7 440.1 446.5 457.5 454.6 473.3	576.2 604.0 725.4 773.4 808.3 849.0 896.0 925.4 954.9 995.4	237.5 250.9 251.3 253.4 261.3 290.4 297.3 300.0 298.8 282.7	26.6 27.1 29.7 36.3 32.2 34.5 34.9 33.4 35.9 44.8	-176.4 -218.4 -302.5 -280.2 -220.4 -206.2 -148.2 -60.1 33.6 98.8
2000 2001 2002 2003 2004 2005 2006 2006 2007 2008 2008 2009 <i>p</i>	2,057 1 2,020 3 1,859 3 1,859 3 1,885 1 2,013 9 2,290.1 2,524 5 2,660 8 2,475.0	1,309.6 1,249.4 1,073.5 1,070.2 1,153.8 1,383.7 1,558.3 1,647.2 1,421.7	995.6 991.8 828.6 774.2 931.9 1.049.9 1.168.1 1.102.5 836.5	87.3 85.3 86.8 89.3 94.3 98.8 99.4 94.7 92.0 92.4	219.4 164.7 150.5 197.8 250.3 341.0 395.0 370.2 212.3	698.6 723.3 739.3 762.8 807.6 852.6 904.6 944.4 974.5 956.4	24.5 24.5 20.3 22.8 23.2 23.7 26.1 29.1 30.3 48.3	25.7 27.0 26.1 25.6 29.0 33.6 38.3 42.7 52.3 68.1	-1.2 -4.0 3.7 -3.5 -2.9 -2.7 -3.8 -3.8 -2.9 -2.7 -3.8 -4.9	1,871.9 1,979.8 2,112.1 2,261.5 2,393.4 2,573.1 2,728.3 2,897.2 3,117.6 3,454.5	496.0 530.2 590.5 660.3 721.4 765.8 811.0 848.8 934.4 986.8	1,047.4 1,140.0 1,252.1 1,339.4 1,405.0 1,491.3 1,587.1 1,688.6 1,840.6 2,137.1	283.3 258.6 229.1 212.9 221.0 255.4 279.2 312.2 292.0 272.3	45.3 51.1 40.5 49.0 46.0 60.5 51.0 47.6 50.6 58.3	185 2 40.5 -252.8 -376 4 -379.5 -283.0 -203.8 -236.5 -642.6
2006: 1 II Itt IV	2,473.8 2,501.8 2,547.4 2,575.1	1,517.6 1,541.6 1,581.3 1,592.8	1,023.1 1,034.7 1,053.9 1,088.0	99.6 99.6 99.9 98.6	383.8 396.1 415.5 384.6	896.9 899.8 904.0 917.8	24.3 25.5 26.5 28.2	37.1 37.7 38.6 39.9	-2.1 -2.7 -3.0 -3.6	2,681.1 2,731.2 2,762.9 2,738.1	810.4 808.5 813.1 812.1	1,552.4 1,588.9 1,603.7 1,603.5	263.1 282.8 296.7 274.2	55.2 51.1 49.4 48.3	-207.3 -229.4 -215.5 -163.0
2007: † II III IV	2,640.1 2,660.1 2,659.9 2,682.9	1,638.3 1,654.0 1,644.8 1,651.7	1,136.8 1,157.6 1,177.6 1,200.6	94.9 94.8 95.4 93.6	393.6 387.3 358.5 341.3	937.3 938.8 943.8 957.6	28.3 28.7 29.6 29.8	41.0 41.5 42.6 45.8	-4.8 -2.9 8 -2.1	2,841.0 2,881.3 2,918.7 2,947.9	821.1 839.9 860.8 873.4	1,666.2 1,672.4 1,694.1 1,721.6	306.4 321.3 316.6 304.7	47.4 47.7 47.3 48.2	-200.9 -221.3 -258.8 -265.0
2008: 1 II IV	2,590.7 2,372.1 2,489.5 2,447.8	1,546.0 1,322.8 1,435.2 1,382.9	1,195.3 984.2 1,110.1 1,120.2	92.7 93.1 91.8 90.2	243.1 231.2 218.5 156.5	970.0 973.0 978.5 976.4	29.3 31.2 30.6 30.0	47.9 48.4 49.0 64.0	-2.5 -3.4 -3.9 -5.4	3,024.2 3,169.0 3,155.2 3,121.9	903.2 923.2 956.0 955.4	1,759.5 1,904.5 1,829.0 1,869.5	312.3 291.4 319.5 244.6	49.2 49.9 50.7 52.4	-433.5 -796.9 -665.7 -674.1
2009: 1 II IV.P	2,251.3 2,237.0 2,215.1	1,191.5 1,157.4 1,153.2	900.3 829.9 811.0 804.7	85.7 91.6 93.5 98.7	192.0 223.8 238.1	953.0 954.3 957.1 961.3	40.7 50.8 49.5 52.1	72.7 79.8 58.7 61.2	-6.7 -5.3 -3.5 -4.3	3,220.3 3,505.9 3,542.1 3,549.7	954.2 979.1 1,001.2 1,012.8	1,981 2 2,195.6 2,178.1 2,193.5	231.3 277.4 296.3 284.1	53.6 53.7 66.5 59.3	-969.1 -1,268.9 -1,327.0

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Includes taxes from the rest of the world, not shown separately.
 Includes an item for the difference between wage accruals and disbursements, not shown separately.
 Includes Federal grants-in-aid to State and local governments. See Table B–82 for data on Federal grants-in-aid.

TABLE B-85. State and local government current receipts and expenditures, national income and product accounts (NIPA), 1960–2009

				Cur	rent recei	ots					Curre	nt expend	itures		
Year or quarter	Total	Total	Current ta Per- sonal current taxes	x receipts Taxes on produc- tion and imports	Taxes on corpo- rate income	Contri- butions for govern- ment social insur- ance	Income re- ceipts on assets	Current transfer re- ceipts 1	Current surplus of govern- ment enter- prises	Total ²	Con- sump- tion expen- ditures	Govern- ment social benefit pay- ments to per- sons	Interest pay- ments	Sub- si- dies	Net State and local govern- ment saving
1960 1961 1962 1963 1964 1965 1966 1967 1966 1967 1968 1969	44.5 48.1 52.0 61.3 66.5 74.9 82.5 93.5 105.5	37 0 39.7 42 8 45.8 49.8 53.9 58.8 64 0 73 4 82.5	4 2 4 6 5 0 5 4 6 1 6 6 7 8 8 6 10 6 12 8	31 5 338 363 387 418 453 488 528 595 660	1.2 1.3 1.5 1.7 1.8 2.0 2.2 2.6 3.3 3.6	0.5 5 6 7 8 9 9	1 3 1 4 1.5 1.6 1.9 2 2 2 6 3 0 3 5 4 3	45 52 58 64 73 80 111 131 142 162	12 13 14 16 16 17 16 15 15 15	40.2 43.8 46.8 50.3 54.9 60.0 67.2 75.5 86.0 97.5	33.5 36.6 39.0 41.9 45.8 50.2 56.1 62.6 70.4 79.8	4.6 5.0 5.3 5.7 6.2 6.7 7.6 9.2 11.4 13.2	2.1 2.2 2.4 2.7 2.9 3.1 3.4 3.7 4.2 4.4	0 0 0 0 0 0 0 0 0 0	4.3 4.3 5.2 5.7 6.4 6.5 7.8 7.0 7.5 8.0
1970 1971 1972 1973 1974 1975 1976 1976 1977 1978 1978	120.1 134.9 158.4 174.3 188.1 209.6 233.7 259.9 287.6 308.4	91.3 101.7 115.6 126.3 136.0 147.4 165.7 183.7 198.2 212.0	14.2 15.9 20.9 22.8 24.5 26.9 31.1 35.4 40.5 44.0	73 3 81 5 89 4 97 4 104 8 113 2 125 0 136 9 145 6 154 4	3.7 4.3 5.3 6.0 6.7 7.3 9.6 11.4 12.1 13.6	1.1 1.2 1.3 1.5 1.7 1.8 2.2 2.8 3.4 3.9	52 55 59 7.8 10.2 11.2 10.4 11.7 14.7 20.1	21.1 25.2 34.0 37.3 39.3 48.7 55.0 61.4 71.1 72.7	15 14 16 15 9 4 4 3 3 -3	113.0 128.5 142.8 158.6 178.7 207.1 226.3 246.8 268.9 295.4	91.5 102.7 113.2 126.0 143.7 165.1 179.5 195.9 213.2 233.3	16.1 19.3 22.0 24.1 25.3 30.8 34.1 37.0 40.8 44.3	53 65 75 85 96 11.1 12.5 13.7 14.9 17.2	0 0 1 1 2 2 2 2 3	7.1 6.5 15.6 15.7 9.3 2 5 7 4 13.1 18.7 13 0
1980 1981 1982 1983 1984 1985 1986 1986 1987 1988 1988	338.2 370.2 391.4 428.6 480.2 521.1 561.6 590.6 635.5 687.5	230.0 255.8 273.2 300 9 337.3 363.7 389.5 422.1 452.8 488.0	48.9 54.6 59.1 66.1 76.0 81.4 87.2 96.6 102.1 114.6	166.7 185.7 200.0 218.9 242.5 262.1 279.7 301.6 324.6 349.1	145 154 140 159 188 202 227 239 260 242	3.6 3.9 4.0 4.1 4.7 4.9 6.0 7.2 8.4 9.0	26 3 32.0 36.7 41.4 47.7 54.8 58.4 58.4 58.2 60.5 65.7	79 5 81.0 79.1 82.4 89.0 94 5 105.0 100.0 109.0 118.1	-12 -24 -1.6 -2 1.5 3.2 2.8 3.1 48 6.7	329.4 362.7 393.6 423.7 456.2 498.7 540.9 578.6 618.3 667.4	258.4 282.3 304.9 324.1 347.7 381.8 418.1 441.4 471.0 504.5	51.2 57.1 61.2 66.9 71 2 77.3 84.3 90.7 98.5 109.3	194 228 271 323 370 394 382 462 484 532	4 5 4 .3 .3 .3 4 4	8 8 7 6 -2.2 4 9 23 9 22 4 20.7 12 0 17 2 20.1
1990 1991 1992 1993 1994 1995 1995 1995 1997 1998 1998	738.0 789.4 846.2 944.8 991.9 1,045.1 1,099.5 1,164.5 1,240.4	519.1 544.3 579.8 604.7 644.2 672.1 709.6 749.9 794.9 840.4	122.6 125.3 135.3 141.1 148.0 158.1 168.7 182.0 201.2 214.5	374.1 395.3 420.1 436.8 466.3 482.4 507.9 533.8 558.8 558.8 590.2	22.5 23.6 24.4 26.9 30.0 31.7 33.0 34.1 34.9 35.8	10.0 11.6 13.1 14.1 14.5 13.6 12.5 10.8 10.4 9.8	68.5 68.0 64.8 61.3 63.3 68.5 73.4 78.2 81.5 85.8	133.5 158.2 180.3 198.1 212.3 224.2 234.0 246.4 265.3 291.1	6.9 7.3 8.3 9.9 10.5 13.5 15.6 14.2 12.5 13.3	731.8 795.2 847.6 889.1 936.6 982.7 1,022.1 1,063.2 1,117.6 1,198.6	547.0 577.5 606.2 634.2 668.2 701.3 730.2 764.5 808.6 870.6	127.7 156.5 180.0 195.2 206.7 217.6 224.3 227.6 235.8 252.3	56.8 60.8 61.0 59.4 61.4 63.5 67.3 70.6 72.8 75.2	4 .4 .3 .3 .3 .4 .4 .4	6.2 5.8 1 4 9 8.2 9.2 23.0 36.3 46.9 41.8
2000	1,322.6 1,374.0 1,412.7 1,496.3 1,601.0 1,730.4 1,829.7 1,927.3 1,974.2	893.2 914.3 928.7 977.7 1,059.4 1,163.1 1,249.0 1,313.4 1,336.3	236.7 243.0 221.8 226.2 248.6 276.7 302.5 322.8 330.0 271.2	621.3 642.4 676.0 717 5 769.1 831.4 887.4 934.0 955.3 931.6	35.2 28.9 30.9 34.0 41.7 54.9 59.2 56.5 51.0	10.8 13.7 15.9 20.1 24.1 24.8 21.8 19.8 21.1 21.9	94.3 90.0 79.6 74.0 77.1 88.3 103.5 114.2 113.9 116.0	313.9 348.0 382.3 421.3 439.4 454.3 456.7 483.9 506.1 597.5	10.4 8.0 6.1 3.3 1.0 .1 -1.3 -3.9 -3.2 -3.2	1,281.3 1,389.9 1,466.8 1,535.1 1,609.3 1,704.5 1,778.6 1,905.6 2,014.4 2,015.1	930.6 994.2 1,049.4 1,096.5 1,139.1 1,212.0 1,282.3 1,366.1 1,452.4 1,430.9	271.4 305.1 333.0 353.4 384.3 404.8 402.9 433.7 455.0 475.9	78.8 83.0 83.5 85.1 85.6 87.3 93.0 98.7 103.9 106.8	5 7 7 9 1 .4 .4 .4 7.1 3 0 1 4	41.3 -15.9 -54.1 -38.8 -8.4 25.9 51.0 21.7 -40.2
2006: 1 It It IV	1,800.6 1,830.3 1,842.5 1,845.3	1,230.0 1,249.5 1,253.8 1,262.9	298.4 305.5 300.4 305.5	871.9 883.8 891.8 902.2	59 6 60 2 61 6 55 1	23.1 22.1 21.3 20.6	97.9 101.9 105.5 108.7	449.9 457.8 463.5 455.5	3 -1.1 -1.6 -2.3	1,738.0 1,767.0 1,800.1 1,809.4	1,254.5 1,274.6 1,292.7 1,307.6	392.2 399.4 412.6 407.4	91.0 92.6 94.5 94.0	4444444	62.6 63.2 42.4 35.9
2007: 1 II III IV	1,902.3 1,923.4 1,932.1 1,951.6	1,296.8 1,309.1 1,315.7 1,331.9	322.7 324.1 323.1 321.3	920.4 930.4 936.8 948.7	53.8 54.7 55.8 61.9	20.0 19.7 19.6 19.9	112.0 114.0 115.3 115.3	477.0 484.5 485.6 488.4	-3.6 -4.0 -4.1 -3.9	1,869.5 1,888.4 1,911.7 1,952.9	1,331.2 1,357.3 1,373.6 1,402.5	439.5 422.6 430.2 442.4	97.0 97.8 99.2 100.8	1.9 10.7 8.8 7.2	32.8 34.9 20.3 -1.3
2008: II IV	1,963.7 1,994.2 1,987.5 1,951.4	1,338.1 1,356.9 1,351.0 1,298.9	336.4 342.0 327.2 314.1	949.8 957.7 966.7 947.1	51.9 57.2 57.1 37.7	20.3 20.8 21.4 22.0	114.4 114.0 112.7 114 5	493.9 505.4 505.5 519.5	-3.1 -2.9 -3.1 -3.5	1,983.8 2,019.8 2,046.5 2,007.5	1,429.3 1,458.3 1,480.4 1,441.7	448.2 454.0 459.7 458.3	2 102.4 104.5 104.3 104.7	4.0 2.9 2.1 2.8	-20.1 -25.5 -59.0
2009: 1 II II IV P	1,961.4 1,989.3 2,003.6	1,272.2 1,238.1 1,263.5	287.0 252.7 275.2 269.6	933.0 928.0 929.7 935.6	52.2 57.4 58.6	21.8 21.7 21.9 21.9	115.8 115.7 116.2 116.4	3 555.7 617.4 604.9	-4.0 -3.5 -2.9 -2.3	1,998.0 2,013.9 2,018.6 2,029.8	1,424,4 1,429,9 1,429,8 1,429,8	465.7 477.9 480.0 480.9	7 106.0 5 105.4 0 107.5 5 108.5	2.0 1.2 1.2 1.2	-36.6 -24.6 -14.9

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

¹ Includes Federal grants-in-aid. See Table B–82 for data on Federal grants-in-aid.
² Includes an item for the difference between wage accruals and disbursements, not shown separately.

TABLE B-86. State and local government revenues and expenditures, selected fiscal years, 1942-2007

		General revenues by source 2						General expenditures by function ²						
Fiscal year ¹	Total	Property taxes	Sales and gross receipts taxes	Individual income taxes	Corpora- tion net income taxes	Revenue from Federal Govern- ment	Ali other ³	Total ⁴	Edu- cation	High- ways	Public welfare ⁴	All other ^{4,5}		
1942 1944 1946 1948 1950 1952	10,418 10,908 12,356 17,250 20,911 25,181	4,537 4,604 4,986 6,126 7,349 8,652	2,351 2,289 2,986 4,442 5,154 6,357	276 342 422 543 788 998	272 451 447 592 593 846	858 954 855 1,861 2,486 2,566	2,123 2,269 2,661 3,685 4,541 5,763	9,190 8,863 11,028 17,684 22,787 26,098	2,586 2,793 3,356 5,379 7,177 8,318	1,490 1,200 1,672 3,036 3,803 4,650	1,225 1,133 1,409 2,099 2,940 2,788	3,889 3,737 4,591 7,170 8,867 10,342		
1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1962	27,307 29,012 31,073 34,667 38,164 41,219 45,306 50,505 54,037 58,252 62,890	9,375 9,967 10,735 11,749 12,864 14,047 14,983 16,405 18,002 19,054 20,089	6,927 7,276 7,643 8,691 9,467 9,829 10,437 11,849 12,463 13,494 14,456	1,065 1,127 1,237 1,538 1,754 1,754 1,759 2,463 2,613 3,037 3,269	817 778 744 890 984 1,018 1,001 1,180 1,266 1,308 1,505	2,870 2,966 3,131 3,335 3,843 4,865 6,377 6,974 7,131 7,871 8,722	6,252 6,897 7,584 8,465 9,252 9,699 10,516 11,634 12,563 13,489 14,850	27,910 30,701 33,724 36,711 40,375 44,851 48,887 51,876 56,201 60,206 64,816	9,390 10,557 11,907 13,220 14,134 15,919 17,283 18,719 20,574 22,216 23,776	4,987 5,527 6,452 6,953 7,816 8,567 9,592 9,428 9,844 10,357 11,136	2,914 3,060 3,168 3,139 3,485 3,818 4,136 4,404 4,720 5,084 5,084	10,619 11,557 12,197 13,399 14,940 16,547 17,876 19,325 21,063 22,549 24,423		
1962–63 1963–64 1964–65 1966–67 1967–68 1968–69 1969–70	62,269 68,443 74,000 83,036 91,197 101,264 114,550 130,756	19,833 21,241 22,583 24,670 26,047 27,747 30,673 34,054	14,446 15,762 17,118 19,085 20,530 22,911 26,519 30,322	3,267 3,791 4,090 4,760 5,825 7,308 8,908 10,812	1,505 1,695 1,929 2,038 2,227 2,518 3,180 3,738	8,663 10,002 11,029 13,214 15,370 17,181 19,153 21,857	14,556 15,951 17,250 19,269 21,198 23,599 26,117 29,973	63,977 69,302 74,678 82,843 93,350 102,411 116,728 131,332	23,729 26,286 28,563 33,287 37,919 41,158 47,238 52,718	11,150 11,664 12,221 12,770 13,932 14,481 15,417 16,427	5,420 5,766 6,315 6,757 8,218 9,857 12,110 14,679	23,678 25,586 27,579 30,029 33,281 36,915 41,963 47,508		
1970–71 1971–72 1972–73 1973–74 1973–74 1975–76 1975–76 1976–77 1977–78 1978–79 1978–79	144,927 167,535 190,222 207,670 228,171 256,176 285,157 315,960 343,236 382,322	37,852 42,877 45,283 47,705 51,491 57,001 62,527 66,422 64,944 68,499	33,233 37,518 42,047 46,098 49,815 54,547 60,641 67,596 74,247 79,927	11,900 15,227 17,994 19,491 21,454 24,575 29,246 33,176 36,932 42,080	3,424 4,416 5,425 6,015 6,642 7,273 9,174 10,738 12,128 13,321	26,146 31,342 39,264 41,820 47,034 55,589 62,444 69,592 75,164 83,029	32,372 36,156 40,210 46,542 51,735 57,191 61,125 68,435 79,822 95,467	150,674 168,549 181,357 198,959 230,722 256,731 274,215 296,984 327,517 369,086	59,413 65,813 69,713 75,833 87,858 97,216 102,780 110,758 119,448 133,211	18,095 19,021 18,615 19,946 22,528 23,907 23,058 24,609 28,440 33,311	18,226 21,117 23,582 25,085 28,156 32,604 35,906 39,140 41,898 47,288	54,940 62,598 69,447 78,095 92,180 103,004 112,472 122,478 137,731 155,276		
1980–81	423,404 457,654 486,753 542,730 598,121 641,486 686,860 726,762 786,129 849,502	74,969 82,067 89,105 96,457 103,757 111,709 121,203 132,212 142,400 155,613	85,971 93,613 100,247 114,097 126,376 135,005 144,091 156,452 166,336 177,885	46,426 50,738 55,129 64,529 70,361 74,365 83,935 88,350 97,806 105,640	14,143 15,028 14,258 17,141 19,152 19,994 22,425 23,663 25,926 23,566	90,294 87,282 90,007 96,935 106,158 113,099 114,857 117,602 125,824 136,802	111,599 128,925 138,008 153,571 172,317 187,314 200,350 208,482 227,838 249,996	407,449 436,733 466,516 505,008 553,899 605,623 657,134 704,921 762,360 834,818	145,784 154,282 163,876 176,108 192,686 210,819 226,619 242,683 263,898 288,148	34,603 34,520 36,655 39,419 44,989 49,368 52,355 55,621 58,105 61,057	54,105 57,996 60,906 66,414 71,479 75,868 82,650 89,090 97,879 110,518	172,957 189,935 205,080 223,068 244,745 269,568 295,510 317,527 342,479 375,094		
1990–91 1991–92 1993–93 1993–95 1995–96 1995–97 1997–98 1998–99 1998–99	902,207 979,137 1,041,643 1,100,490 1,169,505 1,222,821 1,289,237 1,365,762 1,434,029 1,541,322	167,999 180,337 189,744 197,141 203,451 209,440 218,877 230,150 239,672 249,178	185,570 197,731 209,649 223,628 237,268 248,993 261,418 274,883 290,993 309,290	109,341 115,638 123,235 128,810 137,931 146,844 159,042 175,630 189,309 211,661	22,242 23,880 26,417 28,320 31,406 32,009 33,820 34,412 33,922 36,059	154,099 179,174 198,663 215,492 228,771 234,891 244,847 255,048 270,628 291,950	262,955 282,376 293,935 307,099 330,677 350,645 371,233 395,639 409,505 443,186	908,108 981,253 1,030,434 1,077,665 1,149,863 1,193,276 1,249,984 1,318,042 1,402,369 1,506,797	309.302 324.652 342.287 353.287 378.273 398.859 418.416 450.365 483.259 521.612	64,937 67,351 68,370 72,067 77,109 79,092 82,062 87,214 93,018 101,336	130,402 158,723 170,705 183,394 196,703 197,354 203,779 208,120 218,957 237,336	403,467 430,525 449,072 468,916 497,779 517,971 545,727 572,343 607,134 646,512		
2000–01 2001–02 2002–03 2003–04 2003–04 2004–05 2005–06 2006–07	1,647,161 1,684,879 1,763,212 1,887,397 2,026,034 2,189,750 2,329,015	263,689 279,191 296,683 317,941 335,779 358,564 383,101	320,217 324,123 337,787 361,027 384,266 417,013 438,580	226,334 202,832 199,407 215,215 242,273 268,362 289,308	35,296 28,152 31,369 33,716 43,256 53,075 60,524	324,033 360,546 389,264 423,112 438,558 452,854 467,584	477,592 490,035 508,702 536,386 581,902 639,882 689,918	1,626,066 1,736,866 1,821,917 1,908,543 2,012,110 2,122,967 2,265,284	563,575 594,694 621,335 655,182 688,314 728,922 776,626	107,235 115,295 117,696 117,215 126,350 136,495 144,807	261,622 285,464 310,783 340,523 365,286 371,997 389,123	693,634 741,413 772,102 795,622 832,161 885,552 954,729		

[Millions of dollars]

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 ⁴ Excludes revenues or experiments or publicly owned atmittes and inquor stores and or mound between State and local governments are also excluded. ³ Includes motor vehicle license taxes, other taxes, and charges and miscellaneous revenues ⁴ Includes intergovernmental payments to the Federal Government.

⁵ Includes intergovernmental payments to the requeral overnment.
⁵ Includes intergovernmental payments to the requeral overnment.
⁵ Includes expenditures for libraries, hospitals, health, employment security administration, veterans' services, air transportation, water transport and terminals, parking facilities, 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 other general expenditures, not elsewhere classified.

Note: Except for States listed, data for fiscal years listed from 1962–63 to 2006–07 are the aggregation of data for government fiscal years that ended in the 12-month period from July 1 to June 30 of those years. Texas used August and Alabama and Michigan used September as end dates. Data for 1963 and earlier years include data for government fiscal years ending during that particular calendar year.

Data prior to 1952 are not available for intervening years.

Source: Department of Commerce (Bureau of the Census).

	Total				Marketable					N	onmarketal	ble	
End of year or month	rities out-	Total ²	Treasury	Treasury	Treasury	infla	Treasury ition-protect securities	ted	Total	U.S. savings secu-	Foreign series ⁴	Govern- ment account	Other ⁵
	stang- ing 1					Total	Notes	Bonds		rities ³		series	
Fiscal year 1970 1971 1972 1973 1973 1974 1975 1976 1976 1977 1978 1979	369.0 396.3 425.4 456.4 473.2 532.1 619.3 697.6 767.0 819.0	232 6 245 5 257 2 263 0 266 6 315 6 392 6 443 5 443 5 2 485 2 506 7	76 2 86 7 94 6 100.1 105.0 128.6 161 2 156.1 160.9 161 4	93.5 104.8 113.4 117.8 128.4 150.3 191.8 241.7 241.7 267.9 274.2	63.0 54.0 49.1 33.1 36.8 39.6 45.7 56.4 71.1				136.4 150.8 168.2 193.4 206.7 216.5 226.7 254.1 281.8 312.3	51.3 53.0 55.9 61.9 65.5 69.7 75.4 79.8 80.4	4.8 9.3 19.0 28.5 25.0 23.2 21.5 21.8 21.7 28.1	76 3 82 8 89 6 101 7 115 4 130 6 140 1 153 3 176 4	4.1 5.8 3.7 3.7 4.3 3.6 4.9 16.8 27.1 27.4
1980 1981 1981 1982 1983 1984 1985 1986 1986 1987 1988 1989	906.4 996.5 1,140.9 1,375.8 1,559.6 1,821.0 2,122.7 2,347.8 2,599.9 2,836.3	594.5 683.2 824.4 1,024.0 1,176.6 1,360.2 1,564.3 1,676.0 1,802.9 1,892.8	199.8 223.4 277.9 340.7 356.8 384.2 410.7 378.3 398.5 406.6	310.9 363.6 442.9 557.5 661.7 776.4 896.9 1,005.1 1,089.6 1,133.2	83.8 96.2 103.6 125.7 158.1 199.5 241.7 277.6 299.9 338.0				311.9 313.3 316.5 351.8 383.0 460.8 558.4 671.8 797.0 943.5	72.7 68.0 67.3 70.0 72.8 77.0 85.6 97.0 106.2 114.0	25.2 20.5 14.6 11.5 8.8 6.6 4.1 4.4 6.3 6.8	189.8 201.1 210.5 234.7 259.5 313.9 365.9 440.7 536.5 663.7	24.2 23 7 24.1 35.6 41.8 63.3 102.8 129.8 148.0 159.0
1990 1991 1992 1993 1994 1995 1996 1996 1997 1998 1999	3,210,9 3,662,8 4,061,8 4,408,6 4,689,5 4,950,6 5,220,8 5,407,5 5,518,7 5,518,7	2,092.8 2,390.7 2,677.5 2,904.9 3,091.6 3,260.4 3,418.4 3,439.6 3,331.0 3,233.0	482.5 564.6 634.3 658.4 697.3 742.5 761.2 701.9 637.6 653.2	1,218.1 1,387.7 1,566.3 1,734.2 1,867.5 1,980.3 2,098.7 2,122.2 2,009.1 1,828.8	377.2 423.4 461.8 497.4 511.8 522.6 543.5 576.2 610.4 643.7	24.4 58.8 92.4	24.4 41.9 67.6	17.0 24.8	1,118.2 1,272.1 1,384.3 1,503.7 1,597.9 1,690.2 1,802.4 1,967.9 2,187.7 2,414.2	122.2 133.5 148.3 167.0 176.4 181.2 184.1 182.7 180.8 180.0	36.0 41.6 37.0 42.5 42.0 41.0 37.5 34.9 35.1 31.0	779.4 908.4 1,011.0 1,114.3 1,211.7 1,324.3 1,454.7 1,608.5 1,777.3 2,005.2	180.6 188.5 188.0 179.9 167.8 143.8 126.1 141.9 194.4
2000 2001 ¹ 2002 2003 2004 2005 2006 2007 2006 2007 2008 2009	5,622.1 5,807.5 6,228.2 6,783.2 7,379.1 7,932.7 8,507.0 9,007.7 10,024.7 11,909.8	2,992.8 2,930.7 3,136.7 3,846.1 4,084.9 4,303.0 4,448.1 5,236.0 7,009.7	616.2 734.9 868.3 918.2 961.5 914.3 911.5 958.1 1,489.8 1,992.5	1,611.3 1,433.0 1,521.6 1,799.5 2,109.6 2,328.8 2,447.2 2,458.0 2,624.8 3,773.8	635.3 613.0 593.0 576.9 552.0 520.7 534.7 561.1 582.9 679.8	115.0 134.9 138.9 166.1 223.0 307.1 395.6 456.9 524.5 551.7	81.6 95.1 93.7 120.0	33.4 39.7 45.1 46.1	2,629.3 2,876.7 3,091.5 3,322.5 3,533.0 3,847.8 4,203.9 4,559.5 4,788.7 4,900.1	177.7 186.5 193.3 201.6 204.2 203.6 203.7 197.1 194.3 192.5	25.4 18.3 12 5 11.0 5.9 3.1 3.0 3.0 3.0 3.0 4.9	2,242.9 2,492.1 2,707.3 2,912.2 3,130.0 3,380.6 3,722.7 4,026.8 4,297.7 4,454.3	183 3 179 9 178 4 197 7 192 9 260 5 274 5 332 6 293 8 293 8
2008: Jan Feb Apr May June July Aug Sept Oct Nov Dee	9,238.0 9,358.1 9,437.6 9,377.6 9,388.8 9,492.0 9,585.5 9,645.8 10,024.7 10,574.1 10,661.2 10,669.8	4,532,9 4,661,4 4,732,4 4,642,6 4,685,2 4,696,4 4,822,1 4,901,9 5,236,0 5,729,4 5,822,7 5,729,4	984.4 1,125.4 1,158.4 1,025.7 1,119.2 1,060.5 1,135.8 1,227.2 1,489.8 1,909.7 2,003.7 1,866.7	2,503.9 2,478.4 2,514.1 2,540.7 2,476.6 2,543.4 2,574.8 2,556.4 2,624.8 2,686.6 2,686.6 2,674.9 2,792.2	558.5 571.8 571.8 571.8 571.8 581.1 581.1 582.9 582.9 582.9 582.9 582.9 582.9 582.9 582.9	472.0 471.8 474.1 490.3 494.3 497.5 516.5 521.4 524.5 536.2 535.4 530.1			4,705.1 4,696.7 4,705.2 4,735.0 4,703.6 4,795.6 4,763.4 4,763.4 4,743.9 4,788.7 4,884.7 4,838.5 4,902.2	195.7 195.6 195.4 195.3 195.2 195.0 194.8 194.5 194.3 194.2 194.2 194.2	5.9 5.3 4.9 4.9 3.3 3.1 3.0 3.0 3.0 4.0 4.0 4.0 4.0	4,181.7 4,175.6 4,183.7 4,213.6 4,190.8 4,288.1 4,266.0 4,250.9 4,297.7 4,358.4 4,353.7 4,421.7	321.8 320.2 321.2 321.1 314.3 309.4 299.6 295.6 293.8 288.1 288.2 288.1 286.6 282.4
2009 Jan Feb Mar Apr June June Aug Sept Oct Nov Dec	10,632,1 10,632,1 10,877,1 11,126,9 11,238,6 11,321,6 11,545,3 11,669,3 11,812,9 11,909,8 11,893,1 12,113,0 12,311,4	5,749,9 6,012,4 6,266,1 6,363,4 6,454,3 6,612,1 6,782,8 6,939,2 7,009,7 6,947,6 7,174,6 7,272,5	1,798.6 1,985.6 2,033.6 1,994.5 2,065.4 2,006.5 2,006.5 2,006.5 1,992.5 1,858.5 1,850.5 1,793.5	2,826.0 2,892.0 3,084.9 3,204.5 3,211.3 3,417.7 3,537.5 3,638.6 3,773.8 3,818.2 4,039.8 4,181.1	594.6 594.6 609.4 620.5 620.5 632.5 643.7 654.8 667.8 679.8 691.9 704.9 717.9	516.7 511.5 513.1 529.9 531.0 532.3 548.0 552.4 551.7 567.1 567.5 568.1			4,882.2 4,864.8 4,860.8 4,875.2 4,867.3 4,933.2 4,886.5 4,873.6 4,900.1 4,945.5 4,938.5 5,038.9	193.8 194.1 194.0 194.0 193.9 193.6 193.3 192.8 192.5 192.2 191.8 191.3	5.0 5.0 6.0 7.0 6.0 5.5 4.5 4.9 4.4 4.4	4,406.0 4,391.4 4,388.7 4,403.9 4,399.4 4,468.6 4,431.8 4,425.9 4,454.3 4,501.1 4,497.4 4,597.1	277 3 274 3 272 2 270 3 267 E 265 C 256 C 256 4 248 4 248 4 247 E 244 9 244 9 246 C

TABLE B-87. U.S. Treasury securities outstanding by kind of obligation, 1970-2009 [Billions of dollars]

¹ Data beginning with January 2001 are interest-bearing and non-interest bearing securities, prior data are interest-bearing securities only.
 ² Data from 1996 to 2002 and 2005 to 2009 include Federal Financing Bank securities, not shown separately.
 ³ Through 1996, series is U.S. savings bonds. Beginning 1997, includes U.S. retirement plan bonds, U.S. individual retirement bonds, and U.S. savings notes previously included in "other" nonmarketable securities.
 ⁴ Nonmarketable certificates of indebtedness, notes, bonds, and bills in the Treasury foreign series of dollar-denominated and foreign-currency-denominated

issues. ⁵ Includes depository bonds, retirement plan bonds, Rural Electrification Administration bonds. State and local bonds, special issues held only by U.S. Government agencies and trust funds and the Federal home loan banks, for the period July 2003 through February 2004, depositary compensation securities, and beginning August 2008, Hope bonds for the HOPE For Homeowners Program.

Note: Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis, beginning with October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis

Source: Department of the Treasury

TABLE B-88.	Maturity distribution and average length of marketable interest-bearing public
	debt securities held by private investors, 1970–2009

	Amount			Maturity class				
End of year or month	privately held	Within 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and over	Average	length ¹
			Millions	of dollars			Years	Months
Fiscal year:								
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	/9,509	57,157	16,033	6,358	6,922	3	3
1973	164,862	84,041	54,139	16,385	8,/41	4,564	3	1
1975	210.382	115 677	65 852	15 385	3,550	3,401 4,611	2	11
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	ž	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	255,187	182,237	48,743	32,569	30,127	4	0
1983	862,631	379 579	221,783	/5,/49	33,017	37,058	3	11
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
1989	1,000,208	524,201	552,993	232,453	/4,186	1/1,3/5	5	9
1000	1,004,000	540,751	570,333	247,420	00,010	201,532	b	U
1990	2 112 700	712 770	530,144	267,573	82,713	235,176	6	1
1992	2,363,802	808 705	866 329 i	200,074	04,900 94,706	2/3,304	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
1990	3,011,185	1,058,558	1,212,258	306,643	111,360	322,366	5	3
1998	2,550,040	940 572	1,200,993	321,022	154,205	298,113	5	5
1999	2,728,011	915,145	962,644	378 163	149 703	322 356	6	10 D
2000	2 469 152	858 903	791 540	355 382	167.092	206 246	6	2
2001	2,328,302	900,178	650 522	329 247	174 653	273 702	6	2
2002	2,492,821	939,986	802,032	311,176	203,816	235.811	5	6
2003	2,804,092	1,057,049	955,239	351,552	243,755	196,497	5	1
2005	3,145,244	1,127,850	1,150,979	414,728	243,036	208,652	4	11
2005	3,334,411	1,100,783	1,2/9,040 1	499,386	281,229	1/3,367	4	10
2007	3,634,666	1,176,510	1 309 871	677 905	291,963	178,417	4	10
2008	4,745,256	2,042,003	1,468,455	719,347	352,430	163.022	4	1
2009	6,228,565	2,604,676	2,074,723	994,689	350,550	203,928	4	1
2008: Jan	3,805,408	1,315,046	1,295,456	710,580	319,185	165,140	4	9
Feb	3,933,939	1,454,105	1,294,886	691,672	319,156	174,120	4	8
Mar	4,127,033	1,607,155	1,323,534	702,527	319,481	174,336	4	5
May	4,079,778	1,009,000	1,300,837	709,124	338,330	155,827	4	6
June	4,203,441	1,580,568	1.396.177	730.327	334 145	162,030	4	0
July	4,328,809	1,668,784	1,439,791	716,694	341,086	162,453	4	5
Aug	4,386,440	1,774,790	1,390,479	706,395	351,906	162,870	4	5
Sept	4,/45,256 [2,042,003	1,468,455	719,347	352,430	163,022	4	1
Nov	5,230,027	2,402,302	1,490,698	761,782	352,U/b	162,919 1	3	10
Dec	5.307.633	2,406,537	1.607.484	776 147	354 202	163 262	3	10
2009 Jan	5 240 470	2 336 988	1 6/16 792	773 548	360,402	162 741	2	11
Feb	5,505,532	2,543,867	1.659.368	776,956	358 570	166 771	3	11
Mar	5,759,709	2,601,162	1,790,274	833,981	357,716	176,575	3	11
Apr	5,800,248	2,601,043	1,792,321	875,653	376,004	155,227	3	ii
May	5,815,094	2,660,151	1,/62,962	856,289	367,080	168,611	3	11
July	5,543,035	2,011,090	1,891,559	900,239	361,806	1/8,436	3	11
Aug	6,179,984	2,659,428	2 014 501	951 363	360,098	107,037	4	Ű
Sept	6,228,565	2,604,676	2,074,723	994,689	350,550	203.928	4	U 1
Oct	6,138,150	2,481,258	2,073,374	1,019,112	349,067	215,339	4	3
Nov	6,386,026	2,462,190	2,259,073	1,084,264	349,156	231,343	4	3
Liec	6,483,901	2.415.461	2.337.392	1.137.420	349 280	244 348	4	4

1 Treasury inflation-protected securities—notes, first offered in 1997, and bonds, first offered in 1998—are included in the average length calculation from 1997 forward.

Note: Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis; beginning with October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis. Data shown in this table are as of January 14, 2010.

Source: Department of the Treasury.

TABLE B-89. Estimated ownership of U.S. Treasury securities, 2000-2009

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			Federal				ł	leld by priv	ate investor	s			
	:	Tetal	Reserve				Pensior	n funds			C+++-		
E	nd of month	public debt ¹	Intragov- ernmen- tal hold- ings ²	Total privately held	De- pository institu- tions ³	U.S. savings bonds ⁴	Private ⁵	State and local govern- ments	Insur- ance compa- nies	Mutual funds ⁶	and local govern- ments	Foreign and inter- national ⁷	Other inves- tors ⁸
- 2000:	Mar June Sept Dec	5,773.4 5,685.9 5,674.2 5,662.2	2,590.6 2,698.6 2,737.9 2,781.8	3,182.8 2,987.3 2,936.3 2,880.4	237.7 222.2 220.5 201.5	185.3 184.6 184.3 184.8	150.2 149.0 147.9 145.0	196.9 194.9 185.5 179.1	120.0 116.5 113.7 110.2	222.3 205.4 207.8 225.7	306.3 309.3 307.9 310.0	1,085.0 1,060.7 1,038.8 1,015.2	679.1 544.8 529.9 509.0
2001:	Mar	5,773.7	2,880.9	2,892.8	188.0	184.8	153.4	177.3	109.1	225.3	316.9	1,012.5	525.5
	June	5,726.8	3,004.2	2,722.6	188.1	185.5	148.5	183.1	108.1	221.0	324.8	983.3	380.3
	Sept	5,807.5	3,027.8	2,779.7	189.1	186.4	149.9	166.8	106.8	234.1	321.2	992.2	433.1
	Dec	5,943.4	3,123.9	2,819.5	181.5	190.3	145.8	155.1	105.7	261.9	328.4	1,040.1	410.7
2002:	Mar	6,006.0	3,156.8	2,849.2	187.6	191.9	152.7	163.3	114.0	266.1	327.6	1,057.2	388.8
	June	6,126.5	3,276.7	2,849.8	204.7	192.7	152.1	153.9	122.0	253.8	333.6	1,123.1	313.8
	Sept	6,228.2	3,303.5	2,924.8	209.3	193.3	154.5	156.3	130.4	256.8	338.6	1,188.6	297.0
	Dec	6,405.7	3,387.2	3,018.5	222.6	194.9	153.8	158.9	139.7	281.0	354.7	1,235.6	277.4
2003:	Mar	6,460.8	3,390.8	3,069.9	153.4	196.9	165.8	162.1	139.5	296.6	350.0	1,275.2	330.4
	June	6,670.1	3,505.4	3,164.7	145.1	199.1	170.2	161.3	138.7	302.3	347.9	1,371.9	328.2
	Sept	6,783.2	3,515.3	3,268.0	146.8	201.5	167.7	155.5	137.4	287.1	357.7	1,443.3	371.1
	Dec	6,998.0	3,620.1	3,377.9	153.1	203.8	172.1	148.6	136.5	280.8	364.2	1,523.1	395.6
2004:	Mar	7,131.1	3,628.3	3,502.8	162.8	204.4	169.8	143.6	141.0	280.8	374.1	1,670.0	356.3
	June	7,274.3	3,742.8	3,531.5	158.6	204.6	173.3	134.9	144.1	258.7	381.2	1,735.4	340.6
	Sept	7,379.1	3,772.0	3,607.0	138.5	204.1	174.0	140.8	147.4	255.0	381.7	1,794.5	371.0
	Dec	7,596.1	3,905.6	3,690.6	125.0	204.4	173.7	151.0	149.7	254.1	389.1	1,849.3	394.3
2005:	Mar	7,776.9	3,921.6	3,855.4	141.8	204.2	177.3	158.0	152.4	261.1	412.0	1,952.2	396.4
	June	7,836.5	4,033.5	3,803.0	126.9	204.2	181.0	171.3	155.0	248.7	444.0	1,877.5	394.5
	Sept	7,932.7	4,067.8	3,864.9	125.3	203.6	184.2	164.8	159.0	244.7	467.6	1,929.6	386.0
	Dec	8,170.4	4,199.8	3,970.6	117.1	205.1	184.9	153.8	160.4	251.3	481.4	2,033.9	382.6
2006:	Mar	8,371.2	4,257.2	4,114.0	115.3	205.9	186.7	153.0	161.3	248.7	486.1	2,082.1	475.0
	June	8,420.0	4,389.2	4,030.8	117.1	205.2	192.1	150.9	161.2	244.2	499.4	1,977.8	482.8
	Sept	8,507.0	4,432.8	4,074.2	113.5	203.6	201.9	155.6	160.6	235.7	502.1	2,025.3	475.8
	Dec	8,680.2	4,558.1	4,122.1	114.8	202.4	207.5	157.1	159.0	250.7	516.9	2,103.1	410.6
2007:	Mar	8,849.7	4,576.6	4,273.1	119.7	200.3	221.7	159.2	150.8	264.5	535.0	2,194.8	427.1
	June	8,867.7	4,715.1	4,152.6	110.4	198.6	232.5	160.2	142.1	267.7	580.3	2,192.0	268.7
	Sept	9,007.7	4,738.0	4,269.7	119.6	197.1	246.7	165.6	133.4	306.3	541.4	2,235.3	324.1
	Dec	9,229.2	4,833.5	4,395.7	129.7	196.4	257.6	168.8	123.3	362.9	531.5	2,353.2	272.2
2008:	Mar	9,437.6	4,694.7	4,742.9	125.3	195.3	270.5	169.4	129.4	484.4	521.6	2,505.8	341.2
	June	9,492.0	4,685.8	4,806.2	112.7	194.9	276.7	169.1	135.5	477.2	513.4	2,587.2	339.4
	Sept	10,024.7	4,692.7	5,332.0	130.0	194.2	292.5	171.6	140.6	656.1	499.3	2,799.5	448.3
	Dec	10,699.8	4,806.4	5,893.4	105.0	194.0	297.2	174.6	160.5	768.8	483.1	3,075.9	634.4
2009:	Mar June Sept Dec	11,126.9 11,545.3 11,909.8 12,311.4	4,785.2 5,026.8 5,127.1 5,276.9	6,341.7 6,518.5 6,782.7 7,034.5	129.1 140.8 199.0	193.9 193.5 192.4 191.3	305.9 312.4 324.5	173.2 172.7 176.7	179.7 189.7 196.3	716.0 695.0 643.0	477.9 488.4 502.5	3,264.6 3,382.1 3,497.4	901.4 943.8 1,050.9

¹ Face value.

² Federal Reserve holdings exclude Treasury securities held under repurchase agreements. ³ Includes commercial banks, savings institutions, and credit unions.

⁴ Current accrual value.

⁴ Current accrual value.
⁵ Includes Treasury securities held by the Federal Employees Retirement System Thrift Savings Plan "G Fund."
⁵ Includes money market mutual funds, mutual funds, and closed-end investment companies.
⁷ Includes nonparketable foreign series, Treasury securities, and Treasury deposit funds. Excludes Treasury securities held under repurchase agreements in custody accounts at the Federal Reserve Bank of New York. Estimates reflect benchmarks to this series at differing intervals, for further detail, see *Treasury Bulletin* and http://www.treas.gov/incit/usec2.stml
⁸ Includes individuals, Government-sponsored enterprises, brokers and dealers, bank personal trusts and estates, corporate and noncorporate businesses.

and other investors

Note: Data shown in this table are as of January 25, 2010.

Source: Department of the Treasury.

CORPORATE PROFITS AND FINANCE TABLE B-90. Corporate profits with inventory valuation and capital consumption adjustments, 1960–2009

(Billions of dollars; quarterly data at seasonally adjusted annual rates)

_		· · · ·				
		Corporate profits	Taxon	Corporate pr and ca	ofits after tax with inven apital consumption adjus	tory valuation tments
	Year or quarter	with inventory valuation and capital consumption adjustments	on corporate income	Total	Net dividends	Undistributed profits with inventory valuation and capital consumption adjustments
1960.		53.1	22.8	30.3	13.4	16.9
1961		54.2	22.9	31.3	13.9	17.4
1962.		62.3	24.1	38.3	15.0	23.2
1964		00.3	20.4 28.2	42.0 47.4	16 Z 18 2	25./
1965		86.5	31.1	55.5	20.2	25.2
1966.		92.5	33.9	58.7	20.7	38.0
1967.		90.Z	32.9	57.3	21.5	35.8
1969		94.5	39.0 40.0	07.0 54.5	23.5 24.2	34.1
1970		82.5	34.8	47.7	24.2	30.3
1971		96.1	38.2	57.9	24.3	23.4 32.9
1972 .		111.4	42.3	69.1	26.8	42.2
1973.		124.5	50.0	74.5	29.9	44.6
1975		133.3	51.6	62.3 81.7	33.2	29.1
1976		161.6	65.3	96.3	39.0	57.3
1977		191.8	74.4	117.4	44.8	72.6
1970		218.4	84.9	133.6	50.8	82.8
1020		223.4	30.0	130.3	57.5	//.8
1981		201.4	8/.2 84 3	114.2	64.1 73.8	50.2
1982		205.7	66.5	139.2	73.0	61.5
1983		259.8	80.6	179.2	83.5	95.7
1984		318.6	97.5	221.1	90.8	130.3
1986		314.1	109.7	204.5	97.0 106.2	135.0
1987		367.8	130.4	237.4	112.3	125.1
1988		426.6	141.6	285.0	129.9	155.1
1909		425.0	145.1	279.5	158.0	121.5
1990		434.4	145.4	289.0	169.1	120.0
1992		496.2	148.7	347.5	180.7	138.0
1993		543.7	171.0	372.7	202.9	169.7
1994		628.2	193.1	435.1	235.7	199.4
1996		710.2	217.8	498.3 570.0	254.4	243.9
1997		884.8	245.4	639.4	331.2	308.2
1998		812.4	248.4	564.1	351.5	212.6
1333		800.3	258.8	597.5	337.4	260.1
2000		819.2	265.1	554.1	377.9	176.3
2002		872.2	192.3	679.9	399.3	210.0
2003		977.8	243.8	734.0	424.9	309.2
2004		1,246.9	306.1	940.8	550.3	390.5
2006		1,608.3	473.3	1,045.7	007.3) 704.8	460.4
2007		1,541.7	451.5	1,090.2	767.8	322.4
2008		1,360.4	292.2	1,068.2	689.9	378.3
2003 /		4 500 0	100.7		5/6.1	
2006:		1,590.9	460.7	1,130.2	646.4	483.9
	II	1,655.1	496.6	1,122.0	727 1	431.5
ł	۷	1,589.6	460.7	1,128.8	754.5	374.3
2007:		1,535.4	469.5	1,065.9	772.6	293.3
		1,594.9	466.5	1,128.4	778.1	350.3
	V	1,037.1	440.0 420.1	1,097.1	/70.6	326.5
2008		1 450 7	900.1	1,003.3	743.9	319.4
2000.		1,403.7	317.5	1,130.4 1	7 19.4	417.1 302.6
	<u> </u>	1,454.6	304.8	1,149.8	676.6	473.2
1	۷	1,123.6	223.3	900.4	669.9	230.5
2009:		1,182.7	270.3	912.4	618.1	294.2
	t	1,226.5	305.9	920.6	556.0	364.5
i	Ϋ́ρ	1,000 8	321.0	1,057.9	549.9 580 5	488.0

TABLE B-91. Corporate profits by industry, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

			Corporat	e profits w	ith invento	ory valuati	on adjustr	nent and v	without ca	pital consu	Imption a	djustment		
					_	·	Domestic	industries						
Year or quarter	T			Financial					Nonfir	iancial				Rest
	lota	Total	Total	Federal Reserve banks	Other	Total	Manu- factur- ing 1	Trans- porta- tion ²	Utilities	Whole- saie trade	Retail trade	Infor- mation	Other	the world
<i>SIC 3</i> 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969	51.5 51.8 57.0 62.1 68.6 78.9 84.6 82.0 88.8 85.5	48.3 48.5 53.3 58.1 64.1 74.2 80.1 77.2 83.2 78.9	8.4 83 86 83 93 10.7 11.2 12.8 13.6	09 8 9 10 1.1 1.3 1.7 20 25 31	7.5 7.6 7.7 7.3 7.6 8.0 9.1 9.2 10.3 10.5	39.9 40.2 44.7 49.8 55.4 64.9 69.3 66.0 70.4 65.3	23.8 23.4 26.3 29.7 32.6 39.8 42.6 39.2 41.9 37.3	7.5 7.9 8.5 9.5 10.2 11.0 12.0 10.9 11.0 10.7		2.5 2.5 2.8 3.4 3.8 4.0 4.1 4.6 4.9	2.8 3.0 3.4 3.6 4.5 4.9 5.7 6.4 6.4		3.3 3.4 3.6 4.1 4.7 5.4 5.9 6.1 6.6	3.1 3.3 3.8 4.1 4.5 4.7 4.5 4.8 5.6 6.6
1970 1971 1972 1973 1974 1975 1976 1977 1977 1978 1979	74 4 88 3 101 6 115 4 109 6 135 0 165 6 194 8 222 4 232 0	67.3 80.4 92.1 100.5 92.1 120.4 149.1 175.7 199.6 197.4	15.4 17.6 19.2 20.5 20.2 25.0 31.9 39.5 40.4	3.5 3.3 4.5 5.6 5.6 6.1 7.6 9.4	11.9 14.3 15.8 16.1 14.5 14.6 19.1 25.8 31.9 30.9	52.0 62.8 72.9 80.0 71.9 100.2 124.1 143.8 160.0 157.0	27.5 35.1 42.2 47.2 41.4 55.2 71.4 90.5 89.8	8.3 8.9 9.5 11.0 15.3 18.6 21.8 17.0		4.4 5.2 6.9 8.2 11.5 13.8 12.9 15.6 15.6 18.8	60 72 74 67 23 82 105 124 123 99		5.8 6.4 7.0 8.8 9.1 12.0 14.0 17.8 19.8 21.6	7.1 7.9 9.5 14.9 17.5 14.6 16.5 19.1 22 9 34.6
1980	211 4 219 1 191.1 226.6 264.6 257 5 253 0 306 9 367 7 374 1 298 8	175.9 189.4 158.5 191.5 228.1 219.4 213.5 258.8 310.8 307.0 222.7	34 0 29 1 26.0 35.5 34.4 45.9 56.8 61.6 68.8 80.2	11 8 14 4 152 14 6 16 4 16 3 15 5 16 2 18 1 20 6 21 9	22 2 14.7 10.8 21.0 29 5 41.2 45.3 50.7 59 5 70 5	142.0 160.3 132.5 156.0 193.7 173.5 156.8 197.3 242.0 226.8 230.4	78.3 91.1 67.1 76.2 91.8 84.3 57.9 87.5 122.5 112.1	18 4 20 3 23 1 29 5 40 1 33 8 35 8 42 4 48 9 43 8		17 2 22.4 19.6 21.0 29.5 23.9 24.1 19.0 20.4 22.4 19.6	62 99 135 188 21.1 222 235 240 21.0 22.1 21.6		21.8 16.7 9.3 10.4 11.1 9.2 15.5 24.4 29.3 26.7 20.1	35.5 29 7 32 6 35.1 36.6 38 1 39.5 48 0 57 0 67 1 76 1
1991 1992 1992 1993 1994 1995 1996 1997 1997 1998 1998 1999 2000	396.8 430.3 471.6 515.0 586.6 666.0 743.8 815.9 738.6 776.6 755.7	322.7 353.8 398.5 438.1 508.6 573.1 641.8 708.3 635.9 655.0 610.0	92.3 122.1 142.7 133.4 129.2 160.1 167.5 187.4 159.6 190.4 194.4	21 0 20.7 18.3 16.7 18.5 22.9 22.5 24.3 25.6 26.7 31.2	70.5 101.4 124.4 116.7 110.7 137.2 144.9 163.2 134.0 163.8 163.2	230.4 231.7 255.8 304.7 379.5 413.0 474.4 520.9 476.2 464.6 415.7	99.4 100.8 116.8 150.1 176.7 192.0 212.2 173.4 174.6 166.5	53.8 59.2 70.2 85.2 87.9 93.7 86.5 81.1 59.1 45.8		22.2 25.5 26.7 31.8 28.0 40.6 48.2 51.7 51.7 55.6	21.6 27.7 29.2 40.6 47.2 44.8 53.7 65.9 74.7 75.6 71.4		30.1 28.7 41.1 50.4 65.2 75.5 94.5 108.1 95.5 103.6 76.4	76.1 76.5 73.1 76.9 92.9 102.0 107.6 102.8 121.5 145.6
NAICS: 3 1998 1999	738.6 776.6	635.9 655.0	159.5 189.3	25.6 26.7	133.9 162.6	476.4 465.7	155.8 148.8	21.3 16.5	33.5 33.7	52.8 54.8	67.3 65.7	21.9 12.5	123.7 133.6	102.8 121.5
2000 2001 2002 2003 2004 2005 2006 2006 2007 2008	755.7 720.8 762.8 892.2 1,195.1 1,609.5 1,784.7 1,730.4 1,424.5	610.0 551.1 604.9 726.4 990.1 1.370.0 1.527.8 1.382.6 1.047.3	189.6 228.0 265.2 311.8 362.3 443.6 448.0 367.8 278.9	31.2 28.9 23.5 20.1 20.0 26.6 33.8 37.7 35.7	158.4 199.1 241.7 291.8 342.3 417.0 414.1 330.1 243.2	420.4 323.1 339.7 414.6 627.8 926.4 1.079.9 1.014.9 768.4	143.9 49.7 47.7 69.4 154.1 247.2 304.5 278.6 175.5	15.2 1.2 1 7.4 14.4 29.0 42.1 30.0 11.4	25.6 25.2 12.3 12.4 19.4 29.8 54.4 49.1 40.1	58.7 51 3 49.1 54.8 75.6 92.2 103.7 102.2 75.1	60.7 72.6 81.6 88.9 93.4 122.6 133.2 121.6 78.2	-155 -244 -38 49 45.6 81.3 924 90.3 847	131.8 147.4 153.0 176.7 225.2 324.3 349.6 343.0 303.4	145.6 169 7 157.9 165.8 205.0 239.4 256.8 347.8 347.8 377.2
2007 [.] I II III IV	1,705.4 1,779.1 1,732.9 1,704.1	1,423,2 1,467,9 1,362,4 1,277,0	384.2 406.2 378.2 302.5	38.2 38.5 37.5 36.5	346.0 367.7 340.6 266.0	1,039.0 1,061.7 984.2 974.5	288.9 316.0 244.0 265.7	32.9 33.0 30.9 23.4	51.3 46.6 47.3 51.2	107.9 117 0 107.9 76 0	127.9 137.2 118.7 102.4	90 5 77 5 93.9 99 4	339.6 334.4 341.5 356.4	282.2 311.2 370.5 427.1
2008: I II IV	1,512.9 1,463.8 1,522.2 1,199.3	1,100.6 1,096.8 1,125.0 866.9	357.0 330.8 297.5 130.3	35.9 31.1 34.6 41.1	321.1 299.7 262.9 89.2	743.6 766.0 827.5 736.6	187.6 160.1 205.7 148.6	12.9 11.9 9.2 11.5	33.1 43.1 43.5 40.8	46.6 56.6 85.8 111.5	75.6 80.2 77.1 79.7	91.6 101.8 81.9 63.6	296.3 312.1 324.4 280.8	412.3 367.0 397.2 332.4
2009 I II III	1,327.6 1,355.1 1,477.8	1,011.9 1,053.9 1,154.6	253.9 280.7 362.4	28.8 46.1 57.6	225.1 234.6 304.8	758.0 773.3 792.2	121.6 132.3 129.7	6.7 1.3 4.8	53.6 53.4 61.5	94.0 87.5 80.6	83.1 95.1 98.8	95 4 99.4 107 0	303.6 304.2 309.9	315.8 301.2 323.2

See Table B–92 for industry detail.
 Data on Standard Industrial Classification (SIC) basis include transportation and public utilities. Those on North American Industry Classification System (NAICS) basis include transportation and public utilities. Those on North American Industry Classification System (NAICS) as shown beginning 1998).
 SIC-based industry data use the 1987 SIC for data beginning in 1987 and the 1972 SIC for prior data. NAICS-based data use 2002 NAICS.

Note: Industry data on SIC basis and NAICS basis are not necessarily the same and are not strictly comparable.

TABLE B-92.	Corporate	profits of ma	nufacturing	industries,	1960-2009
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[Billions of dollars; quarterly data at seasonally adjusted annual rates]

			Corporate	profits with	inventory	valuation a	djustment a	and without	t capital cor	nsumption a	adjustment		
				Di	rable good	s ²				Non	idurable go	ods ²	
Year or quarter	Total manu- factur- ing	Total ¹	Fabri- cated metal products	Ma- chinery	Compu- ter and elec- tronic products	Elec- trical equip- ment, appli- ances, and compo- nents	Motor vehi- cles, bodies and trailers, and parts	Other	Total	Food and bever- age and tobacco products	Chem- ical products	Petro- leum and coal products	Other
SIC 3 1960 1961 1962 1963 1964 1965 1966 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1984 1985 1986 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 1999 1999 1999 1999 1999 1999 1999 1999	238 2 234 2 263 2 297 3 297 3 297 3 398 4 426 3 399 2 41.9 3 37 3 27.5 3 35.1 4 27.5 4 27.4 4 290 5 27.4 4 794 4 90 5 27.4 4 794 4 90 5 89.8 8 89.8 8 89.8 8 87.5 122 5 122 1 114 4 99.4 1008 8 1168 150.1 176.5 1 176.2 1 99.4 1008 1 176.5 1	$\begin{array}{c} 11.6\\ 11.3\\ 14.1\\ 18.1\\ 224.1\\ 21.3\\ 24.1\\ 21.3\\ 22.5\\ 19.2\\ 25.9\\ 22.9\\ 25.9$	$\begin{array}{c} 0.8\\ 1.0\\ 1.2\\ 2.13\\ 2.1\\ 2.4\\ 2.5\\ 2.3\\ 2.0\\ 1.1\\ 1.5\\ 2.2\\ 2.7\\ 2.7\\ 2.7\\ 2.7\\ 2.7\\ 2.7\\ 2.7$	$\begin{array}{c} 18\\ 19\\ 2.4\\ 3.3\\ 4.2\\ 4.2\\ 3.8\\ 3.1\\ 3.1\\ 3.1\\ 3.1\\ 3.1\\ 3.1\\ 3.1\\ 3.1$		$\begin{array}{c} 1.3\\ 1.5\\ 1.6\\ 1.7\\ 2.0\\ 2.9\\ 2.3\\ 2.9\\ 2.6\\ 2.6\\ 5.9\\ 5.2\\ 2.6\\ 5.5\\ 5.6\\ 7.8\\ 8.7\\ 7.8\\ 8.7\\ 10.6\\ 2.20\\ 7.8\\ 15.4\\ 2.20\\ 2.6\\ 1.5\\ 2.6\\ 7.8\\ 1.5\\ 2.6\\ 7.8\\ 1.5\\ 2.20\\ 7.8\\ 1.5\\ 2.20\\ 7.8\\ 1.5\\ 2.20\\ 7.8\\ 1.5\\ 1.5\\ 2.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1.5\\ 1$	30524096220558 496220558 455454 5509734407 43032468838 45524558 455734 436388 4597448838 459744 43638 459754 43638 2468838 455754 455754	$\begin{array}{c} 2,7\\ 2,9\\ 3,4\\ 4,4\\ 5,5\\ 2,9\\ 2,9\\ 4,7\\ 7,3,5\\ 10,5\\ 2,7\\ 7,8,5\\ 2,7\\ 8,5\\ 2,7\\ 8,5\\ 2,7\\ 8,4\\ 10,1\\ 12,7\\ 11,6\\ 7,3\\ 10,5\\ 2,1\\ 11,7\\ 10,7\\ 11,7\\ 11$	$\begin{array}{c} 122\\ 121\\ 123\\ 133\\ 145\\ 186\\ 180\\ 194\\ 181\\ 170\\ 194\\ 2261\\ 345\\ 2261\\ 345\\ 2261\\ 345\\ 2261\\ 345\\ 52.6\\ 595\\ 546\\ 62.1\\ 552.6\\ 546\\ 62.1\\ 546\\ 64,3\\ 59.6\\ 64,3\\ 59.6\\ 60,4\\ 31,7\\ 60,3\\ 59.6\\ 60,4\\ 99.9\\ 107,4\\ 10,1\\ $	2,2 2,4 2,4 2,7 2,7 2,7 3,3 3,3 3,3 3,3 3,3 3,3 3,3 3,3 3,3 3	$\begin{array}{c} 31\\ 32\\ 37\\ 46\\ 49\\ 43\\ 53\\ 46\\ 53\\ 62\\ 53\\ 62\\ 53\\ 62\\ 53\\ 62\\ 53\\ 62\\ 53\\ 72\\ 57\\ 78\\ 82\\ 72\\ 57\\ 74\\ 82\\ 66\\ 51\\ 146\\ 88\\ 183\\ 170\\ 163\\ 161\\ 163\\ 161\\ 163\\ 163\\ 161\\ 163\\ 161\\ 163\\ 161\\ 163\\ 163$	26 23 22 24 34 34 34 34 34 34 34 34 34 34 34 34 34	$\begin{array}{c} 4 \ 2 \\ 4 \ 4 \\ 4 \ 7 \\ 5 \ 3 \\ 6 \ 1 \\ 6 \ 9 \\ 6 \ 4 \\ 7 \ 1 \\ 7 \ 0 \\ 6 \ 6 \\ 7 \\ 7 \ 9 \\ 5 \\ 7 \\ 7 \\ 9 \\ 5 \\ 11 \\ 11 \\ 14 \\ 6 \\ 6 \\ 6 \\ 14 \\ 8 \\ 14 \\ 7 \\ 13 \\ 15 \\ 0 \\ 15 \\ 21 \\ 9 \\ 25 \\ 9 \\ 25 \\ 9 \\ 25 \\ 0 \\ 22 \\ 3 \\ 25 \\ 9 \\ 25 \\ 9 \\ 25 \\ 0 \\ 25 \\ 9 \\ 25 \\ 0 \\ 25 \\ 9 \\ 25 \\ 0 \\ 25 \\ 9 \\ 25 \\ 0 \\ 25 \\ 9 \\ 25 \\ 0 \\ 25 \\ 9 \\ 31 \\ 2 \\ 35 \\ 33 \\ 31 \\ 4 \\ 39 \\ 2 \\ 30 \\ 9 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10$
NAICS: 3 1998	1558 148.8 143.9 49.7 69.4 154.1 247.2 304.5 278.6 175.5 288.9 316.0 244.0 265.7 187.6 160.1 205.7 187.6 160.1 205.7 148.6 121.6 122.6	82.7 71.2 60.0 -26.9 -4.3 40.7 95.6 118.9 96.1 30.7 105.9 100.6 84.9 92.8 61.0 19.7 40.5 19.7 80.1 19.7 19.7 10.7 19.7 19.7 19.7 19.7 19.7 19.7 19.7 19	164 16.4 15.8 9.8 9.1 18.7 13.7 17.6 22.5 23.0 18.5 22.5 23.0 18.5 14.9 17.7 19.2 19.3 14.9 17.7 19.2 19.3 13.7 10.9	15.3 11.7 7.7 2.0 1.4 1.0 7.1 14.5 19.2 19.8 16.1 20.0 21.0 21.0 21.0 19.3 19.0 17.1 13.1 14.6 19.6 19.6 19.6 19.6 19.6 19.6 19.6 19	42 6.8 42 344 34,4 14,7 43,7 90 17,4 11,2 4,7 11,6 5,5 11,6 5,5 11,6 5,5 2,0 .1 2,2 2,0 .1 2,2 2,3 2,3 3,9 3,1	62 64 59 1.9 0 2.2 6 -14 11.5 -1.1 -4.5 -2.1 -4.5 -2.1 -4.5 -2.0 -2.6 -1.4 -4.5 -2.1 -4.5 -2.0 -2.6 -1.4 -4.5 -2.1 -4.5 -2.0 -2.6 -1.4 -4.5 -2.1 -4.5 -2.5 -2.1 -4.5 -2.1 -4.5 -2.5 -2.5 -2.5 -2.5 -2.5 -2.5 -2.5 -2	6.4 7.7 -8.9 -455 -11.7 -6.8 111 -6.8 -16.4 -47.5 -15.1 -8.7 -24.9 -17.0 -35.3 -55.7 -45.3 4 -53.4 -53.8 -54.8 -36.8 -16.6 -53.4 -54.8 -15.1 -53.4 -54.8 -15.1 -53.5 -15.7 -53.4 -54.8 -15.1 -53.5 -15.7 -15	34.2 35.9 27.1 16.8 31.9 54.2 58.9 61.3 43.9 61.4 59.3 60.9 63.7 49.8 47.4 49.8 47.4 22.2 33.9 31.5 10.8	73.1 77.6 83.9 76.6 55.4 73.8 113.4 151.7 185.7 184.6 184.9 183.0 215.4 159.1 172.9 126.6 140.5 160.5 140.5 150.5 140.5	22.1 30.9 26.0 24.3 27.3 32.5 33.7 28.2 33.7 28.2 29.3 29.8 29.8 29.8 29.2 33.1 33.1 33.1 33.1 33.1 33.1 35.1	250 228 138 178 178 189 247 525 519 313 524 502 426 624 164 482 391 21.7 29.6 394	5.3 2.2 27.6 2.3 431 1 794 4 778 8 66.5 780 110.9 64.8 57.5 64.5 793 793 79,7 29,4 152	20 7 21 7 16 5 7 1 11 0 7 4 15 3 24 0 22 7 13 3 24 0 22 7 13 3 20 8 20 8 20 8 20 2 23 2 20 8 20 2 23 2 20 6 12 7 13 3 20 8 20 2 3 2 20 5 20 2 20 2 20 2 20 2 20 2 20 2 20

¹ For Standard Industrial Classification (SIC) data, includes primary metal industries, not shown separately, ² Industry groups shown in column headings reflect North American Industry Classification System (NA/CS) classification for data beginning 1998. For data on SIC basis, the industry groups would be industrial machinery and equipment (now machinery), electronic and other electric equipment (now electrical equipment, appliances, and components), motor vehicles and equipment (now motor vehicles, bodies and trailers, and parts), food and kindred products (now food and beverage and tobacco products), and chemicals and allied products (now chemical products). ³ See footnote 3 and Note, Table B–91.

TABLE B-93. Sales, profits, and stockholders' equity, all manufacturing corporations, 1968-2009

	Allı	manufacturi	ng corporati	ons		Durable goo	ds industrie	5	N	ondurable gi	ods industi	ies
		Pro	fits			Pro	fits			Pro	fits	
rear or quarter	Sales (net)	Before income taxes	After income taxes	Stock- holders' equity ²	Sales (net)	Before income taxes	After income taxes	Stock- holders' equity ²	Sales (net)	Before income taxes	After income taxes	Stock- holders' equity ²
1968 1969	631.9 694.6	55.4 58.1	32.1 33.2	265.9 289.9	335.5 366.5	30.6 31.5	16.5 16.9	135.6 147.6	296.4 328.1	24.8 26.6	15.5 16.4	130.3 142.3
1970 1971 1972 1973	708.8 751.1 849.5 1,017.2	48.1 52.9 63.2 81.4	28.6 31.0 36.5 48.1	306.8 320.8 343.4 374.1	363.1 381.8 435.8 527.3	23 0 26.5 33.6 43.6	12.9 14.5 18.4 24.8	155.1 160.4 171.4 188 7	345.7 369.3 413.7 489.9	25.2 26.5 29.6 37.8	15.7 16.5 18.0 23.3	151 7 160.5 172.0 185.4
1973 IV	275 1	21.4	13 0	386 4	140 1	10.8	63	194.7	135.0	10.6	6.7	191.7
New series:										i		
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 1975 1976 1977 1978 1978	1,060.6 1,065.2 1,203.2 1,328.1 1,496.4 1,741.8	92.1 79.9 104.9 115.1 132.5 154.2	587 491 645 704 811 98.7	395 0 423 4 462 7 496 7 540 5 600 5	529.0 521.1 589.6 657.3 760 7 865.7	41.1 35.3 50.7 57.9 69.6 72.4	24.7 21.4 30.8 34.8 41.8 45.2	196.0 208.1 224.3 239.9 262.6 292.5	531.6 544.1 613.7 670.8 735.7 876.1	51 0 44.6 54.3 57.2 62.9 81 8	34.1 27.7 33.7 35.5 39.3 53.5	199 0 215.3 238.4 256.8 277 9 308 0
1980	1,912.8 2,144 7 2,039.4 2,114.3 2,335 0 2,331 4 2,220 9 2,378 2 2,596.2	145.8 158.6 108.2 133.1 165.6 137.0 129.3 173.0 215.3 215.3	92 6 101 3 70 9 85 8 107 6 87 6 83 1 115 6 153 8	668 1 743 4 770 2 812 8 864 2 866 2 874 7 900 9 957 6	889 1 979 5 913 1 973 5 1,107 6 1,142 6 1,125 5 1,178 0 1,284 7	57 4 67 2 34 7 48.7 75 5 61 5 52 1 78 0 91 6	35.6 41.6 21.7 30.0 48.9 38.6 32.6 53.0 66.9	317.7 350.4 355.5 372.4 395.6 420.9 436.3 444.3 468.7	1,023 7 1,165 2 1,126 4 1,140 8 1,227 5 1,188 8 1,095 4 1,200 3 1,311 5	88.4 91.3 73.6 84.4 90.0 75.6 77.2 95.1 123.7	56.9 59.6 49.3 55.8 58.8 49.1 50.5 62.6 86.8	350 4 393 0 414 7 440.4 468.5 445 3 438 4 456 6 488 9
1999	2,745.1	167.0 1	13511	1 043 8	1,350 0	/5 I ' 57 3	55.5 j 40.7	50131	1,388.5	11Z.6	79 b i	4977 528 b
1991 1992 4 1993 1994 1994 1995 1996 1996 1997 1998 1998 1999 2000	2,761,1 2,890,2 3,015,1 3,255,8 3,528,3 3,757,6 3,920,0 3,949,4 4,148,9 4,548,2	98.7 31.4 117.9 243.5 274.5 306.6 331.4 314.7 355.3 381.1	66.4 221 832 1749 1982 2249 2445 2344 2578 2753	1,043,0 1,064,1 1,034,7 1,039,7 1,110,1 1,240,6 1,348,0 1,462,7 1,482,9 1,569,3 1,823,1	1,304 0 1,389 8 1,490 2 1,657 6 1,807 7 1,941 6 2,075 8 2,168 8 2,314 2 2,457 4	13.9 -33.7 38.9 121.0 130.6 146.6 167.0 175.1 198.8 190.7	7.2 -24.0 27.4 87.1 94.3 106.1 121.4 127.8 140.3 131.8	513 0 506 8 473 9 482 7 533 3 613 7 673 9 743 4 779 9 869.6 1.054 3	1,453 3 1,457 1 1,500 4 1,524 9 1,598 2 1,720 6 1,816 0 1,844 2 1,780 7 1,834.6 2,090.8	84 8 65 1 79 0 122 5 143 9 160 0 164 4 139 6 156 5 190 5	59 4 59 3 46 0 55 7 103 9 118 8 123 1 106 5 117 5 143 5	526 9 557 4 560 8 557 1 557 6 627 0 674 2 719 3 703 0 699 7 768.7
2000: IV	1,163.6	69.2	46.8	1,892.4	620.4	31.2	19.3	1,101.5	543.2	38.0	27.4	790.9
2000: IV	1,128.8	62.1	41.7	1,833.8 j	623.0	26.9	15.4	1,100.0	505.8	35.2	26.3	733 8
2001	4,295.0 4,216.4 4,397.2 4,934.1 5,411.5 5,782.7 6,060.0 6,375.6	83.2 195.5 305.7 447.5 524.2 604.6 602.8 388.1	36.2 134 7 237.0 348 2 401.3 470 3 442 7 266.3	1,843.0 1,804 0 1,952.2 2,206.3 2,410.4 2,678.6 2,921 8 2,994.5	2,321 2 2,260.6 2,282 7 2,537.3 2,730.5 2,910 2 3,015 7 2,971 0	-69.0 45.9 117.6 200.0 211.3 249.1 246.8 97.9	-76.1 21 6 88 2 156.5 161 2 192.8 159 4 43.4	1,080.5 1,024.8 1,040.8 1,212.9 1,304.0 1,384.0 1,493.1 1,494.7	1,973.8 1,955.8 2,114.5 2,396.7 2,681.0 2,872.5 3,044.4 3,404.6	152.2 149.6 188.1 247.5 312.9 355.5 356.1 290.2	112.3 113 1 148 9 191 6 240 2 277 5 283 3 222 9	762 5 779 2 911.5 993.5 1.106.5 1,294.6 1,428 7 1,499 8
2007: II IV	1,405.8 1,526.5 1,539.4 1,588.3	149.2 172.8 147.6 133.2	117.3 136.3 79.9 109.2	2,775.4 2,900.1 2,959.6 3,052.2	715.8 760.8 767.2 771.8	61.4 75.4 57.1 52.9	47.7 61.0 8.7 42.1	1,441 4 1,490 8 1,500 3 1,539 9	690.0 765.7 772.2 816.5	87.8 97.4 90.6 80.4	69.6 75.3 71.2 67.1	1,334.0 1,409 2 1,459 3 1,512.3
2008 1 1 11 IV	1,566 4 1,724.2 1,682 3 1,402.8	150 0 142 7 165.5 -70 1	117.3 109.4 123.6 84.0	3,086.3 3,082 7 3,059.7 2,749.2	740 5 780 4 757 9 692 2 ;	58.6 47.6 54.6 63.0	44.8 31.4 36.0 68.8	1,551 0 1,544.8 1,538.9 1,344.0	825.9 943 7 924 4 710.5	91.3 95.1 110.9 -7.2	72 6 78 0 87 6 -15 2	1,535.3 1,537 9 1,520.8 1,405.3
2009: 1 II III	1,203.6 1,263.2 1,321.9	48.4 81.5 117.6	33.2 60 0 94 3	2,661.5 2,714.4 2,877.2	590 8 598 6 624 6	-6.6 12.3 37.4	-10.9 3.6 28.8	1,301.7 1,315.6 1,419.7	612.7 664.6 697.3	55.0 69 1 80.2	44.1 56.4 65.5 ;	1,359 8 1,398 9 1,457 5

[Billions of dollars]

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 jusing four end-of-guarter figures; ³ Beginning with 1988, profits before and after income taxes reflect inclusion of minority stockholders' interest in net income before and after income taxes ⁴ Data for 1992 (most significantly 1992) (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 (1993) also reflect adoption of Statement 106. Corporations must show the cumulative effect of a change in accounting grinciple in the first quarter of the year in which the change is adopted ⁵ Data based on the North American Industry Classification System (NAICS) Other data shown are based on the Standard Industrial Classification (SIC).

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)

	Ratio of profi to stor	ts after income taxes kholders' equity—per	(annual rate) cent '	Pi	rofits after income tax er dollar of sales—cer	es its
Year or quarter	All manufacturing corporations	Durable goods industries	Nondurable goods industries	All manufacturing corporations	Durable goods industries	Nondurable goods industries
1959	10.4	10.4	10.4	4.8	4.8	49
1960	9.2	8.5	9.8	4.4	4.0	48
1961	. 89	8.1	96	4.3	3.9	47
1962.	9.8	96	99	4.5	4.4	4/
1964	11.5	11.7	11.5	52	5.1	54
1965	13.0	13.8	12 2	5.6	5.7	5.5
1966	13.4	14.2	12.7	5.6	5.6	56
1967	12.1	12.2	119	5.0	4.0	52
1969	11.5	11.4	11.5	4.8	4.6	5.0
1970	9.3	8.3	10.3	4.0	35	45
1971	. 9.7	9.0	10.3	4.1	3.8	45
1972	. 10.5	10.8	10.5	4.3	42	4.4
1070. //	12.0	12.0	12.0	4.7	4.7	4.5
1973. IV	. 13.4	12.3	14.0	4.7	4.5	0.0
New series:		10.0	15.0			
1973: IV	14.3	13.3	15.3	5.6	5.0	6.1
19/4	14.9	12.6	17.1	5.5	4.7	6.4
1975	13.9	13.7	14.2	5.4	5.2	5.5
1977	14.2	14.5	13.8	5.3	5.3	53
1978	. 15.0	16.0	14.2	5.4	5.5	5.3
1979	10.4	10.4	17.4	5.7	5.2	01
1980	13.9	11.2	15.3	4.8	4.0	5.0
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.b 3.8	4.4	4.8
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
19882	. 16.1	14.3	17.8	5.9	5.2	6.6
1989	. 13.0	7.0	100	4.9	4.1.	5.7
1990	. IU.b 6.2	/.9	13.1	3.9	3.0	4.0
1992 3	2.1	-5.1	8.2	.8	-1.7	3.1
1993	. 8.0	5.7	10.0	2.8	1.8	3.7
1994	15.8	15.3	15.2	5.4	5.3	5.5
1996	16.7	15.7	17.6	6.0	5.5	6.5
1997	. 16.7	16.3	171	6.2	5.8	6.7
1998	. 15.8	10.4	15.2	62	5.9	64
2000	15.1	12.5	18.7	6.1	5.4	6.9
2000: IV	. 9.9	7.0	13.9	4.0	3.1	5.1
NAICS: 4						
2000: IV	. 9.1	5.6	14.3	3.7	2.5	5.2
2001	2.0	-7.0	14.7	.8	-3.3	5.7
2002	7.5	2.1	14.5	3.2	1.0	5.8
2003	15.8	12.9	19.3	7.1	6.2	8.0
2005	. 16.7	12.4	21.7	7.4	5.9	9.0
2006	. 17.6	13.9	21.4	8.1	b.b 53	9./
2008	8.9	2.9	14.9	4.2	1.5	6.5
2007.	16.9	13.2	20.9	8.3	6.7	10.1
	. 18.8	16.4	21.4	8.9	8.0	9.8
III	10.8	2.3	19.5	5.2	1.1	9.2
1¥	. 14.3	10.9	17.0	0.3	0.4	0.2
2008: 1		81	20.3	/.5 63	6.0	88
	16.2	9.3	23.0	7.3	4.7	9.5
IV		-20.5	-4.3	-6.0	-9.9	-2.1
2009:	5.0	-3.4	13.0	2.8	-1.9	7.2
11 111	. 8.8	1.1	16.1	4./	d. a k	8.5
10	1.01	Ū.1	10.0	1/	L 4.0	J.4

TABLE B-94. Relation of profits after taxes to stockholders' equity and to sales, allmanufacturing corporations, 1959-2009

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.

² See footnote 3, Table B–93.
 ³ See footnote 4, Table B 93.
 ⁴ See footnote 5, Table B–93.

Note: Based on data in millions of dollars. See Note, Table B–93.

Source: Department of Commerce (Bureau of the Census).

				C	ommon stoc	c prices ¹	-			Common s (Standard (perc	stock yields d & Poor's) ent) 5
		New York	Stock Excha	ange (NYSE)	indexes ²						
Year	Composite		Dece	mber 31, 196	65=50		Dow Jones	Standard & Poor's	Nasdaq composite	Dividend-	Earnings
	(Dec. 31, 2002= 5,000) ³	Com- posite	Industrial	Transpor- tation	Utility ⁴	Finance	industrial average ²	index (1941–43=10) ²	(Feb. 5, 1971=100) ²	ratio ⁶	price ratio ⁷
1949		9.02					179.48	15.23		6.59	15.48
1950 1951		10.87					216.31 257.64	18.40 22.34		6.57 6.13	13.99 11.82
1952		13.81					270.76	24.50		5.80	9.47
1954		16.19					333.94	24.73 29.69		5.80 4.95	8.57
1955 1956		21.54					442.72	40.49		4.08	7.95
1957		23.67					475.71	44.38		4.35	7 89
1958		24.56			•••••	•••••	632.12	46.24 57.38		3.97	6.23 5.78
1960		30.01					618.04	55.85		3.47	5.90
1962		35.37			····· · ···		639.76	62.38		2.98	4 62 5.82
1963 1964		37.51 43.76					714.81	69.87 81.37		3.17 3.01	5.50 5.32
1965		47.39					910.88	88.17		3.00	5 59
1966 1967	487.92	46.15	46.18 51.97	50.26 53.51	90.81 90.86	44 45	873.60 879.12	, 85.26 91.93		3 40 3 20	6.63 5.73
1968 1969	585.47 578.01	55.37	58.00	50.58 46.96	88.38 85.60	65.85	906.00	98.70		3.07	5.67
1970	483.39	45.72	48.03	32.14	74 47	60.00	753 19	83.22		3 83 :	6.45
1971 1972	573.33	54.22	57.92 65.73	44.35 50.17	79.05	70.38	884 76 950 71	98.29 109.20	107 44	3.14	541
1973	607.11	57.42	63.08	37.74	75.38	70.12	923.88	107.43	109.90	3.06	7 12
1974	463.54	45.73	40 U0 50 52	31 10	59.58 63.00	49.67	759.37 802.49	82.85	76 29	4.47	9 15
1976	575.85	54 46	60.44	39.57	73.94	52.94	974.92	102.01	89.90	3 77	8.90
1978	567.81	53.70	58.23	43.50	78.44	56.65	820.23	96.02	117 53	5 28	12.03
1979	720.15	68.10	64.76 78.70	47.34	76 41 74 69	61.42	844.40	103.01	136.57	5.47	13.46
1981	782.62	74.02	85.44	72.61	77.81	73.52	932.92	128.05	203.18	5.20	11.96
1982	979.52	92.63	107.45	89.36	79.49 93.99	71.99 95.34	884.36 1,190.34	160.41	285.43	5.81 4.40	11.60
1984	977.33	92.46	108.01	85.63	92.89	89.28	1,178.48	160.46	248.88	4.64	10.02
1986	1,438.02	136.00	155.85	119.87	142.72	14.21	1,792.76	236.34	290.19	4.25 3.49	8.12 6.09
1987 1988	1,709.79	161.70 149.91	195.31 180 95	140.39 134.12	148.59 143.53	146.48 127.26	2,275.99	286.83 265.79	402 57 374 43	3.08	548 801
1989	1.903.36	180.02	216.23	175.28	174.87	151.88	2,508.91	322.84	437 81	3.45	7 42
1990 1991	2,181.72	183.46 206.33	225.78 258.14	158.62 173.99	181.20 185.32	133.26 150.82	2,678.94 2,929.33	334.59 376.18	409.17 491.69	3.61 3.24	6.47 4.79
1992 1993	2,421.51	229.01 249.58	284.62	201.09	198.91 228.90	179.26	3,284.29	415.74 451.41	599.26	2.99	4.22
1994	2,687.02	254.12	315.25	247.29	209.06	209.73	3,793.77	460.42	751.65	2.82	5.83
1995 1996	3,078.56	291.15 358.17	367.34 453.98	269.41 327.33	220.30 249.77	238.45 303.89	4,493.76 5,742.89	541.72 670.50	925.19 1.164.96	2.56	6.09 5.24
1997	4,827.35	456.54	574.52	414.60	283.82	424.48	7,441.15	873 43	1,469,49	1 77	4 57
1999	6,546.81	619.16	001.57 774.78	408.09	473.73	516.35	8,625.52 10,464.88	1,085.50	1,794.91 2,728.15	1.49	3 46 3 17
2000	6,805.89	643.66	810.63	413.60	477.65	553.13	10,734.90	1,427.22	3,783.67	1 15	3.63
2002	5,578.89	527.62	657.37	443.59	260.85	555.27	9,226.43	993.94	2,035.00	1.32	2.95
2003 3	5,447.46		633.18	436.51	237.77	565.75	8,993.59	965.23	1,647.17	1.77	3.84

TABLE B-95. Historical stock prices and yields, 1949-2003

1 Averages of daily closing prices.

² Includes stocks as follows: for NYSE, all stocks listed, for Dow Jones industrial average, 30 stocks; for Standard & Poor's (S&P) composite index, 500

² Includes stocks as follows: for NYSE, all stocks listed, for Dow Jones industrial average, 30 stocks, for Standard & Poor's IS&P) composite index, 500 stocks, and for Nasdaq composite index, over 5000 a "The NYSE relaunched the composite index over 50000" a "The NYSE relaunched the composite index on January 9, 2003, incorporating new definitions, methodology, and base value. (The composite index based on December 31, 1965=50 was discontinued.) Subset indexes on financial, energy, and health care were released by the NYSE on January 8, 2004 (see Table B=96). NYSE indexes shown in this table for industrials, utilities, transportation, and finance were discontinued. ⁴ 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 state 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 ''utaretry data are ratio of earnings (after taxes) for four quarters ending with particular quarter-to-price index for iast day of that quarter Annual data are averages of weekly figures.

averages of quarterly ratios.

Sources: New York Stock Exchange, Dow Jones & Co., Inc., Standard & Poor's, and Nasdag Stock Market.

				Co	mmon stock price	25 ¹			Common s (Standard (perc	tock yields I & Poor's) ent) ⁴
Year or mo	nth	New Y	ork Stock Exchan (December 31,	ge (NYSE) index 2002=5,000)	es ^{2, 3}	Dow Jones	Standard & Poor's composite	Nasdaq composite index	Dividend- price	Earnings-
		Composite	Financial	Energy	Health care	average ²	index (1941–43=10) ²	(Feb 5, 1971=100) ²	ratio ⁵	ratio ⁶
2000		6,805.89 6,397.85 5,578.89				10,734.90 10,189.13 9,226.43	1,427,22 1,194,18 993,94	3,783.67 2,035.00 1,539.73	1.15 1.32 1.61	3.63 2.95 2.92
2002 2003 2004		5,447.46 6,612.62	5,583.00 6,822.18	5,273.90 6,952.36	5,288.67 5,924.80	8,993.59 10,317.39	965.23 1,130.65	1,647.17 1,986.53	1.77	3.84 4.89
2005 2006 2007 2008 2008		7,349.00 8,357.99 9,648.82 8,036.88 6,091.02	7,383.70 8,654.40 9,321.39 6,278.38 3,987.04	9,377.84 11,206.94 13,339.99 13,258.42 10,020.30	6,283.96 6,685.06 7,191.79 6,171.19 5,456.63	10,547.67 11,408.67 13,169.98 11,252.62 8,876.15	1,207,23 1,310,46 1,477,19 1,220,04 948,05	2,099.32 2,263.41 2,578.47 2,161.65 1,845.38	1.83 1.87 1.86 2.37 2.40	5.36 5.78 5.29 3.54
2006: Jan Feb Mar Apr		8,007.35 8,044.86 8,174.34 8,351.28	8,187.86 8,280.82 8,459.04 8,572.54 8,609.10	10,965.30 10,741.43 10,702.23 11,467.85 11,280.52	6,604.09 6,566.87 6,653.63 6,519.78 6,499.14	10,872,48 10,971,19 11,144,45 11,234,68 11,333,88	1,278.72 1,276.65 1,293.74 1,302.18 1,290.00	2,289.99 2,273.67 2,300.26 2,338.68 2,245.28	1.83 1.86 1.85 1.85 1.85	5.61
June . July Aug Sept		8,353,45 7,985,59 8,103,97 8,294,89 8,383,29	8,225.13 8,340.25 8,574.68 8,789.30	10,690.86 11,360.86 11,610.65 10,807.75	6,395.87 6,566.19 6,763.81 6,910.95	10,997.97 11,032.53 11,257.35 11,533.60	1,253.12 1,253.12 1,260.24 1,287.15 1,317.81	2,137,41 2,086,21 2,117,77 2,221,94	1.96 1.94 1.92 1.87	5.86 5.88
Uct Nov Dec		8,651.02 8,856.30 9,089.55	9,101.77 9,251.53 9,461.77	11,657.36 12,078.39	6,845.16 6,931.01	12,185.15 12,377.62	1,388.63 1,416.42	2,330.17 2,408.70 2,431.91	1.80 1.79	5.75
2007: Jan Feb Mar Apr		9,132.04 9,345.98 9,120.57 9,555.98	9,575.21 9,732.63 9,342.66 9,658.88	11,381.56 11,658.11 11,503.16 12,441.16	7,083.45 7,174.03 6,997.30 7,332.01	12,512.89 12,631.48 12,268.53 12,754.80	1,424.16 1,444.79 1,406.95 1,463.65	2,453.19 2,479.86 2,401.49 2,499.57	1.81 1.82 1.89 1.84	5.85
May June. July Aug Sent		9,822.99 9,896.98 9,985.42 9,440.44 9,777.59	9,864.01 9,754.29 9,543.66 8,963.67 9,060.63	13,031.00 13,639.81 14,318.49 13,250.28 14,300.99	7,474.48 7,268.42 7,210.07 6,957.87 7,138.20	13,407.76 13,480.21 13,677.89 13,239.71 13,557.69	1,511.14 1,514.49 1,520.70 1,454.62 1,497.12	2,552.14 2,595.40 2,655.08 2,539.50 2,634.47	1.81 1.81 1.80 1.92 1.88	5.65
Oct Nov Dec		10,159.33 9,741.15 9,807.36	9,390.30 8,522.71 8,447.99	14,976.30 14,622.23 14,956.77	7,231.60 7,127.40 7,306.60	13,901.28 13,200.58 13,406.99	1,539.66 1,463.39 1,479.23	2,780.42 2,662.80 2,661.55	1.84 1.95 1.93	4.51
2008: Jan Feb Mar Apr		9,165.10 9,041.52 8,776.21 9,174.10	7,776.77 7,577.54 7,155.51 7,579.73	14,222.14 13,931.92 14,000.91 15,159.35	7,068.98 6,674.75 6,318.44 6,381.98	12,538.12 12,419.57 12,193.88 12,656.63	1,378.76 1,354.87 1,316 94 1,370.47	2,418.09 2,325.83 2,254.82 2,368.10	2.06 2.10 2.17 2.09	4.57
May June. July Δια		9,429.04 8,996.98 8,427.37 8 362.20	7,593.63 6,798.20 6,207.89 6 304 58	16,365.23 16,272.67 14,899.86 13,772.04	6,405.40 6,243.42 6,412.48 6,618.92	12,812.48 12,056.67 11,322.38 11,530.75	1,403.22 1,341.25 1,257.33 1,281.47	2,483.24 2,427.45 2,278.14 2,389.27	2.07 2.15 2.27 2.23	4.01
Sept Oct Nov Dec		7,886.29 6,130.39 5,527.63 5,525.70	6,159.18 4,733.74 3,779.86 3,673.95	12,562.82 9,515.71 9,262.07 9,136.33	6,316.05 5,434.03 5,088.99 5,090.83	11,114.08 9,176.71 8,614.55 8,595.56	1,217.01 968.80 883.04 877.56	2,205.20 1,730.32 1,542.70 1,525.89	2.36 2.83 3.11 3.00	3.94
2009: Jan Feb Mar		5,477.14 5,051.42 4,739.72 5,329.20	3,337.14 2,823.74 2,633.65	9,295.97 8,785.04 8,266.81 8,839.95	5,256.13 5,106.78 4,596.81	8,396.20 7,690.50 7,235.47 7,992.12	865.58 805.23 757.13 848.15	1,537.20 1,485.98 1,432.23 1,641.15	3.01 3.07 2.92 2.60	
Apr May. June July		5,823.10 5,985.64 6,026.55	3,819.95 3,924.19 4,000.66	9,848.66 10,189.64 9,765.09	5,051.78 5,224.16 5,410.22 5,706.06	8,398.37 8,593.00 8,679.75 9,375.06	902.41 926.12 935.82	1,726.08 1,826.99 1,873.84 1,997.51	2.30 2.41 2.35 2.31 2.12	
Aug Sept. Oct Nov Dec		6,839.88 6,986.35 7,079.38 7,167.51	4,844.93 4,918.07 4,848.04 4,734.07	10,791.73 11,342.57 11,486.95 11,335.23	5,838.22 5,931.28 6,155.21 6,430.25	9,634.97 9,857.34 10,227.55 10,433.44	1,044.55 1,067.66 1,088.07 1,110.38	2,084.75 2,122.85 2,143.53 2,220.60	2.06 2.02 1.99 1.95	1.19

TABLE B-96. Common stock prices and yields, 2000-2009

¹ Averages of daily closing prices

¹ Averages of daily closing prices. ² Includes stocks as follows: for NSE, all stocks listed (in 2009, over 3,800); for Dow Jones industrial average, 30 stocks; for Standard & Poor's (S&P) composite index, 500 stocks; and for Nasdaq composite index, in 2009, over 2,700. ³ The NYSE relaunched the composite index on January 9, 2003, incorporating new definitions, methodology, and base value. Subset indexes on financial, energy, and health care verse released by the NYSE of January 8, 2004. ⁴ Based on 500 stocks in the S&P composite index.

based on bod sources in the serie composite mode.
 Aggregate cash dividents (based on latest known annual rate) divided by aggregate market value based on Wednesday closing prices. Monthly data are averages of weekly figures, annual data are averages of monthly figures.
 Quarterly data are ratio of earnings (after taxes) for four quarters ending with particular quarter-to-price index for last day of that quarter. Annual data are averages of quarterly ratios.

Sources: New York Stock Exchange, Dow Jones & Co., Inc., Standard & Poor's, and Nasdaq Stock Market.

AGRICULTURE TABLE B-97. Farm income, 1948-2009

[Billions of dollars]

			Inc	ome of farm oper	ators from farmin	ıg		
			Gross farm	Income				
Year		Cast	marketing receip	its			Production	Net
	Total 1	Total	Livestock and products	Crops ²	Value of inventory changes ³	Direct Government payments ⁴	expenses	farm income
1948	36.5	30.2	17.1	13.1	1.7	0.3	18.8	17.7
1949	30.8	27 8	15.4	12.4	9	2	18.0	
1950	33.1	28.4	16.1	12.4	.8	3	19.5	13.6
1951	38.3	32.8	19.6	13.2	1.2	.3	22.3	15.9
1952	37.7	32.5	18.2	14.3	.9	.3	22.8	14.9
1953	34.4	31.0	16.9	14.1	-6	.2	21.5	13.0
1954	34.2	29.8	16.3	13.6	5	.3	21.8	12.4
1955	33.4	29.5	16.0	13 5	2	2	22.2	11.3
1956	33.9	30.4	16.4	14 0	5	.6	22.7	11.2
1957	34.8	29.7	17.4	12 3	.6	1.0	23.7	11.1
1958	39.0	33.5	19.2	14 2	.8	1 1	25.8	13.2
1959	37.9	33.6	18.9	14 7	0	7	27.2	10.7
1960	38.6 40.5 42.3 43.4 42.3	34 0 35.2 36.5 37.5 37.3	19.0 19.5 20.2 20.0 19.9	15.0 15.7 16.3 17 4 17.4	4 .3 .6 - 8	7 15 17 17 17 22	27 4 28 6 30.3 31.6 31 8	11 2 12 0 12.1 11.8 10.5
1965	46.5	39.4	21 9	17.5	10	2 5	33 6	12 9
1966	50.5	43.4	25.0	18.4	-1	3.3	36 5	14 0
1967	50.5	42.8	24.4	18.4	.7	3.1	38 2	12 3
1968	51.8	44.2	25.5	18.7	.1	3.5	39 5	12 3
1969	56.4	48.2	28.6	19.6	1	3.8	42 1	14 3
1970	58.8	50 5	29.5	21 0	0	3.7	44 5	14 4
1971	62.1	52.7	30.5	22.3	14	31	47 1	15 0
1972	71.1	61.1	35.6	25.5	9	4.0	51.7	19.5
1973	98.9	86.9	45.8	41.1	3.4	2.6	64.6	34.4
1974	98.2	92.4	41.3	51.1	-16	5	71.0	27.3
1975 1976 1977 1978 1978 1979	100.6 102.9 108.8 128.4 150.7	88.9 95.4 96.2 112.4 131.5	43 1 46.3 47.6 59.2 69.2	45.8 49.0 48.6 53.2 62.3	34 -1.5 11 19 5.0	.8 7 1.8 3.0 1.4	75 0 82 7 88 9 103 2 123 3	25 5 20 2 19 9 25.2 27 4
1980	149.3	139.7	68.0	71.7	63	1.3	133.1	16 1
1981	166.3	141.6	69.2	72 5	65	1.9	139.4	26.9
1982	164.1	142.6	70.3	72.3	1.4	3.5	140.3	23.8
1983	153.9	136.8	69.6	67.2	10.9	9.3	139.6	14.3
1984	168.0	142.8	72.9	69.9	6.0	8.4	142.0	26 0
1985	161.1	144.0	70 1	73.9	-2.3	77	132.6	28 5
1986	156.1	135.4	71.6	63.8	-2.2	11.8	125.0	31 1
1987	168.4	141.8	76.0	65.8	-2.3	16.7	130.4	38.0
1988	177.9	151.3	79.6	71.6	-4.1	14.5	138.3	39 6
1988	191.6	160.5	83.6	76 9	3.8	10.9	145.1	46.5
1990	197.8	169 3	89.1	80 2	33	9.3	151 5	46.3
1991	192.0	168.0	85.8	82.2	-2	8.2	151.8	40.2
1992	200.6	171.5	85.8	85 7	42	9.2	150 4	50 2
1993	205.0	178.3	90.5	87.8	-42	13.4	158.3	46 7
1994	216.1	181.4	88.3	93.1	83	7.9	163.5	52.6
1995	210.8	188.2	87 2	101.0	-50	7.3	171 1	39.8
1996	235.8	199.4	92.9	106.5	7.9	7.3	176 9	58 9
1997	238.0	207.8	96 5	111.3	- 6	7.5	186 7	51.3
1998	232.6	196.5	94.2	102.2	6	12.4	185 5	47.1
1998	234.9	187.8	95.7	92.1	2	21.5	187 2	47.7
2000 2001 2002 2003 2003 2004	241.7 249.9 230.6 258.6 294.7	192.1 200.0 194.6 216.1 238.0	99.6 106.7 93.9 105.7 123.5	92 5 93.4 100 7 110.5 114.5	16 11 -35 -2.7 11.2	23.2 22.4 12.4 16.5 13.0	191 0 195 0 191 4 197 7 207 3	50.7 54.9 39.1 60.9 87.3
2005	298.4	241.0	124 9	116.1	4	24.4	219.7	78 7
2006	291.2	240.9	118.6	122.3	-3 1	15.8	232.7	58 5
2007	338.4	288.5	138 6	149.9	.6	11 9	267.5	70 9
2008	377.1	324.2	141.1	183.1	-2 4	12.2	290.0	87 1
2009 P	335.2	282.1	118.4	163.6	-1 0	12.5	278.1	57 0

¹ Cash marketing receipts, Government payments, value of changes in inventories, other farm-related cash income, and nonmoney income produced by farms including imputed ient of operator residences.
² Crop receipts include proceeds received from commodities placed under Commodity Credit Corporation Ioans.
³ Physical changes in beginning and ending year inventories of crop and livestock commodities valued at weighted average market prices during the year 4 Includes only Government payments made directly to farmers.

Note Data for 2009 are forecasts

TABLE B-98. Farm business balance sheet, 1952-2009

(Billions of dollars)

	Assets										Cla	ims	
			Ph	ysical asse	ets		Fir	nancial ass	ets				
End of year				Non-rea	al estate			Invest-			Pool	Non-	Pront
End of year	Total assets	Real estate	Live- stock and poultry ¹	Ma- chinery and motor vehi- cles	Crops ²	Pur- chased inputs ³	Total ⁴	ments in coopera- tives	Other ⁴	lotal claims	debt 5	real estate debt ⁶	etors' equity
1952	133.1	85.1	14.8	15.0	7.9		10.3	3.2	7.1	133.1	6.2	7.1	119.8
1953	128.7	84.3	11.7	15.6	6.8		10.3	3.3	7.0	128.7	6.6	6.3	115.8
1954	132.6	87.8	11.2	15.7	7.5		10.4	3.5	6.9	132.6	7.1	6.7	118.8
1955	137.0	93.0	10.6	16.3	6.5	······	10.6	3.7	6.9	137.0	7.8	7.3	121.9
1956	145.7	100.3	11.0	16.9	6.8		10.7	4.0	6.7	145.7	8.5	7.4	129.8
1957	154.5	106.4	13.9	17.0	6.4		10.8	4.2	6.6	154.5	9.0	8.2	137.3
1958	168.7	114.6	17.7	18.1	6.9		11.4	4.5	6.9	168.7	9.7	9.4	149.6
1958	172.9	121.2	15.2	19.3	6.2		11.0	4.8	6.2	172.9	10.6	10.7	151.6
1960	174.4	123.3	15.6	19.1	6.4		10.0	4.2	5.8	174.4	11.3	11.1	151.9
1961	181.6	129.1	16.4	19.3	6.5		10.4	4.5	5.9	181.6	12.3	11.8	157.5
1962	188.9	134.6	17.3	19.9	6.5		10.5	4.6	5.7	188.9	13.5	13.2	162.2
1963	196.7	142.4	15.9	20.4	7.4		10.7	5.0	5.7	196.7	15.0	14.6	167.1
1964	204.2	150.5	14.5	21.2	7.0		11.0	5.2	5.8	204.2	16.9	15.3	172.1
1965	220.8	161.5	17.6	22.4	7.9		11.4	5.4	6.0	220.8	18.9	16.9	185.0
1966	234.0	171.2	19.0	24.1	8.1		11.6	5.7	6.0	234.0	20.7	18.5	194.8
1967	246.1	180.9	18.8	26.3	8.0		12.0	5.8	6.1	246.1	22.6	19.6	203.9
1968	257.2	189.4	20.2	27.7	7.4		12.4	6.1	6.3	257.2	24.7	19.2	213.2
1968	267.8	195.3	22.8	28.6	8.3		12.8	6.4	6.4	267.8	26.4	20.0	221.4
1970	278.8	202.4	23.7	30.4	8.7		13.7	7.2	6.5	278.8	27.2	21.3	230.3
1971	301.8	217.6	27.3	32.4	10.0		14.5	7.9	6.7	301.8	28.8	24.0	248.9
1972	339.9	243.0	33.7	34.6	12.9		15.7	8.7	6.9	339.9	31.4	26.7	281.8
1973	418.5	298.3	42.4	39.7	21.4		16.8	9.7	7.1	418.5	35.2	31.6	351.7
1974 ⁷	449.2	335.6	24.6	48.5	22.5		18.1	11.2	6.9	449.2	39.6	35.1	374.5
1975	510.8	383.6	29.4	57.4	20.5		19.9	13.0	6.9	510.8	43.8	39.8	427.3
1976	590.7	456.5	29.0	63.3	20.6		21.3	14.3	6.9	590.7	48.5	45.7	496.5
1977	651.5	509.3	31.9	69.3	20.4		20.5	13.5	7.0	651.5	55.8	52.6	543.1
1978	777.7	601.8	50.1	78.8	23.8		23.2	16.1	7.1	777.7	63.4	60.4	653.9
1978	914.7	706.1	61.4	91.9	29.9		25.4	18.1	7.3	914.7	75.8	71.7	767.2
1980 1981 1982 1983 1983 1984	1,000.4 997.9 962.5 959.3 897.8	782.8 785.6 750.0 753.4 661.8	60.6 53.5 53.0 49.5 49.5	97.5 101.1 103.9 101.7 125.8	32.8 29.5 25.9 23.7 26.1	2.0	26.7 28.2 29.7 30.9 32.6	19.3 20.6 21.9 22.8 24.3	7.4 7.6 7.8 8.1 8.3	1,000.4 997.9 962.5 959.3 897.8	85.3 93.9 96.8 98.1 101.4	77.2 83.8 87.2 88.1 87.4	838.0 820.2 778.5 773.1 709.0
1985	775.9	586.2	46.3	86.1	22.9	1.2	33.3	24.3	9.0	775.9	94.1	78.1	603.8
1986	722.0	542.4	47.8	79.0	16.3	2.1	34.4	24.4	10.0	722.0	84.1	67.2	570.7
1987	756.5	563.7	58.0	78.7	17.8	3.2	35.2	25.3	9.9	756.5	75.8	62.7	618.0
1988	788.5	582.3	62.2	81.0	23.7	3.5	35.9	25.6	10.4	788.5	70.8	62.3	655.4
1988	813.7	600.1	66.2	84.1	23.9	2.6	36.7	26.3	10.4	813.7	68.8	62.3	682.7
1990	840.6	619.1	70.9	86.3	23.2	2.8	38.3	27.5	10.9	840.6	67.6	63.5	709.5
1991	844.2	624.8	68.1	85.9	22.2	2.6	40.5	28.7	11.8	844.2	67.4	64.4	712.3
1992	867.8	640.8	71.0	84.8	24.2	3.9	43.0	29.4	13.6	867.8	67.9	63.7	736.2
1993	909.2	677.6	72.8	85.4	23.3	3.8	46.3	31.0	15.3	909.2	68.4	65.9	774.9
1993	934.7	704.1	67.9	86.8	23.3	5.0	47.6	32.1	15.5	934.7	69.9	69.0	795.8
1995	965.7	740.5	57.8	87.6	27.4	3.4	49.1	34.1	15.0	965.7	71.7	71.3	822.8
1996	1,002.9	769.5	60.3	88.0	31.7	4.4	49.0	34.9	14.1	1,002.9	74.4	74.2	854.3
1997	1,051.3	808.2	67.1	88.7	32.7	4.9	49.6	35.7	13.9	1,051.3	78.5	78.4	894.4
1998	1,083.4	840.4	63.4	89.8	29.9	5.0	54.7	40.5	14.2	1,083.4	83.1	81.5	918.7
1999	1,138.8	887.0	73.2	89.8	28.3	4.0	56.5	41.9	14.6	1,138.8	87.2	80.5	971.1
2000 2001 2002 2003 2003 2004	1,203.2 1,255.9 1,259.7 1,383.4 1,588.0	946.4 996.2 998.7 1,112.1 1,305.2	76.8 78.5 75.6 78.5 78.5 79.4	90.1 92.8 96.2 100.3 107.8	27.9 25.2 23.1 24.4 24.4	4.9 4.2 5.6 5.6 5.7	57.1 58.9 60.4 62.4 65.5	43.0 43.6 44.7 45.6	14.1 15.3 15.8 16.9	1,203.2 1,255.9 1,259.7 1,383.4 1,588.0	84.7 88.5 95.4 83.2 95.7	79.2 82.1 81.8 81.0 86.3	1,039.3 1,085.3 1,082.5 1,219.2 1,406.0
2005 2006 2007 2008 2009 ^p	1,779.4 1,923.6 2,055.3 2,005.5 1,943.7	1.487.0 1,625.8 1,751.4 1,692.7 1,633.8	81.1 80.7 80.7 80.6 80.6	113.1 114.2 114.7 115.8 112.3	24.3 22.7 22.7 27.6 27.6	6.5 6.5 7.0 7.2 7.2	67.5 73.7 78.8 81.6 82.1			1,779.4 1,923.6 2,055.3 2,005.5 1,943.7	104.8 108.0 112.7 130.1 132.8	91.6 95.5 101.4 108.8 106.1	1,583.0 1,720.0 1,841.2 1,766.6 1,704.8

Excludes commercial broilers; excludes horses and mules beginning with 1959 data; excludes turkeys beginning with 1986 data.
 Non-Commodity Credit Corporation (CCC) crops held on farms plus value above loan rate for crops held under CCC.
 Includes fertilizer, chemicals, fuels, parts, feed, seed, and other supplies.
 Hegymming with 2004, data available only for total financial assets. Data through 2003 for other financial assets are currency and demand deposits.
 Include CCC storage and drying facilities loans.
 Does not include CCC crop loans.
 Reginning with 1974 data, farms are defined as places with sales of \$1,000 or more annually.

Note: Data exclude operator households. Beginning with 1959, data include Alaska and Hawaii.

Data for 2009 are forecasts.

		Farm		Productivit	y indicators	
Year	Total	Livestock and products	Crops	Farm-related output	Farm output per unit of total factor input	Farm output per unit of labor input
1948	44	49	42	32	47	13
1949	43	50	41	28	45	14
1951 1952	45 46	54 55	41 42	30	46	15
1953 1954	46 47	55	42	27	47	17
1955	48	59	42	28	48	18
1956 1957	49 48	61 60	42 42	30 31	49 48	20 21
1958 1959	51 53	62 65	46 47	35 45	51 51	24
1960	55	65	49	46 45	54	27
1962	56	69	49 50	45	55	28
1964	57	72	52 50	46 42	56 57	30 32
1965 1966	59 59	71 73	53 52	42 40	58 58	33 36
1967 1968	61 62	74 74	54 56	40 39	59 60	40 40
1969	63	74	58	37	60	42
1970	67	79	55 62	33 34	60 64	43 47
1972	68 70	81	62 66	35 42	64 66	48 50
1974	65 70	/8 75	60 68	41	62 68	47
1976 1977	71 75	79 80	68 74	40	67 71	53
1978 1979	76 80	80 81	76	42	67	57 59
1980	77	82	75	40	67	60
1981 1982	83 84	83 83	86 87	36 72	75 77	65 71
1983	73 83	84 83 i	67 84	73 67	68 79	63 73
1985	87 84	85	88	80	85	83
1987	85	87	83	84	85	79 78
1989	86	88	73 84	102	88	/3 81
1990 1991	90 90	90 92	89 89	96 97	91 91	91 91
1992 1993	96 91	95 96	97 88	91 95	98 92	98 98
1994	102	101	104	92	99	95
1995	100	102	100	104	92 100	89 100
1997	105	103 104	105 104	111 122	102 101	106 111
1999	107 107	108 107 i	105 107	128	102	115
2001	108	107	106	123	108	128
2003	108	110	102	109	110	124
2005	111	108	115	118	117	142 141
2006 2007	112 114	113	111	118	116	152
2008	113	113	113	110	120	154

TABLE B-99. Farm output and productivity indexes, 1948-2008

[1996=100]

Note: Farm output includes primary agricultural activities and certain secondary activities that are closely linked to agricultural production for which information on production and input use cannot be separately observed. Secondary output latternatively, farm-related output) includes recreation activities, the imputed value of employer-provided housing, land rentals under the Conservation Reserve, and services such as custom machine work and custom livestock feeding.

See Table B-100 for farm inputs.

	Fai	rm employs thousands	nent) ¹					Select	ed index	es of inpl	ut use (19	196=100)			
		Self-		Crops har-		Capita	al input	L	abor inp	ut		Inte	rmediate	input	
Year	Total	em- ployed and unpaid family work- ers ²	Hired work- ers ³	vested (mil- lions of acres) ⁴	Totai farm input	Total	Dur- able equip- ment	Total	Hired labor	Self- em- pioyed and unpaid family labor	Total	Feed and seed	Energy and lubri- cants ⁵	Agri- cul- tural chemi- cals	Pur- chased serv- ices
1948	9,759	7,433	2.326	356	93	115	66	325	277	349	46	55	65	20	44
1949	9,633	7,392	2.241	360	97	115	78	317	257	347	52	58	72	21	43
1950 1951 1952 1953 1953 1954	9,283 8,653 8,441 7,904 7,893	6,965 6,464 6,301 5,817 5,782	2,318 2,189 2,140 2,087 2,111	345 344 349 348 346	98 99 99 99 99 97	118 120 122 123 124	90 100 109 114 120	305 293 287 275 269	268 259 253 246 232	323 311 304 289 288	53 56 56 56 54	59 61 60 61 58	73 76 80 81 81	25 25 26 26 27	45 49 52 50 49
1955 1956 1957 1958 1959	7,719 7,367 6,966 6,667 6,565	5,675 5,451 5,046 4,705 4,621	2,044 1,916 1,920 1,962 1,944	340 324 324 324 324 324	100 100 100 101 103	124 124 123 121 121	123 124 123 121 121	263 247 229 218 217	228 208 199 201 196	281 266 244 226 227	59 61 63 67 70	65 68 71 76 77	83 83 82 80 81	28 30 29 30 34	51 53 54 56 76
1960 1961 1962 1963 1964	6,155 5,994 5,841 5,500 5,206	4,260 4,135 3,997 3,700 3,585	1,895 1,859 1,844 1,800 1,621	324 302 295 298 298	102 101 103 103 101	121 121 120 120 121	123 121 119 119 121	205 200 200 192 180	196 195 195 195 195 175	208 201 202 190 182	69 69 72 74 73	77 76 79 82 79	82 84 85 86 88	34 37 41 45 49	73 72 72 71 68
1965	4,964	3,465	1,499	298	101	121	123	176	165	181	73	79	89	50	70
1966	4,574	3,224	1,350	294	102	121	126	163	149	170	78	85	91	55	70
1967	4,303	3,036	1,267	306	102	122	131	154	138	161	79	86	90	62	73
1968	4,207	2,974	1,233	300	103	123	136	153	134	162	81	87	90	66	71
1969	4,050	2,843	1,207	290	105	123	139	150	135	158	83	91	92	74	69
1970	3,951	2,727	1,224	293	104	122	140	144	136	147	84	92	92	79	65
1971	3,868	2,665	1,203	305	104	121	142	142	134	145	86	94	90	86	66
1972	3,870	2,664	1,206	294	106	121	142	141	134	144	89	98	89	94	65
1973	3,947	2,702	1,245	321	107	120	145	140	136	141	91	97	90	110	70
1974	3,919	2,588	1,331	328	106	121	153	139	145	136	89	94	86	115	68
1975	3,818	2,481	1,337	336	103	123	159	137	147	131	84	91	102	79	71
1976	3,741	2,369	1,372	337	106	124	163	135	149	127	88	94	114	89	75
1977	3,660	2,347	1,313	345	106	126	169	131	145	124	89	94	120	88	74
1978	3,682	2,410	1,272	338	113	127	173	129	136	125	100	105	126	92	89
1979	3,549	2,320	1,229	348	115	128	179	131	141	125	103	109	115	100	94
1980 1981 1982 1983 1984	3,605 3,497 3,335 3,282 3,091	2,302 2,241 2,142 1,991 1,930	1,303 1,256 1,193 1,291 1,161	352 366 362 306 348	114 110 109 108 105	130 129 127 125 121	186 187 184 176 168	128 127 118 117 113	140 140 125 138 129	121 121 114 106 105	101 95 96 93	109 103 106 106 99	112 108 101 98 102	100 94 83 77 90	85 81 88 87 85
1985	2,760	1,753	1,007	342	102	119	159	105	117	98	91	99	91	83	87
1986	2,693	1,740	953	325	100	115	148	106	112	103	90	100	85	81	80
1987	2,681	1,717	964	302	100	112	137	108	115	105	91	99	95	78	83
1988	2,727	1,725	1,002	297	99	109	130	110	118	105	91	99	95	78	83
1989	2,637	1,709	928	318	98	107	125	106	111	103	90	95	94	84	89
1990	2,568	1,649	919	322	99	106	121	99	111	93	94	101	94	88	85
1991	2,591	1,682	909	318	99	105	118	100	110	94	96	101	94	93	89
1992	2,505	1,640	865	319	98	104	114	97	104	94	95	101	92	93	85
1993	2,367	1,510	857	308	99	103	110	93	104	88	99	103	93	95	95
1994	2,613	1,774	839	321	102	102	106	107	101	111	101	103	95	94	100
1995	2,597	1,730	867	314	105	101	103	108	105	110	105	109	100	94	105
1996	2,433	1,602	831	326	100	100	100	100	100	100	100	100	100	100	100
1997	2,432	1,557	875	333	103	100	98	99	105	96	105	105	102	103	106
1998	2,284	1,405	879	326	104	99	98	94	107	87	110	111	103	105	113
1999	2,239	1,326	913	327	105	99	98	93	112	84	114	116	105	104	117
2000	2,126	1,249	877	325	101	98	98	84	94	79	109	114	103	103	107
	2,084	1,211	873	321	100	98	98	84	95	78	108	111	100	100	110
	2,115	1,243	872	316	100	98	99	85	96	79	107	110	109	100	104
	2,066	1,181	885	324	98	97	100	82	94	76	105	114	91	93	101
	2,012	1,188	824	321	96	97	103	79	87	75	103	112	98	95	98
2005 2006	1,988 1,900 1,832 1,786	1,208 1,148 1,082 1,054	780 752 750 732	321 312 322 327 319	97 96 101 94	98 98 97 97	107 109 109 111	79 74 76 73	87 83 90 86	74 69 68 67	105 107 114 102	113 114 118 110	91 87 100 88	96 96 105 84	103 105 115 107

TABLE B-100. Farm input use, selected inputs, 1948-2009

Persons involved in farmwork. Total farm employment is the sum of self-employed and unpaid family workers and hired workers shown here. ² Data from Current Population Survey (CPS) conducted by the Department of Commerce, Census Bureau, for the Department of Labor, Bureau of Labor

Lata num current operation exiting to be set of the set of th

	-	Pric	es receive farmers	d by			-		Prices p	oaid by fa	rmers					Addaa
	Ì				All				Pro	duction it	ems					dum: Average
Year or moi	nth	All farm prod- ucts	Crops	Live- stock and prod- ucts	modities, serv- ices, interest, taxes, and wage rates ¹	Total ²	Feed	Live- stock and poul- try	Fertil- izer	Agri- cul- tural chemi- cals	Fuels	Farm ma- chin- ery	Farm serv- ices	Rent	Wage rates	farm real estate value per acre (dollars) ³
1975 1976 1977 1978 1978 1979		73 75 73 83 94	88 87 83 89 98	62 64 64 78 90	47 50 53 58 66	55 59 61 67 76	83 83 82 80 89	39 47 48 65 88	87 74 72 72 77	72 78 71 66 67	40 43 46 48 61	38 43 47 51 56	4 5 5 6	8 2 7 0 6	44 48 51 55 60	340 397 474 531 628
1980 1981 1982 1983 1984	······	98 100 94 101	107 111 98 108 111	89 89 90 88 91	75 82 86 86 89	85 92 94 92 94	98 110 99 107 112	85 80 78 76 73	96 104 105 100 103	71 77 83 87 90	86 98 97 94 93	63 70 76 81 85	8 8 9 8 8	1 9 6 2 6	65 70 74 76 77	737 819 823 788 801
1985 1986 1987 1988 1988 1989		91 87 89 99 104	98 87 104 109	86 88 91 93 100	86 85 87 91 96	91 86 87 90 95	95 88 83 104 110	74 73 85 91 93	98 90 86 94 99	90 89 87 89 93	93 76 76 77 83	85 83 85 89 94	8 8 8 9	5 3 4 5 1	78 81 85 87 95	713 640 599 632 668
1990 1991 1992 1993 1994		104 100 98 101 100	103 101 101 102 105	105 99 97 100 95	99 100 101 104 106	99 100 101 104 106	103 98 99 102 106	102 102 96 104 94	97 103 100 96 105	95 101 103 109 112	100 104 96 93 89	96 100 104 107 113	96 98 103 110 110	96 100 104 100 108	96 100 105 108 111	683 703 713 736 798
1995 1996 1997 1998 1998	···· .	102 112 107 102 96	112 127 115 107 97	92 99 98 97 95	109 115 118 115 115	108 115 119 113 111	103 129 125 111 100	82 75 94 88 95	121 125 121 112 105	116 119 121 122 121	89 102 106 84 94	120 125 128 132 135	115 116 116 115 114	117 128 136 120 113	114 117 123 129 135	844 887 926 974 1,030
2000 2001 2002 2003 2004		96 102 98 106 118	96 99 105 110 115	97 106 90 103 122	119 123 124 128 134	115 120 119 124 132	102 109 112 114 121	110 111 102 109 128	110 123 108 124 140	120 121 119 121 121	129 121 115 140 165	139 144 148 151 162	118 120 120 125 127	110 117 120 123 126	140 146 153 157 160	1,090 1,150 1,210 1,270 1,360
2005 2006 2007 2008 2008 2009		114 115 136 149 131	110 120 142 169 150	119 111 130 130 112	142 150 161 183 179	140 148 160 190 183	117 124 149 194 186	138 134 131 124 115	164 176 216 392 288	123 128 129 139 147	216 239 264 344 228	173 182 191 209 223	133 139 146 146 159	129 141 147 165 178	165 171 177 183 187	1,610 1,830 2,010 2,170 2,100
2008: Jan Feb Mar Apr July July Aug Sept Oct Nov Dec 2009: Jan Feb Mar Mar May		145 146 146 152 158 159 156 154 159 142 135 139 126 126 129 130	159 164 167 169 173 183 182 177 174 168 158 158 158 158 150 161 146 147 151	129 131 129 128 134 137 138 137 133 137 123 119 114 109 109 112	170 172 175 180 184 192 192 192 192 192 192 192 192 193 199 183 179 180 180 180 180	171 174 178 185 192 197 202 203 201 196 190 184 184 183 184 185	168 176 183 185 198 202 216 209 196 191 184 189 187 185 185 185	123 128 125 122 127 124 128 125 118 125 118 127 120 118 119 122	275 291 315 344 406 441 469 479 479 479 443 396 320 320 320 320	133 133 134 135 136 138 140 141 143 144 145 142 148 151 151	307 311 349 369 400 425 429 393 372 317 247 207 204 198 191 200	198 199 199 202 207 208 210 212 214 215 221 216 214 219 220 220	143 144 144 145 147 148 148 148 148 148 148 147 147 160 159 159	165 165 165 165 165 165 165 165 165 165	187 187 183 183 183 183 183 179 179 179 185 185 185 185 185 189 189 189 189	2,170
June July Aug Sept Oct Nov Dec		134 131 127 126 134 135 135	159 150 147 142 151 153 148	112 112 109 108 110 115 119	180 179 178 177 178 179 179 179	184 182 181 180 180 182 182	197 190 185 180 180 182 182	112 113 111 109 110 113 114	281 271 257 261 253 254 258	145 146 141 142 143 150 150	237 230 241 245 252 265 265	220 220 226 227 227 226 226 226 227	159 159 159 159 159 159 158 158	178 178 178 178 178 178 178 178	187 184 184 184 188 188 188	

TABLE B-101. Agricultural price indexes and farm real estate value, 1975-2009

[1990-92=100, except as noted]

Includes items used for family living, not shown separately.
 Includes other production items, not shown separately.
 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
1990–2009.

Source: Department of Agriculture (National Agricultural Statistics Service).

TABLE B-102. U.S. exports and imports of agricultural commodities, 1950-2009

[Billions of dollars]

		Exports								-	Imports			
	Year	Total 1	Feed grains	Food grains ²	Oilseeds and prod- ucts	Cotton	Tobacco	Animals and prod- ucts	Total ¹	Fruits, nuts, and veg- etables ³	Animals and prod- ucts	Coffee	Cocoa beans and prod- ucts	Agri- cultural trade balance
1950 1951 1952 1953		2.9 4.0 3.4 2.8	0.2 3 3 3	06 11 11 7	02 .3 2 2	1 0 1.1 .9 .5	0.3 .3 .2 .3	03 .5 .3 .4	40 52 45 42	0.2	0.7 1.1 .7 .6	1.1 1.4 1.4 1.5	0 2 .2 .2 .2	-1.1 -1.1 -1.1 -1.3
1954 1955 1956		3.1 3.2 4.2	.2 .3 4	.5 .6 10	.3	.8 .5 7	.3 .4 3	.5 .6 7	4.0 4.0 4.0	2	.5 .5 4	1.5 1.4 1.4	.3	- 9 8 2
1957 1958 1959		4.5 3.9 4.0	.3	1.0 .8 .9	.5 4 .6	1.0 .7 .4	.4	7 5 .6	4.0 3.9 4.1	222	.5 .7 .8	1.4 1.2 1.1	222	- 1
1960 1961 1962 1963 1964		4.8 5.0 5.6 6.3	5 5 8 9	1.2 1.4 1.3 1.5 1.7	.6 6 7 .8 1.0	1.0 .9 .5 .6 .7	4 4 4 4	.6 .6 .7 .8	38 3.7 39 4.0 41	.2 .2 .3 .3	.6 .7 .9 .9	1.0 1.0 1.0 1.0 1.2	.2 .2 .2 .2 .2 .2	1 0 1.3 1 2 1.6 2 3
1965 1966 1967 1968 1969		6.2 6.9 6.4 6.3 6.0	1.1 1.3 1.1 .9	1.4 1.8 1.5 1.4 1.2	1.2 1.2 1.3 1.3 1.3	.5 .4 .5 .3	.4 .5 .5 .5	.8 .7 .7 .7 .8	4.1 4.5 4.5 5.0 5.0	.3 .4 .5 .5		1.1 1.1 1.0 1.2 .9	1 1 2 2 2	2.1 2.4 1.9 1.3 1.1
1970 1971 1972 1973 1974		7.3 7.7 9.4 17.7 21.9	1.1 1.0 1.5 3.5 4.6	1.4 1.3 1.8 4.7 5.4	1.9 2.2 2.4 4.3 5.7	.4 .6 .5 .9 1.3	.5 .5 .7 .7	.9 1.0 1.1 1.6 1.8	5.8 5.8 6.5 8.4 10.2	.5 .6 .7 .8	1.6 1.5 1.8 2.6 2.2	1.2 1.2 1.3 1.7 1.6	.3 .2 .3 .5	1.5 1.9 2.9 9.3 11.7
1975 1976 1977 1978 1979		21.9 23.0 23.6 29.4 34.7	5.2 6.0 4.9 5.9 7.7	6.2 4.7 3.6 5.5 6.3	4.5 5.1 6.6 8.2 8.9	1.0 1.0 1.5 1.7 2.2	.9 .9 1.1 1.4 1.2	1.7 2.4 2.7 3.0 3.8	9.3 11.0 13.4 14.8 16.7	.8 .9 1.2 1.5 1.7	1.8 2.3 2.3 3.1 3.9	1.7 2.9 4.2 4.0 4.2	.5 .6 1.0 1.4 1.2	12.6 12.0 10.2 14.6 18.0
1980 1981 1982 1983 1984		41.2 43.3 36.6 36.1 37.8	9.8 9.4 6.4 7.3 8.1	7 9 9.6 7.9 7.4 7.5	9.4 9.6 9.1 8.7 8.4	2.9 2.3 2.0 1.8 2.4	1.3 1.5 1.5 1.5 1.5	3.8 4.2 3.9 3.8 4.2	17.4 16.9 15.3 16.5 19.3	1.7 2.0 2.3 2.3 3.1	3.8 3.5 3.7 3.8 4.1	4.2 2.9 2.9 2.8 3.3	.9 .9 7 .8 1.1	23.8 26.4 21.3 19.6 18.5
1985 1986 1987 1988 1988		29.0 26.2 28.7 37.1 40.0	6.0 3.1 3.8 5.9 7.7	4.5 3.8 3.8 5.9 7.1	5.8 6.5 6.4 7.7 6.4	1.6 .8 1.6 2.0 2.2	1.5 1.2 1.1 1.3 1.3	4.1 4.5 5.2 6.4 6.4	20.0 21.5 20.4 21.0 21.9	3.5 3.6 3.6 3.8 4.1	4.2 4.5 4.9 5.2 5.1	3.3 4.6 2.9 2.5 2.4	1.4 1.1 1.2 1.0 1.0	9.1 4.7 8.3 16.1 18.2
1990 1991 1992 1993 1994		39.5 39.4 43.2 43.0 46.2	7.0 5.7 5.8 5.0 4.7	4.8 4.2 5.4 5.7 5.3	5.7 6.4 7.3 7.3 7.2	2.8 2.5 2.0 1.6 2.6	1.4 1.4 1.6 1.3 1.3	6.6 7.0 7.9 8.0 9.2	22.9 22.9 24.8 25.1 27.0	4.6 4.6 4.7 5.0 5.3	5.7 5.5 5.7 5.9 5.8	1.9 1.9 1.7 1.5 2.5	1.1 1.1 1.0 1.0	16.6 16.5 18.4 17.9 19.2
1995 1996 1997 1998 1999		56.2 60.4 57.1 51.8 48.4	8.1 9.4 6.0 5.0 5.5	6.7 7.4 5.3 5.0 4.7	8.9 10.8 12.1 9.5 8.1	3.7 2.7 2.7 2.6 1.0	1.4 1.4 1.5 1.5 1.3	10.9 11.1 11.3 10.6 10.4	30.3 33.5 36.1 36.9 37.7	5.9 6.6 6.9 7.7 8.5	6.0 6.1 6.5 6.9 7.3	3.3 2.8 3.9 3.4 2.9	1.1 1.4 1.5 1.7 1.5	25.9 26.9 21.0 14.9 10.7
2000 2001 2002 2003 2003 2004		51.3 53.7 53.1 59.4 61.4	5.2 5.2 5.5 5.4 6.4	4.3 4.2 4.5 5.0 6.3	8.6 9.2 9.6 11.7 10.4	1.9 2.2 2.0 3.4 4.2	1.2 1.3 1.0 1.0 1.0	11.6 12.4 11.1 12.2 10.4	39.0 39.4 41.9 47.4 54.0	8.6 9.0 9.7 10.8 12.2	8.4 9.2 9.0 8.9 10.6	2.7 1.7 1.7 2.0 2.3	1.4 1.5 1.8 2.4 2.5	12.3 14.3 11.2 12.0 7.4
2005 2006 2007 2008	·····	63.2 70.9 90.0 115.3	5.4 7.7 10.9 14.9	5.7 5.5 9.9 13.6	10.2 11.3 15.6 23.7	3.9 4.5 4.6 4.8	1.0 1.1 1.2 1.2	12.2 13.5 17.2 21.8	59.3 65.3 71.9 80.5	13.4 14.6 16.3 17.6	11.5 11.5 12.4 12.0	3.0 3.3 3.8 4.4	2 8 2.7 2.7 3.3	3.9 5.6 18.1 34.8
Jan-1 2008 2009	NUV:	107.1 88.6	14.1 8.7	13.0 7.1	21.5 20.6	4.6 3.1	1.1 1.0	20.4 16.5	73.9 65.4	16.0 15.9	10. 9 9.2	4.1 3.7	2.9 3.0	33.2 23.2

* Less than \$50 million.

¹ Total includes items not shown separately

² Rice, wheat, and wheat flour.

³ Includes fruit, nut, and vegetable preparations. Beginning with 1989, data include bananas but exclude yeasts, starches, and other minor horticultural products

Note. Data derived from official estimates released by the Bureau of the Census, Department of Commerce. Agricultural commodities are defined as (1) nonmarine food products and (2) other products of agriculture that 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.

INTERNATIONAL STATISTICS TABLE B-103. U.S. international transactions, 1946-2009

[Millions of dollars; quarterly data seasonally adjusted. Credits (+), debits (-)]

			Goods 1			Services	-		Income ri	eceipts and	payments		
Year	Year or quarter	Exports	Imports	Balance on goods	Net military trans- actions ²	Net travel and trans- por- tation	Other services, net	Balance on goods and services	Receipts	Payments	Balance on income	eral current trans- fers, net ²	Balance on current account
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
1948		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	2,347	-6,657	-1,286
1954		12,929	-10,353	2,576	902	-269	305	3,254	2,736	624	2,347	-5,642	219
1955		14,424	-11,527	2,897	-113	-297	299	2,786	3,406	735	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	736	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 1971 1972 1973 1973 1974 1975 1976 1977 1978 1979		42,469 43,319 49,381 71,410 98,306 107,088 114,745 120,816 142,075 184,439	-39,866 -45,579 -55,797 -70,499 -103,811 -98,185 -124,228 -151,907 -176,002 -212,007	2,603 -2,260 -6,416 911 -5,505 8,903 -9,483 -31,091 -33,927 -27,568	-641 653 1.072 740 165 1,461 931 1,731 857 -1,313	-2,038 -2,345 -3,063 -3,158 -3,158 -3,184 -2,812 -2,558 -3,565 -3,573 -2,935	2,330 2,649 2,965 3,406 4,231 4,854 5,027 5,680 6,879 7,251	2,254 -1,303 -5,443 1,900 -4,292 12,404 -6,082 -27,246 -29,763 -24,565	11,748 12,707 14,765 21,808 27,587 25,351 29,375 32,354 42,088 63,834	-5.515 -5.435 -6.572 -9.655 -12.084 -12.564 -13.311 -14.217 -21.680 -32.961	6,233 7,272 8,192 12,153 15,503 12,787 16,063 18,137 20,408 30,873	-6.156 -7,402 -8.544 -6.913 -9.249 -7.075 -5.686 -5.226 -5.788 -6.593	2,331 1,433 5,795 7,140 1,962 18,116 4,295 14,335 15,143 285
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	91,747	-56,583	35,164	-16,544	-5,536
1983		201,799	-268,901	-67,102	-563	-4,227	14,124	-57,767	90,000	-53,614	36,386	-17,310	-38,691
1984		219,926	-332,418	-112,492	-2,547	-8,438	14,404	-109,073	108,819	-73,756	35,063	-20,335	-94,344
1985		215,915	-338,088	-122,173	-4,390	-9,798	14,483	-121,880	98,542	-72,819	25,723	-21,998	-118,155
1986		223,344	-368,425	-145,081	-5,181	-8,779	20,502	-138,538	97,064	-81,571	15,494	-24,132	-147,177
1988		250,208	-409,765	-159,557	-3,844	-8,010	19,728	-151,684	108,184	-93,891	14,293	-23,265	-160,655
1988		320,230	-447,189	-126,959	-6,320	-3,013	21,725	-114,566	136,713	-118,026	18,687	-25,274	-121,153
1989		359,916	-477,665	-117,749	-6,749	3,551	27,805	-93,142	161,287	-141,463	19,824	-26,169	-99,486
1990		387,401	-498,438	-111,037	-7,599	7,501	30,270	-80,864	171,742	-143,192	28,550	-26,654	-78,968
1991		414,083	-491,020	-76,937	-5,275	16,560	34,516	-31,136	149,214	-125,085	24,131	9,904	2,897
1993		439,631	-536,528	-96,897	-1,448	19,969	39,164	-39,212	133,766	-109,531	24,234	-36,636	-51,613
1993		456,943	-589,394	-132,451	1,383	19,714	41,040	-70,311	136,057	-110,741	25,316	-39,811	-84,805
1994		502,859	-668,690	-165,831	2,570	16,305	48,463	-98,493	166,521	-149,375	17,146	-40,265	-121,612
1995		575,204	-749,374	-174,170	4,600	21,772	51,414	-96,384	210,244	-189,353	20,891	-38,074	-113,567
1996		612,113	-803,113	-191,000	5,385	25,015	56,535	-104,065	226,129	-203,811	22,318	-43,017	-124,764
1997		678,366	-876,794	-198,428	4,968	22,152	63,035	-108,273	256,804	-244,195	12,609	-45,062	-140,726
1998		670,416	-918,637	-248,221	5,220	10,210	66,651	-166,140	261,819	-257,554	4,265	-53,187	-215,062
1999		683,965	-1,031,784	-347,819	2,593	7,085	73,051	-265,090	293,925	-280,037	13,888	-50,428	-301,630
2000 2001 2002 2003 2004 2006 2006 2007 2008		771,994 718,711 685,170 715,848 806,161 892,337 1,015,812 1,138,384 1,276,994	-1,226,684 -1,148,609 -1,168,002 -1,264,860 -1,477,996 -1,683,188 -1,863,072 -1,969,375 -2,117,245	-454,690 -429,898 -482,831 -549,012 -671,835 -790,851 -847,260 -830,992 -840,252	317 -2.296 -7.158 -11.981 -13.518 -10.536 -7.119 -7.384 -13.881	2,486 -3,254 -4,245 -11,475 -14,275 -13,006 -10,873 2,345 16,175	72,052 69,943 72,633 77,433 89,640 99,124 104,893 134,609 142,021	-379.835 -365,505 -421,601 -495,034 -609,987 -715,268 -760,359 -701,422 -695,936	350,918 290,797 280,942 320,456 413,739 535,263 682,221 818,931 764,637	-329,864 -259,075 -253,544 -275,147 -346,519 -462,905 -634,136 -728,085 -646,406	21.054 31.722 27.398 45.309 67.219 72.358 48.085 90.845 118.231	-58,645 -64,948 -71,794 -88,362 -105,772 -91,273 -115,996 -128,363	-417,426 -398,270 -459,151 -521,519 -631,130 -748,683 -803,547 -726,573 -706,068
2008:		315,637	-534,482	-218,846	-2,543	3.076	35,659	-182,653	202,927	-166,241	36,686	-33,330	-179,298
		332,876	-554,372	-221,496	-3,055	4.922	36,784	-182,847	198,796	-172,521	26,274	-31,147	-187,719
		337,912	-559,002	-221,090	-4,664	5.595	34,217	-185,942	195,319	-161,194	34,125	-32,361	-184,178
	V	290,569	-469,389	-178,820	-3,618	2.581	35,363	-144,495	167,596	-146,450	21,146	-31,527	-154,875
2009:		249,374	-373,411	-124,036	-3,017	1,985	32,661	-92,408	135,352	-117,051	18,301	-30,343	-104,450
		246,134	-361,621	-115,487	-1,855	3,509	32,592	-81,240	135,074	-118,404	16,670	-33,410	-97,980
	P	263,911	-396,050	-132,138	-2,044	3,939	32,865	-97,378	140,403	-116,694	23,709	-34,365	-108,034

¹ Adjusted from Census data for differences in valuation, coverage, and timing; excludes military ² Includes transfers of goods and services under U.S. military grant programs.

See next page for continuation of table.

TABLE B-103. U.S. international transactions, 1946-2009-Continued

[Millions of dollars; quarterly data seasonally adjusted. Credits (+), debits (-)]

				Statistical	discrepancy						
View or or other	Capital account	l ex [in	J.S -owned as cluding financ crease/financ	ssets abroad, cial derivative cial outflow (-	es -}]	Foreign-ov excludin (increas	vned assets i g financial de e/financial in	n the U.S., rivatives flow (+)]	Financial	Total Isum of	Of
rear or quarter	actions. net	Total	U.S. official reserve assets ³	Other U.S. Govern- ment assets	U.S. private assets	Total	Foreign official assets	Other foreign assets	derivatives, net	the items with sign reversed)	Seasonal adjustment discrepancy
1946			-623								
1947 1948			-3,315 -1,736								
1949			-266								
1950			1,758								
1952			-415								
1953			1,256								
1955			460								
1956			-869								
1957			-1,165 2,292								
1959			1,035								
1960		-4,099	2,145	-1,100	-5,144	2,294	1,473	821		-1,019	
1961		-5,538 -4,174	1.535	-910	-5,235 -4,623	2,705	1,270	641		-989	
1963		-7,270	378	-1,662	-5,986	3,217	1,986	1,231		-360	
1964		-9,560 -5,716	1/1	-1,680 -1,605	-8,050 -5,336	3,643 742	1,660	1,983		-907 -457	
1966		-7,321	570	-1,543	-6,347	3,661	-672	4,333		629	<i></i>
1967		-9,/5/ -10.977	-870	-2,423 -2,274	-7,386 -7,833	7,379	3,451	3,928		-205	
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	7,226	7,775	-550		-219	
19/1		-12,4/5 -14,497	2,349	-1,884	-12,940	23,687	27,596	-3,909		-9,779	
1973		-22,874	158	-2,644	-20,388	18,388	6,026	12,362		-2.654	
1974		-34,745	-1,467	366	-33,643	35,227	10,546	24,682		-2,444	
1976		-51,269	-2,558	-4,214	-44,498	37,839	17,693	20,147		9,134	
1977		-34,785	-375	-3,693	-30,717	52,770	36,816	15,954		-3,650	
1979		-66,054	-1,133	-3,746	-61,176	40,693	-12,526	53,218		25,647	
1980		-86,967	8,155	-5,162	73,651	62,037	16,649	45,388		22,613	
1981	100	-114,147	-5,175	-5,097	-103,875	85,684	6,053	79,631		23,433	
1983	209	-66,373	-1,196	-5,006	-60,172	87,399	5,845	81,554		17,457	
1984	235	-40,376	-3,131	-5,489	-31,757	116,048	3,140	112,908		18,437	
1986	301	-111,723	312	-2,021	-110,014	228,330	35,648	192,681		30,269	
1987	365	-79,296	9,149	1,006	-89,450	247,100	45,387	201,713		-7,514	
1989	493	-175,383	-25,293	1,233	-151,323	222,777	8,503	214,274		51,756	
1990	-6,579	-81,234	-2,158	2,317	81,393	139.357	33,910	105,447		27,425	
1991	4,479	-64,389	5,763	2,923	-73.075	108,221	17,388	90,833		-42,252	
1993	-1,299	-200,551	-1,379	-351	-198,823	279,758	71,753	208,005		6,898	
1994	-1,723	-178,937	5,346	-390	-183,893	303,174	39,583	263,591		-902	
1996	-735	-413,409	6,668	-989	-419,088	547,885	126,724	421,161		-8,977	
1997	-1,027	-485,475	-1,010		-484,533	704,452	19,036	685,416		-77,224	
1999	-4,939	-504,062	8,747	2,750	-515,559	742,210	43,543	698,667		68,421	
2000	-1,010	-560,523	-290	-941	-559,292	1,038,224	42,758	995,466		~59,265	
2001	11,922	-382,616	-4,911 -3,681	-486 345	-3/7,219	/82,8/0 795,161	28,059	679,216		-13,906	
2003	-3,480	-325,424	1,523	537	-327,484	858,303	278,069	580,234		-7,880	
2004	1,323	-1,000,870	2,805	1,710 5,530	-1,005,385	1,533,201	259 268	1,135,446 988 n79		97,476	
2006	-3,906	-1,285,729	2,374	5,346	-1,293,449	2.065.169	487,939	1,577,230	29,710	-1,698	
2007	-1,895	-1,472,126	-122	-22,273	-1,449,731	2,129,460	480,949	1,648,511	6,222 -28 905	64,912	
2008 1	-637	-251 501	-276	3 268	-254 493	426.058	208.646	217.412	-7.966	13.344	14.659
	-682	107,343	-1,267	-41,592	150,202	2,003	178.826	-176,823	-2,355	81,410	3,037
III IV	2,967	29,322	-179	-225,997 -265,293	255,498	117,897	-16.024	4.136	-4,0/5	58,067 67.236	-25,884
2009: 1	-710	94.734	-982	244,102	-148.387	-67.757	70,892	-138,649	8.407	69,777	10,571
	719	37,398	-3,632	193,750	-152,720	14,614	124,299	-109,685	11,265	35,422	-1,806
III P	1 -686	-294,102	-49.0Z1	57,928	-303,009	332,407	123,584	208,823		/0,416	U,b//

³ Consists of gold, special drawing rights, foreign currencies, and the U.S. reserve position in the International Monetary Fund (IMF).

TABLE B-104. U.S. international trade in goods by principal end-use category, 1965-2009

Exports Imports														
				Nonagi	ricultural p	roducts					Nonpe	troleum pro	oducts	
Year or quarter	Total	Agri- cultural prod- ucts	Total	Indus- trial sup- plies and materi- als	Capital goods except auto- motive	Auto- motive	Other	Total	Petro- leum and prod- ucts	Tota!	Indus- trial sup- plies and materi- als	Capital goods except auto- motive	Auto- motive	Other
1965 1966 1967 1968 1969	26.5 29.3 30.7 33.6 36.4	6.3 6.9 6.5 6.3 6.1	20.2 22.4 24.2 27.3 30.3	7.6 8.2 8.5 9.6 10.3	8.1 8.9 9.9 11.1 12.4	1.9 2.4 2.8 3.5 3.9	2.6 2.9 3.0 3.2 3.7	21.5 25.5 26.9 33.0 35.8	2.0 2.1 2.1 2.4 2.6	19.5 23.4 24.8 30 6 33.2	9.1 10.2 10.0 12.0 11.8	1.5 2.2 2.5 2.8 3.4	0.9 1.8 2.4 4.0 4.9	8.0 9.2 9.9 11.8 13.0
1970 1971 1972 1973 1974 1975 1976 1976 1977 1978	42.5 43.3 49.4 71.4 98.3 107.1 114.7 120.8 142.1 184.4	7 4 7 8 9 5 18.0 22 4 22 2 23 4 24 3 29 9 35.5	35.1 35.5 39.9 53.4 75.9 84.8 91.4 96.5 112.2 149.0	12.3 10.9 11.9 17.0 26.3 26.8 28.4 29.8 34.2 52.2	14 7 15 4 16 9 22 0 30 9 36 6 39 1 39 8 47 5 60 2	3.9 4.7 5.5 6.9 10.6 12.1 13.4 15.2 17.9	4.3 5.6 7.6 100 10.8 11.7 13.5 15.3 18.7	39 9 45 6 55 8 70 5 103 8 98 2 124 2 151 9 176 0 212 0	2 9 3.7 4.7 8.4 26.6 27.0 34.6 45.0 42.6 60.4	36.9 41.9 51.1 62.1 77.2 71.2 89.7 106.9 133.4 151.6	12 4 13.8 16 3 19 6 27 8 24 0 29 8 35 7 40 7 47 5	40 43 59 83 98 102 123 140 193 246	55 7.4 8.7 10.3 12.0 11.7 16.2 18.6 25.0 26.6	15.0 16.4 20.2 23.9 27.5 25.3 31.4 38.6 48.4 52.8
1980 1981 1982 1983 1984 1985 1986 1986 1987 1988 1988 1989	224.3 237.0 211.2 201.8 219.9 215.9 223.3 250.2 320.2 359.9	42.0 44.1 37.3 37.1 38.4 29.6 27.2 29.8 38.8 41.1	182.2 193.0 173.9 164.7 181.5 186.3 196.2 220.4 281.4 318.8	65.1 63.6 57.7 52.7 56.8 54.8 59.4 63.7 82.6 90.5	76.3 84.2 76.5 71.7 77.0 79.3 82.8 92.7 119.1 136.9	17.4 19.7 17.2 18.5 22.4 24.9 25.1 27.6 33.4 35.1	23.4 25.5 22.4 21.8 25.3 27.2 28.9 36.4 46.3 56.3	249.8 265.1 247.6 268.9 332.4 338.1 368.4 409.8 447.2 477.7	79.5 78.4 62.0 55.1 51.4 34.3 42.9 39.6 50.9	170 2 186 7 185 7 213 8 274 4 286 7 334 1 366 8 407 6 426 8	53 0 56.1 48 6 53 7 66 1 62 6 69 9 70 8 83 1 84 6	31.6 37.1 38.4 43.7 60.4 61.3 72.0 85.1 102.2 112.3	28 3 31.0 34 3 43.0 56.5 64.9 78.1 85.2 87 9 87 4	57 4 62 4 64 3 73 3 91 4 97 9 114 2 125 7 134 4 142 5
1990 1991 1992 1993 1994 1995 1996 1997 1996 1997	387.4 414.1 439.6 456.9 502.9 575.2 612.1 678.4 670.4 684.0	40.2 40.1 44.1 43.6 47.1 57.2 61.5 58.5 53.2 49.7	347.2 374.0 395.6 413.3 455.8 518.0 550.6 619.9 617.3 634.3	97.0 101.6 101.7 105.1 112.7 135.6 138.7 148.6 139.4 140.3	153 0 166.6 176 4 182 7 205.7 234.4 254.0 295.8 299.8 311.2	36.2 39.9 46.9 51.6 57.5 61.4 64.4 73.4 72.5 75.3	61.0 65.9 70.6 74.0 79.9 86.5 93.6 102.0 105.5	498.4 491.0 536.5 589.4 668.7 749.4 803.1 876.8 918.6 1.031.8	62 3 51.7 51.6 51.5 51.3 56.0 72.7 71.8 50.9 67.8	436.1 439.3 484.9 537.9 617.4 693.3 730.4 805.0 867.7 964.0	83 0 81 3 89 1 100.8 113.6 128.5 136.1 144.9 151 6 156.3	116.4 121.1 134.8 153.2 185.0 222.1 228.4 253.6 269.8 295.7	88.2 91.5 91.5 102.1 118.1 123.7 128.7 139.4 148.6 179.0	148 5 151 4 169 6 182 0 200 6 219 0 237 1 267 1 297 7 333 0
2000 2001 2002 2003 2004 2005 2006 2006 2007 2008	772.0 718 7 685.2 715.8 806 2 892 3 1.015 8 1.138 4 1.277 0	52.8 54.9 54.5 60.9 62.9 64.9 72.9 92.1 118.0	719.2 663.8 630.7 655.0 743.2 827.5 942.9 1.046.3 1.159.0	163 9 150.5 147 6 162.5 192.2 221.5 263 2 302.3 372 0	357 0 321.7 290.4 293.7 327.5 358.4 404.0 433.0 457.7	80.4 75.4 78.9 80.6 89.2 98.4 107.3 121.3 121.5	117.9 116.2 113.7 118.2 134.2 149.2 168.4 189.7 207.9	1,226.7 1,148.6 1,168.0 1,264.9 1,478.0 1,683.2 1,863.1 1,969.4 2,117.2	120.3 103.6 103.5 133.1 180.5 251.9 302.4 331.0 453.3	1,106,4 1,045,0 1,064,5 1,131,8 1,297,5 1,431,3 1,560,6 1,638,4 1,664,0	181.9 172.5 164.6 181.4 232.5 272.7 300.1 308.4 333.1	347.0 298.4 283.9 296.4 344.5 380.7 420.0 446.0 455.2	195.9 189.8 203.7 210.1 228.2 239.4 256.6 259.2 233.8	381.6 384.3 412.2 443.8 492.4 538.5 584.0 624.8 641.9
2006: V	243.4 252.1 255.9 264.4	17.5 18.0 18.4 19.0	226.0 234.1 237.6 245.3	61.0 65.7 67.4 69.1	97.9 100 8 100.9 104 4	26.7 26.4 26.6 27.6	40.5 41.2 42.6 44.3	454.6 463.8 476.4 468.3	72.9 78.2 82.9 68.4	381.8 385.6 393.4 399.9	74.1 74.4 77 1 74 5	101.9 104.0 106 5 107 5	64.2 64.1 62.9 65.4	141.6 143 0 146.9 152 4
2007: V	269.5 277.7 289.2 302.0	20.0 21.4 24.5 26.2	249.5 256 2 264.7 275.8	69.8 74.7 76.6 81.2	104.9 105.4 109.9 112.9	28.9 29.9 30.6 31.8	46.0 46.2 47.6 49.8	475.6 483.3 494.1 516.4	70.5 77.8 82.3 100.4	405.1 405.5 411.8 416.0	74.8 78.4 78.5 76.7	110.0 109.9 112.1 114.1	63.8 63.1 66.3 66.0	156 5 154 1 154.8 159 3
2008: 1 II III IV	315.6 332.9 337.9 290.6	29.3 31.6 31.4 25.7	286.3 301.3 306.5 264.8	90.7 100.0 103.1 78.2	113.6 116.9 118.1 109.0	31.1 31.2 31.9 27 3	50.9 53.2 53.5 50.3	534.5 554.4 559.0 469.4	112.6 124.4 130.8 85.4	421.9 430.0 428.2 383.9	82.7 86.5 90.2 73.7	115.3 117.5 115.5 106.9	63.7 62.1 58.1 49.9	160.2 163.9 164.3 153.5
2009: 1 <i>P</i>	249.4 246.1 263.9	23.6 25.2 24.8	225.8 220.9 239.2	63.5 65.5 74.4	98.4 93.3 95.5	17 5 16 7 21.6	46.3 45.4 47.6	373.4 361.6 396.1	52.2 56.9 68.9	321.2 304.7 327.2	55.2 46.9 50.0	91.8 86.5 91.1	32.3 31.7 44.5	141.9 139.5 141.6

[Billions of dollars; quarterly data seasonally adjusted]

¹ End-use commodity classifications beginning 1978 and 1989 are not strictly comparable with data for earlier periods. See *Survey of Current Business*, June 1988 and July 2001.

Note: Data are on a balance of payments basis and exclude military. In June 1990, end-use categories for goods exports were redefined to include reexports (exports of foreign goods), beginning with data for 1978, reexports are assigned to detailed end-use categories in the same manner as exports of domestic goods.

item	2001	2002	2003	2004	2005	2006	2007	2008	2009 first 3 quarters at annual rate ¹
EXPORTS									
iotal, all countries Euro area ² France Germany	718,711 178,229 111,025 19,693 29,363 9,715 39,701	685,170 161,116 104,242 18,897 26,125 9,898 32,627	715,848 169,249 110,301 16,891 28,422 10,378 33,233	806,161 188,913 123,972 20,770 31,016 10,547 35,336	892,337 207,503 134,920 22,120 33,787 11,342 37,842	1,015,812 239,764 152,282 23,339 40,770 12,398 44,526	1,138,384 279,476 176,484 26,436 49,106 14,003 49,395	1,276,994 321,151 198,538 28,603 54,209 15,330 52,868	1,012,559 251,943 157,255 26,045 41,933 11,920 44,793
Canada	163,259	160,915	169,929	189,982	212,192	230,983	249,949	261,872	200,239
Latin America and Other Western Hemisphere	158,969	148,337	149,049	171,800	192,257	221,626	242,312	287,806	229,384
Brazil	15,789	12,310	11,139	13,756	15,212	18,832	24,061	32,175	24,999
Mexico	101,181	97,305	97,248	110,606	120,160	133,658	135,811	151,147	124,031
Venezuela	5,600	4,021	2,827	4,761	6,413	8,994	10,193	12,604	9,453
Asia and Pacific	188,731	186,871	199,192	220,914	236,019	270,810	301,190	325,948	266,709
China	19,108	22,043	28,292	34,324	41,072	53,528	62,786	69,552	62,636
India	3,754	4,098	4,980	6,101	7,914	9,622	14,885	17,623	16,599
Japan	55,879	50,298	50,845	52,271	53,118	57,153	60,421	64,457	49,728
Korea, Republic of	21,203	21,881	23,542	25,581	27,112	31,671	33,657	33,913	26,557
Singapore	17,338	16,042	16,287	19,199	20,212	23,550	25,379	27,633	21,087
Taiwan	17,394	18,027	17,065	21,157	21,016	22,334	25,415	24,636	16,491
Middle East	18,142	18,061	18,270	21,784	29,634	34,782	42,744	52,343	40,525
Africa	11,383	9,870	10,158	12,768	14,733	17,847	22,713	27,873	23,759
<i>Memorandum</i> : Members of OPEC ³	19,502	17,895	16,662	21,723	31,052	37,994	47,607	63,669	47,077
IMPORTS									
Total, all countries	1,148,609	1,168,002	1,264,860	1,477,996	1,683,188	1,863,072	1,969,375	2,117,245	1.508,109
Europe	255,988	261,340	285,282	321,505	355,431	383,816	411,205	440,802	322,091
Euro area ²	166,509	172,762	187,948	209,767	229,233	246,867	268,798	277,728	207,759
France	30,422	28,290	29,244	31,608	33,848	37,037	41,544	44,036	33,608
Germany	59,141	62,540	68,201	77,350	84,992	89,242	94,306	97,597	68,132
Italy	23,768	24,209	25,397	28,096	30,975	32,660	35,027	36,140	26,160
United Kingdom	41,185	40,596	42,610	46,087	50,800	53,187	56,367	57,884	45,407
Canada	219,358	212.431	225,357	260,386	295,060	307,109	320,786	342,920	219,735
Latin America and Other Western Hemisphere	199,923	205,610	218,665	257,114	296,315	335,493	349,409	379,783	275,707
Brazii	14,468	15,782	17,917	21,164	24,441	26,373	25,650	30,449	19,681
Mexico	132,542	136,117	139,834	158,464	173,436	201,812	214,582	219,808	170,528
Venezuela	15,251	15,094	17,136	24,921	33,978	37,134	39,910	51,424	26,755
Asia and Pacific China	411,473 102,404 9,755 126,685 35,207 15,080 33,641	432,214 125,316 11,822 121,618 35,605 14,821 32,611	462,062 152,671 13,067 118,264 37,238 15,162 32,117	542,073 196,973 15,577 130,094 46,177 15,407 34,985	608,703 243,886 18,819 138,375 43,791 15,131 35,103	684,325 288,139 21,845 148,560 45,811 17,712 38,414	718,565 321,688 24,102 146,037 47,547 18,423 38,489	729,142 337,963 25,739 139,587 48,062 15,891 36,496	577,561 285,835 21,097 90,933 39,115 15,624 27,292
Middle East	36,423	34,303	41,470	51,283	62,467	71,907	77,405	111,108	56,217
Africa	25,444	22,103	32,025	45,636	65,211	80,420	92,005	113,490	56,797
Memorandum: Members of OPEC ³	59,755	53,247	68,346	94,109	124,942	145,367	174,340	242,575	104,260
BALANCE (excess of exports +)									
Total, all countries	-429,898	-482,831	-549,012	671,835	-790,851	-847,260	-830,992	-840,252	-495.548
Europe	-77,759	-100,224	-116,033	132,592	-147,928	-144,053	-131,729	-119,651	-70,149
Euro area ²	-55,483	-68,520	-77,648	85,795	-94,313	-94,585	-92,313	-79,190	-50,504
France	-10,729	-9,393	-12,354	10,838	-11,727	-13,698	-15,108	-15,433	-7,564
Germany	-29,778	-36,415	-39,778	46,334	-51,204	-48,472	-45,200	-43,387	-26,199
Italy	-14,053	-14,311	-15,020	17,550	-19,633	-20,262	-21,024	-20,810	-14,239
United Kingdom	-1,484	-7,969	-9,377	10,751	-12,958	-8,661	-6,971	-5,015	-615
Canada	-56,099	-51,516	-55,428	-70,403	-82,868	-76,126	-70,837	-81,049	-19,496
Latin America and Other Western Hemisphere	-40,955	-57,273	-69,615	-85,314	-104,059	-113,867	-107,097	-91,977	-46,324
Brazil	1,321	-3,472	-6,778	-7,408	-9,229	-7,541	-1,588	1,726	5,317
Mexico	-31,361	-38,812	-42,586	-47,857	-53,276	-68,153	-78,771	-68,661	-46,496
Venezuela	-9,651	-11,073	-14,309	-20,160	-27,565	-28,140	-29,717	-38,820	-17,304
Asia and Pacific China Japan Korea, Republic of Singapore Taiwan	-222,742 -83,296 -6,001 -70,806 -14,004 2,258 -16,248	-245.344 -103.274 -7.724 -71.320 -13.724 1.221 -14.584	-262,869 -124,379 -8,088 -67,419 -13,697 1,125 -15,052	-321,159 -162,649 -9,477 -77,823 -20,596 3,793 -13,829	-372.684 -202.813 -10.905 -85,257 -16.679 5.080 -14,087	-413,515 -234,612 -12,223 -91,407 -14,140 5,838 -16,080	-417.375 -258.902 -9.217 -85,616 -13,890 6,956 -13,074	-403,194 -268,411 -8,116 -75,130 -14,149 11,741 -11,860	-310,852 -223,199 -4,500 -41,205 -12,557 5,464 -10,801

TABLE B-105. U.S. international trade in goods by area, 2001-2009

[Millions of dollars]

Memorandum Members of OPEC 3

Middle East

Africa ..

¹ Preliminary: seasonally adjusted.
² Euro area consists of Austria, Belgium, Cyprus (beginning in 2008), Finland, France, Germany, Greece (beginning in 2001), Ireland, Italy, Luxembourg, Malta (beginning in 2009), Netherlands, Portugal, Slovakia (beginning in 2009), Slovenia (beginning in 2007), and Spain
³ Organization of Petroleum Exporting Countries, consisting of Algeria, Angola (beginning in 2007), Ecuador (beginning in 2007), Indonesia (ending in 2008), Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

-23,199

-21,867

-51.684

-29,499

-32,867

-72,386

-32,833 -50,479

-93,889

-37,126 -62,574

-107,373

-16,242 -12,233

-35.351

-18,282 -14,062

-40,253

Note: Data are on a balance of payments basis and exclude military. For further details, and additional data by country, see Survey of Current Business, January 2010

Source: Department of Commerce (Bureau of Economic Analysis)

-15,692

-33,036

-57,183

-58,764

-85,617 -178,907

-34,661 -69,292 -126,733

TABLE B-106. U.S. international trade in goods on balance of payments (BOP) and Census basis, and trade in services on BOP basis, 1981-2009

			Goo (f.a.s	ds: Expor 5. value) ¹	ts 2				Goods: Imports (customs value) 5							Services (BOP basis)	
		(Census ba	asis (by e	nd-use c	ategory)				Census I	basis (by i	end-use o	category)				
Year or month	Total, BOP basis ³	Total, Census basis ^{3, 4}	Foods, feeds, and bev- erages	Indus- trial sup- plies and mate- rials	Capi- tal goods except auto- mo- tive	Auto- motive vehi- cles, parts, and en- gines	Con- sumer goods (non- food) except auto- motive	Total, BOP basis	Total, Census basis ⁴	Foods, feeds, and bev- erages	Indus- trial sup- plies and mate- rials	Capi- tal goods except auto- mo- tive	Auto- motive vehi- cles, parts, and en- gines	Con- sumer goods (non- food) except auto- motive	Ex- ports	lm- ports	
1981 1982 1983 1984 1985 1986 1987 1986 1987 1988 1989	237.0 211.2 201.8 219.9 215.9 223.3 250.2 320.2 359.9	238.7 216.4 205.6 224.0 7218.8 7227.2 254.1 322.4 363.8	31.3 30.9 31.5 24.0 22.3 24.3 32.3 37.2	61.7 56.7 61.7 58.5 57.3 66.7 85.1 99.3	72.7 67.2 72.0 73.9 75.8 86.2 109.2 138.8	15.7 16.8 20.6 22.9 21.7 24.6 29.3 34.8	14.3 13.4 13.3 12.6 14.2 17.7 23.1 36.4	265.1 247.6 268.9 332.4 338.1 368.4 409.8 447.2 477.7	261.0 244.0 258.0 6330.7 6336.5 365.4 406.2 441.0 473.2	17.1 18.2 21.0 21.9 24.4 24.8 24.8 24.8 25.1	112.0 107.0 123.7 113.9 101.3 111.0 118.3 132.3	35.4 40.9 59.8 65.1 71.8 84.5 101.4 113.3	33.3 40.8 53.5 66.8 78.2 85.2 87.7 86.1	39.7 44.9 60.0 68.3 79.4 88.7 95.9 102.9	57.4 64.1 64.3 71.2 73.2 86.7 98.7 110.9 127.1	45.5 51.7 55.0 67.7 72.9 80.1 90.8 98.5 102.5	
1990 1991 1992 1993 1995 1995 1996 1998 1998	387.4 414.1 439.6 456.9 502.9 575.2 612.1 678.4 670.4 684.0	393.6 421.7 448.2 465.1 512.6 584.7 625.1 689.2 682.1 695.8	35.1 35.7 40.3 40.6 42.0 50.5 51.5 51.5 46.4 46.0	104.4 109.7 109.1 111.8 121.4 146.2 147.7 158.2 148.3 147.5	152.7 166.7 175.9 181.7 205.0 253.0 294.5 299.4 310.8	37.4 40.0 47.0 52.4 57.8 61.8 65.0 74.0 72.4 75.3	43.3 45.9 51.4 54.7 60.0 64.4 70.1 77.4 80.3 80.9	498.4 491.0 536.5 589.4 668.7 749.4 803.1 876.8 918.6 1,031.8	495.3 488.5 532.7 580.7 663.3 743.5 795.3 869.7 911.9 1,024.6	26.6 26.5 27.6 27.9 31.0 33.2 35.7 39.7 41.2 43.6	143.2 131.6 138.6 145.6 162.0 181.8 204.5 213.8 200.1 221.4	116.4 120.7 134.3 152.4 184.4 221.4 228.1 253.3 269.5 295.7	87.3 85.7 91.8 102.4 118.3 123.8 128.9 139.8 148.7 179.0	105.7 108.0 122.7 134.0 146.3 159.9 172.0 193.8 217.0 241.9	147.8 164.3 177.3 185.9 200.4 219.2 239.5 256.1 262.8 281.9	117.7 118.5 119.6 123.8 133.1 141.4 152.6 165.9 180.7 199.2	
2000 2001 2002 2003 2004 2005 2005 2006 2006 2007 2008	772.0 718.7 685.2 715.8 806.2 892.3 1,015.8 1,138.4 1,277.0	781.9 729.1 693.1 724.8 814.9 901.1 1,026.0 1,148.2 1,287.4	47.9 49.4 49.6 55.0 56.6 59.0 66.0 84.3 108.3	172.6 160.1 156.8 173.0 203.9 233.0 276.0 316.4 388.0	356.9 321.7 290.4 293.7 327.5 358.4 404.0 433.0 457.7	80.4 75.4 78.9 80.6 89.2 98.4 107.3 121.3 121.5	89.4 88.3 84.4 89.9 103.2 115.3 129.1 146.0 161.3	1,226.7 1,148.6 1,168.0 1,264.9 1,478.0 1,683.2 1,863.1 1,969.4 2,117.2	1,218.0 1,141.0 1,161.4 1,257.1 1,469.7 1,673.5 1,853.9 1,957.0 2,103.6	46.0 46.6 49.7 55.8 62.1 68.1 74.9 81.7 89.0	299.0 273.9 267.7 313.8 412.8 523.8 602.0 634.7 779.5	347.0 298.0 283.3 295.9 343.6 379.3 418.3 444.5 453.7	195.9 189.8 203.7 210.1 228.2 239.4 256.6 259.2 233.8	281.8 284.3 307.8 333.9 372.9 407.2 442.6 474.6 481.6	298.6 286.2 292.3 304.3 353.1 389.1 435.9 504.8 549.6	223.7 221.8 231.1 250.4 291.2 313.5 349.0 375.2 405.3	
2008: Jan Feb Mar May June July Aug Sept Nov Dec	103.8 106.8 105.1 109.0 109.5 114.4 117.2 114.7 106.0 103.8 97.5 89.2	104.7 107.9 105.8 109.8 110.1 115.1 115.9 106.6 104.8 98.5 90.1	8.7 9.0 9.4 9.5 10.0 10.0 9.9 9.0 8.3 7.9 7.1	30.0 32.2 32.3 33.1 34.2 36.7 37.9 37.0 32.4 31.4 27.6 23.2	38.2 38.1 37.4 39.1 38.4 39.4 40.1 40.4 37.6 37.5 36.4 35.1	10.4 10.9 9.8 10.2 10.2 10.8 11.5 10.3 10.2 10.0 9.2 8.1	13.3 13.4 12.8 13.5 13.5 14.0 14.6 13.9 13.5 13.3 13.2 12.6	177.7 180.1 176.6 183.5 183.2 187.6 194.5 186.8 177.7 175.2 151.8 142.4	176.8 178.3 174.9 181.8 182.3 186.7 193.3 186.1 176.2 174.4 151.0 141.9	7.2 7.2 7.4 7.6 7.4 7.5 7.8 7.6 7.6 7.6 7.4 7.2	65.4 63.7 63.5 68.0 73.2 79.9 73.4 65.9 66.1 48.8 43.6	37.9 38.6 38.4 39.1 39.4 38.5 38.7 38.0 38.4 37.2 35.4 34.1	21.2 22.3 20.2 20.4 20.5 20.3 19.3 18.6 17.9 16.7 15.2	39.8 41.2 40.1 40.5 41.5 41.4 41.0 42.0 40.1 37.4 36.7	45.5 44.8 45.3 45.9 47.1 47.2 47.2 47.0 46.0 45.9 44.0 43.7	33.1 33.2 33.2 33.4 33.9 34.2 34.8 35.7 34.4 33.9 33.0 33.0 32.4	
2009: Jan Feb Apr June July Aug Sept Oct Nov P .	82.4 84.4 82.6 80.0 82.1 84.1 86.8 90.3 93.5 94.6	83.2 85.2 83.6 80.8 83.1 85.0 87.8 87.6 91.1 94.8 95.6	7.1 7.3 7.6 7.9 8.1 7.8 7.9 7.5 7.7 9.0	22.2 22.2 22.4 21.1 23.2 24.4 24.8 25.7 27.1 27.6 27.0	33.2 33.3 31.9 30.9 31.0 31.4 32.2 30.9 32.5 33.7 34.1	5.6 6.0 5.8 5.4 5.5 6.8 7.3 7.5 7.9 8.6	11.4 12.8 12.4 11.9 12.1 12.1 12.4 12.3 12.8 13.7 13.0	130.0 121.6 121.8 119.9 119.3 122.4 129.5 128.8 137.7 138.6 143.0	129.6 121.2 121.4 119.5 119.0 122.1 129.3 128.4 137.3 138.2 142.6	6.9 6.7 6.8 6.7 6.8 6.9 6.8 6.9 6.8 6.7 6.7 6.9 6.9 6.8	38.5 34.3 34.5 33.7 33.1 37.0 38.3 37.5 42.9 41.1 43.1	31.9 30.1 29.6 28.6 28.9 30.1 30.1 30.9 31.9 33.2	11.5 10.2 10.6 10.5 10.2 11.1 13.4 14.7 16.3 16.9 16.9	36.1 34.6 35.2 35.5 35.5 33.7 35.4 34.8 35.4 36.6 38.0	41.6 40.9 40.3 41.7 41.4 42.1 42.6 42.9 43.1 43.5 43.6	30.9 30.3 30.0 30.3 30.0 30.7 31.3 31.2 31.4 31.6 31.6 31.6	

[Billions of dollars; monthly data seasonally adjusted]

¹ Department of Defense shipments of grant-aid military supplies and equipment under the Military Assistance Program are excluded from total exports ¹ Department or Deense sinpments of grant-air military supplies and equipment under the Military Assistance rrogram are excluded from total exports ² Fa.s. (free alongside ship) value basis at U.S. port of exportation for exports. ³ Beginning with 1989 data, exports have been adjusted for undocumented exports to Canada and are included in the appropriate end-use categories. For prior years, only total exports include this adjustment. ⁴ Total includes forther exports or imports, not shown separately.

⁵ Total arrivals of imported goods other than in-transit 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 international trade of the U.S. Virgin Islands, Puerto Rico, and U.S. Foreign Trade Zones.

Source: Department of Commerce (Bureau of the Census and Bureau of Economic Analysis).

TABLE B-107. International investment position of the United States at year-end, 2001-2008

	[N	Aillions of d	ollars]					
Type of investment	2001	2002	2003	2004	2005	2006	2007	2008 ^p
NET INTERNATIONAL INVESTMENT POSITION	_1 868 875	-2 037 970	-2 086 513	-2 245 417	-1 925 146	-2 184 282	-2 139 916	-3 469 246
Financial derivatives net 1	1,000,075	2,007,070	2,000,010	2,210,111	57,915	59,836	71.472	159.582
Net international investment position, excluding					0,,010			
financial derivatives	-1,868,875	-2,037,970	-2,086,513	-2,245,417	-1,983,061	-2,244,118	-2,211,388	-3,628,828
U.SOWNED ASSETS ABROAD Financial derivatives, gross positive fair value ¹ U.Sowned assets abroad, excluding financial	6,308,681	6,649,079	7,638,086	9,340,634	11,961,552 1,190,029	14,428,137 1,238,995	18,278,842 2,559,332	19,888,158 6,624,549
derivatives	6,308,681	6,649,079	7,638,086	9,340,634	10,771,523	13,189,142	15,/19,510	13,263,609
U.S. official reserve assets	129,961	90,906	183,577	189,591	188,043	219,853	217,211	293,732
Special drawing rights	10,783	12,166	12,638	13,628	8,210	8,870	9,476	9.340
Reserve position in the International Monetary Fund	17,869	21,979	22,535	19,544	8,036	5,040	4,244	7,683
Foreign currencies	28,981	33,651	39,538	42,472	37,622	40,676	45,466	49,270
U S Government assets, other than official reserve assets. U S credits and other long-term assets ³ Repayable in dollars Other ⁴ .	85,654 83,132 82,854 278	85,309 82,682 82,406 276	84,772 81,980 81,706 274	83,062 80,308 80,035 273	77,523 76,960 76,687 273	72,189 71,635 71,362 273	94,471 70,015 69,742 273	624,100 69,877 69,604 273
U.S. foreign currency holdings and U.S. short-	2 522	2 627	2 702	2 754	563	554	24.456	554 222
U.S. private assets	6,093,066	6,405,168	7,369,737	9,067,981	10,505,957	12,897,100	15,347,828	12,345,777
Direct investment at current cost Foreign securities Bonds Cornorate stocks	2,169,735 557,062 1,612,673	1,867,043 2,076,722 702,742 1,373,980	2,054,464 2,948,370 868,948 2,079,422	2,498,494 3,545,396 984,978 2,560,418	4,329,259	2,948,172 5,604,475 1,275,515 4,328,960	6,835,079 1,587,089 5,247,990	4,244,311 1,392,903 2,851,408
U.S. claims on unaffiliated foreigners reported by U.S. nonbanking concerns ⁶ U.S. claims reported by U.S. banks, not	839,303	901,946	594,004	793,556	1,018,462	1,184,073	1,239,718	991,920
included elsewhere 7	1,390,897	1,559,457	1,772,899	2,230,535	2,506,515	3,160,380	3,821,549	3,410,762
FOREIGN-OWNED ASSETS IN THE UNITED STATES Financial derivatives, gross negative fair value 1	8,177,556	8,687,049	9,724,599	11,586,051	13,886,698 1,132,114	16,612,419 1,179,159	20,418,758 2,487,860	23,357,404 6,464,967
excluding financial derivatives	8,177,556	8,687,049	9,724,599	11,586,051	12,754,584	15,433,260	17,930,898	16,892,437
Foreign official assets in the United States U.S. Government securities U.S. Treasury securities Other Other U.S. Government liabilities ⁸	1,109,072 847,005 720,149 126,856 17,007	1,250,977 970,359 811,995 158,364 17,144	1,562,564 1,186,500 986,301 200,199 16,421	2,011,899 1,509,986 1,251,943 258,043 16,287	2,306,292 1,725,193 1,340,598 384,595 15,866	2,825,628 2,167,112 1,558,317 608,795 18,682	3,403,995 2,540,062 1,736,687 803,375 24,024	3,871,362 3,228,438 2,325,672 902,766 32,650
included elsewhere ⁹	134,655 110,405	155,876 107,598	201,054 158,589	270,387 215,239	296,647 268,586	297,012 342,822	406,031 433,878	252,588 357,686
Other foreign assets Direct investment at current cost U.S. Treasury securities	7,068,484 1,518,473 375,059	7,436,072 1,499,952 473,503	8,162,035 1,580,994 527,223	9,574,152 1,742,716 561,610	10,448,292 1,905,979 643,793	12,607,632 2,154,062 567,861	14,526,903 2,450,132 639,715	13,021,075 2,646,847 884,965
U.S. securities other man U.S. ireasury securities Corporate and other bonds Corporate stocks U.S. currency	2,821,372 1,343,071 1,478,301 229,200	2,779,067 1,530,982 1,248,085 248,061	3,422,856 1,710,787 1,712,069 258,652	3,995,506 2,035,149 1,960,357 271,953	4,352,998 2,243,135 2,109,863 280,400	5,372,339 2,824,871 2,547,468 282,627	6,190,067 3,289,077 2,900,990 271,952	4,703,529 2,865,903 1,837,626 301,139
U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns ¹⁰	798,314	897,335	450,884	600,161	658,177	799,471	1,000,430	873,227
included elsewhere ¹¹	1,326,066	1,538,154	1,921,426	2,402,206	2,606,945	3,431,272	3,974,607	3,611,368
Memoranda: Direct investment abroad at market value Direct investment in the United States at market value	2,314,934 2,560,294	2,022,588 2,021,817	2,729,126 2,454,877	3,362,796 2,717,383	3,637,996 2,817,970	4,470,343 3,293,053	5,227,962 3,593,291	3,071,189 2,556,882

¹ A break in series in 2005 reflects the introduction of U.S. Department of the Treasury data on financial derivatives. ² U.S. official gold stock is valued at market prices.

³ Also includes paid-in capital subscriptions to international financial institutions and resources provided to foreigners under foreign assistance programs requiring repayment over several years. Excludes World War I debts that are not being serviced.

⁴ Includes indebtedness that the borrower may contractually, or at its option, repay with its currency, with a third country's currency, or by delivery of materials or transfer of services

⁵ Beginning in 2007, includes foreign-currency-denominated assets obtained through temporary reciprocal currency arrangements between the Federal Reserve System and foreign central banks.
⁵ A break in series in 2003 reflects the reclassification of assets reported by U.S. securities brokers from nonbank-reported assets to bank reported assets, and a reduction in counterparty balances to eliminate double counting. A break in series in 2005 reflects the addition of previously unreported claims of U.S. financial intermedianes on their foreign parents associated with the issuance of asset-backed commercial paper in the United States.
² Also includes claims reported by U.S. securities brokers in 2003 reflects. The variable of the securities brokers are set in the foreign parents associated with the issuance of asset-backed commercial paper in the United States.

from nonbank-reported assets to bank-reported assets. ⁸ Primarily U.S. Government liabilities associated with military sales contracts and other transactions arranged with or through foreign official agencies.

⁹ Also includes liabilities reported by U.S. securities brokers.

¹⁰ A break in series in 2003 reflects the reclassification of fiabilities reported by U.S. securities brokers from nonbank-reported liabilities to bank-reported liabilities and a reduction in counterparty balances to eliminate double counting

¹¹ Also includes liabilities reported by U.S. securities brokers. A break in series in 2003 reflects the reclassification of liabilities reported by U.S. securities brokers from nonbank-reported liabilities to bank-reported liabilities.

Note: For details regarding these data, see Survey of Current Business, July 2009.

TABLE B-108.	Industrial production and consumer prices, major industrial countries,
	1982-2009

Year or quarter	United States ¹	Canada	Japan	France	Germany ²	Italy	United Kingdom			
	1.		Industrial p	production (Index, 2	2002=100) 3	<u>+</u>				
1982	54 1 55 6 60 5 61 3 61 9 65 1 68 4 69 1	532 561 631 663 658 685 731 729	74 5 76.8 84.0 87.1 86.9 89.9 98.5 104.3	73.6 73.6 74.9 75.4 76.3 77.8 81.0 83.9	69 5 69 8 71 9 75 4 76 9 77 2 79 9 83 7	73.3 71.4 73.8 74.9 77.9 80.2 85.3 88.4	72 8 75 4 75 5 79 6 81 5 84 8 88 9 90 8			
1990	69,7 68,7 70,6 72,9 76,8 80,4 84,0 90,1 95,4 99,5	70.9 68.3 72.5 77.1 80.6 81.6 86.2 89.2 94.4	108 5 110 4 103 7 99 8 100 7 103 8 106 0 110 3 102 5 103 0	89.6 89.2 87.5 83.8 87.4 89.5 89.2 92.5 95.9 97.3	88 1 93 9 91 8 84 9 87 4 88 3 88 4 91 0 94 4	88.6 87.8 86.8 89.9 95.3 93.6 97.3 98.5 98.3	90 5 90 5 87 5 87 8 89 7 94 5 96 2 97 5 98 9 99 9 90 1 14			
2000	103,7 100,1 100,0 101,3 103,8 107,2 109,7 111,3 108,8 98,2	102.6 98.4 100.0 100.1 101.7 103.7 102.9 102.6 97.2	108.4 101.3 100.0 103.0 108.0 109.6 114.2 117.6 113.6 88.3	101 0 101 8 100 0 98 9 100 2 100 3 101 6 102 8 100 4	100 8 101.1 100 0 100 5 103 6 107 1 113.3 120 1 120 1	102.4 101.3 10C.0 99.4 99.0 98.3 101.8 104.0 100.5	103 2 101 7 100 0 99 3 100 4 99 1 99 2 99 5 96 4			
2008: I	112 0 110 7 108 1 104.4 99 1 96 4 98 0 98 0 99 7	99.0 98.3 97.6 93.9 87.7 84.5 83.8	1198 1184 1145 1016 791 857 920 963	104.1 102.2 100.9 94.3 87.7 87.0 89.6	123.6 122.7 121.3 112.7 98.2 97.6 101.2	105.6 1045 100.0 91.9 83.2 80.6 84.1	99.6 98.2 96.2 91.7 87.1 86.6 85.8			
	Consumer prices (Index, 1982–84=100)									
1962 - 1983 - 1984 - 1985 - 1986 - 1987 - 1988 - 1989 - 1999 - 1991 - 1992 - 1993 - 1995 - 1995 - 1997 - 1998 - 1999 - 1999 - 1990 - 1991 - 1992 - 1993 - 1995 - 1997 - 1998 - 1999 - 1998 - 1999 -	96 5 99 6 103 9 107 6 113 6 113 3 118 3 124 0 130 7 136 2 140 3 144 5 148 2 152 4 156 9 160 5 163 0 166 6	94 9 100 4 104 7 108 9 113 5 118 4 123 2 129 3 135 5 143 1 145 2 147 9 147 9 148 2 151 4 153 8 156 2 157 8 160 5 164 6	98 0 99 9 102 1 104 2 105 0 105 7 106 1 111 4 115 0 117 0 118 5 119 3 119 2 119 3 119 2 119 3 121 4 122 2 121 8	917 1003 1080 1143 1172 1211 1243 1287 1331 1373 1406 1436 14460 14460 1515 1533 1553 1553	97 0 100 3 102 7 104 9 104 7 105 0 106 3 109 2 112 2 116 7 122 7 122 7 122 7 122 7 122 7 122 7 122 7 123 1 133 9 135 8 138 4 139 7 140 5	878 1007 1115 1218 1289 1350 1419 1508 1508 1508 1706 1794 1873 1949 2052 2133 2177 2219 2256	954 998 1048 1111 1149 1197 1256 1354 1482 1569 1627 1653 1694 1754 1794 1794 1850 1914			
Z000 Z001 Z002 Z003 Z003 Z003 Z004 Z005 Z005 Z006 Z006 Z009 P Z008 Z009 P Z000 P	172 2 177 1 179 9 184 0 188 9 195 3 201 6 207 342 215 303 214 537 212 100 216 757	164 9 169 1 172 9 177 7 181 0 185 0 188 7 192 7 197 3 197 9 194 0	121 0 1200 1190 1187 1187 1183 1186 1187 1203 1187 1203 1187 1203	1578 160.3 163.4 166.9 170.4 173.4 176.3 178.9 184.0 184.1 182.1 182.1	142 5 145 3 147 4 148 9 151 4 153 7 156 2 159 7 163 9 164 5 162 7 162 0	231 3 237 8 243 6 250 1 255 7 260 7 266 2 271 1 280 1 280 1 282 3 276 7 276 7	200 0 203.7 207 0 213 0 219 3 225 6 232 8 242 7 252.4 251.1 248 0 240 0			
11	210.757 219.278 213.075 212.015 214.263 215.718 216.152	198.0 200.0 197.1 196.4 198.1 198.3 198.6	120.2 121.4 120.5 119.0 119.0 118.7 118.1	184.7 185.0 184.1 183.3 184.3 184.2 184.2 184.7	163.9 165.1 164.1 164.0 164.3 164.7 164.9	279.9 282.6 281.4 280.8 282.3 282.9 282.9 283.2	253.0 255.4 253.2 247.8 249.7 251.9 251.9			

See Note, Table B–51 for information on U.S. industrial production series.
 Prior to 1991 data are for West Germany only.
 All data exclude construction. Quarterly data are seasonally adjusted.

Note: National sources data have been rebased for industrial production and consumer prices.

Sources: As reported by each country, Department of Labor (Bureau of Labor Statistics), and Board of Governors of the Federal Reserve System.

TABLE B-109. Civilian unemployment rate, and hourly compensation, major industrial countries, 1982-2009

[Quarterly data seasonally adjusted]

	Year or quarter	United States	Canada	Japan	France	Germany 1	Italy	United Kingdom
				Civilian u	nemployment rate i	Percent) ²	L	
1982 1983 1984 1985 1986 1986 1988 1988		97 96 7.5 7.2 7.0 62 5.5 5.3	10.7 11.6 10.9 10.2 9.3 84 7.4 7.1	2.4 2.7 2.8 2.7 2.8 2.9 2.9 2.9 2.5 2.3	37.3 7.6 89 94 95 96 92 86	5.6 69 ³ 7.1 7.2 6.6 6.3 6.3 5.7	5.4 5.9 60 375 7.9 7.9 7.8	10.8 11.5 11.8 11.4 11.4 10.5 8.6 7.3
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999		³ 56 68 75 69 361 56 54 49 45 42	7.7 98 10.6 108 ³ 9.6 86 88 8 84 7,7 7.0	2.1 2.1 2.2 2.5 2.9 3.2 3.4 3.4 4.1 4.7	³ 8.3 85 9.4 105 11.1 105 11.1 111 111 106 10.2	5.0 ³ 56 6.7 80 85 82 90 99 9.3 9.3 38.5	70 369 73 398 10.7 113 113 113 114 115 110	7.1 89 10.0 9.5 8.7 8.1 7.0 6.3 6.0
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009		4.0 4.7 5.8 6.0 5.5 5.1 4.6 4.6 5.8 9.3 9.3	61 65 70 64 64 60 55 53 5.3	4.8 5.1 5.3 4.8 4.5 4.5 4.5 3.9 4.0	87 7.9 81 386 9.0 9.0 9.0 8.1 7.5	7.8 7.9 8.6 9.3 10.3 <i>3</i> 11.2 10.4 8.7 7.5	10.2 9.2 8.7 8.5 8.1 7.8 6.9 6.2 6.8	5.5 5.1 5.2 5.0 4.8 4.9 5.5 5.4 5.7
2008	: I II II IV	5.0 5.3 6.0 6.9 8.2	5.2 5.3 5.3 5.6 6.7	3.9 4.1 4.1 4.1 4.1	7.2 7.4 7.5 8.0 8.7	7.8 7.6 7.4 7.4 7.7	6.6 6.9 6.8 7.1 7.4	5.3 5.4 5.9 6.4 7.1
	 V	9.3 9.7 10.0	7.5 7.8	5.3 5.5	9.3 9.7	8.0 8.0	7.6 7.9	7.8 7.9
	1	10.0	Manut	facturing hourly co	Tipensation in U.S.	dollars (index, 2002	2=100) ⁴	
1982 1983 1984 1985 1986 1987 1988 1989		45.9 47.3 48.9 51.4 53.8 55.6 57.5 59.3	59 8 64.0 64.7 64.7 64.7 69.3 78 1 85.1	28 5 30.7 31.6 32.7 48.2 57.8 66.8 65.7	40.7 39.3 37.7 39.9 54.1 65.0 67.9 66.8	34.3 34.1 32.1 32.9 46.3 584 62.2 61.1	41.5 43.3 43.4 44.8 61.2 75.9 81.2 85.0	36.3 33.7 32.0 34.0 41.8 51.8 60.1 59.1
1990 1991 1992 1993 1994 1995 1995 1995 1995 2000 2001 2002		62 1 65.8 68.9 70.5 72 2 73.4 73.4 73.6 76.5 81.2 84.8 91.3 94.8 91.3 94.8 91.0 0.0	92.0 100.2 99.5 94.4 91.7 93.4 95.5 96.3 94.5 96.4 99.6 98.1 100.0	66 8 76 6 84 3 98 9 109.5 123 1 107 3 99 7 94 4 108 6 113 9 102 3 100.0	81.8 83.5 93.7 91.5 97.0 111.1 110.4 99.2 98.2 89.6 89.2 89.6 89.2 100.0	764 791 920 922 984 1174 1170 1034 1034 1014 924 924 100.0	104.8 110.1 96.3 99.1 103.7 115.5 109.5 105.5 103.3 91.9 92.0 100.0	720 803 804 691 722 758 747 818 890 919 919 919 919 907 1000
2003 2004 2005 2005 2005 2007 2006		108.0 108.9 112.5 114.7 119.6 123.2	116.6 130.0 145.7 160.4 175.4 180.4	105.7 114.3 113.2 106.1 104.5 121.2	122.5 138.9 144.1 151.1 169.4 187.3	122.4 135.3 137.1 144.0 159.9 176.1	124.2 141.2 145.9 150.2 167.5 184.6	114.1 133.7 140.4 149.3 167.5 159.0

¹ Prior to 1991 data are for West Germany only.

¹² Pror to 1991 data are for West termany only.
² Civilian unemployment rates, approximating U.S. concepts. Quarterly data for France, Germany, and Italy should be viewed as less precise indicators of unemployment under U.S. concepts that the annual data.
³ There are breaks in the series for Canada (1994), France (1982, 1990) and 2003), Germany (1984, 1991, 1999, and 2005), Italy (1986, 1991), and 1993), and United States (1990) and 1994). For details, see International Comparisons of Annual Labor Force Statistics, Adjusted to U.S. Concepts, 10 Countries, 1970–2008, October 1, 2009, Appendix B, a http://www.bbs.gov/fishtscomparelifynotes. htm/scountry_notes.
⁴ Hourly compensation in manufacturing, U.S. dollar basis, data relate to all employed persons (employees and self-employed workers). For details on manufacturing hourly compensation, see International Comparisons of Manufacturing Productivity and Unit Lahor Cost Trends, 2009, October 22, 2009.

Source: Department of Labor (Bureau of Labor Statistics).

Table B-110.	Foreign exchange rates,	1988-2009
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	(Foreign cu	rrency unit	s per U.S. d	dollar, exce	pt as noted	; certified n	oon buying	rates in N	ew York]		
Period	Australia (dollar) ¹	Canada (dollar)	China, P.R. (yuan)	EMU Members (euro) ^{1, 2}	Germany (mark) ²	Japan (yen)	Mexico (peso)	South Korea (won)	Sweden (krona)	Switzer- land (franc)	United Kingdom (pound) ¹
March 1973	1.2716	0.9967	2.2401		2.8132	261.90	0.013	398.85	4 4294	3.2171	2.4724
1988 1989	0.7841 .7919	1.2306 1.1842	3.7314 3.7673		1.7570 1.8808	128.17 138.07	2.273 2.461	734.52 674.13	6 1370 6 4559	1.4643 1.6369	1.7813 1.6382
1990	7807 7787 7352 6799 7316 7407 7828 7437 6291 6454	1.1668 1.1460 1.2085 1.2902 1.3664 1.3725 1.3638 1.3849 1.4836 1.4858	4,7921 5,3337 5,5206 5,7795 8,6397 8,3700 8,3389 8,3193 8,3008 8,2783	1.0653	1 6166 1 6610 1 5618 1 6545 1 6216 1 4321 1 5049 1 7348 1 7597	145.00 134.59 126.78 111.08 102.18 93.96 108.78 121.06 130.99 113.73	2,813 3,018 3,095 3,116 3,385 6,447 7,600 7,918 9,152 9,553	710.64 736.73 784.66 805.75 806.93 772.69 805.00 953.19 1.400.40 1.189.84	5 9231 6.0521 5.8258 7.7956 7.7161 7.1406 6.7082 7.6446 7.9522 8.2740	1.3901 1.4356 1.4064 1.4781 1.3667 1.1812 1.2361 1.4514 1.4506 1.5045	1.7841 1.7674 1.7663 1.5016 1.5319 1.5785 1.5607 1.6376 1.6573 1.6172
2000	.5815 .5169 .5437 .6524 .7365 .7627 .7535 .8391 .8537 .7927	1.4855 1.5487 1.5704 1.4008 1.3017 1.2115 1.1340 1.0734 1.0660 1.1412	8.2784 8.2770 8.2771 8.2772 8.2768 8.1936 7.9723 7.6058 6.9477 6.8307	.9232 .9454 1.1321 1.2438 1.2449 1.2563 1.3711 1.4726 1.3935		107 80 121 57 125 22 115 94 108 15 110 11 116 31 117 76 103 39 93 68	9.459 9.337 9.663 10.793 11.290 10.894 10.906 10.928 11.143 13.498	1,130.90 1,292.02 1,250.31 1,192.08 1,145.24 1,023.75 954.32 929.97 1,098.71 1,274.63	9.1735 10.3425 9.7233 8.0787 7.3480 7.4710 7.3718 6.7550 6.5846 7.6539	1.6904 1.6891 1.5567 1.3450 1.2428 1.2428 1.2459 1.2532 1.1999 1.0816 1.0860	1.5156 1.4396 1.5025 1.6347 1.8330 1.8204 1.8434 2.0020 1.8545 1.5661
2008: 1 II II II IV 	.9058 .9436 .8879 .6735	1.0039 1.0099 1.0411 1.2115	7.1590 6.9578 6.8375 6.8400	1.5007 1.5625 1.5030 1.3202		105.17 104.62 107.58 96.01	10.803 10.428 10.328 13.061	956.12 1,017.02 1,064.56 1,360.86	6.2668 5.9862 6.3175 7.7957	1.0670 1.0316 1.0734 1.1560	1.9790 1.9712 1.8924 1.5704
2009: 1 11 11 11 1V	.6644 .7609 .8332 .9090	1.2455 1.1682 1.0980 1.0557	6.8361 6.8293 6.8306 6.8271	1.3035 1.3619 1.4304 1.4762		93.78 97.42 93.54 89.88	14.384 13.315 13.261 13.062	1,415.27 1,282.78 1,237.55 1,166.70	8.4107 7 9239 7.2907 7.0114	1.1487 1.1123 1.0623 1.0219	1.4344 1.5502 1.6410 1.6335

	Trade-weighted value of the U.S. dollar										
		Non	ninal			Real 7					
	G-10 index (March 1973=100) ³	Broad index (January 1997=100) ⁴	Major currencies index (March 1973=100) ⁵	OITP index (January 1997=100) ⁶	Broad index (March 1973=100) ⁴	Major currencies index (March 1973=100) ⁵	OITP index (March 1973=100) ⁶				
1988 1989	 92.7 98.6	60.92 66.90	90.43 94.29	24.07 29.61	92.09 93.83	84.24 88.58	115.57 110.11				
1990 1991 1992 1993 1994 1995 1996 1997 1998 1998	89.1 89.8 86.6 93.2 91.3 84.2 87.3 96.4 98.8	71.41 74.35 76.91 83.78 90.87 92.65 97.46 104.43 115.89 116.04	89.91 88.59 87.00 89.90 88.43 83.41 87.25 93.93 98.45 96.89	40.10 46.69 53.13 63.37 80.54 92.51 98.24 104.64 125.89 129.20	91.30 89.77 87.88 89.23 89.06 86.61 88.62 93.34 101.32 100.69	85.21 83.54 82.40 85.65 85.30 81.43 86.34 93.63 98.70 98.44	109.76 108.85 105.24 102.61 102.62 102.68 99.68 100.73 113.93 112.64				
2000 2001 2002 2003 2004 2005 2006 2007 2008 2008 2009		119 45 125 93 126 67 119 11 113 63 110 71 108 52 103 40 99 83 105.87	101.58 107.67 105.99 92.99 85.37 83.71 82.46 77.84 74.34 77.75	129.84 135.91 140.36 143.52 143.88 135.38 135.38 130.28 127.23 136.68	104,55 110,56 110,71 104,00 99,38 97,75 96,64 92,03 88,29 91,84	105.08 112.54 110.92 97.85 90.86 90.67 90.58 86.40 83.44 86.55	112 82 117 35 119 81 121 41 120 05 116 38 113 70 108 07 103 02 107 53				
2008: I II III IV	 	97.31 95.80 97.88 108.35	71.97 70.87 73.46 81.19	124.96 123.01 123.79 137.18	85.92 85.61 87.58 94.06	80.36 80.10 83.28 90.03	101.27 100.86 101.56 108.39				
2009: V	 	111.12 107.08 103.69 101.61	82.68 79.41 75.45 73.58	141.89 136.91 135.01 132.91	95.95 93.43 90.58 87.41	91.41 88.74 84.55 81.51	111.07 108.48 106.98 103.59				

¹ U.S. dollars per foreign currency unit ² European Economic and Monetary Union (EMU) members consists of Austria, Belgium, Cyprus (beginning in 2008), Finland, France, Germany, Greece (beginning in 2001), Ireland, Italy, Luxembourg, Malta (beginning in 2008), Netherlands, Portugal, Slovakia (beginning in 2009), Slovenia (beginning in 2007), and Spain ³ G-10 index discontinued after December 1998.

3 G-10 index assortioned after becember 1995. Weighted average of the foreign exchange value of the dollar against the currencies of a broad group of U.S. trading partners. Subset of the broad index. Consists of currencies of the Euro area, Australia, Canada, Japan, Sweden, Switzerland, and the United Kingdom. Subset of the broad index. Consists of other important U.S. trading partners (JUTP) whose currencies are not heavily traded outside their home markets. ⁷ Adjusted for changes in consumer price indexes for the United States and other countries.

Source: Board of Governors of the Federal Reserve System.

TABLE B-111.	International	reserves.	selected	vears.	1972-	-2009
THDEE D III.	meenmanoma		ociected	, eu . e,		

[Millions of special drawing rights (SDRs); end of period]

	_						20)09
Area and country	1972	1982	1992	2002	2007	2008	October	November
World ¹	151 995	368 041	760 933	1 893 634	4 123 167	4,563,431	5.102.935	5.101.008
Advanced economies 1	113,362	214.025	557,602	1,142,317	1,564,042	1,648,376	1,892,898	1,904,061
United States	12,112	29,918	52,995	59,160	46,820	52,396	86,925	86,149
Japan	16,916	22,001	52,937	340,088	603,794	656,178	651,148	651,393
United Kingdom	5,201	11,904	27,300	27,973	25 944	29,142	35,533	30,772
Euro area (incl. ECB) ¹	3,372	5,455	0,002	105 771	148 621	154 221	192 634	191 281
Austria	2.505	5,544	9,703	7,480	7,079	6,101	5.604	5,582
Belgium	3,564	4,757	10,914	9,010	6,827	6,306	10,533	10,415
Сургиз	294	490	764	2,239	3,888	416	478	483
Finland	664	1,420	3,862	6,885	4,525	4,58/	5,855	5,911
France	9,224	17,850	22,522	24,268	31,855	24,630	31,240	31,430
Germany	21,908	43,909	69,489	41,515	31,895	1,840	43,177	42,103
Greece	1 0 20	2 200	3,000	2,003	320	500	1,000	1,052
Italu	5,605	2,350	22,314	23,303	20 721	26.838	32,540	32,206
Luxembourg	3,003	13,100	66	114	20,721	20,000	464	463
Malta	253	QQQ	927	1 625	2 396	239	359	356
Netherlands	4 407	10 723	17.492	7,993	7,198	8.140	12,712	12,703
Portugal	2,130	1,179	14,474	8.889	1,226	1,281	1,990	1,919
Slovak Republic				6,519	11,450	11,631	477	476
Slovenia			520	5,143	624	567	631	619
Spain	4,567	7,450	33,640	25,992	7,582	8,376	11,508	11,385
Australia	5.656	6.053	8.429	15,307	15,764	20,015	26,386	24,395
China, P.R.: (Hong Kong)			25,589	82,308	96,593	118,468	150,964	159,103
Denmark	787	2,111	8,090	19,924	20,663	26,347	46,378	47,382
Iceland	78	133	364	326	1,634	2,284	2,241	
Israel	1,126	3,518	3,729	17,/14	18,04/	27,601	38,491	38,222
Korea	485	2,556	12,463	89,2/2	165,908	130,607	166,139	168,205
New Zealand	1 220	5//	2,239	3,650	10,914	22 070	9,400	9,090
Norway	1,220	0,272	6,725	23,379	30,000	33,079	30,032	30,040
Singapore	1 610	7 687	29.049	60 478	103 121	113 092	115 941	117 315
Sweden	1 453	3,307	16 667	12,807	17 281	16 967	28 126	27 680
Switzerland	6 961	16,930	27 100	31 693	29,432	30,426	59.638	62,100
Taiwan Province of China	957	7,866	60,333	119,381	171,532	189,864	215,097	216,099
Emerging and developing economies	33,295	124,025	196,245	747,475	2,555,349	2,911,295	3,206,282	3,193,432
By area								
Africa	3,962	7,737	13,069	53,757	183,632	216,669	217,494	216,705
Developing Asia	4,882	44,490	63,596	368,403	1,354,990	1,654,342	1,902,421	1,880,812
China, P.R. (Mainland)		10,733	15,441	214,815	969,055	1,266,206	1,475,683	100.004
_ India	1,087	4,213	4,584	50,1/4	169,356	161,036	1/2,402	168,291
Europe	2,680	5,359	13,811	125,684	527,820	507,498	524,268	530,185
HUSSIa	0 201	60 620	10 660	32,640	290,8/2	200,420	201,093	204,308
Wostern Hemisphere	0,201	25 562	65 102	118 700	282,407	323 427	333 781	335 572
Brazil	3,853	3 566	16 457	27 593	113 585	125,239	144 701	146 226
Mexico	1.072	828	13,800	37,223	55,128	61,766	55,586	56,134
Mamoranda		520	1					
All-exporting countries	9 915	69 941	40.923	131 309	620 884	632,376	620,963	628.044
Non-oil developing countries	18,431	54,084	155,322	616,166	1,934,465	2,278,919	2,585,319	2,565,388

¹ Includes data for European Central Bank (ECB) beginning 1999. Detail does not add to totals shown. Note: international reserves consists of monetary authorities' holdings of gold (at SDR 35 per ounce), SDRs, reserve positions in the International Monetary

Fund, and foreign exchange. U.S. dollars per SDR (end of period) are: 1.08570 in 1972; 1.10310 in 1982; 1.37500 in 1992; 1.35952 in 2002; 1.58025 in 2007; 1.54027 in 2008; 1.58989 in October 2009; and 1.61018 in November 2009.

Source: International Monetary Fund, International Financial Statistics.

Area and country	1991– 2000 annual average	2001	2002	2003	2004	2005	2006	2007	2008	2009 1	2010 '
World	3.1	2.3	2.9	36	4.9	4.5	5.1	5.2	3.0	- 8	3.9
Advanced economies	2.8	1.4	1.7	1.9	3.2	2.6	3.0	2.7	.5	-32	21
Of which: United States Japan United Kingdom Canada	3.4 1.2 2.5 2.9	1.1 .2 2.5 1.8	1.8 3 2.1 2.9	25 14 28 19	3.6 2.7 3.0 3.1	3.1 1.9 2.2 3.0	2.7 2.0 2.9 2.9	2.1 2.3 2.6 2.5	.4 -12 .5 .4	-2.5 -5.3 -4.8 -2.6	27 1.7 1.3 26
Euro area ²	2.1 2.0 1.6 2.9	1.9 1.2 1.8 1.8 3.6	.9 .0 1.1 .5 2.7	.8 2 1.1 .0 3.1	2.2 1.2 2.3 1.5 3.3	1.7 .7 1.9 .7 3.6	2.9 3.2 2.4 2.0 4.0	27 2.5 2.3 1.6 3.6	.6 1.2 .3 -1.0 9	-3.9 -4.8 -2.3 -4.8 -3.6	1.0 15 14 10 -6
Memorandum: Newly industrialized Asian economies ³ .	6.1	1.2	5.6	3.1	5.9	4.7	5.6	5.7	1.7	-1.2	4.8
Emerging and developing economies	3.6	3.8	4.8	6.2	7.5	71	79	8.3	6.1	2.1	60
Regional groups Africa Central and eastern Europe Commonwealth of Independent States ⁴ Russia Developing Asia China India Middle East. Western Hemisphere Brazil Mexico	2 4 2.0 7.4 10.4 5.6 4.0 3.3 2.5 3.5	4.9 2 6.1 5.8 8.3 3.9 2.5 7 1.3 2	6.5 4.4 5.2 4.7 6.9 9.1 4.6 3.8 .6 2.7 .8	5.4 4.8 7.8 7.3 8.2 10.0 6.9 2.2 1.1 1.7	6.7 7.3 8.2 7.2 8.6 10.1 7.9 5.9 6.0 5.7 4.0	5.7 6.0 6.4 9.0 10.4 9.2 5.5 4.7 3.2 3.2	61 66 84 77 98 116 98 58 57 40 51	6.3 5.5 8.6 8.1 10.6 13.0 9.4 6.2 5.7 5.7 3.3	5.2 3.1 5.5 5.6 7.9 9.6 7.3 5.3 4.2 5.1 1.3	1.9 -4.3 -75 -90 65 8.7 56 2.2 -2.3 -4 -68	4.3 2.0 3.8 3.6 8.4 10.0 7.7 4.5 3.7 4.7 4.0

TABLE B-112. Growth rates in real gross domestic product, 1991-2010

Percent cha

¹ All figures are forecasts as published by the International Monetary Fund. For the United States, advance estimates by the Department of Commerce show that real GDP fell 2 4 percent in 2009.

Tail teal of Preiz 4 percent in 2003 2 Euro area consists of Austra, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovak Republic, Slovenia, and Spain 3 Consists of Hong Kong SAR (Special Administrative Region of China), Korea, Singapore, and Taiwan Province of China 4 Includes Mongolia, which is not a member of the Commonwealth of Independent States but is included for reasons of geography and similarities in economic structure.

Note: For details on data shown in this table, see World Economic Outlook and World Economic Outlook Update published by the International Monetary Fund

Sources: Department of Commerce (Bureau of Economic Analysis) and International Monetary Fund.