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# **CRS Report for Congress**

# Current Economic Conditions and Selected Forecasts

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# **Current Economic Conditions and Selected Forecasts**

### Summary

For the first time in the current economic expansion, recent revisions to the data show that the U.S. experienced a quarter in which real GDP growth was negative (the fourth quarter of 2007). Positive GDP growth returned during the first two quarters of 2008. As of the second quarter of 2008, real GDP was about 20% larger than it was at its previous high near the end of the 1991-2001 expansion.

During the first two quarters of 2008, real GDP grew at an annual rate of 0.9% and 3.3%, respectively. Annualized quarterly rates of growth over the four quarters of 2007 were 0.1%, 4.8%, 4.8%, and - 0.2%.

While the present expansion has been characterized by a modest growth in payroll employment compared with past expansions, a rising unemployment rate and job losses have characterized the first seven months of 2008. The unemployment rate rose to 6.1% in August from an expansion low of 4.4% (October 2006) and payroll employment has declined by more than 600,000 since December 2007.

Inflation is also on the rise. The headline inflation rate, measured by the CPI, rose 5.4% for the 12 months ending in August 2008. This is higher than the core inflation rate (which excludes food and energy) of 2.5%. For the three months ending in August 2008, the headline CPI rose at an annual rate of 7.2%. Excluding food and energy, it rose at an annualized rate of 3.4%.

The consensus among economists is that GDP will grow between 1.5% and 1.8% in 2008 and 0.7% and 2.2% in 2009. The unemployment rate is expected to rise and average between 5.4% and 5.6%. The inflation rate is expected to be higher than the rate that prevailed in 2007. And, although the international trade deficit is still large, it has declined and the decline is expected to continue.

To forestall an economic downturn and to ease the stress in national financial markets, the Federal Reserve has eased monetary policy over the past seven months. Between September 18, 2007, and April 30, 2008, the target for the federal funds rate was incrementally reduced to 2% from 5.25%. No additional changes were made to the target rate at the June 28, August 5, and September 16 meetings.

This report will be updated monthly.

# Contents

| Current Economic Conditions   |
|---|
| Monetary Policy   |
| Details   |
| GDP   |
| Labor Markets   |
| Inflation   |
| The U.S. Foreign Trade Deficit  |
| The U.S. Dollar   |
| Posture of Fiscal and Monetary Policy   |
| Economic Forecasts, 2008-2009   |
| Special Topics    12      Accounting for GDP Growth    12      Promotion of Economic Growth: The Importance of Saving    12 |

# List of Figures

| Figure 1. | Real Dollar Exchange Rate (Broad Dollar Index) | 6 |
|-----------|--|---|
| Figure 2. | Yield on Selected Securities and Federal Funds | 9 |

# List of Tables

# Current Economic Conditions and Selected Forecasts

## **Current Economic Conditions**

#### Overview

U.S. economic growth has been positive during 25 of the past 26 quarters. The National Bureau of Economic Research (NBER) declared that the recession that began in March 2001 ended in November 2001. As of the first quarter 2008, U.S. real GDP (measured in 2000 dollars) was about 18% above its recession low point in the third quarter 2001, and had grown about 20% from its previous high near the end of the 1991-2001 expansion.

According to the most recent GDP report, growth in the second quarter of 2008 was at an annual rate of 3.3% up from 0.9% in the first quarter. During the four quarters of 2007, the annualized quarterly rates were 0.1%, 4.8%, 4.8%, and -0.2%. During the four quarters of 2006, the quarterly rates were 4.8%, 2.4%, 1.1%, and 2.1%. Growth excluding inventories during the first half of 2008 was positive at an annual rate of 2.8.<sup>1</sup>

The rise in payroll employment peaked in December 2007. Since then, it was dropped by more than 600,000. The unemployment rate is also on the rise and in August stood at 6.1%, up from an expansion low of 4.4% first reached in October 2006 and 4.5% in May 2007. Over the past 18 months, the unemployment rate has varied between 4.4% and 6.1%. These rates are still above the 3.8% low of the 1990s expansion.

Measured or headline inflation has accelerated. As measured by the Consumer Price Index (CPI) it rose 5.4% for the 12 months ended in August 2008 compared with 2.5% during 2006 and 3.4% in 2005. The rise in the core rate for the 12 months ending in August, which excludes food and energy prices, was 2.4%. The broadest measure of inflation for the economy, the GDP price index, rose at an annual rate of 1.9% over the first half of 2008, compared with 2.7% over 2007.

#### **Monetary Policy**

The policy of monetary easing that began in January 2001 ended in mid-2004. During this period, the Federal Open Market Committee (FOMC) of the Federal Reserve System lowered the federal funds target rate in 13 steps by a cumulative 550

<sup>&</sup>lt;sup>1</sup> The GDP data for the second quarter 2008 come from the first or "advance" estimates.

basis points (5.50 percentage points), from 6.5% to 1.0% (its lowest level since April 1961). As the expansion gathered momentum and the possibility of an increase in inflationary pressures rose, the FOMC began to move the federal funds target upward. At each of 17 consecutive meetings, beginning on June 30, 2004, and ending on June 29, 2006, the FOMC advanced the target by 0.25% until it stood at 5.25%. The target was not changed until September 18, 2007, when, in a series of six moves, the rate was reduced to 2% on April 30, 2008. These changes were designed to forestall a recession and deal with the stresses in the nation's financial markets.

#### Details

**GDP.** To understand the most recent macroeconomic developments, it may be important to understand aspects of the previous business cycle. The growth rate of GDP since 1992 is shown in **Table 1**. Its most notable feature is that after a weak start, the growth rate of GDP averaged more than 4% per year during the second half of the last expansion (1995-2000). GDP growth began to slacken during the second half of 2000 and actually contracted during 2000:3Q, 2001:1Q, and 2001:3Q. This pattern was reversed beginning with 2001:4Q when GDP grew positively, at an annual rate of 1.6%. During 2004, the annualized quarterly rates of growth were 3.0%, 3.5%, 3.6%, and 2.5%. During the four quarters of 2005, GDP grew at an annual rates of 3.0%, 2.6%, 3.8%, and 1.3%, respectively. During the four quarters of 2006, the annualized rates were 4.8%, 2.7%, 0.8%, and 1.5%. During the comparable quarters of 2007, GDP grew at an annual rate of 0.1%, 4.8%, 4.8%, and -0.2%. During the first two quarters of 2008, it grew at annualized rates of 0.9% and 3.3%, respectively.

**Productivity** gains have been an important part of the current expansion.<sup>2</sup> Most economists refer to recent trends as reflecting a "productivity-led" recovery. Between 2002 and 2007, productivity growth was from 0.8% to 4.5% (on a 4/Q over 4/Q basis). To put this into perspective, the underlying productivity trend from 1973 to 1995 was for 1.4% annual growth; and the "step-up" in productivity from 1995 to 2000 was to a 2.5% annual rate of productivity growth. In the previous expansion, strong productivity gains were not part of the initial recovery phase after March 1991 and did not show up in the aggregate data until 1995.

**Labor Markets.** The civilian unemployment rate fell from a cyclical high of 7.8% in June 1992 to a low of 3.8% in April 2000, as shown in **Table 2**. At 3.8%, the unemployment rate was at a 30-year low. With a weakening of growth and a contraction followed initially by a modest recovery, the unemployment rate reversed course and rose, reaching a high of 6.3% in June 2003. It then declined reaching an expansion low of 4.4% in October 2006. It has recently risen, however, and in August stood at 6.1% (compared with 4.5% in May 2007). And, payroll employment between December 2007 and August 2008 fell by more than 600,000, in response to the decline in the rate of growth of GDP during two of the last three quarters.

<sup>&</sup>lt;sup>2</sup> Productivity is measured by output per hour of all persons. In the current situation, change in both the numerator and denominator of this ratio have been contributing to higher productivity: output (the numerator) has been rising and hours (denominator) have been declining.

|                          | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| GDP<br>Year-Year         | 3.3  | 2.7  | 4.0  | 2.5  | 3.7  | 4.5  | 4.2  | 4.5  | 3.7  | 0.8  | 1.6  | 2.5  | 3.6  | 2.9  | 2.8  | 2.0  |
| $4^{th}Q$ - $4^{th}Q$    | 4.1  | 2.5  | 4.1  | 2.0  | 4.4  | 4.3  | 4.5  | 4.7  | 2.2  | 0.2  | 1.9  | 3.7  | 3.0  | 2.6  | 2.4  | 2.3  |
| Final Sales<br>Year-Year | 3.0  | 2.6  | 3.4  | 3.0  | 3.7  | 4.0  | 4.2  | 4.5  | 3.8  | 1.6  | 1.2  | 2.5  | 3.3  | 3.3  | 2.8  | 2.4  |
| $4^{th}Q$ - $4^{th}Q$    | 4.2  | 2.6  | 3.2  | 2.9  | 3.9  | 4.0  | 4.7  | 4.2  | 2.9  | 1.5  | 0.8  | 3.7  | 2.8  | 2.7  | 2.8  | 2.5  |

#### Table 1. The Growth Rate of Real GDP v. Final Sales, 1992-2007 (percentages)

Source: U.S. Department of Commerce.

*Divergence in payroll and household surveys?* An interesting and perhaps important feature of the present economic expansion is the divergence between the two main measures of employment. The payroll survey shows that employment has increased by 5.1 million since the peak of the last expansion in March 2001 (and 6.7 million since the trough in November 2001). Less well known is the fact that the other main measure of employment (the household survey of the Bureau of Labor Statistics) indicates that employment has increased by about 8.0 million since the peak of the last expansion (and 9.6 million since the trough). Does the difference between the two measures of employment reflect statistical problems? Experts do not know. Some economists also note that self-employment trends are more accurately captured by the household survey (the payroll survey does not measure self-employment) and that household employment trends have often been reliable forward indicators of coming improvement in payroll employment in the aftermath of a recession.

#### Table 2. Civilian Unemployment Rate, 1991-2008

(%, seasonally adjusted)

|      | J   | F   | Μ   | Α   | Μ   | J    | J   | Α   | S   | 0   | Ν   | D   |
|------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|
| 1991 | 6.4 | 6.6 | 6.8 | 6.7 | 6.9 | 6.9  | 6.8 | 6.9 | 6.9 | 7.0 | 7.0 | 7.3 |
| 1992 | 7.3 | 7.4 | 7.4 | 7.4 | 7.6 | 7.8  | 7.7 | 7.6 | 7.6 | 7.3 | 7.4 | 7.4 |
| 1993 | 7.3 | 7.1 | 7.0 | 7.1 | 7.1 | 7.0  | 6.9 | 6.8 | 6.7 | 6.8 | 6.6 | 6.5 |
| 1994 | 6.6 | 6.6 | 6.5 | 6.4 | 6.1 | 6.1  | 6.1 | 6.0 | 5.9 | 5.8 | 5.6 | 5.5 |
| 1995 | 5.6 | 5.4 | 5.4 | 5.8 | 5.6 | 5.6  | 5.7 | 5.7 | 5.6 | 5.5 | 5.6 | 5.6 |
| 1996 | 5.6 | 5.5 | 5.5 | 5.6 | 5.6 | 5.3  | 5.5 | 5.1 | 5.2 | 5.2 | 5.4 | 5.4 |
| 1997 | 5.3 | 5.2 | 5.2 | 5.1 | 4.9 | 5.0  | 4.9 | 4.8 | 4.9 | 4.7 | 4.6 | 4.7 |
| 1998 | 4.6 | 4.6 | 4.7 | 4.3 | 4.4 | 4.5  | 4.5 | 4.5 | 4.6 | 4.5 | 4.4 | 4.4 |
| 1999 | 4.3 | 4.4 | 4.2 | 4.3 | 4.2 | 4.3  | 4.3 | 4.2 | 4.2 | 4.1 | 4.1 | 4.0 |
| 2000 | 4.0 | 4.1 | 4.0 | 3.8 | 4.0 | 4.0  | 4.0 | 4.1 | 3.9 | 3.9 | 3.9 | 3.9 |
| 2001 | 4.2 | 4.2 | 4.3 | 4.4 | 4.3 | 4.55 | 4.6 | 4.9 | 5.0 | 5.3 | 5.5 | 5.7 |
| 2002 | 5.7 | 5.7 | 5.7 | 5.9 | 5.8 | 5.8  | 5.8 | 5.7 | 5.7 | 5.7 | 5.9 | 6.0 |
| 2003 | 5.8 | 5.9 | 5.9 | 6.0 | 6.1 | 6.3  | 6.2 | 6.1 | 6.1 | 6.0 | 5.8 | 5.7 |
| 2004 | 5.7 | 5.6 | 5.8 | 5.6 | 5.6 | 5.6  | 5.5 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 |
| 2005 | 5.2 | 5.4 | 5.2 | 5.1 | 5.1 | 5.0  | 5.0 | 4.9 | 5.1 | 5.0 | 5.0 | 4.9 |
| 2006 | 4.7 | 4.8 | 4.7 | 4.7 | 4.6 | 4.6  | 4.8 | 4.7 | 4.6 | 4.4 | 4.5 | 4.5 |
| 2007 | 4.6 | 4.5 | 4.4 | 4.5 | 4.5 | 4.6  | 4.7 | 4.7 | 4.7 | 4.8 | 4.7 | 5.0 |
| 2008 | 4.9 | 4.8 | 5.1 | 5.0 | 5.5 | 5.5  | 5.7 | 6.1 |     |     |     |     |

Source: U.S. Department of Labor.

**Inflation.** The U.S. inflation performance has been remarkable over the past 10 years. The inflation rate decelerated throughout most of the expansion in the 1990s (see **Tables 3** and **4**). While the inflation rate accelerated in 2000 as the expansion ended, the pickup was not too different from the earlier years of the cycle.

During the 1991-2001 expansion, the inflation rate increased more slowly on average than at any time since the early 1960s. At the same time, growth was stronger and the unemployment rate lower than experience would have predicted. Inflationary pressures slowed further with the recession. Moreover, the deceleration in inflation over the 1990s occurred even as the pace of growth accelerated. In the post-World War II experience, this combination is unusual. The rates of growth and inflation have not typically moved in the opposite direction, particularly when the unemployment rate was sustained at a relatively low level close to 4.0% in what was generally considered to be an economy at or above full employment.

Table 3. Rate of Change in the GDP Deflators, 1993-2007 (%, 4Q-4Q)

|                         | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Implicit Price Deflator | 2.3  | 2.2  | 2.0  | 1.9  | 1.5  | 1.1  | 1.6  | 2.2  | 2.5  | 1.7  | 2.2  | 3.2  | 3.5  | 2.8  | 2.6  |
| Chain Type Price Index  | 2.3  | 2.2  | 2.0  | 1.9  | 1.5  | 1.1  | 1.6  | 2.2  | 2.5  | 1.7  | 2.2  | 3.2  | 3.5  | 2.8  | 2.6  |

Source: U.S. Department of Commerce.

With the start of the recession in March 2001, the inflation rate decelerated. The increase in consumer prices (the Consumer Price Index or CPI) slowed on a year-year basis from 2.8% in 2001 to 1.6% in 2002. The rate of increase in the GDP deflator, the broadest measures of inflation in the economy, decelerated from 2.2% in 2000 to 1.7% in 2002, on a fourth quarter-fourth quarter basis. It then rose to 3.2% during 2004 and 3.4% during 2005. During 2006 it declined to 2.7% and in 2007 to 2.6%. During the first half of 2008, it rose at an annual rate of 1.9%.

# Table 4. Rate of Change in the Consumer Price Index (CPI),1993-2007

|                           | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Dec. over Dec.            | 2.7  | 2.7  | 2.5  | 3.3  | 1.7  | 1.6  | 2.7  | 3.4  | 1.6  | 2.4  | 1.9  | 3.3  | 3.4  | 2.5  | 4.1  |
| Excluding food and energy | 3.3  | 2.6  | 3.0  | 2.6  | 2.2  | 2.4  | 1.9  | 2.6  | 2.7  | 1.9  | 1.1  | 2.2  | 2.2  | 2.6  | 2.4  |
| Year Over Year            | 3.0  | 2.6  | 2.8  | 3.0  | 2.3  | 1.6  | 2.2  | 3.4  | 2.8  | 1.6  | 2.3  | 2.7  | 3.4  | 3.3  | 2.8  |
| Excluding food and energy | 3.3  | 2.8  | 3.0  | 2.7  | 2.4  | 2.3  | 2.1  | 2.4  | 2.6  | 2.4  | 1.4  | 1.7  | 2.2  | 2.5  | 2.3  |

(in percentages)

Source: U.S. Department of Labor.

This pattern can be found in the CPI. Measured on a December-December basis, it rose by 1.9% during 2003, accelerated to 3.3% during 2004 and 3.4% during 2005. During 2006 it declined to 2.5% only to rise to 4.1% in 2007. Much of this

acceleration can be attributed to energy price increases for when food and energy are excluded the increase was reduced to 2.4%. This also characterizes 2008. During the three months ended in August, the annualized rate of rise of the CPI was 7.2%. Excluding food and energy it was 3.4%.

Except for 2006, the rate at which Unit Labor Costs has been low over the past six years, as shown in **Table 5**. Labor cost trends are also measured by the Employment Cost Index (ECI). The rate at which the ECI for private industry rose accelerated from 1995 through most of 2001, but began to decelerate in the course of 2002 as a result of weakened labor market pressures. The ECI began a very modest rise beginning in 2003, somewhat in line with increases during the late 1990s.

|                          | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Unit Labor Costs         | 1.6  | 0.5  | 2.1  | 0.7  | 2.0  | 2.7  | 1.6  | 4.2  | 0.3  | 0.2  | 0.5  | 2.1  | 1.6  | 4.2  | 1.4  |
| Employment Cost<br>Index | 3.6  | 2.6  | 2.6  | 3.1  | 3.4  | 3.5  | 3.4  | 4.4  | 4.2  | 3.2  | 4.0  | 3.8  | 3.0  | 2.7  | 3.1  |

 Table 5. Rate of Change in Labor Costs, 1993-2007

(in percentages)

Source: U.S. Department of Labor.

**Notes:** Unit labor costs are for the nonfarm business sector, 4<sup>th</sup> quarter-4<sup>th</sup> quarter. The Employment Cost Index is for private industry on a December-December basis. During the first quarter of 2008, Unit labor costs rose at an annual rate of 2.3%.

**The U.S. Foreign Trade Deficit.** The U.S. foreign trade deficit (net imports as a share of GDP), as shown in **Table 6**, recorded a continued and dramatic fall from 1988 through 1992.<sup>3</sup> This was reversed beginning in 1993 as the trade deficit began to grow as a fraction of GDP. During 2006, it averaged 5.4% of GDP, declining to 4.8% in 2007 and 4.0% and 3.6% during the first half of 2008. Since the net inflow of capital from abroad comes to the United States in the form of a trade deficit, it serves as a reminder that the rate of capital formation in the United States depends on other than domestic sources of saving.

<sup>&</sup>lt;sup>3</sup> The foreign trade deficit figure analyzed above is different from the headline trade deficit reported in the press and another trade deficit ratio often used by economists, although they are all related and can be reconciled. In this report, the "trade deficit" refers to exports and imports from the U.S. national accounts, which are the basis for the GDP figures. The underlying data for the figures cited above are released quarterly and annually and are on an inflation-adjusted basis ("real"). In contrast, foreign trade figures frequently quoted in the press are different because they released monthly rather than quarterly, not adjusted for inflation and are defined slightly differently otherwise. These figures are usually not compared to GDP. To make matters even more confusing, economists often refer by convention to the quarterly trade figures known as the current account. The current account position includes components not in the figures above and is not adjusted for inflation. For years 2002 through 2007, the current account deficit was, respectively, approximately 4.1%, 4.6%, 5.3%, 5.7%, 5.7% and 5.1% of nominal GDP. During the first half of 2008, it averaged 5.0% of nominal GDP.

#### Table 6. U.S. Foreign Trade Deficit, 1989-2007

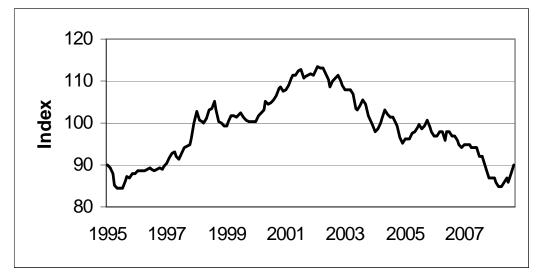
(as a percentage of GDP)

| 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1.2  | 0.8  | 0.2  | 0.2  | 0.7  | 1.0  | 0.9  | 1.0  | 1.2  | 2.2  | 3.1  | 3.9  | 4.0  | 4.7  | 5.0  | 5.6  | 5.6  | 5.5  | 4.8  |

Source: U.S. Department of Commerce.

**The U.S. Dollar. Figure 1** records the movement in the foreign exchange value of the dollar measured against a trade-weighted index of the currencies of many U.S. trade partners over the past 15 years. After hitting a low in the second quarter 1995, the dollar rose in real or inflation-adjusted terms (that is, it appreciated) by more than 34% to its peak in February 2002. From then until December 2004, it depreciated by about 16% on an inflation-adjusted basis, with some ups and downs. From December 2004 through April 2008, the dollar has depreciated about 10.0%.

Figure 1. Real Dollar Exchange Rate (Broad Dollar Index)



Source: Board of Governors of the Federal Reserve System.

The dollar has shown less movement against the major world currencies than the broad trade-weighted index described above suggests.<sup>4</sup> From its high in February 2002 through December 2004, the dollar depreciated some 7% against an index consisting of the major currencies that circulate, adjusted for inflation. However, over the period December 2004 through February 2008, this index shows that the dollar fell in value about 6.5%.

<sup>&</sup>lt;sup>4</sup> In **Figure 1**, the dollar is measured against an index of the currencies of many of the major trade partners of the United States weighted according to the proportion of trade. This is referred to as the "broad dollar index." The Board of Governors also publishes the exchange rate of the dollar with the currencies of smaller groups of countries or individual countries.

### **Posture of Fiscal and Monetary Policy**

### **Fiscal Policy**

The posture of fiscal policy depends on how it is measured. A generally accepted method is to examine the ratio of the structural or full employment federal budget deficit to full employment GDP, also called "potential GDP." When that is done, as shown in **Table 7**, fiscal policy was expansionary between 2001 and 2003 as a full employment surplus in 2001 fell from 1.1% to a deficit of 2.5% of potential GDP in 2003. Subsequent tightening is reflected in the decline in the deficit from 2.5% of potential GDP in 2004 to 1.2% in 2007. An alternative, although inferior measure, is the ratio of the actual budget deficit to actual GDP. Using this measure, fiscal policy was also expansionary between 2000 and 2004 during which a surplus of 2.5% shifted to a deficit of 3.5%, a net shift of 6% of GDP. Between 2005 and 2007, the deficit fell from 2.6% of GDP to 2.1% indicating a shifts toward fiscal tightness.

|                                | 1993  | 1994  | 1995  | 1996  | 1997  | 1998  | 1999   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   |
|--------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Standardized<br>Budget Deficit | 192   | 144   | 146   | 93    | 81    | 38    | +2     | +105   | +102   | -131   | 288    | 294    | 239    | 229    | 167    |
| Full<br>Employment<br>GDP      | 6,711 | 7,039 | 7,389 | 7,753 | 8,139 | 8,514 | 8,935  | 9,450  | 10,019 | 10,536 | 11,039 | 11,623 | 12,316 | 13,073 | 13,796 |
| Ratio                          | 0.029 | 0.020 | 0.020 | 0.012 | 0.010 | 0.004 | 0.000  | +0.011 | +0.010 | 0.012  | 0.026  | 0.024  | 0.019  | 0.018  | 0.012  |
| Actual Budget<br>Deficit       | 255   | 203   | 164   | 107   | 22    | +69   | +126   | +236   | +128   | 158    | 378    | 413    | 318    | 248    | 163    |
| Actual GDP                     | 6,578 | 6,964 | 7,325 | 7,697 | 8,187 | 8,626 | 9,127  | 9,708  | 10,060 | 10,378 | 10,804 | 11,504 | 12,245 | 13,023 | 13,670 |
| Ratio                          | 0.039 | 0.029 | 0.022 | 0.014 | 0.003 | +0.08 | +0.014 | +0.024 | +0.013 | 0.015  | 0.035  | 0.036  | 0.026  | 0.019  | 0.0129 |

(\$ in billions per fiscal year)

Source: Congressional Budget Office (January 2008).

#### **Monetary Policy**

Traditionally, the posture of monetary policy has been judged either by the growth of the monetary aggregates or by movements in interest rates.<sup>5</sup> The monetary aggregates M1 and M2, as shown in **Table 8**, have not responded uniformly to the easing of monetary policy.<sup>6</sup> The rate of growth of M1 since the end of 2004 has been

<sup>&</sup>lt;sup>5</sup> For a more comprehensive discussion of monetary policy, see CRS Report RL30354, *Monetary Policy: Current Policy and Conditions*, by Marc Laborte and Gail Makinen.

<sup>&</sup>lt;sup>6</sup> M1 consists primarily of currency held by the public and demand deposits of businesses (continued...)

either zero or negative, whereas that for M2 has accelerated. The pattern in Aggregate Reserves over 2005-2008 is consistent with the Federal Reserve's movement in the target for federal funds, the principal tool of monetary policy (see **Figure 2**). The continued growth of the Monetary Base reflects in part the growth in reserves. However, it mainly reflects the growth in paper currency in circulation since about 90% of the Base is accounted for by currency (the great portion of which does not circulate in the United States). Nevertheless, the various measures of money do not provide consistent measures of the thrust of monetary policy.

| Time Period   | Aggregate<br>Reserves | Monetary<br>Base | M1   | M2   | M3 <sup>a</sup> |
|---------------|-----------------------|------------------|------|------|-----------------|
| 99:12 - 00:12 | -7.3                  | -1.5             | -3.0 | 6.2  | 8.6             |
| 00:12 - 01:12 | 6.7                   | 8.7              | 8.3  | 10.5 | 12.9            |
| 01:12 - 02:12 | -2.8                  | 7.2              | 3.2  | 6.4  | 6.5             |
| 02:12 - 03:12 | 6.9                   | 5.7              | 6.2  | 4.6  | 3.3             |
| 03:12 - 04:12 | 8.8                   | 5.4              | 5.2  | 5.7  | 6.4             |
| 04:12 - 05:12 | -4.3                  | 3.6              | 0.0  | 4.1  | 7.8             |
| 05:12 - 06:12 | -4-4                  | 3.1              | -0.5 | 5.3  | NA              |
| 06:12 - 07:12 | -1.7                  | 1.4              | 0.0  | 5.9  | NA              |
| 07:08 - 08:08 | -1.0                  | 2.1              | 1.6  | 5.4  | NA              |

 Table 8. The Growth Rates of the Monetary Aggregates

(annualized rates of growth)

Source: Board of Governors of the Federal Reserve System.

a. Data on M3 ceased to be published after March 2006.

The growth in the reserves of depository institutions results to a large degree from decisions to move the key federal funds' interest rate (shown in **Figure 2**), the principal tool of monetary policy. These moves have been motivated primarily by a desire to bring the economy to full employment and then keep it growing at a rate sufficient to maintain full employment. From time to time, other factors may influence the movement of this rate. For example, the turmoil in both domestic and international financial markets during 1998 caused the rate to be reduced ¼% on September 29, October 15, and November 17 of that year. And, in response to the September 11, 2001 terrorist attacks, the rate was reduced ½% on September 17 (and an additional three times between then and December 11, 2001).

<sup>&</sup>lt;sup>6</sup> (...continued)

and accounts held by households against which checks can be written. M2 consists of M1 plus saving and time deposits under \$100,000, individual holdings of money market mutual funds and money market deposit accounts. M3, data on which is no longer recorded, consists of M2 plus time deposits at commercial banks in amounts of \$100,000 or more, time repurchase agreements, institution-only money market funds, overnight repurchase agreements, and several types of Eurodollar deposits held by U.S. residents.

During the period 2004-2006, the target rate was increased. In 17 steps, each 1/4% in magnitude, it was raised to 51/4% on June 29, 2006, from 1% on June 30, 2004. This was reversed beginning on September 18, 2007and concluding on April 30, 2008, during which the target was reduced to 2.0% from 5.25% to provide liquidity to ease unsettled conditions related to the subprime mortgage market and to provide a boost in aggregate demand to a sagging economy.

As **Figure 2** shows, movements in short-term interest rates mimic closely movements in the federal funds rate. This is not as true for longer-term rates. Their changes as well as the magnitude of their changes are often different from the timing and magnitude of shifts in the federal funds target. This is due in part to the fact that they respond to the longer run outlook for inflation, the financing requirements necessitated by the budget deficit, both current and prospective, and the international flow of capital.

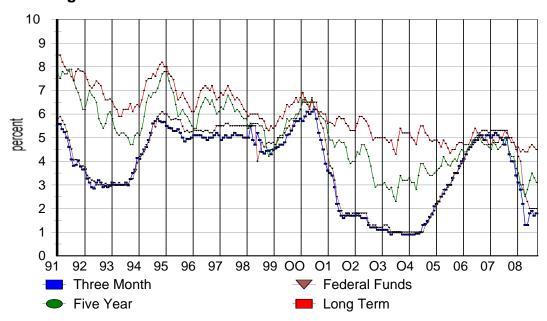


Figure 2. Yield on Selected Securities and Federal Funds

Source: Board of Governors of the Federal Reserve System.

### Economic Forecasts, 2008-2009

The forecasts in **Table 9** come from three sources. OMB and CBO are well known. BC stands for the Blue Chip Economic Indicators, a firm that collects the forecasts from about 50 forecasters in finance, business, and universities. BC Con represents the consensus or average forecasts of this group. BC T-10 is the average of the high 10 among these forecasts, while BC B-10 is the average of the low 10 forecasts.

The consensus view taken by the forecasts summarized in **Table 9** is that GDP growth should be between 1.5% and 2.0% during 2008. This is lower than the growth rates achieved in 2005, 2006, and 2007. The forecasted 2008 rate of GDP

#### CRS-10

growth, according to the consensus, will be insufficient to keep the unemployment rate from rising. The headline inflation rate for the entire economy is expected to range from 2.1% to 4.7% (depending on the price index used). Both short-term and long-term interest rates are expected to be below comparable Treasury rates prevailing in 2007.

In the *Monetary Policy Report* submitted to Congress on July 15, 2008, the Federal Reserve presented new economic projections for 2008 and 2009. It projected that from the fourth quarter 2007 to the fourth quarter 2008, real GDP will grow from 1.0% to 1.6% and that prices<sup>7</sup> will increase from about 3.8% to 4.2%. The civilian unemployment rate is projected to average between 5.5% and 5.7% during the remainder of the year. For 2009, real GDP, on a fourth quarter over fourth quarter basis, is projected to grow between 2.0% and 2.8%, prices are expected to rise between 2.0% and 2.3%, and unemployment during the fourth quarter of the year is projected to average from 5.3% to 5.8%.

<sup>&</sup>lt;sup>7</sup> The Federal Reserve features in its projections a measure of inflation derived from the Personal Consumption Expenditure (PCE), less food and energy, index found in the GDP accounts. This price index attempts to measure inflation with regard to consumer spending. The PCE covers about two-thirds of GDP.

| CRS-11 |
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|   | i able s              |                       |                |     |      |      |                          |      |      |  |  |  |
|---|-----------------------|-----------------------|----------------|-----|------|------|--------------------------|------|------|--|--|--|
|   |                       | 07                    |                |     | 008  |      |                          |      |      |  |  |  |
|   | <b>3</b> <sup>a</sup> | <b>4</b> <sup>a</sup> | 1 <sup>a</sup> | 2ª  | 3    | 4    | <b>2007</b> <sup>a</sup> | 2008 | 2009 |  |  |  |
| Nominal GDP <sup>b</sup> (Rate of Change) |                       |                       |                |     |      |      |                          |      |      |  |  |  |
| OMB                                       | 6.4                   | 2.3                   | 3.5            | 4.5 | NA   | NA   | 4.8                      | 3.8  | 4.4  |  |  |  |
| CBO                                       | 6.4                   | 2.3                   | 3.5            | 4.5 | NA   | NA   | 4.8                      | 3.8  | 3.8  |  |  |  |
| BC T-10                                   | 6.4                   | 2.3                   | 3.5            | 4.5 | 6.3  | 5.1  | 4.8                      | 4.4  | 4.7  |  |  |  |
| BC Con.                                   | 6.4                   | 2.3                   | 3.5            | 4.5 | 4.3  | 2.8  | 4.8                      | 4.1  | 3.9  |  |  |  |
| BC B-10                                   | 6.4                   | 2.3                   | 3.5            | 4.5 | 1.9  | 0.3  | 4.8                      | 3.7  | 2.8  |  |  |  |
| Real GDP <sup>b</sup> (Rate of Change)    |                       |                       |                |     |      |      |                          |      |      |  |  |  |
| OMB                                       | 4.8                   | -0.2                  | 0.9            | 3.3 | NA   | NA   | 2.0                      | 1.6  | 2.2  |  |  |  |
| СВО                                       | 4.8                   | -0.2                  | 0.9            | 3.3 | NA   | NA   | 2.0                      | 1.5  | 1.1  |  |  |  |
| BC T-10                                   | 4.8                   | -0.2                  | 0.9            | 3.3 | 1.8  | 1.5  | 2.0                      | 2.0  | 2.0  |  |  |  |
| BC Con.                                   | 4.8                   | -0.2                  | 0.9            | 3.3 | 1.0  | 0.2  | 2.0                      | 1.8  | 1.5  |  |  |  |
| BC B-10                                   | 4.8                   | -0.2                  | 0.9            | 3.3 | -0.2 | -1.3 | 2.0                      | 1.6  | 0.7  |  |  |  |
| Unemployment <sup>c</sup>                 |                       |                       |                |     |      |      |                          |      |      |  |  |  |
| OMB                                       | 4.6                   | 4.8                   | 4.9            | 5.3 | NA   | NA   | 4.6                      | 5.3  | 5.6  |  |  |  |
| СВО                                       | 4.6                   | 4.8                   | 4.9            | 5.3 | NA   | NA   | 4.6                      | 5.4  | 6.2  |  |  |  |
| BC T-10                                   | 4.6                   | 4.8                   | 4.9            | 5.3 | 5.9  | 6.2  | 4.6                      | 5.6  | 6.5  |  |  |  |
| BC Con.                                   | 4.6                   | 4.8                   | 4.9            | 5.3 | 5.8  | 6.0  | 4.6                      | 5.5  | 6.2  |  |  |  |
| BC B-10                                   | 4.6                   | 4.8                   | 4.9            | 5.3 | 5.7  | 5.8  | 4.6                      | 5.4  | 5.8  |  |  |  |
| GDP Price Index                           | (chain-we             | ighted)b              |                |     |      |      |                          |      |      |  |  |  |
| OMB                                       | 1.5                   | 2.8                   | 2.6            | 1.2 | NA   | NA   | 2.7                      | 2.3  | 2.6  |  |  |  |
| СВО                                       | 1.5                   | 2.8                   | 2.6            | 1.2 | NA   | NA   | 2.7                      | 2.2  | 2.2  |  |  |  |
| BC T-10                                   | 1.5                   | 2.8                   | 2.6            | 1.2 | 4.5  | 3.6  | 2.7                      | 2.6  | 2.8  |  |  |  |
| BC Con.                                   | 1.5                   | 2.8                   | 2.6            | 1.2 | 3.3  | 2.6  | 2.7                      | 2.3  | 2.3  |  |  |  |
| BC B-10                                   | 1.5                   | 2.8                   | 2.6            | 1.2 | 2.1  | 1.6  | 2.7                      | 2.1  | 1.8  |  |  |  |
| CPI-U <sup>b</sup>                        |                       | -                     |                |     |      |      |                          |      |      |  |  |  |
| OMB                                       | 2.7                   | 5.1                   | 4.2            | 5.0 | NA   | NA   | 2.9                      | 3.8  | 2.3  |  |  |  |
| СВО                                       | 2.7                   | 5.1                   | 4.2            | 5.0 | NA   | NA   | 2.9                      | 4.7  | 3.1  |  |  |  |
| BC T-10                                   | 2.7                   | 5.1                   | 4.2            | 5.0 | 7.6  | 4.1  | 2.9                      | 4.7  | 3.7  |  |  |  |
| BC Con.                                   | 2.7                   | 5.1                   | 4.2            | 5.0 | 5.6  | 2.2  | 2.9                      | 4.4  | 2.9  |  |  |  |
| BC-10                                     | 2.7                   | 5.1                   | 4.2            | 5.0 | 4.1  | 0.2  | 2.9                      | 3.9  | 2.2  |  |  |  |
| T-BILL Interest R                         | ate (three            | -month)               | с              |     |      |      |                          | 1    |      |  |  |  |
| OMB                                       | 4.3                   | 3.6                   | 2.1            | 1.7 | NA   | NA   | 4.4                      | 1.9  | 2.8  |  |  |  |
| СВО                                       | 4.3                   | 3.6                   | 2.1            | 1.7 | NA   | NA   | 4.4                      | 1.9  | 2.7  |  |  |  |
| BC T-10                                   | 4.3                   | 3.6                   | 2.1            | 1.7 | 1.9  | 2.1  | 4.4                      | 2.0  | 2.9  |  |  |  |
| BC Con.                                   | 4.3                   | 3.6                   | 2.1            | 1.7 | 1.8  | 1.9  | 4.4                      | 1.8  | 2.4  |  |  |  |
| BC B-10                                   | 4.3                   | 3.6                   | 2.1            | 1.7 | 1.7  | 1.6  | 4.4                      | 1.7  | 1.9  |  |  |  |
| 10-year Treasury                          | Note <sup>c</sup>     |                       |                |     |      |      |                          |      | •    |  |  |  |
| OMB                                       | 4.7                   | 4.2                   | 3.7            | 3.9 | NA   | NA   | 4.6                      | 4.0  | 4.6  |  |  |  |
| СВО                                       | 4.7                   | 4.2                   | 3.7            | 3.9 | NA   | NA   | 4.6                      | 3.9  | 4.4  |  |  |  |
| BC T-10                                   | 4.7                   | 4.2                   | 3.7            | 3.9 | 4.1  | 4.2  | 4.6                      | 4.0  | 4.8  |  |  |  |
| BC Con.                                   | 4.7                   | 4.2                   | 3.7            | 3.9 | 3.9  | 4.0  | 4.6                      | 3.9  | 4.3  |  |  |  |
| BC B-10                                   | 4.7                   | 4.2                   | 3.7            | 3.9 | 3.9  | 3.7  | 4.6                      | 3.8  | 3.9  |  |  |  |
|   |                       |                       |                |     |      |      |                          |      |      |  |  |  |

#### Table 9. Economic Forecasts 2008-2009

**Sources:** Blue Chip Economic Indicators, September 2008; Congressional Budget Office, January 2008; and the Office of Management and Budget (CEA), July, 2008.

a. Actual data, subject to revisions. The annual data for nominal GDP, real GDP, the GDP price index and the CPI are on a year over year basis; and the unemployment and interest rate data are either quarterly or annual averages.

b. Quarterly rates of change are annualized.

c. Quarterly averages.

## **Special Topics**

#### Accounting for GDP Growth

**Table 10** records contributions to growth in GDP from 1995 to 2006. These data record two interesting developments. First, except for 2001, 2002, and 2007, investment spending has played an important role in both the 1991-2001 and current expansions. Among the categories of investment spending, outlays for personal computers were important. This bodes well for the longer run growth in productivity. Second, with the exception of 2001, 2002, and 2007, purchases by all levels of government have played only a small role in both expansions. Net export growth was an important component of growth in 2007. Consumption expenditures remain the largest single contributor to GDP growth.

|                    | 1995   | 1996   | 1997   | 1998   | 1999   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008:1H |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Real GDP<br>Growth | 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%  |
| Consumption        | 73.6   | 63.5   | 57.4   | 81.2   | 81.6   | 87.2   | 234.2  | 122.7  | 78.3   | 69.9   | 75.6   | 67.6   | 71.6   | 49.3    |
| Investment         | 17.7   | 34.3   | 41.5   | 37.7   | 26.2   | 26.9   | -187.8 | -26.8  | 22.4   | 39.1   | 27.4   | 21.3   | -16.2  | -74.4   |
| Govt. Purchases    | 4.3    | 5.2    | 7.9    | 8.4    | 16.3   | 10.1   | 80.4   | 51.0   | 18.3   | 8.9    | 5.0    | 10.9   | 17.7   | 26.5    |
| Net Exports        | 4.3    | -2.9   | -6.8   | -27.4  | -24.1  | -24.1  | -26.8  | -46.9  | -19.0  | -17.9  | -8.1   | 0.1    | 27.1   | 98.5    |

#### Table 10. Accounting for GDP Growth: 1995-2008:1H

Source: U.S. Department of Commerce.

Note: Computed using real GDP at 2000 chained dollars on a year-over-year basis.

#### Promotion of Economic Growth: The Importance of Saving

Over the longer run, the economic well-being of a nation depends on the growth of potential output or GDP per capita. Crucial to this growth is the fraction of a nation's resources devoted to capital formation. The ability to add to the capital stock through investment depends on a nation's saving rate.

Saving comes from several sources. In the private sector individuals (households) and businesses are responsible for saving. The former save when all of their after tax income is not used for consumption. Businesses save through retained earnings and capital consumption allowances.

The public sector can also be a source of national saving and this occurs when government revenues are larger than expenditures. Budget surpluses, then, can be viewed as a source of national saving.

**Table 11** shows the sources of saving for the United States during the past 45 years. There are several things to note about these data. First, except for the decade of the 1990s, the gross private sector savings rate has averaged a remarkably stable 17%-19% of GDP, with most of the saving being done by businesses. More

#### CRS-13

significantly, however, the private sector saving rate net of depreciation, representing saving available for additions to capital, declined considerably in the 1990s. The drop in the household (personal) savings rate has been the major factor in the decline in the private sector saving rate. Thus, even without a federal budget deficit, the United States would have had a "saving problem."

Second, over this 45-year period, the saving done by the public sector, as a whole, has declined. There is, however, diversity as to the contribution made by the level of government. The large negative contribution made by the federal government during the 1980s and 2002-2005 reflects the widely publicized budget deficit. Even though state and local governments have been running budget surpluses, they have not been large enough to offset the federal deficits. This was reversed during the period 1993-2001. The improved budget position of the federal government during this period added to national saving.

Third, the data show that for 20 of these 45 years, the United States exported a small fraction of its savings to the rest of the world (i.e., was a net exporter of capital). This changed during the 1980s when the United States began to import the savings of the rest of the world.

The United States has been able to sustain its growth and standard of living since the 1980s because we have been able so far to attract sufficient capital (saving) from international investors. Without these savings, the United States would have had a "financing gap" in view of its domestic saving shortfall relative to its demand for investment capital. In the absence of sufficient capital, U.S. interest rates would have had to rise in order to restore balance between investment and a now smaller amount of saving. Higher interest rates would have choked off investment and dampened U.S. growth.<sup>8</sup>

Should efforts to correct the international trade deficit prove fruitful, the net inflow of foreign saving will diminish or perhaps on net cease (that is, stabilize). Should this occur without a significant improvement in either the private sector saving rate or the negative saving rate of the public sector, the rate of new investment will fall to a very low level in the United States and with it the means for improving the well-being of future generations of Americans.

A sudden increase in the national saving rate is, however, not without some possible adverse consequences. In the short run, a sudden increase in the saving rate means decreased consumption or lower public sector net spending, both of which depress aggregate demand. Moreover, in either case, the demand for some types of output would decline to be replaced by an increased demand for other types of output. As a result, some industries and firms would have to contract while others expand. Resources would have to transit from declining to growing industries. These short-run dislocations should be borne in mind if a higher national saving rate becomes the object of public policy.

<sup>&</sup>lt;sup>8</sup> See also CRS Report RL30534, *America's Growing Trade Deficit: Its Cause and What It Means for the Economy*, by Marc Labonte and Gail Makinen; and CRS Report RL31032, *The U.S. Trade Deficit: Causes, Consequences, and Cures*, by Craig Elwell.

#### Table 11. U.S. Saving By Sector

**Private Sector Public Sector** Net Net of State/ Net of Private/ Net<sup>b</sup> Year Pers. Bus. Total Deprec. Fed. Local Total Deprec. **Public**<sup>a</sup> Foreign 1960-69 5.7 11.4 17.1 9.6 2.2 1.7 4.0 1.3 10.9 -0.6 1970-79 -1.2 6.8 11.6 18.4 9.8 -0.5 1.8 1.3 8.6 -0.2 -2.2 1980-89 6.7 12.6 19.2 9.0 1.4 -0.8 -3.0 6.0 1.5 1990-99 3.8 12.3 16.1 -1.1 1.3 0.2 -2.0 4.5 1.3 6.4 7.3 2.2 1984 7.8 13.2 21.0 11.0 -3.1 1.7 -1.4 -3.7 1985 6.7 19.8 9.8 -3.0 -1.4 -3.7 13.1 1.6 6.1 2.6 1986 6.0 12.1 18.1 8.0 -3.1 1.5 -1.6 -3.8 4.2 3.2 5.3 1.3 -2.9 4.7 3.2 1987 12.3 17.7 7.6 -1.9 -0.6 5.7 12.7 2.2 1988 18.5 8.4 -1.5 1.4 -0.1 -2.4 6.0 5.5 11.9 7.3 -1.2 1.4 0.2 -2.0 5.3 1989 17.4 1.6 5.2 7.3 1.2 -2.8 1990 11.6 16.8 -1.8 -0.6 4.4 1.2 -0.2 1991 5.4 12.0 17.4 7.6 -2.4 1.0 -1.4 -3.6 4.0 1992 8.0 -4.7 5.8 11.8 17.6 -3.5 1.1 -2.4 3.3 0.6 1993 4.3 11.9 16.2 6.8 -2.9 1.1 -1.8 -4.1 2.8 1.1 -1.9 1994 3.5 15.5 6.0 -2.9 12.0 1.3 -0.6 3.1 1.5 1995 3.4 12.7 16.1 6.7 -1.6 1.3 -0.3 -2.5 4.1 1.2 1996 2.9 12.9 15.8 6.2 -0.8 1.4 0.6 -1.5 4.8 1.3 1.9 1997 2.6 13.1 15.7 6.1 0.3 -0.2 5.9 1.3 1.6 12.0 3.2 15.2 5.5 1.7 6.5 2.11998 1.4 3.1 1.0 1.7 2.0 3.7 1.7 3.0 1999 12.6 14.3 4.5 1.6 6.2 2000 1.7 11.9 13.6 3.5 2.8 1.6 4.4 2.4 5.9 4.02.5 0.5 3.7 3.7 2001 1.3 12.5 3.2 1.3 1.2 13.8 -1.5 0.8 -0.7 -2.7 1.9 4.4 2002 1.8 13.1 14.9 4.6 -2.6 1.1 4.7 2003 1.6 13.2 14.8 4.6 1.0 -1.6 -3.6 2004 4.8 -2.4 -1.2 -3.2 1.6 13.6 15.2 1.2 1.6 5.3 14.3 -1.8 5.9 2005 0.4 14.0 3.4 1.4 -0.4 -2.4 1.0 2006 0.3 13.3 13.5 3.3 -0.9 1.4 0.5 -1.5 1.9 6.0 2007 0.3 12.5 12.8 2.7 -0.8 1.2 0.4 -1.7 1.2 5.1

(as a percentage of GDP)

Source: U.S. Department of Commerce.

- a. Equal to the sum of private sector saving net of depreciation and total public sector saving net of depreciation.
- b. Negative indicates the export of saving from the United States. Positive indicates the import of saving from abroad.