

The Year in Review and the Years Ahead

Following 6 consecutive years of expansion of the U.S. economy, the pace of real GDP expansion slowed in the first half of 2008 and turned negative in the second half. Payroll jobs began to decline in January, following a record 52 months of continuous growth. The observed pattern of output, employment, and other key indicators led the Business Cycle Dating Committee of the National Bureau of Economic Research to declare that the economy peaked in December of 2007, beginning a recession that continued throughout 2008. The reorientation of the U.S. economy—which had been underway in 2006 and 2007—away from housing investment and consumer spending and toward exports and investment in business structures continued through the first three quarters of 2008. However, the reorientation was neither smooth nor graceful, as falling house prices initiated a cascade of problems beginning with mortgage delinquencies and falling prices of mortgage-backed securities. This eventually threatened the solvency of several major financial institutions and ultimately resulted in several failures and forced mergers along with a major decline in the stock market beginning in late September. To respond to these problems, policymakers have undertaken a wide range of actions during the year, including: personal tax rebates and bonus depreciation allowances for business (the Economic Stimulus Act of 2008, enacted in February); support for the housing market (the Housing and Economic Recovery Act of 2008 in July); large-scale investment in financial assets (the Emergency Economic Stabilization Act of 2008 in October); a reduction in the Federal funds rate from 5¼ percent in August 2007 to almost zero by December 2008; and the implementation of a variety of programs by the Treasury, the Federal Reserve, the Federal Deposit Insurance Corporation (FDIC), and other agencies to provide liquidity to financial institutions and to mitigate strains impairing the functioning of the overall financial system.

In the wake of mounting problems with the performance of *subprime* (higher risk) mortgages, financial markets became stressed beginning about August 2007 and became substantially more stressed after mid-September 2008. After a slight decline in real gross domestic product (real GDP, the total value of all goods and services produced in the United States after adjusting for inflation) in the fourth quarter of 2007, policy actions—including the enactment of a fiscal stimulus program and the initial round of Federal Reserve rate cuts—helped maintain positive real GDP growth in the first half of 2008. These actions likely delayed the downturn in output but were not sufficient to prevent the steep falloff in employment, production,

and aggregate spending that appears to have begun in mid-September. After the mid-September failure of Lehman Brothers (an investment bank), the emergency loans to AIG (an insurance company with extensive involvement in insuring mortgage-related securities), and the takeover of Washington Mutual (a savings bank with extensive mortgage-related assets), the global financial markets showed a sharp increase in perceived risk, and the stock market tumbled.

Inflation figures were mixed, with notable rises through mid-year in indexes that included food and imported energy products such as the consumer price index (CPI) and the price index for gross domestic purchases. A sharp decline in petroleum prices brought these prices down substantially by the end of the year. In contrast, inflation was less volatile for the broadest index of the goods and services produced in the United States (the GDP price index) and for most measures of wages and hourly compensation.

This chapter reviews the economic developments of 2008 and discusses the Administration's forecast for the years ahead. The key points of this chapter are:

- Real GDP likely declined over the four quarters of 2008, ending a 6-year run of positive growth, as the slow growth in the first half of the year was eclipsed by what appears to be a sharp decline in the fourth quarter.
- Financial distress, which first became evident in mid-2007 in the market for mortgage-backed securities (MBS), continued through 2008 and affected a variety of markets. In the wake of the failure and near-failure of several major financial institutions in September 2008, financial stresses increased sharply to levels not seen during the post-World War II era.
- Payroll jobs declined during 2008, having peaked in December of 2007. Employment losses averaged 82,000-per-month during the first 8 months of 2008 before accelerating to a 420,000-per-month pace during the next 3 months. The unemployment rate was at 5 percent through April—a low rate by historical standards—but increased to 6.7 percent in November. Initial and continued claims for unemployment insurance moved up sharply over the course of the year.
- Energy prices dominated the movement of overall inflation in the consumer price index (CPI), with large increases through July, followed by a sharp decline during the latter part of the year. Core consumer inflation (which excludes food and energy inflation) edged down from 2.4 percent during the 12 months of 2007 to a 1.9 percent annual rate during the first 11 months of 2008. Food prices rose appreciably faster than core prices.
- Nominal hourly compensation increased 2.8 percent during the 12 months through September 2008 (according to the employment cost index), a gain that was undermined by the rise in food and energy prices,

so that real hourly compensation fell 2 percent. In the long run, real hourly compensation tends to increase with labor productivity, although the correlation can be very loose over shorter intervals. Nonfarm business productivity has grown at an average annual rate of 2.6 percent since the business-cycle peak in 2001.

- An economic stimulus package was proposed by the President in January and passed by Congress in February, authorizing about \$113 billion in tax rebate checks to low- and middle-income taxpayers and allowing 50 percent expensing for business equipment investment. The stimulus likely boosted GDP growth in the second and third quarters above what it might have been otherwise, but its influence faded by the end of the year.
- The Administration's forecast calls for real GDP to continue to fall in the first half of 2009, with the major declines projected to be concentrated in the fourth quarter of 2008 and the first quarter of 2009. An active monetary policy and Treasury's injection of assets into financial institutions are expected to ease financial stress and to lead to a rebound in the interest-sensitive sectors of the economy in the second half of 2009. Also supporting growth during 2009 is the substantial recent drop in petroleum prices, which offsets some of the effects of the recent decline in household wealth. The unemployment rate is expected to increase to an average of 7.7 percent for 2009. The expansion in 2010–11 is projected to be vigorous, bringing the unemployment rate down to 5 percent by 2012.

Developments in 2008 and the Near-Term Outlook

During the first three quarters of 2008, the economy continued the rebalancing that began in 2006, with strong growth in business structures investment and exports offsetting pronounced declines in homebuilding, while consumer spending edged lower by 0.6 percent at an annual rate. By the fourth quarter of 2008, however, most major indicators became sharply negative.

Consumer Spending and Saving

Real consumer spending stagnated in the first half of 2008 and then fell sharply in the third quarter in what was the largest quarterly decline since 1980. This was a major deceleration after the 2.8 percent average annual rate during the 2001–07 expansion. During these three quarters, motor vehicle purchases fell to 12.9 million units at an annual rate, a drop of 19 percent at an annual rate, having fluctuated around a 16-17 million unit average annual pace during the expansion. Energy purchases (which had edged up at

a 0.7 percent annual rate) declined at a 9 percent annual rate, finally reacting to the enormous increase in energy prices (relative to the price of the overall consumer basket) during the preceding 3 years. Other consumer spending (that is, outside of motor vehicles and energy) slowed to only a 1 percent annual rate of growth following a 3 percent average rate of growth during the preceding expansion. Consumer spending has continued to fall in the fourth quarter. Key factors influencing the evolution of consumer spending during the past year were the response to the multiyear increase in energy prices, the February stimulus package (see Box 1-1), and most importantly, the decline in household wealth during 2008.

Box 1-1: The Economic Stimulus Act of 2008

Policymakers moved quickly to address the slowing economy early in the year. The Federal Reserve cut the target Federal funds rate by 1¼ percentage points in January (following 1 percentage point of earlier cuts from August through December of 2007). The economic effects of monetary policy emerge more gradually than those of tax rebates, and so some fiscal stimulus from rebates was judged to be useful in supporting the economy in the short term. The Congress passed and the President signed the Economic Stimulus Act of 2008 in early February, only a few weeks after the President proposed it. The Act was designed to place money in the hands of those individuals and households who were most likely to spend it. The amount to be dispensed was about \$113 billion, or about 0.8 percent of GDP. Most of the money was dispensed between late April and early July, with the bulk of the disbursements (\$78 billion) in the second quarter.

Under this Act, the Treasury mailed checks ranging between \$300 and \$600 to taxpayers filing as individuals. Individuals who earned \$3,000 (the minimum amount under this Act) received a \$300 check; those who earned between \$3,000 and \$75,000 received a check for up to \$600. The formula phased out the payments at a rate of \$50 for every \$1000 of income in excess of \$75,000. (The figures for those filing as married couples were doubled.) Social Security and veterans payments were counted as earned income. The Act also included an allowance of \$300 for each child (under the age of 17 as of the end of 2007). Those who did not qualify for payments based on their 2007 income could qualify based on their 2008 income, with the benefit to be paid in early 2009.

Some academic studies, however, suggest that individuals would realize that these checks were a one-time event and that they would choose to spend this windfall over many years. Other studies suggest that individuals, especially those who were credit-constrained, would

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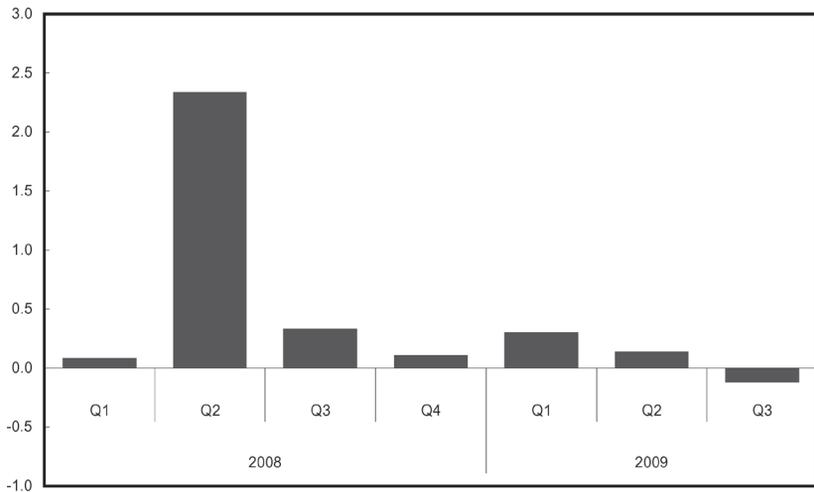
Box 1-1 — continued

spend most of the money as it came in. A macroeconomic model simulated the expected boost to the profile of real GDP on the estimate that about 70 percent of the funds would be considered temporary income (to be spent over a long time) and the remaining funds would be regarded as immediately spendable. The profile from that simulation, which also showed the boost from bonus depreciation (discussed below), is shown in chart 1-1. The model simulation suggests a 2¼ percentage point boost to the annual rate of real GDP growth in the second quarter. Because many of the rebate checks were delivered late in the second quarter, however, some of the second-quarter stimulus shown in the chart was considered likely to spill over into the third quarter.

Boost to Quarterly Real GDP Growth from the 2008 Fiscal Stimulus

The Economic Stimulus Act of 2008 was expected to boost second- and possibly third-quarter growth.

Percentage point difference from baseline GDP growth at an annual rate



Note: The nominal Federal Funds rate was held constant at baseline for the simulation.
Source: Council of Economic Advisers.

The Act also authorized businesses to deduct 50 percent of the cost of investment equipment installed during 2008 from their 2008 taxes, a policy that is often referred to as *bonus depreciation*. The Act also expanded the limits for small business expensing, a policy that was expected to boost real GDP growth by about 0.2 percentage point during 2008. Bonus depreciation is valuable only to firms with positive profits,

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Box 1-1 — continued

however, and so the fourth-quarter plunge in output will likely reduce the ability of firms to take advantage of this program.

Whether or not the fiscal stimulus produced the intended effect cannot be determined from observed macroeconomic data alone because the path that GDP would have taken without the stimulus remains unknown. However, a recent study that examined the nondurable purchases of a large sample of consumers found that the spending of individuals rose at the time rebate checks were received. The study concluded that the stimulus checks had a significant effect on purchases and that these effects were more pronounced among low-income consumers.

Energy Expenditures

Real energy consumption (that is, adjusted for increases in prices) increased slightly (4 percent) from 2001 through 2007, despite a cumulative 66 percent increase in the relative price of energy. The resulting increase in nominal energy spending through 2007 was not offset by a decline in nonenergy spending, and was one force that lowered the personal saving rate during these 6 years. As the relative price of energy increased another 15 percent during the first three quarters of 2008, real energy consumption finally fell 7 percent.

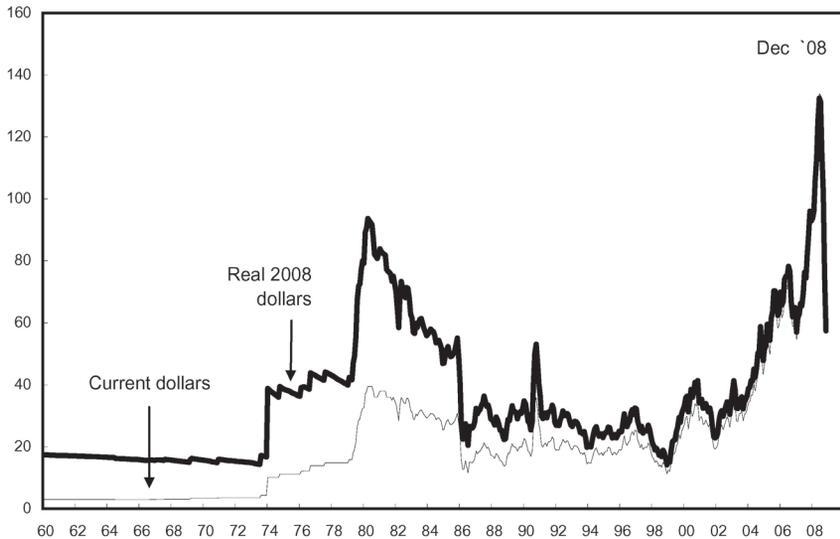
Oil prices skyrocketed to a peak monthly average of \$134 per barrel in June for West Texas Intermediate (WTI) (a benchmark grade of crude oil), almost double the price of a year earlier. The sharp rise in the price of oil (see Chart 1-1) reflected roughly unchanged world oil production in the face of rapid global economic growth. More than half of the increase in world oil demand over the past 5 years is accounted for by China. Over that period, production increases in Brazil, China, Canada, the Sudan, and the former Soviet Union were mostly offset by a large decline in North Sea production and reductions in U.S. and Mexican production. By December the price of WTI oil had fallen to about \$41 per barrel.

Because the U.S. imports about 3.7 billion barrels of oil per year, each \$10-per-barrel increase adds about \$37 billion to the national oil import bill. However, the economic consequences of the higher oil import bill during 2003–07 (when the price of WTI crude oil increased from a \$31-per-barrel annual average to a \$72-per-barrel annual average) were partially offset by an increase in demand for our exports (which grew at an average of 9 percent per year over this period). This increase in exports was partly a consequence of the same rise in foreign economic growth that caused the price of oil to increase. The additional \$66-per-barrel increase in the price of oil from June

Chart 1-1 **Oil Prices: West Texas Intermediate**

Real oil prices reached record levels during the summer of 2008 before falling dramatically in the fall.

Dollars per barrel



Note: Nominal oil prices were deflated with the PCE chain-type price index to arrive at real oil prices.

Sources: Wall Street Journal and Department of Commerce (Bureau of Economic Analysis).

2007 to June 2008 was larger than the entire increase during the preceding 4 years and added roughly \$245 billion to the national import bill. This rise in cost was reversed by an even larger decline from June through December, with the price decline attributable to the drop in energy demand due to a worldwide decline in economic activity.

Wealth Effects on Consumption and Saving

The decline in value for housing wealth and, even more importantly, stock-market wealth were among the most important influences on consumer behavior during 2008. Changes in real wealth and real consumer spending are correlated, as can be seen in Chart 1-2. The interrelationship between wealth and consumer spending is far from perfect (at least in part because many other factors influence spending). The relationship is nevertheless statistically significant whether or not other related factors such as income and lagged values are included. Household wealth peaked in the second quarter of 2007, when it reached a level that was worth 6.3 years of disposable income. Housing and stock market wealth fell over the next five quarters; by the end of the third quarter of 2008 (the most recent official data available), the wealth-to-income ratio had fallen by 1.0 year of income. The continued stock market declines in October and November, together with the downward trend in house prices, suggest that the wealth-to-income ratio dropped

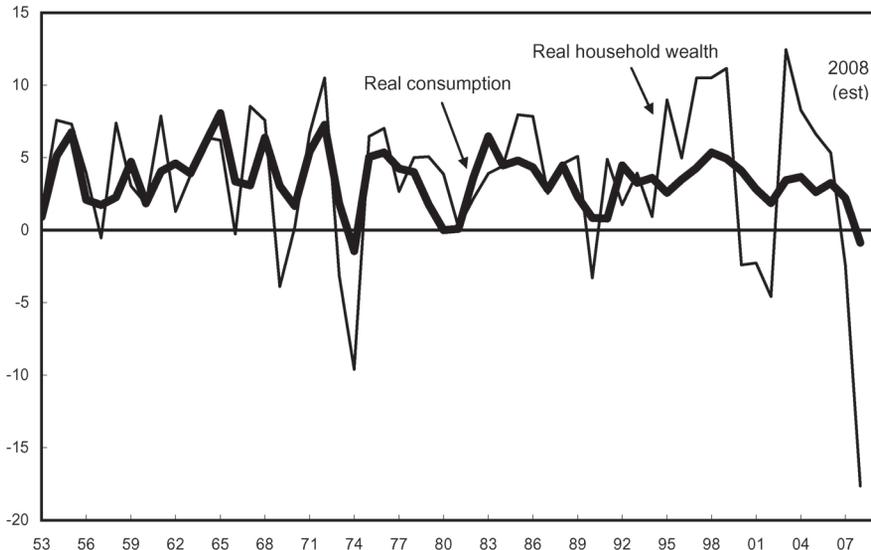
a further 0.5 year in the fourth quarter. As a result, the cumulative decline in the wealth-to-income ratio now appears to be about 1.5 years of income.

Most of the drop in household wealth is related to the stock market decline. In dollar terms, household net worth fell about \$7 trillion between the second quarter of 2007 and the third quarter of 2008. Most of this decline was accounted for by the stock market, while the erosion of housing wealth was about one-half as large as that of the stock market. Other components of wealth (a category that includes consumer durables, credit market instruments, and equity in nonfinancial business, among others) were roughly unchanged over this five-quarter period.

Projected Consumer Spending

Consumer spending tends to rise and fall along with wealth (as illustrated in chart 1-2). A statistical analysis of the relationship between consumer spending, income, wealth, and other variables suggests that about 5 percent of wealth is spent every year. If this is so, the recent decline in the wealth-to-income ratio (of about 1.5 years of income) appears likely to reduce the consumption-to-income ratio and to raise the saving rate by roughly 7 percentage points over time. During the three years from 2005 to 2007, the saving rate averaged 0.5 percent, and so it appears that the saving rate will

Chart 1-2 Real Consumption and Real Wealth
 Real consumer spending fluctuates with real wealth.
 Q4-to-Q4 percent change



Notes: Data for the fourth quarter of 2008 are CEA estimates. Household wealth deflated by the PCE price index.
 Sources: Department of Commerce (Bureau of Economic Analysis) and Federal Reserve Board.

probably move up gradually towards 7 percent—barring any sizable recovery in the stock market. A saving rate at this level would return the saving rate to the same level as for the 10-year period through 1985 (that is, before the run-up in the stock market in the late 1990s). To get there from the third quarter saving rate of 1.1 percent, however, would require substantially slower growth in consumer spending than in income. Thus, it seems likely that real consumer spending will continue to fall during the fourth quarter of 2008 and early in 2009. A rebound in the stock market would, of course, make this adjustment easier, as the saving rate would not have to rise by the full 7 percentage points. If a stock market rebound does not occur, consumption growth will likely remain weak into 2010.

Residential Investment

Residential investment continued into its third year of decline in 2008. Major measures of housing activity moved lower over the course of the year, with housing starts falling to an average annual rate of 740,000 units during the three months through November, a huge decline from the 2.1 million unit annual rate at its peak in the first quarter of 2006. The drop in home construction now appears to have subtracted an average of 0.75 percentage point from the annual rate of growth of real GDP, similar to the subtraction during 2006 and 2007.

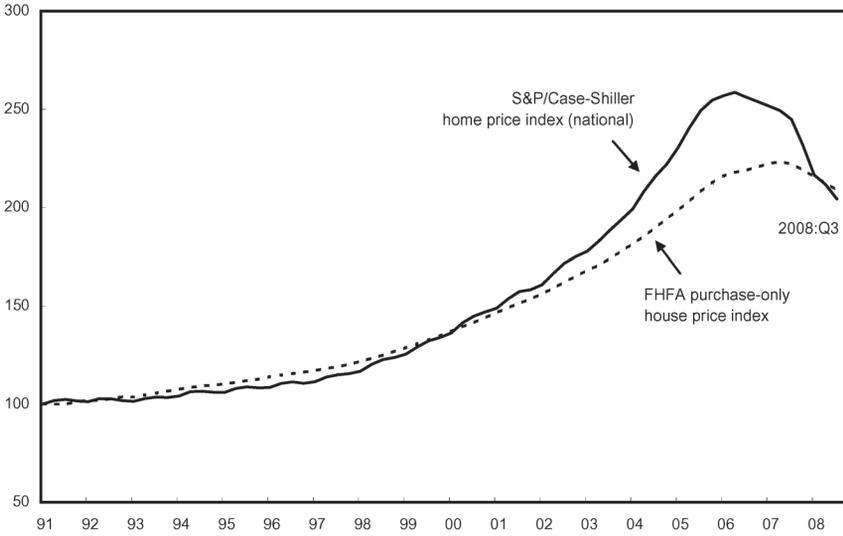
Housing prices peaked in the second quarter of 2007, as measured by the purchase-only index published by the Federal Housing Finance Authority (FHFA, formerly the Office of Federal Housing Enterprise Oversight). From that peak through the latest available data (the third quarter of 2008), housing prices have declined 6.5 percent (see Chart 1-3). According to the S&P/Case-Shiller index, which peaked earlier (in the second quarter of 2006) and subsequently declined 21 percent, the recent decline, as well as the earlier run-up, is more accentuated. (See Box 1-2 on the relative merits of the two house price indexes).

Further declines in home construction seem likely through at least the first half of 2009, as builders' confidence has fallen to the lowest level on record and the secondary market for housing-related securities continues to be thin. The Administration forecasts a steady uptrend in housing starts during the next 5 years, with the annual rate of starts gradually increasing so that by 2013 starts would reach 1.8 million units. This reflects, among other factors, a return to steady income growth, an easing of lending standards, and improved credit availability. The pace of the expected housing recovery has some upside risk. The number of unsold new houses has fallen to about 400,000 units, about the level of 2003 and 2004, even though the ratio of unsold new homes to the current selling pace remains near its record high. If and when aggregate demand accelerates, housing starts would easily be pulled upward.

Chart 1-3 **FHFA versus S&P/Case-Shiller Home Price Index**

Both house price indexes increased at an average rate of 5.5% per year from 2000 to 2008, but the Case-Shiller Index increased faster during 2000–06 and fell faster thereafter.

Index (1991:Q1 = 100)



Sources: Federal Housing Finance Agency (FHFA) and S&P/Case-Shiller.

Box 1-2: Different Measures of House Prices

Both the FHFA purchase-only index and the S&P/Case-Shiller index have merit and use similar methods, but they cover different types of mortgages and have different regional coverage. As a result, each may have advantages in different contexts. Both are based on a methodology of observing pairs of sales of the same house over a span of years. The FHFA index is limited to homes purchased with conforming mortgages (that is, mortgages that conform to the maximum size and minimum downpayment standards set by Fannie Mae or Freddie Mac). In contrast, the S&P/Case-Shiller index collects data from a sample of homes that includes nonconforming as well as conforming mortgages. Each house gets an equal weight in the FHFA index, while more expensive houses are assigned larger weights in the S&P/Case-Shiller index. Of the two indexes, the FHFA index has the broadest national geographic distribution, while the Case-Shiller index has no data for 13 States and incomplete data for another 29 States.

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Box 1-2 — continued

The contrasting path of house prices as measured by these two indexes during the past decade is informative. By relying on conforming mortgages only, the FHFA index may provide a more stable picture of house prices during a period when the mix of mortgages changed toward the nonconforming types (subprime and jumbo, for example) and then back again. (This may be relevant if the type of mortgage is correlated with the price of the house.) On the other hand, the S&P/Case-Shiller index better illustrates the price path of all houses regardless of mortgage type and mortgage size. The contrast between the two indexes suggests that the runup in housing prices may have been larger for homes purchased with nonconforming mortgages and perhaps with jumbo mortgages. As the share of nonconforming mortgages fell sharply over the past 2 years, the two indexes are likely relying on more similar samples in 2008, and as a result, the recent larger decline in the S&P/Case-Shiller index may partly reflect a falling back to earth after having been temporarily elevated by higher prices for homes purchased with nonconforming mortgages. One study suggests that the inclusion of subprime mortgages in the S&P/Case-Shiller index accounts for a substantial share of the index's deeper decline. The larger increase and subsequently larger decline in the S&P/Case-Shiller index may also reflect larger price movements among more expensive homes.

Business Fixed Investment

During the first three quarters of 2008, real business investment in equipment and software fell 4.4 percent at an annual rate, down from 2.8 percent growth in 2007. Growing categories included software (2.4 percent), communication equipment (5.2 percent), and agricultural equipment (27 percent), while investment in industrial equipment fell 4.0 percent. Investment in transportation equipment (which includes motor vehicles and aircraft) was particularly weak, falling 37 percent at an annual rate through the third quarter, with the sharpest drop seen in the light trucks category.

In contrast to residential investment, real business investment in nonresidential structures grew at a strong 12 percent annual rate through the third quarter of 2008. The gains during 2008 made it the third consecutive year of strong growth, which was a marked reversal from the weakness during the period from 2001 to 2005. Nearly 65 percent of total growth in nonresidential structures was accounted for by manufacturing structures and petroleum and natural gas exploration and wells.

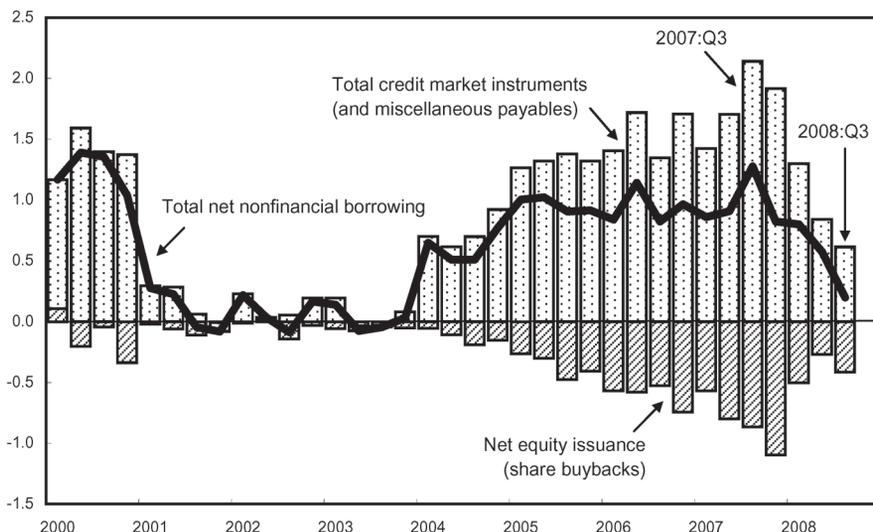
Access to the credit markets to support investment became more difficult for nonfinancial corporations during 2008. The flow of new external funds (credit market instruments such as bond issues, commercial paper, and bank loans) in the fourth quarter of 2007 was about \$1.9 trillion (the positive bars in Chart 1-4); it then fell by \$1.3 trillion by the third quarter of 2008. Despite this drop in the flow of external funds, firms were able maintain solid investment by cutting back on programs to buy stock in their own company (by \$700 billion, the negative bars in Chart 1-4) so that the total funds raised in all capital markets fell only \$600 billion (the solid line in Chart 1-4). These share buyback programs had reached record levels during the period from 2004 through 2007. However, by the third quarter of 2008—when the major financial stress began—share buybacks had diminished to only \$410 billion, so that this “source” of internal funds had been mostly exhausted.

Business investment growth is projected to decline in 2009, a projection that is based partially on the high level of interest rates on corporate bonds. It is also partially based on the pattern of business investment reacting to the change in output growth. That is, following the decline in output in late 2008, investment in 2009 is likely to fall. Later, the expected acceleration of real GDP in late 2009 and 2010 is expected to result in rapid growth of business investment. In the longer run, real business investment is projected to grow at about the same rate as real GDP.

Chart 1-4 Nonfinancial Corporate Sector Net Borrowing by Type

Loans and other credit market issues to nonfinancial corporations declined during 2008, but firms were able to cushion the effect on investment by scaling back their share buyback programs.

Trillions of dollars



Source: Federal Reserve Board (Flow of Funds, table F.102).

Business Inventories

Inventory investment fell during the first three quarters of 2008 and had a noticeable influence on quarter-to-quarter fluctuations in real GDP, subtracting 1½ percentage points from growth in the second quarter. Inventories of motor vehicles on dealer lots were an important contributor to these fluctuations as these inventories were liquidated during the first half of 2008 and were increased slightly in the third quarter. Inventories of other goods outside of the motor vehicle sector were liquidated in each of the first three quarters of the year.

The overall ratio of inventories to sales has come down substantially since 2001. The inventory-to-sales ratio for manufacturing and trade (in current dollars) fell in the first half of 2008 before rising during the 3 months through October. Firms could soon find themselves with more inventory than they need if (as expected) sales continue to fall over the next few months. As a consequence, inventories are likely to be liquidated in the near term. Even so, a drop in inventory investment is not likely to be as dominant in the current downturn as it was in most of the post–World War II recessions because of the fairly lean inventory position relative to sales at the outset of this recession. In the long term, inventory investment is projected to be fairly stable, and the overall inventory-to-sales ratio is expected to continue to trend lower.

Government Purchases

Nominal Federal revenues (that is, in current dollars) fell 2 percent in fiscal year (FY) 2008, following 7 percent growth in FY 2007. The decline in revenues can be attributed partly to slowing economic growth (a key determinant of tax receipts), as well as reduced Federal tax revenues due to the tax rebate provisions of the Economic Stimulus Act of 2008. Coupled with declining revenues, a 9 percent increase in outlays resulted in an increase in the Federal budget deficit to 3.2 percent of GDP in FY 2008, up from 1.2 percent in FY 2007.

Through several appropriations acts, the Congress provided a total of \$192 billion for the wars in Iraq and Afghanistan in FY 2008. One of these acts, the Supplemental Appropriations Act of 2008, also provided \$68 billion in bridge funding for FY 2009.

Real State and local government purchases rose at a 1.2 percent annual rate during the first three quarters of 2008, down from 2.4 percent in 2007. State and local tax revenues slowed in 2008, as receipts from personal income taxes, sales taxes, and property taxes decelerated, while corporate tax receipts fell. Notably, property tax revenue, which had grown at a 6 percent annual rate each year in 2004, 2005, and 2006, slowed to a 2.6 percent annual rate of growth through the third quarter of 2008. Over the same period, receipts from sales taxes edged up only 0.1 percent at an annual rate.

The State and local government sector fell into deficit during 2008, reaching \$109 billion or 0.8 percent of GDP, by the third quarter, the largest operating deficit on record. On average, State and local government operating budgets have been in surplus during the post–World War II period. In 2009 and 2010, only slow growth—if any—can be anticipated for this sector’s consumption and gross investment. This decline results from the deterioration in their tax base, as reflected in falling home prices, declining consumer spending, and slowing growth in personal income. Property tax receipts and sales tax revenues each represent slightly more than 20 percent of State and local government revenues: Federal grants constitute another 20 percent; personal income tax receipts account for about 15 percent, while corporate tax collections constitute only 3 percent. A variety of fees, transfers, and incomes account for the remaining 18 percent.

Exports and Imports

Real exports of goods and services grew at a 7 percent annual rate during the first three quarters of 2008, following solid growth of at least 7 percent over the preceding 4 years. The rapid pace of export expansion over the past 5 years coincided with strong foreign growth from 2003 to 2007, as well as changes in the terms of trade between 2002 and mid-2008 that made American goods cheaper relative to those of some other countries. Recently, however, economic growth among our major trading partners has slowed considerably, with the Euro zone, Japan, and Canada posting negative growth. Because foreign growth and U.S. exports are closely related, the global economic slowdown will likely weigh on U.S. exports in the future.

By region, export growth during 2008 was strongest to Latin American countries, rising at a 24 percent annual rate through the third quarter. The European Union (EU) remains the major overseas destination for U.S. products and services, consuming about 25 percent of our exports. By country, Canada accounts for the largest share of U.S. exports, at about 16 percent. Mexico purchases 10 percent of our exports; Japan, 6 percent; and China, 5 percent.

Real imports fell at a 3.9 percent annual rate during the first three quarters of 2008; the last year of decline before that was 2001. The decline in real imports was especially pronounced among petroleum products, which fell 12 percent at an annual rate, pushed down by high prices and slowing domestic economic activity over this period. Due to rapidly rising petroleum prices through the first half of the year, nominal imports of petroleum products rose at a 46 percent annual rate. Oil prices have since receded dramatically, which will greatly reduce growth in nominal petroleum imports in coming quarters. Nonpetroleum import prices also increased substantially

(6.6 percent during the four quarters through the third quarter of 2008), which may also have restrained the level of imports.

The current account deficit (the excess of imports and income flows to foreigners over exports and foreign income of Americans) averaged 5.0 percent of GDP during the first three quarters of 2008, down from its 2007 average of over 5.3 percent. The decline in the current account deficit reflects faster growth in exports relative to imports, although domestic investment continues to exceed domestic saving, with foreigners financing the gap between the two.

Employment

The employment situation deteriorated during 2008, mirroring weakness in other sectors. The pace of job growth appears to have had two phases: a period of moderate job losses, at an average rate of 82,000 per month from January through August, followed by a steeper decline at an average rate of 420,000 per month in September, October, and November. Nonfarm payroll employment fell 1.9 million jobs during the first 11 months of the year. The unemployment rate rose 1.7 percentage points over the same period, reaching 6.7 percent. Initial claims for unemployment insurance rose to an average of about 550,000 per week in December, up from the 2007 average of 320,000 per week.

Job losses during the first 11 months of 2008 were concentrated in construction, manufacturing, and temporary help services. Although manufacturing and construction account for only about 15 percent of total employment, they accounted for nearly 60 percent of the overall decline in nonfarm jobs during 2008. Construction employment has been declining as a result of continued weakness in the housing market, and manufacturing employment has been on a downward trend as a share of overall employment for the past five decades. Temporary help services, which account for only 2 percent of employment, accounted for 21 percent of the year's job losses. Retailing also posted a notable decline. One bright spot in the employment picture has been education and health services, which added 505,000 jobs through November.

Changes in unemployment differed by education level, race, and gender over the year. Through November, the unemployment rate had risen for workers of all education levels; it increased 0.9 percentage point for those holding at least a bachelor's degree, 1.8 percentage points for those with some college, 2.1 percentage points for those whose education ended with a high school degree, and 2.9 percentage points among those who did not finish high school. By race and ethnicity, the unemployment rate for African Americans rose by 2.2 percentage points and was about 5 percentage points

above the rate for Caucasians, a smaller margin than during most of the past 35 years. The unemployment rate among Caucasians rose 1.7 percentage point, among Hispanics rose 2.3 percentage points, and among Asian Americans rose 1.1 percentage points. By gender, the jobless rate for adult men rose 2.1 percentage points to 6.5 percent, and the rate for adult women rose by 1.1 percentage point to 5.5 percent. The median duration of unemployment increased to 10.0 weeks in November from 8.4 weeks at the end of 2007. The number of long-term unemployed (those who are jobless for 15 weeks or more) rose by 1.4 million over the same period.

The Administration projects that employment will decline during the four quarters of 2009, with the job losses likely to be largest early in the year. As the expected recovery strengthens in 2010, job growth is anticipated to pick up to 222,000 jobs per month. In the longer run, the pace of employment growth will slow, reflecting diminishing rates of labor force growth due to the retirement of the baby-boom generation. The Administration also projects that the unemployment rate will increase from 2008 to a 7.7 percent annual average in 2009 as a whole, before returning to roughly 5 percent in 2012, the middle of the range consistent with stable long-run inflation.

Productivity

Nonfarm productivity growth has averaged 2.5 percent at an annual rate since 1995 (see Chart 1-5). The best estimate of the productivity growth rate over the next 6 years is 2.4 percent, which is slightly below the 2.5 percent long-term (that is, post-1995) rate. Different measures of recent productivity growth are discussed in Box 1-3. Compared with last year's projection, this projected rate of growth has been revised down 0.1 percentage point. The downward revision is a consequence of the downward adjustment to output and productivity in the annual revision to the national income and product accounts.

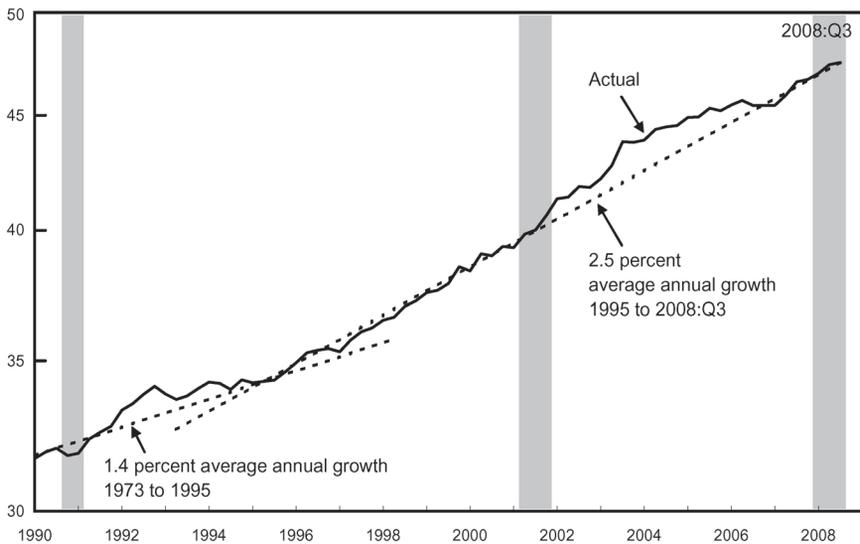
Prices and Wages

Headline inflation rose and then fell during 2008, although key indicators of inflation trends were fairly stable. As measured by the overall consumer price index (CPI), the 12-month rate of inflation moved up to 5.6 percent for the 12 months through July, up from the 4.1 percent during the 12 months of 2007 (Chart 1-6). The acceleration was due to increases in food and energy price inflation. By November, however, the 12-month rate of overall CPI inflation had fallen to 1.1 percent. The 12-month change in the core CPI (which excludes the volatile food and energy components) fluctuated in a more narrow range, peaking at 2.5 percent during the third quarter, but edging down to 2.0 percent by November.

Chart 1-5 Output per Hour in the Nonfarm Business Sector

Productivity has trended up at an average annual rate of 2.5% since 1995.

Real output per hour (constant \$2000, ratio scale)



Note: Shading indicates recessions.

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

Box 1-3: Alternate Measures of Productivity Growth

Productivity growth can be projected by extrapolating its behavior over the recent past. But using which measure? According to the official index, which measures output from the product-side (spending) components of GDP, productivity growth picked up slightly from the 1995–2001 period (2.4 percent) to the 2001–08 period (2.6 percent at an annual rate), as shown in the following table. In contrast, an alternative measure of nonfarm output, derived from the income side of the national income and product accounts, shows a deceleration in productivity between the two periods to a 2.1 percent annual rate of increase over the period 2001–08. The income- and product-side measures of GDP differ by measurement error only, and the truth is likely to be somewhere in between. Both measures show a 2.5 percent annual average growth rate over the entire 1995–2008 interval.

continued on the next page

Box 1-3 — continued

*Productivity Growth in the Nonfarm Business Sector:
Income- and Supply-Side Measures*

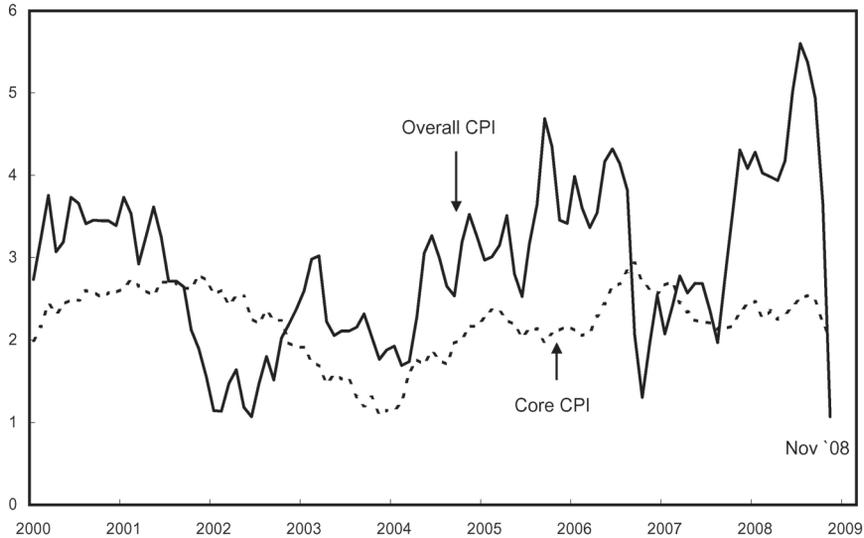
Interval	Average Annual Percent Change	
	Product-Side (official)	Income-Side
1995:Q2 to 2001:Q1	2.4%	3.1%
2001:Q1 to 2008:Q3	2.6%	2.1%
1995:Q2 to 2008:Q3	2.5%	2.5%

Sources: Department of Commerce (Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), income-side calculations by the Council of Economic Advisers.

Chart 1-6 Consumer Price Inflation

The increase in overall CPI inflation through mid-2008 was due to rising food and energy price inflation. A late 2008 drop in energy prices reversed much of the earlier increase. Core inflation was more stable.

12-month change (percent)



Source: Department of Labor (Bureau of Labor Statistics).

Energy prices increased rapidly in the second half of 2007 and in the early part of 2008 before peaking in July, when the 12-month rate of change reached 29 percent. Among the various energy products, prices of gasoline and heating oil increased the most rapidly during this period (reflecting the price of crude oil on world markets), but prices of electricity and natural gas also moved up sharply. Energy prices came down sharply during the 4 months from July to November, when consumer prices of petroleum products fell 41 percent (not at an annual rate). The rapid decline reflects the sharp fall in the price of crude oil; prices of West Texas Intermediate plunged from an average of \$134 per barrel in June to roughly \$41 per barrel in December.

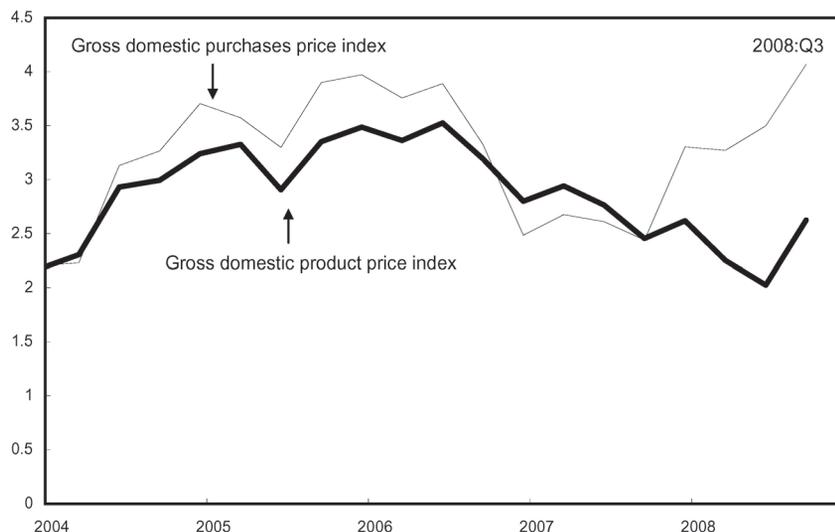
Rapidly rising import prices were another factor boosting inflation early in the year and also holding it down later. Nonpetroleum import prices rose nearly 8 percent during the twelve months through July, before falling during the next 4 months. The pattern reflects the exchange value of the dollar, which depreciated in 2006, 2007, and during the first 3 months of 2008 before rebounding later in the year.

The effect of import prices appears clear in the contrast between the rate of inflation for the goods and services that Americans buy and the rate of inflation for what Americans produce (see Chart 1-7). The rate of inflation for the goods and services that Americans buy (measured by the price of gross domestic purchases) moved up from the year-earlier pace, in contrast to the less volatile rate of inflation for gross domestic product.

Chart 1-7 Gross Domestic Product and Gross Domestic Purchases Price Indexes

The price index for gross domestic purchases has increased more rapidly than the price index for gross domestic product over the past year due to rising prices for imported food and energy products.

Four-quarter change (percent)



Source: Department of Commerce (Bureau of Economic Analysis).

Food prices advanced notably faster than core prices for the second consecutive year. During the first 10 months of 2008, food prices increased 6.5 percent at an annual rate following a 5 percent increase during the 12 months of 2007. The increase was a worldwide phenomenon and likely reflects several factors, including rapid growth in developing countries in the first half of 2008, crop shortages and increased production of biofuels as well as higher energy prices being passed through to consumers.

Growth in nominal hourly compensation edged down slightly. Private-sector hourly compensation increased at a 2.6 percent annual rate during the first 9 months of 2008, down slightly from 3.1 percent during 2007. Slightly diminished gains in benefits as well as wages and salaries account for the deceleration. Gains in real hourly wages of production workers rose 3.4 percent at an annual rate during the first 11 months of the year, following a 0.7 percent decline during the 12 months of 2007, when nominal wage gains were undermined by rapidly rising food and energy prices.

Despite the relative stability of several key measures of inflation (hourly compensation, the core CPI, and the GDP price index), a measure of consumers' inflation expectations moved up and down during the year in a way that suggests that it was influenced by volatile energy and nonpetroleum import prices. One-year-ahead median inflation expectations (as measured by the Reuters-University of Michigan survey) rose from 3.4 percent at the end of 2007 to about 5 percent in midyear, before falling to 1.7 percent in December. Longer-term inflation expectations were less volatile but also moved up and then down in a similar fashion in the 2.6 to 3.4 percent range.

Financial Markets

The Wilshire 5000 (a broad stock market index) fell 39 percent during 2008, and the Standard and Poor (S&P) 500 (an index of the 500 largest corporations) suffered a similar decline. This decline erased the cumulated increases over the preceding 5 years. The Wilshire index slipped 16 percent through September 16, but then tumbled another 40 percent through November 20, before recovering a bit in late November and December. The S&P index of financial stocks fell by 57 percent in 2008.

Yields on 10-year Treasury notes ended 2007 at 4.10 percent—at the low end of the historical range—and fell another 170 or so basis points during 2008 with much of the decline coming in November and December. The low level of these long-term interest rates was due in part to a likely flight to the quality of these secure assets relative to others in the private and international markets during the recent market turmoil. Rates also fell toward the end of the year as market participants revised down the expected path of the Federal Reserve's target rate.

The Administration's forecast of short-term interest rates was roughly based on the expected path of Federal funds rates in the futures market (where participants place "bets" on future rates) as of November 10, the date that the forecast was developed. The near-term interest rate forecast has been overtaken by more recent events as interest rates have fallen notably since the forecast was finalized. Whatever the starting point, the Administration projects the rate on 91-day Treasury bills to edge up gradually to 3.9 percent by 2012 and then remain at that level. At that level, the real rate (that is, the nominal rate less the rate of inflation) on 91-day Treasury bills would be close to its historical average.

The yield on 10-year Treasury notes on November 10 was 3.8 percent. The decline in this yield during the subsequent month means that this near-term forecast has also been overtaken by events. The Administration expects the 10-year rate to increase, eventually reaching a normal spread of about 1.2 percentage points over the 91-day Treasury-bill rate by 2012. Market participants also appear to expect an increase in yield as evidenced by the higher-than-average spread between the rate on 20-year Treasury notes over rates on notes with 10-year maturities. As a result, yields on 10-year notes are expected to increase, to 5.1 percent by 2012 and then to plateau at this rate for the remainder of the forecast.

One measure of increasing financial stress is the premium that private borrowers have had to pay relative to the rates on 10-year government notes (see Chart 1-8). This premium began rising around August of 2007. Rates on the highest-quality corporate bonds have increased 170 basis points since August 2007. Rates on BAA-rated corporate borrowers have increased more than 400 basis points, while rates on high-risk ("junk") bonds have skyrocketed.

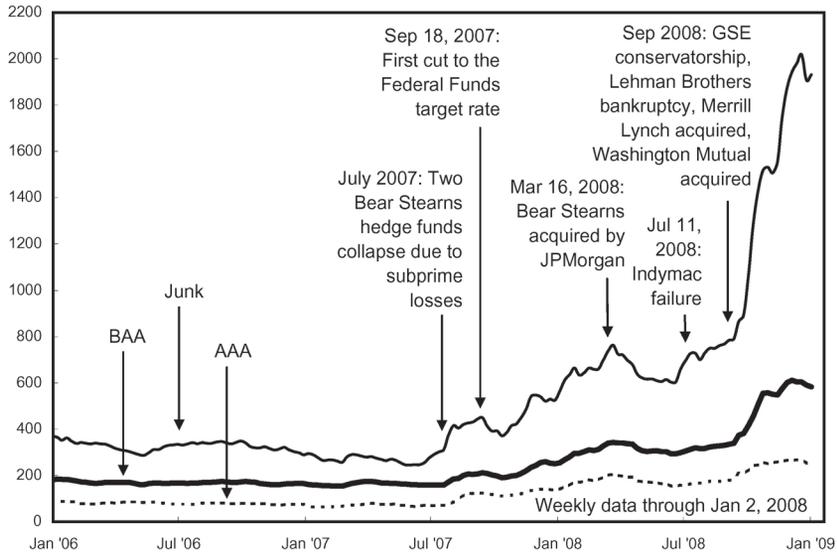
Financial stress also became evident in other ways. The rate that international banks lend to each other (as measured by the London interbank offered rate, LIBOR) soared to an unprecedented premium over Treasury rates beginning in September. For 3-month maturities, this premium that had averaged 114 basis points during the first 8 months of the year jumped to 273 basis points in the second half of September and remained high in October and November, but fell to 135 basis points by year-end. The Federal Reserve's survey of senior loan officers also shows a tightening of lending standards for all private borrowers.

One consequence of the rising spreads for corporate debt is that the sharp drop in the target Federal funds rate (from 5.25 percent in August 2007 to a range of 0 to 0.25 percent in December 2008) has not translated into lower rates for corporate borrowers. The rising rates for corporate bonds and the troubled market for interbank lending means that two major channels for monetary policy (lower interest rates to encourage investment and lower rates

Chart 1-8 **Corporate Bond Spreads**

Corporate bond yields have risen dramatically relative to 10-year Treasury-notes as a result of the credit crunch.

Basis points



Sources: Moody's, Merrill Lynch, and the Treasury Department.

to boost consumer spending indirectly by raising the value of fixed income and equity assets) are not working as they have in the past. Chapter 2 of this *Report* discusses financial market developments in greater detail.

In view of how the stress in financial markets has interfered with the Federal Reserve's primary policy tool (the Federal funds rate), the Federal Reserve has responded by developing a range of programs to provide liquidity to support market functioning, thereby improving credit conditions for businesses and households. These include programs to provide liquidity directly to nondepository financial institutions (such as the Primary Dealer Credit Facility and the Term Securities Lending Facility) and programs to support the functioning of particular financial markets (such as the Asset-backed Commercial Paper Money Market Mutual Fund Liquidity Facility, the Commercial Paper Funding Facility, and the Term Asset-Backed Securities Loan Facility). These programs are allowed under section 13-3 of the Federal Reserve Act, which authorizes the Federal Reserve banks to make secured loans to entities under "unusual and exigent circumstances," provided that these entities are not able to secure funding from other banking institutions. In addition, the Federal Reserve has announced programs to buy substantial quantities of securities, including direct obligations of, and mortgage-backed

securities issued by, the housing-related government-sponsored enterprises (GSEs). The Federal Reserve has also indicated that it is evaluating the potential benefits of purchasing longer-term Treasury securities.

The Long-Term Outlook Through 2014

After 6 years, the expansion ended in December 2007, and real GDP fell in the second half of 2008. Real consumer spending—a sector that constitutes two-thirds of GDP—is in the process of reacting to the substantial declines in wealth that began earlier in the year and cascaded in the fourth quarter. As a result, the Administration projects that after recording modest growth in the first half of 2008, real GDP contracted in the second half, with a sharp decline in the fourth quarter. The contraction is projected to continue into the first half of 2009, followed by a recovery in the second half of 2009 that is expected to be led by the interest-sensitive sectors of the economy. The overall decline, from the second-quarter level of GDP to the quarter with the lowest real GDP, is projected to slightly exceed the depth of the average post-World War II recession. This pattern translates into a small decline during the four quarters of 2008, followed by a small increase during 2009 (see Table 1-1). Reflecting the drop in real GDP, the unemployment rate is projected to increase to an annual average rate of 7.7 percent in 2009. The higher-than-normal level of slack is expected to put some downward pressure on the rate of inflation. Overall CPI inflation is projected at 1.7 percent in 2009 and 2010, a rate that appears plausible in view of the 2.0 percent change for the core CPI over the 12 months through November. Payroll employment is projected to fall during 2009 before rebounding in 2010. The 2009 forecasts for real GDP and inflation are similar to the consensus forecasts for those variables.

Downturns are eventually followed by recoveries, and historically the strength of a recovery appears to be loosely correlated with the depth of the preceding recession (see Chart 1-9). Moreover, the slope of the regression line in the scatter diagram indicates that—to the extent that a recession is deeper than the average—most of the excess depth is offset within the first four quarters of the recovery. During the 2 years following a recession, real GDP growth has averaged almost 5 percent, similar to the recovery anticipated in the Administration forecast for 2010 and 2011. The 5 percent growth rates in 2010 and 2011 would lower the unemployment rate from its projected 2009 peak to 5 percent, the center of the range consistent with stable inflation, in 2012.

TABLE 1-1.—Administration Economic Forecast¹

Year	Nominal GDP	Real GDP (chain-type)	GDP price index (chain-type)	Consumer price index (CPI-U)	Unemployment rate (percent)	Interest rate, 91-day Treasury bills ² (percent)	Interest rate, 10-year Treasury notes (percent)	Nonfarm payroll employment (average monthly change, Q4-to-Q4, thousands ³)
	Percent change, Q4-to-Q4				Level, calendar year			
2007 (actual).....	4.9	2.3	2.6	4.0	4.6	4.4	4.6	104
2008.....	2.4	-0.2	2.5	2.8	5.7	1.4	3.8	-114
2009.....	2.2	0.6	1.7	1.7	7.7	0.7	4.2	-235
2010.....	6.6	5.0	1.5	1.7	6.9	2.0	4.6	222
2011.....	6.5	5.0	1.5	1.8	5.8	3.5	4.9	269
2012.....	5.1	3.4	1.6	1.9	5.0	3.9	5.1	261
2013.....	4.5	2.7	1.7	2.0	5.0	3.9	5.1	121
2014.....	4.5	2.7	1.8	2.1	5.0	3.9	5.1	115

¹ Based on data available as of November 10, 2008.

² Secondary market discount basis.

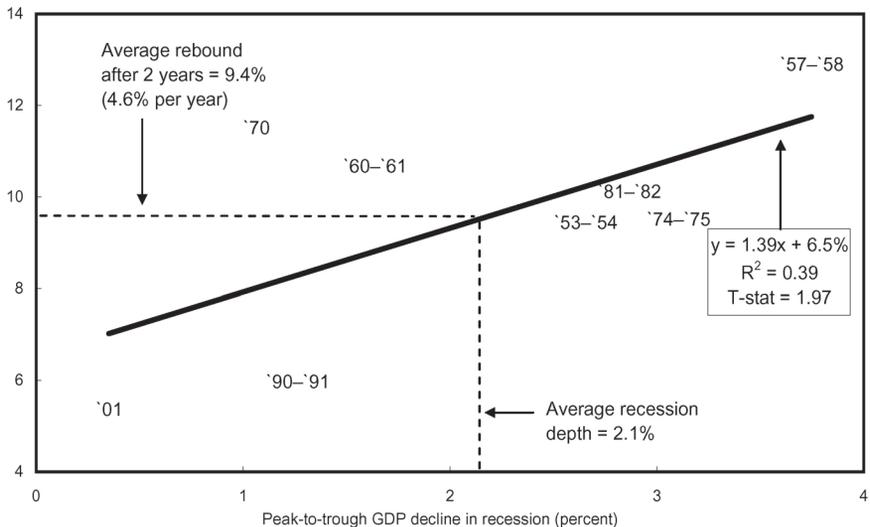
³ The figures do not reflect the upcoming BLS benchmark which is expected to reduce 2007 and 2008 job growth by a cumulative 21,000 jobs.

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

Chart 1-9 Recessions and Recession Recoveries

GDP growth over the eight quarters following a recession tends to be higher after more severe recessions.

Growth over the eight quarters subsequent to GDP trough (percent)



Note: Datapoint labels indicate year of recession. The depth of recession is measured from the peak GDP quarter to the minimum GDP quarter. The recovery is the eight-quarter growth from that minimum-GDP quarter.
Source: Department of Commerce (Bureau of Economic Analysis).

Growth in GDP over the Long Term

The Administration forecast is based on a projection that sees the U.S. economy fluctuating around a long-run potential rate of growth of 2.7 percent. (*Potential real GDP* growth is a measure of the sustainable rate of growth of productive capacity.) The path of real GDP growth in the current downturn and projected recovery fluctuates around this long-term trend.

Over the next 6¼ years, real GDP growth is projected to increase 2.9 percent (see Table 1-2), a growth rate that is faster than the 2.7 percent long-term rate because the current level of the unemployment rate has considerable room to fall before the economy is again operating at its potential. Real GDP growth in 2013 and 2014, at 2.7 percent, is almost identical to the consensus projection of long-run growth.

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 different supply-side factors to real GDP growth is shown in Table 1-2.

Over the next 6 years, the working-age population (line 1) is projected to grow 1.0 percent, the rate set in the Census Bureau's newly revised projection. The labor force participation rate (line 2), which edged down at a 0.2 percent annual rate during the past 8 years, is expected to decline even faster (0.3 percent per year) during the projection period. The further projected deceleration is a consequence of the aging baby-boom generation (born between 1946 and 1962) entering their retirement years. For example, the 1946 birth cohort reached the early-retirement age of 62 in 2008. Over long periods of time the employment rate (defined as 100 less the unemployment rate) is usually stable, but the elevated jump-off level of the unemployment rate makes room for some growth in this component (line 4). The ratio of nonfarm business employment to household employment (line 6), which has accounted for a puzzling subtraction from real GDP growth since 2001, is projected to edge down only slightly (0.1 percent per year) over the projection interval. The workweek (line 8) is projected to edge up slightly, in contrast to its general decline over the past 50 years. The slight upward tilt is projected to be a labor market reaction to buffer labor supply against the projected falling rates of labor force participation. Productivity growth (line 10) is projected to grow 2.4 percent, our best estimate of the trend rate of growth during the recent business cycle (accounting for some measurement issues, as noted earlier). The ratio of real GDP to nonfarm business (line 12) is expected to continue to subtract from overall growth as it has over most long periods.

TABLE 1-2.—*Supply-Side Components of Real GDP Growth, 1953-2014*
[Average annual percent change]

Item	1953 Q2 to 1973 Q4	1973 Q4 to 1995 Q2	1995 Q2 to 2001 Q1	2001 Q1 to 2008 Q3	2008 Q3 to 2014 Q4
1) Civilian noninstitutional population aged 16+ ¹	1.6	1.4	1.2	1.2	1.0
2) PLUS: Civilian labor force participation rate.....	0.2	0.4	0.1	-0.2	-0.3
3) EQUALS: Civilian labor force ²	1.8	1.8	1.4	1.0	0.8
4) PLUS: Civilian employment rate.....	-0.1	0.0	0.3	-0.2	0.2
5) EQUALS: Civilian employment ²	1.7	1.8	1.6	0.7	0.9
6) PLUS: Nonfarm business employment as a share of civilian employment ^{2,3}	-0.1	0.1	0.4	-0.6	-0.1
7) EQUALS: Nonfarm business employment ⁴	1.6	1.9	2.0	0.1	0.8
8) PLUS: average weekly hours (nonfarm business).....	-0.3	-0.3	-0.2	-0.3	0.1
9) EQUALS: Hours of all persons (nonfarm business) ⁴	1.3	1.6	1.9	-0.1	0.9
10) PLUS: Output per hour (productivity, nonfarm business) ⁴	2.5	1.5	2.4	2.6	2.4
11) EQUALS: Nonfarm business output ⁴	3.8	3.1	4.3	2.5	3.3
12) PLUS: Ratio of real GDP to nonfarm business output ⁵	-0.2	-0.2	-0.5	-0.2	-0.4
13) EQUALS: Real GDP.....	3.6	2.8	3.8	2.3	2.9

¹Adjusted by CEA to smooth discontinuities in the population series since 1990.

²BLS research series adjusted to smooth irregularities in the population series since 1990.

³Line 6 translates the civilian employment growth rate into the nonfarm business employment growth rate.

⁴Nonfarm employment, workweek, productivity, and output sourced from the BLS productivity and cost database.

⁵Line 12 translates nonfarm business output back into output for all sectors (GDP), which includes the output of farms and general government.

Note: 1953 Q2, 1973 Q4, and 2001 Q1 are NBER business-cycle peaks.

Detail may not add to total because of rounding.

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

A Perspective on the Past Eight Years

The past 8 years began with a mild recession and then shifted into a slow-growth recovery that only gradually gained momentum. Throughout the first 7 years, consumer spending provided a solid base for economic growth, and that base was fortified by housing investment. As residential construction fell in 2006 and 2007, it was replaced by export growth as a major contributor to overall GDP growth. In 2008, the combination of falling construction, losses in housing-related securities, rising oil prices, and a falling stock market eventually tipped the economy into recession. Inflation as measured by the four-quarter change in the price index for GDP fluctuated between 1.6 and 3.5 percent, a fairly narrow range in a broad historical context.

The economy showed signs of slowing in 2000: the dot-com bust was already underway, and GDP growth in the third quarter of 2000 was negative. In response to the incipient downturn, the Federal Reserve slashed its target rate early in January 2001. The economy began to shed jobs steadily

in March 2001. The Administration and Congress responded proactively with EGTRRA (The Economic Growth and Tax Relief Reconciliation Act of 2001) which delivered about \$36 billion of stimulus checks in 2001 and phased in cuts in marginal tax rates over several years. The recession of 2001 was particularly severe in business investment, a demand component that had been particularly strong in preceding years. Low interest rates during this period boosted demand for housing and consumer durables, both of which were substantially stronger than during an average recession. The recession of 2001 was exacerbated by the terrorist attacks of September 11, and several widely publicized accounting scandals also contributed to the economic uncertainty of the time. All told, however, the 2001 recession turned out to be the shallowest of the post–World War II period (the most that real GDP declined in a single quarter during the recession was 0.4 percent), with some of the credit attributable to the quick action of monetary and fiscal policy.

The unemployment rate continued to rise following the official end of the recession. To address the lagging recovery, the Administration and Congress instituted JCWAA (the Job Creation and Worker Assistance Act), which allowed firms to expense 30 percent of their equipment investment and extended unemployment compensation to laid-off workers, and JGTRRA (the Jobs and Growth Tax Relief Reconciliation Act), which boosted the expensing rate on investment to 50 percent and extended the duration of this provision. JGTRRA also cut the tax rate on dividends and capital gains. These Acts helped speed up economic growth soon after their implementation. The relative strength of the U.S. economy, evident in the demand for imports and in foreigners' desire to invest in the United States, helped maintain world demand during this early-recovery period. It also resulted in a large increase in the U.S. current account deficit.

Late in 2003, the economy shifted from a period of slow recovery to a period of broad economic expansion, marked by a decline in the unemployment rate and rapid growth in economic activity. The recovery was led by robust growth in consumer spending, equipment and software investment, exports, and residential construction, and coincided with spectacular house price appreciation. With the benefit of hindsight, house prices climbed too high. As home prices began to recede beginning in early 2006, so did the pace of housing starts. Housing starts continued to decline over the next 2½ years, eventually reaching an all-time low in November 2008.

During 2006 and 2007, rapid export growth and growth in investment of nonresidential structures replaced residential investment as the main drivers of aggregate demand. The economies of our trading partners, especially those in developing countries, picked up and boosted the demand for our exports—and also boosted the demand for petroleum. The rise in petroleum prices, which moved up again toward the end of 2007, added to the cascade of problems caused by falling house prices.

Although growth slowed to a crawl in early 2008 and employment edged down, fiscal stimulus and monetary policy actions held real GDP growth in generally positive territory through the first half of the year. The sharp declines in consumer spending in the third quarter and the stock market drop in September and October finally confirmed that the decline was a recession.

Until the second half of 2008, the economy was resilient, weathering many shocks including the 2001 recession, the terrorist attacks of September 11, some widely publicized accounting scandals, and the 2005 and 2008 hurricanes. The most damaging event was the decline in the housing market that began in early 2006. Even after the onset of the housing market decline, however, real GDP growth remained positive until the fourth quarter of 2007.

The business-cycle expansion lasted 73 months, the fourth longest post-World War II expansion. The growth rate of real GDP per labor force participant averaged 1.5 percent at an annual rate from the business-cycle peak in 2001 to the business-cycle peak in the fourth quarter of 2007, identical to its average growth over the period from 1953 to 2001.

Conclusion

The economy was weakening as it entered 2008, but was temporarily sustained at generally positive growth by the 2008 fiscal stimulus package and monetary policy actions. Consumer spending declined sharply in the third quarter, and mounting stress in financial markets reached a crescendo in September, triggering a decline in stock market wealth that further reduced consumer spending. Because of the large declines in wealth from September to December, the saving rate is likely to rise in 2009, which will continue to cause a decline or slow growth in consumer spending. The large September to December declines in wealth imply that an upward movement of the saving rate is likely in 2009, with further constraint on consumer spending as the increase plays out. The monetary and financial agencies of the Government have recently been particularly active with the Federal Reserve implementing a variety of new programs to provide liquidity to financial institutions and to support the functioning of financial markets. The Treasury, empowered by the recently passed Emergency Economic Stabilization Act, has also been active over this period and has strategically allocated funds to support financial sector solvency and liquidity (discussed in more detail in Chapter 2). These vigorous measures are expected to increase confidence in the financial sector over the next several months, leading to a rebound in output sometime in 2009.

Beyond the next few years, the economy is projected to settle into a steady state in which real GDP grows at about 2.7 percent per year, the unemployment rate stays around the level consistent with stable inflation (about 5.0 percent) and inflation remains moderate and stable (about 2.1 percent on the CPI). Economic forecasts are subject to error, and unforeseen positive and negative developments will affect the course of the economy over the next several years. Given the economy's strong basic structure (that is, free mobility of labor, relatively low taxes, and openness to trade), prospects for a resumption of steady growth in the years ahead remain good. Later chapters of this *Report* explore how market-based reforms and pro-growth policies such as tax reform and open commerce can enhance our economic performance.