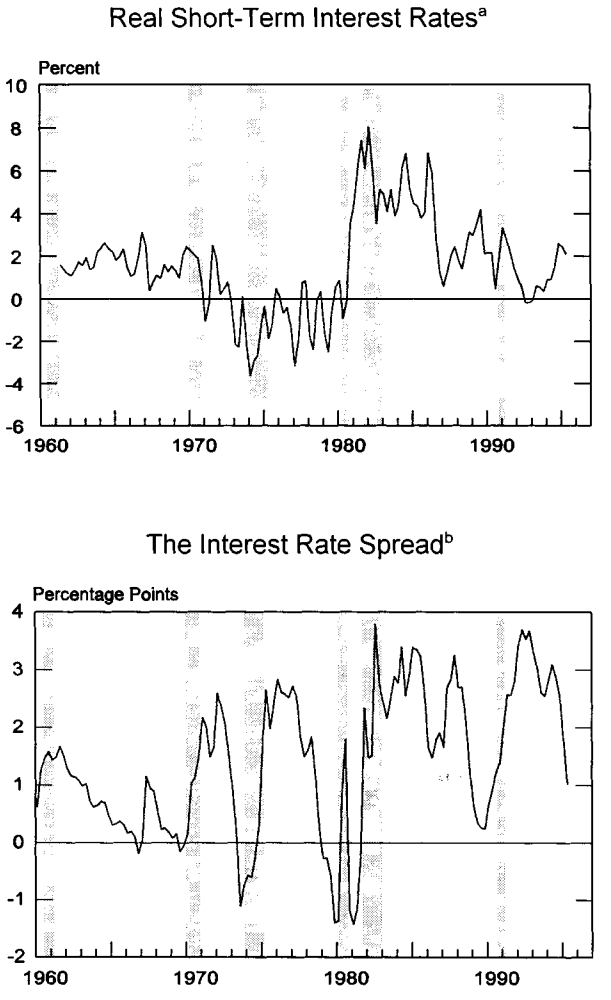
Will the Federal Reserve Achieve a Soft Landing? The strength of economic growth during 1994 led to a succession of increases in interest rates--the last increase occurred in February 1995. Those hikes in rates were part of the Federal Reserve's continuing effort to head off any increase in inflation. Nonetheless, the weakening of economic growth that occurred during the first half of 1995 caught many economic forecasters off guard--most had expected the slower growth to occur later in the year. The minutes of the May 23 meeting of the Federal Open Market Committee suggest that its members were surprised by the weakening of the economy during the first half of the year, but they clearly viewed the slowdown as a temporary falter rather than the harbinger of a recession. In early July, the committee decided that the degree of inflationary pressure had subsided enough that it could trim the federal funds rate slightly, which it did by 25 basis points.

Economic conditions during the first half of 1995 could help the Federal Reserve move toward its goals of low inflation and sustainable economic growth for two reasons. First, slowing economic activity relieved some of the tightness in labor and product markets, meaning that inflationary pressures are not as strong as feared. Second, the decline in long-term interest rates experienced during the first half of 1995 means that the weakness in interest-sensitive sectors will be self-correcting to some degree (though the effect may not be realized until 1996).

Monetary policy, though restrictive, is not as restrictive as it has been before past recessions. For example, real short-term interest rates peaked at 2.5 percent during early 1995, about 1.5 percentage points above their level at the beginning of 1994, but well below the levels attained before the recession of 1990 (see Figure 10). Another indicator, the slope of the yield curve, tells the same story: the curve has flattened, which usually foreshadows a slowing of growth, but has not suffered the inversion that often precedes recessions.

Short-Term Rates Decline Further. CBO expects that the Federal Reserve will allow short-term interest rates to drift gradually down through the end of 1996. The rate on three-month Treasury bills, for example, is expected to drop from 5.5 percent in mid-1995 to 5.1 percent by the end of 1995. The federal funds rate is expected to decline in a similar manner: from 5¾ percent to 5½ percent by the end of 1996. Those paths for short-term interest rates hinge on CBO's forecast for growth of real GDP during the

Figure 10.
Indicators of Monetary Policy



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board.

a. The real short-term interest rate is calculated by subtracting from the three-month Treasury bill rate the growth (on an annual basis) of the consumer price index for all urban consumers (CPI-U) over the subsequent three-month period. For the second quarter of 1995, the real interest rate is based on CBO's forecast of the growth of the CPI-U for the third quarter of 1995.

b. The interest rate spread is the yield on 10-year Treasury notes minus the three-month Treasury bill rate.

same period. If economic growth was to be much stronger than CBO envisions, rates would not decline as much, if at all. If growth was to come in much weaker than anticipated, rates could fall more quickly.

Long-Term Rates Rebound Slightly. CBO's baseline forecast assumes that long-term interest rates will rise slightly over the forecast period. The 10-year Treasury note rate is forecast to be about 50 basis points higher at the end of 1996 than its level in July of 6.1 percent. In CBO's view, slower economic growth during the first half of 1995 drove long-term rates below the level that is consistent with current-law fiscal policy. Therefore, long-term rates rise gently in this forecast in response to faster growth. However, implementation of the budget resolution--which markets may already expect--would change that outlook, producing lower interest rates (see Chapter 3 for a discussion of the effects of the budget resolution on interest rates and economic growth).

Alternative Outlooks

CBO's forecast reflects a likely path for the economy. As usual, however, the barometers of future economic activity are difficult to read. The stance of monetary policy shifted toward restraint during 1994, and the timing of the effects of such a shift in policy are hard to gauge. The effect on output appears to have come earlier than it has in the past; the magnitude of the effect might possibly have been misestimated. The size of the effect depends on how consumers and businesses react to the pockets of weakness in the economy; their reaction could be stronger or weaker than in the past. The outlook will also depend on the response of the economy to any changes to fiscal policy enacted by the Congress. Any of those factors could cause economic growth to be significantly weaker or stronger than CBO projects (see Appendix A for an analysis of how accurate CBO's forecasts have been since 1976).

A Deeper Downturn

The weakness during the first half of 1995 took analysts by surprise--most expected the economy to slow later in the year, based on the average lag between tightening monetary policy and economic growth. Moreover, the weakness in demand may be more extensive than current statistics indicate. If so, producers may respond to falling orders by further slowing the pace of production to pare their stocks of inventories, or they could decide to delay the purchase of capital goods even more than CBO anticipates. In that way, the falloff in demand in the interest-sensitive sectors of the economy could lead to layoffs and cuts in production in other sectors later in the year. Similarly, the scattered cutbacks in production witnessed thus far could, by shaking consumer or business confidence, cause consumers to retrench or businesses to slash capital-spending plans, resulting in the same downward spiral of cuts in production, incomes, and spending.

If the full effects of the tightening of monetary policy have yet to be felt, then the weakness in the economy could be more pronounced than CBO expects. CBO estimates that the delay between a change in monetary policy and the effects on the economy usually ranges from nine to 18 months. Since monetary policy shifted from one of ease to tightness during the middle of 1994, the effects of the change would be expected to occur during the second half of 1995. However, the economy began to weaken during the first quarter and slowed much more than CBO had expected. Based on the normal delay between the change in policy and the effects on the economy, further effects of the tightening that occurred during the latter half of 1994 and early 1995 may yet be felt.

Fiscal policy could also affect the near-term outlook. The Congress appears ready to alter the course of fiscal policy for the next decade, based on the budget resolution passed in June. If that effort is sustained, the standardized-employment budget deficit could fall by almost 0.5 percent of GDP on average per year through 2002. Monetary policy could offset such restraint, but the restraint would add to the risk of slower growth. Failure to deliver significant reduction might also create a risk. If fiscal policy actions failed to persuade financial markets that significant deficit reduction was imminent, then long-term interest rates could rise. Any increase in rates could exacerbate the existing weakness in the economy.

Global events are another source of uncertainty about the outlook. The most immediate concern is that growth abroad will be more tepid than anticipated, which could weaken U.S. exports in the near term. The outlook for Japan is extremely uncertain because it is still wrestling with the effects of deflating asset prices. Although the consensus forecast for Japan's growth is still positive, many analysts have highlighted the very real possibility that further loans might go bad and that Japan could relapse into recession. The high yen (caused in part by Japanese banks and insurers selling off foreign assets to maintain adequate capital reserves) heightens the problem by making Japanese goods more expensive in the United States and other foreign countries.

A Cycle of Boom and Bust

Another interpretation of the recent data is that the weakness experienced during the first half of 1995 is overstated and that the economy will grow vigorously during the remainder of the year. The weakness could be overstated for various reasons. Seasonal effects in the data may not have been removed correctly, or the slowing of demand for housing and autos may be temporary. A return to growth faster than the economy's long-run potential could occur if demand for autos and housing picks up slightly and companies replenish their inventory stocks. Those factors, combined with a steady growth in demand for consumer nondurables and services as well as an improving trade picture, could easily support growth of real GDP above 4 percent in the near term.

Strong growth for any of those reasons risks precipitating a harsh response from the Federal Reserve and a hard landing later. The Federal Reserve has stated repeatedly that it will act quickly to prevent inflationary pressures from boiling over. Even after the slowing during the first half of the year, the economy is at a very high level of resource use and risks overheating. In the face of growth above potential--about 2½ percent--monetary policy is likely to tighten further, perhaps aggressively. If that scenario occurred, then the probability of a recession during 1996 or 1997 would increase dramatically.

CBO's forecast assumes that the economy avoids both of those extremes and that growth continues during the second half of the year and through 1996. That outlook assumes the Federal Reserve has succeeded in guiding the economy between the risk of recession and that of accelerating inflation, thereby achieving its stated goal of monetary policy: sustainable economic growth and moderate inflation.

The *Blue Chip*, Administration, and Federal Reserve Forecasts

The *Blue Chip* consensus, derived from a monthly survey of about 50 private-sector forecasters, expects a milder slowdown and a more rapid pickup in economic growth during the next year and a half than does CBO. The consensus forecast for growth in real GDP is 2 percent in 1995 and 2.5 percent in 1996, compared with 1.3 percent and 2.3 percent for CBO (see Table 3). Despite the different view of growth during the next two years, little difference exists between the two forecasts on inflation or the unemployment rate. Interest rates are slightly higher in the *Blue Chip* consensus. Short-term rates decline from 5.6 percent in 1995 to 5.4 percent in 1996, and long-term rates moderate from 6.7 percent in 1995 to 6.5 percent in 1996; CBO expects short-term rates to fall from 5.4 percent to 5.1 percent and long-term rates to slip from 6.5 percent to 6.4 percent between 1995 and 1996.

CBO's forecast is also similar to the forecasts of the Administration and the Federal Reserve. Both of those alternatives foresee slightly faster real growth during the next two years than CBO does, but their assumptions about inflation and the unemployment rate are quite close to CBO's.

Projection for the Years Beyond 1996

CBO projects that growth of real GDP will average 2.4 percent between 1997 and 2005 and that the rate of unemployment will hold steady at about 6 percent during the same period (see Tables 4 and 5 on pages 16 and 17). The growth of the CPI-U is projected to decline slightly during the medium term, down from

Table 3.
Comparison of Forecasts for 1995 and 1996

	Actual 1994	Forecast 1995	Forecast 1996
	Fourth Quarter to Fourth Quarter (Percentage change)		
Nominal GDP			
CBO	6.5	3.8	5.1
Blue Chip	6.5	4.3	5.4
Administration	6.5	4.7	5.5
Federal Reserve[a]	6.5	4¼ to 4¾	4¾ to 5⅜
Real GDP[b]			
CBO	4.1	1.3	2.3
Blue Chip	4.1	2.0	2.5
Administration	4.1	1.9	2.5
Federal Reserve[a]	4.1	1½ to 2	2¼ to 2¾
Implicit GDP Deflator			
CBO	2.3	2.5	2.7
Blue Chip	2.3	2.2	2.9
Administration	2.3	2.8	2.9
Federal Reserve[a]	2.3	*	*
Consumer Price Index[c]			
CBO	2.6	3.3	3.4
Blue Chip	2.6	3.3	3.4
Administration	2.6	3.2	3.2
Federal Reserve[a]	2.6	3⅛ to 3⅜	2⅞ to 3¼
	Average Level in the Fourth Quarter (Percent)		
Civilian Unemployment Rate			
CBO	5.6	5.9	6.0
Blue Chip	5.6	5.7	5.8
Administration	5.6	6.0	5.8
Federal Reserve[a]	5.6	5¾ to 6⅛	5¾ to 6⅛
	Calendar Year Average (Percent)		
Three-Month Treasury Bill Rate			
CBO	4.3	5.4	5.1
Blue Chip	4.3	5.6	5.4
Administration	4.3	5.7	5.5
Federal Reserve[a]	4.3	*	*
Ten-Year Treasury Note Rate			
CBO	7.1	6.5	6.4
Blue Chip[d]	7.1	6.7	6.5
Administration	7.1	6.6	6.8
Federal Reserve[a]	7.1	*	*

SOURCES: Congressional Budget Office; Eggert Economic Enterprises, Inc., *Blue Chip Economic Indicators* (August 10, 1995); Office of Management and Budget; Federal Reserve Board.

NOTES: * = not applicable. The *Blue Chip* forecasts through 1996 are based on a survey of 50 private forecasters.

a. The Federal Reserve figures are the ranges--known as the central tendency--that include the majority of the forecasts of Federal Open Market Committee members and other Federal Reserve Bank presidents.

b. Based on constant 1987 dollars.

c. The consumer price index for all urban consumers (CPI-U).

d. *Blue Chip* does not forecast a 10-year note rate. The values shown here for the 10-year note rate are based on the *Blue Chip* forecasts of the Aaa bond rate, adjusted by CBO to reflect the estimated spread between Aaa bonds and 10-year Treasury notes.

3.4 percent in 1996 to 3.3 percent in 1998, and 3.2 percent thereafter. Interest rates will remain steady in the years after 1996: the three-month Treasury bill rate will average 5.1 percent through 2005, and the 10-year Treasury note will average 6.7 percent during the same period.

CBO's medium-term projections do not reflect any attempt to estimate cyclical movements of the economy during the 1997-2005 period or the effects of fiscal policy on the year-to-year changes in economic activity. Instead, the projections are designed to approximate the level of economic activity on average, including the possibility of above- or below-average rates of growth, inflation, and interest. CBO uses historical relationships to identify trends in fundamental factors underlying the economy, including growth of the labor force, the rate of national saving,

Table 4.
The Economic Forecast and Projections for Calendar Years 1995 Through 2005

	Actual	Forecast		Projected								
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Nominal GDP (Billions of dollars)	6,738	7,058	7,385	7,764	8,165	8,587	9,032	9,497	9,986	10,501	11,042	11,610
Nominal GDP (Percentage change)	6.2	4.7	4.6	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Real GDP (Percentage change)[a]	4.1	2.6	1.9	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Implicit GDP Deflator (Percentage change)	2.1	2.1	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
CPI-U (Percentage change)[b]	2.6	3.1	3.4	3.4	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Unemployment Rate (Percent)	6.1	5.7	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Three-Month Treasury Bill Rate (Percent)	4.2	5.4	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Ten-Year Treasury Note Rate (Percent)	7.1	6.5	6.4	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Tax Bases (Percentage of GDP)												
Corporate profits	8.1	8.0	7.9	7.8	7.6	7.5	7.3	7.1	7.0	6.9	6.8	6.7
Other taxable income	20.2	20.7	20.5	20.4	20.4	20.4	20.4	20.5	20.5	20.5	20.5	20.5
Wage and salary disbursements	48.7	48.8	48.7	48.6	48.6	48.6	48.6	48.5	48.5	48.5	48.5	48.5
Total	76.9	77.5	77.1	76.8	76.6	76.4	76.3	76.1	76.0	75.9	75.8	75.7

SOURCE: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. Based on constant 1987 dollars.

b. CPI-U is the consumer price index for all urban consumers.

and growth of productivity. The projections of variables such as real GDP, inflation, and real interest rates are then based on their historical norms. The projections do not include the effects of policies contained in the budget resolution and are more nearly consistent with the policies embodied in CBO's baseline projections of spending and revenues.

The Projection for Growth

The forecast for economic growth during the near term leaves real GDP just below the level of potential real GDP (see Figure 11). In fact, the gap in output at the end of 1996 would be equal to the average gap that existed during the period since 1960, and that gap is held constant throughout the projection

Table 5.
The Economic Forecast and Projections for Fiscal Years 1995 Through 2005

	Actual	Forecast		Projected								
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Nominal GDP (Billions of dollars)	6,634	6,992	7,295	7,667	8,062	8,479	8,918	9,379	9,862	10,370	10,904	11,465
Nominal GDP (Percentage change)	5.9	5.4	4.3	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Real GDP (Percentage change)[a]	3.8	3.3	1.6	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Implicit GDP Deflator (Percentage change)	2.0	2.1	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
CPI-U (Percentage change)[b]	2.6	2.9	3.3	3.4	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Unemployment Rate (Percent)	6.1	5.6	5.9	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Three-Month Treasury Bill Rate (Percent)	3.7	5.5	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Ten-Year Treasury Note Rate (Percent)	6.5	6.9	6.3	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Tax Bases (Percentage of GDP)												
Corporate profits	8.1	8.1	7.9	7.9	7.7	7.5	7.3	7.2	7.0	6.9	6.8	6.7
Other taxable income	20.1	20.7	20.6	20.4	20.4	20.4	20.4	20.5	20.5	20.5	20.5	20.5
Wage and salary disbursements	48.6	48.8	48.7	48.6	48.6	48.6	48.6	48.6	48.5	48.5	48.5	48.5
Total	76.8	77.5	77.2	76.9	76.6	76.5	76.3	76.2	76.0	75.9	75.8	75.7

SOURCE: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. Based on constant 1987 dollars.

b. CPI-U is the consumer price index for all urban consumers.

period. Thus, CBO projects that real GDP will grow at the same rate as potential real GDP during the 1997-2005 period--that is, about 2.4 percent.

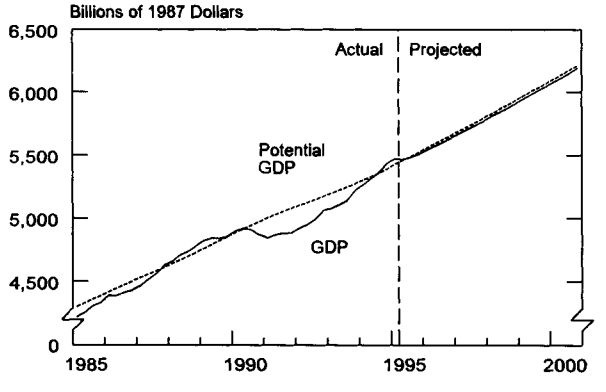
The growth of real GDP during the medium term is little changed from last winter's report because the outlook for the factors that underlie the growth of potential output are little changed. The labor force is expected to grow by 1.1 percent annually during the 1997-2005 period, about the same rate that was assumed last winter. That rate reflects an increase in the rate of labor force participation during the medium term, though at a slower rate than during the 1970s and 1980s. The rate of national saving, which averages about 13 percent of GDP during the medium term, supports a rate of capital accumulation of nearly 3 percent on average between 1997 and 2005, about the same as CBO assumed last winter. Growth of total factor productivity averages 0.7 percent a year, which is almost identical to the rate assumed last winter.

The Projection for Inflation

Since the level of real GDP is about equal to the level of potential GDP at the end of 1996, there is no further upward pressure on the rate of inflation in wages and prices. The same story is told by the unemployment gap, which is the difference in percentage points between the unemployment rate and the NAIRU. Therefore, CBO projects that the rate of inflation will remain steady during the 1997-2005 period. When measured using the implicit GDP deflator, inflation averages 2.7 percent a year and the CPI-U grows at an average rate of 3.2 percent during the period.

CBO has reduced its projection for the CPI-U by 0.2 percentage points beginning in 1998 to account for the planned rebenchmarking of the CPI-U.[3] The Bureau of Labor Statistics has announced that it will reweight the CPI-U to reflect the cost of a typical market basket of goods purchased by urban consumers during the 1993-1995 period, switching from weights computed using expenditures from the 1982-1984 period. Updating the weights in that fashion will place a heavier weight on goods with lower rates of price increase. Consequently, the new measure will grow more slowly than the old. CBO estimates that the rebenchmarking will slow the measured rate of inflation by 0.2 percentage points.

Figure 11.
GDP and Potential GDP



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

The Projection for Interest Rates

To project interest rates, CBO combines its projection for inflation with a projection of real interest rates. Real interest rates are projected to reach their long-term historical averages gradually, with an adjustment for any special factors present (or absent) that would make the 1990s different from the postwar period as a whole. Increased federal deficits and greater demand for capital among newly industrialized and newly liberalized economies are two examples of factors that tend to boost real interest rates relative to historical averages. CBO assumes that the rate on three-month Treasury bills will remain steady at 5.1 percent during the 1997-2005 period and that the rate on 10-year Treasury notes will hold at 6.7 percent. Neither assumption has changed since CBO's winter report.

3. This rebenchmarking was not included in CBO's projections from last winter but was incorporated into the economic assumptions used for the budget resolution.