EXTENDED DISCUSSION OF CBO'S JULY 1999 ECONOMIC OUTLOOK

July 1, 1999

Congress of the United States Congressional Budget Office

NOTES

Unless otherwise indicated, all years referred to in this report are calendar years.

The figures in this report use shaded vertical bars to indicate periods of recession. Those bars extend from the peak to the trough of the recession.

Unemployment rates throughout the report are calculated on the basis of the civilian labor force.

Numbers in the text and tables may not add up to totals because of rounding.

Preface

This report provides an extended discussion of the state of the economy and the latest economic forecast and projections of the Congressional Budget Office (CBO). A shorter version of the report appears in CBO's *The Economic and Budget Outlook:* An Update (July 1, 1999). In accordance with CBO's mandate to provide objective and impartial analysis, this report contains no recommendations.

The analysis was prepared by CBO's Macroeconomic Analysis Division under the direction of Robert Dennis, Kim J. Kowalewski, and John F. Peterson. David Brauer was the lead author for the report. Michael Simpson and Robert Arnold carried out the economic forecast and projections. Douglas Hamilton, Juann Hung, Mark Lasky, Randy Mariger, Angelo Mascaro, Benjamin Page, Frank Russek, Matthew Salomon, John Sturrock, and Christopher Williams contributed to the analysis. David Arnold, Ezra Finkin, and Michael Simpson provided research assistance.

An early version of the economic forecast underlying this report was discussed at a meeting of CBO's Panel of Economic Advisers on June 2, 1999. Members of the panel are Alan J. Auerbach, Martin N. Baily, Jagdish Bhagwati, Michael Boskin, Barry P. Bosworth, John Cogan, Robert Dederick, William C. Dudley, Martin Feldstein, Robert J. Gordon, David Hale, Robert E. Hall, N. Gregory Mankiw, Allan Meltzer, William Niskanen, William D. Nordhaus, June E. O'Neill, Rudolph Penner, James Poterba, Robert Reischauer, Joel Slemrod, John Taylor, and Martin B. Zimmerman. Rudy Boschwitz, John Makin, Mark McClellan, William McGuire, and Joan Trauner attended as guests. Although those outside advisers provided considerable assistance, they are not responsible for the contents of this document.

Christian Spoor edited the report, and Sherry Snyder proofread it. Kathryn Quattrone prepared the report for final publication, and Laurie Brown prepared the electronic versions for CBO's World Wide Web site (www.cbo.gov).

Dan L. Crippen Director

July 1, 1999

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Extended Discussion of CBO's July 1999 Economic Outlook

The Congressional Budget Office (CBO) now projects significantly stronger economic growth in calendar years 1999 and 2000 than it did in January, when it published its previous economic forecast. The new forecast assumes that growth in the nation's gross domestic product (GDP) will continue at about the current pace through the rest of this year but will slow in 2000 (see Table 1). Inflation, as measured by either the consumer price index or the GDP price index, is projected to increase modestly in 1999. Looking farther ahead, economic growth is projected to average 2.4 percent a year between 2001 and 2009, about 0.1 percentage point higher than CBO previously estimated.

Over the past three years, the economy has repeatedly grown faster, and inflation has been lower, than most forecasters anticipated. In early 1996, CBO, the Federal Reserve, and the *Blue Chip* consensus of private economic forecasters foresaw a period of moderate growth of about 2 percent a year along with a stable inflation rate of around 3 percent. The predominant view in 1996 was that the Federal Reserve would successfully engineer a soft landing for the economy and that the unemployment rate would settle in at roughly 5.5 percent. In fact, growth has averaged about 4 percent, the inflation rate has fallen, and the unemployment rate reached a 29-year low of 4.2 percent in May.

Much of that favorable situation has resulted from atypical performances in productivity and com-

pensation, the U.S. economy's response to international developments, and the surge in stock market prices. However, as the Chairman of the Federal Reserve, Alan Greenspan, told the Joint Economic Committee in June, the recent pace of growth in demand and output cannot be sustained indefinitely. In particular, although productivity growth accounted for almost 2 percentage points of economic growth over the past three years, and growth in the working-age population for about another percentage point, the rest is attributable to a higher rate of employment. In that view, because labor markets are already extremely tight, employment cannot grow at the same pace much longer without raising serious concerns about inflation. More generally, uncertainty about how long recent atypical developments will persist creates uncertainty about the forecast.

The Forecast for 1999 and 2000

CBO expects growth in output (GDP) to slow and inflation to rise through the end of 2000. Continued rapid growth this year, combined with expectations of higher inflation, is likely to prompt the Federal Reserve to increase the federal funds rate (the overnight interest rate that banks charge one another). Such an increase will help slow the economy next year and cap the inflation rate.

Real (inflation-adjusted) GDP grew at an annualized rate of 4.3 percent in the first quarter of 1999 and shows few signs of slowing. Strong growth is projected to continue in the near term for a number of reasons. First, although CBO expects the growth of consumer spending to slow from its recent breakneck pace, strong incomes and the lingering effects of the increase in wealth from rising stock prices will keep the growth of real consumption robust for the rest of 1999, at roughly 3.5 percent. Second, businesses' investment spending will probably continue at a rapid pace as the cost of capital remains fairly low and companies substitute productivity-enhancing capital equipment for increasingly scarce labor. Third, concerns about the Year 2000 (Y2K) computer problem may also spur growth in 1999 as businesses stockpile inventories in anticipation of possible disruptions in their supply. In the other direction, residential construction is likely to slow in response to higher mortgage rates this spring and perhaps to shortages of construction labor and materials.

Long-term interest rates have risen sharply in recent weeks, and prices in the futures market for federal funds suggest that the Federal Reserve will tighten its monetary policy in the next several months. Last fall, concern that dislocations in financial markets would stall the U.S. economy and threaten global recession prompted the Federal Reserve to reduce the target federal funds rate by 75 basis points (0.75 percentage points). The easing of the Asian crisis and of financial-market problems has mostly removed those concerns. Following the May 18 meeting of the Federal Open Market Committee, the Federal Reserve announced that it was leaning toward monetary tightening, citing "ongoing strength in demand" and "the

Actual	Fore	cast
1998	1999	2000
Fourth Quarter to Fourth Qua (Percentage change)	irter	
5.2	5.2	4.0
		2.1
		1.9
1.5	2.5	2.4
Calendar Year Average (Percent)		
3.9	4.0	2.4
4.5	4.2	4.3
4.8	4.6	5.0
5.3	5.6	5.9
	1998 Fourth Quarter to Fourth Qua (Percentage change) 5.2 4.3 0.9 1.5 Calendar Year Average (Percent) 3.9 4.5 4.8	1998 1999 Fourth Quarter to Fourth Quarter (Percentage change) 5.2 5.2 4.3 3.6 0.9 1.6 1.5 2.5 Calendar Year Average (Percent) 3.9 4.0 4.5 4.2 4.8 4.6

Table 1. The CBO Forecast for 1999 and 2000

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

a. Based on chained 1992 dollars.

b. The GDP price index is virtually the same as the implicit GDP deflator.

c. The consumer price index for all urban consumers.

Table 2.

Comparison of the CBO Economic Projections for Calendar Years 1999-2009

	Actual	Forecast		Projected								
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Nominal GDP (Billions of dollars) July 1999 January 1999	8,511 8,499ª	8,964 8,846	9,351 9,182								13,113 13,089	
Nominal GDP (Percentage change) July 1999 January 1999	4.9 4.8 ^ª	5.3 4.1	4.3 3.8	4.3 4.3	4.2 4.5	4.2 4.6	4.2 4.6	4.4 4.6	4.4 4.6	4.5 4.5	4.5 4.5	4.4 4.4
Real GDP (Percentage change) July 1999 January 1999	3.9 3.7ª	4.0 2.3	2.4 1.7	2.4 2.2	2.3 2.4	2.3 2.4	2.3 2.4	2.5 2.4	2.5 2.4	2.5 2.3	2.5 2.3	2.5 2.3
GDP Price Index ^b (Percentage change) July 1999 January 1999	1.0 1.0ª	1.3 1.7	1.8 2.0	1.8 2.1	1.8 2.1	1.8 2.1	1.8 2.1	1.9 2.1	1.9 2.1	1.9 2.1	1.9 2.1	1.9 2.1
Consumer Price Index ^c (Percentage change) July 1999 January 1999	1.6 1.6	2.2 2.5	2.5 2.6	2.5 2.6	2.5 2.6	2.5 2.6	2.5 2.6	2.5 2.6	2.5 2.6	2.5 2.6	2.5 2.6	2.5 2.6
Unemployment Rate (Percent) July 1999 January 1999	4.5 4.5	4.2 4.6	4.3 5.1	4.6 5.4	4.9 5.6	5.1 5.7	5.3 5.7	5.4 5.7	5.5 5.7	5.5 5.7	5.5 5.7	5.5 5.7
Three-Month Treasury Bill Rate (Percent) July 1999 January 1999	4.8 4.8	4.6 4.5	5.0 4.5	4.6 4.5	4.5 4.5	4.5 4.5	4.5 4.5	4.5 4.5	4.5 4.5	4.5 4.5	4.5 4.5	4.5 4.5
Ten-Year Treasury Note Rate (Percent) July 1999 January 1999	5.3 5.3	5.6 5.1	5.9 5.3	5.5 5.4	5.4 5.4	5.4 5.4	5.4 5.4	5.4 5.4	5.4 5.4	5.4 5.4	5.4 5.4	5.4 5.4
Tax Bases (Percentage of GDP) Corporate profits July 1999 January 1999 Wages and salaries	8.4 8.5	8.1 8.1	7.3 7.4	7.4 7.6	7.5 7.7	7.4 7.8	7.4 7.9	7.3 7.9	7.3 7.9	7.3 7.8	7.2 7.7	7.2 7.5
July 1999 January 1999	48.8 48.8	49.2 49.3	49.5 49.7	49.3 49.5	49.2 49.3	49.2 49.2		49.3 49.1	49.3 49.1	49.3 49.1	49.3 49.1	49.3 49.1

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

NOTE: Percentage change is year over year. Corporate profits are book profits.

a. Based on data for the first three quarters of 1998 published November 24, 1998.

b. The GDP price index is virtually the same as the implicit GDP deflator.

c. The consumer price index for all urban consumers.

Table 3.

The CBO Economic Projections for Fiscal Years 1999-2009

	Actual	Fore	cast	Projected								
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Nominal GDP (Billions of dollars)	8,404	8,851	9,259	9,652	10,055	10,476	10,913	11,385	11,887	12,418	12,972	13,547
Nominal GDP (Percentage change)	5.0	5.3	4.6	4.2	4.2	4.2	4.2	4.3	4.4	4.5	4.5	4.4
Real GDP (Percentage change)	3.8	4.1	2.8	2.3	2.3	2.3	2.3	2.4	2.5	2.5	2.5	2.5
GDP Price Index ^a (Percentage change)	1.2	1.1	1.8	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9
Consumer Price Index ^b (Percentage change)	1.6	1.9	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Unemployment Rate (Percent)	4.6	4.3	4.2	4.5	4.8	5.1	5.3	5.4	5.5	5.5	5.5	5.5
Three-Month Treasury Bill Rate (Percent)	5.0	4.5	5.0	4.8	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Ten-Year Treasury Note Rate (Percent)	5.6	5.2	5.9	5.6	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Tax Bases (Percentage of GDP) Corporate profits Wages and salaries	8.6 48.6	8.2 49.1	7.5 49.5	7.4 49.4	7.5 49.2	7.4 49.2	7.4 49.2	7.3 49.3	7.3 49.3	7.3 49.3	7.3 49.3	7.2 49.3

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

NOTE: Percentage change is year over year. Corporate profits are book profits.

a. The GDP price index is virtually the same as the implicit GDP deflator.

b. The consumer price index for all urban consumers.

potential for a buildup of inflationary imbalances." CBO's forecast assumes that the federal funds rate will be raised by a total of 50 basis points in 1999. That assumption is reflected in the increase in CBO's forecast for interest rates on three-month Treasury bills (see Tables 2 and 3).¹

Higher interest rates will slow the economy in 2000 through several channels. CBO anticipates a pronounced slowdown in fixed investment, especially in residential construction. At the same time, with interest rates rising and greater growth in compensation putting pressure on profits, stock prices are unlikely to continue increasing at the rate of the past several years. Consequently, the boost to consumer spending from higher stock prices should gradually diminish. Higher interest rates will also help keep the dollar strong; thus, the trade deficit will most likely

^{1.} CBO's forecast and the discussion above were produced before the June 29-30 meeting of the Federal Open Market Committee.

remain a drag on U.S. output in 2000. In addition, any excess inventory buildup related to Y2K fears will need to be worked off. For all of those reasons, CBO anticipates that growth of real GDP will slow from 4 percent in 1999 to 2.4 percent next year.

Inflation is forecast to rise modestly in both 1999 and 2000, in part because of higher energy prices. In addition, prices of imports other than oil, which have declined during the past two years, and prices for medical care, which have helped keep inflation down in recent years, may reverse course. And with labor markets still exceptionally tight, growth in compensation is likely to speed up.

The Outlook After 2000

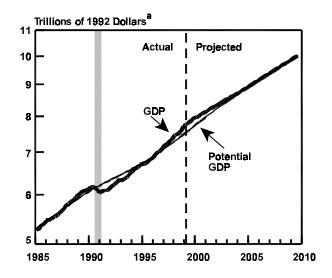
CBO does not forecast the ups and downs of the economy more than two years ahead. Its projections beyond that period simply extend historical patterns in the factors that underlie the trend growth of real GDP —factors such as the growth of the labor force, the growth of productivity, and the rate of national saving (see Table 4). Rapid growth in the past three years has driven real GDP above CBO's estimate of potential GDP (the highest level of real GDP that could persist for a substantial period without raising the rate of inflation). Therefore, CBO assumes that real GDP will grow more slowly than potential GDP after 2000 to close the gap between the two and reduce inflationary pressures (see Figure 1).

The current projection for growth of potential GDP—about 2.7 percent a year through 2009—is roughly 0.2 percentage points higher than CBO estimated in January. Half of that difference results from faster projected growth in the capital stock (4.1 percent, up from 3.8 percent last winter) caused by a higher projected rate of business investment that partly reflects larger budget surpluses.

The other half stems from two additional factors. First, CBO has revised its estimate of the technical adjustment that it incorporates into its projections to account for methodological changes to various price indexes. That adjustment reflects the effect that changes in the methods used to calculate the CPI and the price indexes based on the national income and product accounts will have on inflation and growth of real GDP. Such changes reduce the measured rate of inflation without affecting nominal GDP, thus raising the growth of real GDP. CBO has increased its estimate of the technical adjustment by less than 0.1 percentage point a year, on average, for the 1999-2009 period.

Second, CBO has raised its projection of the growth of total factor productivity slightly to reflect the possibility that part of the recent boom in such growth may be permanent. (The growth of total factor productivity is the growth of output beyond that accounted for by the growth of labor and capital.) Some analysts have argued that the spread of free-market principles around the world, the increase in international trade, the rapid pace of investment in computers and information technology, and the apparent increase in the ability and motivation of managers to innovate will foster stronger productivity growth for years to come. Although those arguments rely on anecdotal evidence, there are few corresponding arguments that

Figure 1. GDP and Potential GDP



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

NOTE: Values are plotted using a logarithmic scale.

a. Chain weighted.

Table 4.

Key Assumptions for the CBO Projection of Potential Output (By calendar year)

	Average Annual Growth Rate (Percent)								
	1949- 1998	1949- 1960	1960- 1969	1969- 1980	1980- 1990	1990- 1998	1998-2009 (Projection)		
		Overall Ec	onomy						
Working-Age Population	1.3	0.8	1.4	2.0	1.1	1.0	1.0		
Potential Labor Force	1.7	1.0	1.6	2.7	1.6	1.1	1.0		
Potential Labor Force Productivity ^a Excluding new price indexes Effect of new price indexes	1.6 1.6 n.a.	2.7 2.7 n.a.	2.4 2.5 n.a.	0.6 0.6 n.a.	1.0 1.0 n.a.	1.2 1.0 0.1	1.7 1.4 0.3		
Potential Real GDP	3.3	3.8	4.1	3.3	2.6	2.4	2.8		
Real GDP	3.4	3.9	4.6	2.8	2.9	2.6	2.6		
	Non	farm Busir	ness Secto	r					
Potential Employment	1.8	1.2	1.7	2.8	1.7	1.4	1.1		
Potential Hours Worked	1.5	1.0	1.3	2.1	1.6	1.4	1.1		
Capital Input	3.7	3.4	4.3	4.1	3.6	3.1	4.1		
Potential Total Factor Productivity	1.3	2.0	2.0	1.1	0.5	0.7	1.1		
Potential Labor Force Productivity ^b Excluding new price indexes Effect of new price indexes	1.9 1.9 n.a.	2.7 2.7 n.a.	2.9 2.9 n.a.	1.7 1.7 n.a.	1.0 1.0 n.a.	1.3 1.1 0.2	2.0 1.5 0.5		
Potential Real Output	3.5	3.8	4.3	3.8	2.7	2.7	3.1		

SOURCE: Congressional Budget Office using data from the Department of Labor, Bureau of Labor Statistics, and the Department of Commerce, Bureau of Economic Analysis.

NOTES: The years marking the ends of historical periods (except 1998) are years in which the business cycle peaked.

n.a. = not applicable.

a. Growth in potential output per labor force member.

b. Growth in potential output per hour in the nonfarm business sector.

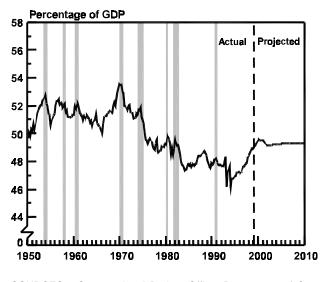
would imply slower productivity growth. Thus, CBO has assumed a small increase in productivity growth above and beyond the effects of measurement changes and faster growth of the capital stock.

Taxable Income

Projections of federal revenue are closely linked to projections of national income. However, different components of income are taxed at different rates, and some are not taxed at all. Thus, the distribution of national income among its various components is one of the most important parts of CBO's economic projections. Wage and salary disbursements and corporate profits are of special interest because they are taxed at the highest effective rates. Together, the share of GDP that those two sources of income represent is expected to decline by about 0.8 percentage points between 1999 and 2009 (see Tables 2 and 3).

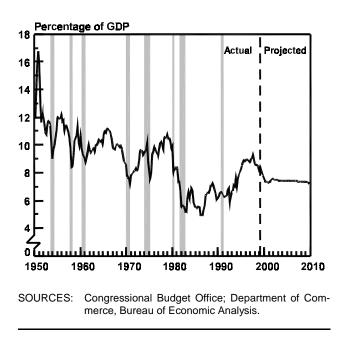
In response to tight labor markets, wage and salary disbursements are forecast to rise slightly as a percentage of GDP—reaching 49.5 percent in 2000. They are then projected to decline slightly—to an av-





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

Figure 3. Corporate Book Profits



erage of about 49.3 percent from 2001 through 2009 —as gains in compensation relative to productivity diminish (see Figure 2).

CBO projects that corporate profits (measured as book profits) will decline as a share of GDP as the economy slows, falling from 8.1 percent in 1999 to 7.3 percent in 2000 and then averaging 7.3 percent through 2009 (see Figure 3). Profits' share of GDP rose dramatically between 1992 and 1997. Although it eased back in 1998, it is still high compared with the average of the past 20 years. The recent increase stemmed from a sharp drop in interest expenses and the initial slow response of compensation growth to the pickup of productivity growth. Compensation started to catch up with productivity gains during 1998, weakening the profit share. That trend is likely to continue to put downward pressure on profits through 2000.

An increase in depreciation charges will also reduce book profits during the projection period. Corporations can deduct depreciation of plant and equipment from earnings in calculating their tax liability. The rapid increase in investment in recent years and the high level of investment throughout the projection period increase depreciation charges relative to earnings. Therefore, the profits on which corporate taxes are based tend to fall as a share of GDP.

The State of the Economy

The U.S. economy has far outperformed the expectations of economists since 1996. Early that year, when the unemployment rate had fallen to 5.5 percent and inflation was about 3 percent, economists generally thought that the labor market was near the point at which inflationary pressures were likely to build. Forecasts made at that time for the next three years predicted stable unemployment and inflation, with real growth averaging about 2 percent a year—considered then to be the growth rate that could be maintained without exacerbating inflation. In actuality, the economy grew much more rapidly than that without any pickup in inflation. Growth averaged almost 4 percent, and the underlying rate of inflation eased to roughly 2.2 percent by the end of 1998.

Similarly, late last year the consensus forecast for 1999 was for 2.2 percent real growth and 2.2 percent inflation. So far this year, growth has been significantly higher than forecast, with only faint signs of an increase in the underlying rate of inflation.

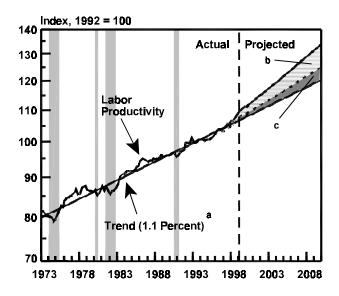
With the benefit of hindsight, much of that unexpected good fortune can be explained, but uncertainty remains about the implications of the recent performance for the future. The low-inflation, high-growth experience since 1996 has stemmed in part from unexpectedly strong growth in investment, as well as from changes in the way inflation is measured.² But those factors do not explain all of the improvement. There have also been atypical patterns in productivity growth, the response of compensation growth to low

unemployment, the effect on the United States of weak economies abroad, and the behavior of the stock market. The extent to which the economy will continue to post high growth with low inflation depends crucially on how long those atypical patterns will persist.

Strong Productivity Growth

Productivity growth has followed an unusual pattern during the current economic expansion, with the strong gains that are typical early in an expansion followed by an atypical stagnation in the 1993-1995 period and a surge since early 1996. Between the first quarter of 1996 and the first quarter of 1999, output per hour in the nonfarm business sector rose at an average rate of 2.0 percent a year, compared with trend growth since 1973 of 1.1 percent (see Figure 4).

Figure 4. Factors Affecting Labor Productivity



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

NOTE: Values are plotted using a logarithmic scale.

- Computed over the 1973-1998 period using data that exclude the effect of changes in the measurement of inflation beginning in 1993.
- b. The effect of changes in the measurement of inflation.
- c. The effect of capital deepening and the possibility of faster trend growth.

^{2.} Changes in the methods for measuring inflation have tended to reduce the growth of the consumer price index and, to a lesser extent, the GDP price index over the past three years. The Bureau of Labor Statistics made various improvements to the CPI that, together with the 1998 update of expenditure weights, lowered its growth rate by about 0.7 percentage points by 1999 from what the former methods would have generated. Those improvements lowered growth of the GDP price index (which uses CPI data for only some of its components) by about 0.3 percentage points. The GDP price index was also affected by changes in price measurement unrelated to the CPI, which reduced its growth by almost another 0.1 percentage point.

The fact that productivity growth has exceeded its trend for such a sustained period this late in an expansion has led some observers to conclude that the economy has entered a "new era"—driven by advances in computers, telecommunications, and managers' heightened awareness of the need and opportunity to cut production costs. On a number of occasions in the past, productivity growth exceeded its trend for a time, yet a permanently higher trend did not materialize. Nevertheless, the extent to which the recent surge in productivity growth may be temporary or permanent remains an open question.

Some of the recent improvement in productivity growth can be readily explained. One important factor is the surprise in output growth during the past three years. Over the short run, productivity growth tends to move with changes in demand. In addition, about 0.3 percentage points of the surge since 1995 can be directly attributed to the effects of changes in the measurement of inflation. Finally, the rapid pace of investment and consequent deepening of the capital stock since 1995 also account for some of the increase. Although investment growth slows somewhat in CBO's forecast, capital deepening continues, boosting growth in labor productivity slightly during the 1999-2009 period (see Figure 4).

A part of the recent increase, however, may well stem from fundamental improvements that will persist for many years. The spread of free-market principles, the expansion of international trade, the more widespread adoption of computers and other technological advances, and a greater emphasis on cost-cutting on the part of managers may imply not only a continuation of the current rate of productivity growth but perhaps even an acceleration. Another possibility is that a number of one-time supply-side changes (such as improvements in communications that permit greater use of just-in-time inventory management and give businesses greater flexibility in pricing and the use of capital) have temporarily allowed productivity growth to exceed its trend. If so, the resulting higher level may be sustained even if the growth rate eventually reverts to a somewhat slower pace.

Moderate Compensation Growth

Another unusual aspect of the past three years has been the subdued response of growth in hourly compensation to tight labor markets: the growth of benefits has been surprisingly low throughout the period, and the growth of wages unexpectedly weak during late 1998 and early 1999.

Until fairly recently, wage growth largely conformed to economists' expectations. It accelerated in 1996 as the unemployment rate fell below the level generally accepted as the point at which wage pressures would build. Since the middle of 1998, however, nominal wage growth has actually decelerated even though the unemployment rate has continued to fall. The employment cost index for wages and salaries in private industry rose by just 3.3 percent between the first quarter of 1998 and the first quarter of 1999, down from 4.0 percent in the previous year. Other wage measures also showed some deceleration in recent quarters.

Even though wage growth was accelerating through mid-1998, extremely slow growth in benefits slowed the acceleration of total compensation growth. The cost of employer-financed health insurance eased, apparently because of structural changes in the provision of medical care. In addition, the rising stock market made it easier for employers to meet their pension obligations by letting them reduce contributions to defined benefit plans. Over the past few quarters, the cost of employer-financed health insurance has begun to rise for the first time in several years. Nonetheless, growth in overall benefits has not accelerated, so the slowing in wage growth has translated directly into slower compensation growth.

Some analysts argue that inflation is unlikely to rise rapidly in the near future even though the unemployment rate is low because the labor market may have changed. For one thing, they argue, the jobmatching process has become more efficient through increased use of temporary-help services to screen prospective workers. For another thing, tight labor markets themselves have beneficial effects. Some evidence suggests that previously hard-to-employ individuals—especially unmarried mothers of young children and unskilled men living in depressed inner cities —have been able to find steady employment during the current expansion to a greater extent than in the 1970s and 1980s, which could make them permanently more attractive to prospective employers.³

Although those arguments are plausible, little direct evidence yet exists to support the contention that the current low unemployment rate is not putting upward pressure on wages and prices. In fact, even with the recent deceleration, workers at all earnings levels have experienced significant inflation-adjusted wage gains over the past few years. Thus, a possible source of the recent slowdown in nominal compensation growth is the deceleration in inflation. If so, given the low level of unemployment, the recent slowdown in compensation growth could prove temporary.

International Developments

In addition to the surprising surge in productivity and the moderate response of compensation, the U.S. economy appears to have benefited, at least temporarily, from the turbulence in foreign financial markets in 1997 and 1998. The turbulence did lead to weak foreign growth and a strong dollar, which caused the U.S. trade deficit to widen substantially (from 1.1 percent of GDP in the first half of 1997 to 2.3 percent in the first quarter of 1999) and hurt the agricultural and manufacturing sectors. On balance, however, the drag from the larger trade deficit has so far been more than offset by the beneficial effects of lower inflation and interest rates. Lower commodity prices and the appreciation of the dollar have dampened inflation. Weak economic conditions abroad have helped keep the cost of capital low, thus sustaining the boom in investment and housing. And lower risk-adjusted rates of return on foreign assets—a by-product of excess capacity and heightened uncertainty abroad—have triggered a capital inflow into the United States, reducing longterm interest rates on Treasury securities and other high-quality debt and reinforcing downward pressures on the cost of capital.

In addition, the main reasons that the Federal Reserve lowered the federal funds rate by 75 basis points last fall were fear of impending global financial meltdown after Russia defaulted on its debt in August and the widening of interest rate spreads between risky and less-risky assets in U.S. markets. That reduction in interest rates further stimulated both business and housing investment. Risk spreads have retreated somewhat from their crisis levels, and long-term interest rates have risen.

Corporate Profits and the Stock Market

The surge in productivity growth and the subdued response of compensation growth buoyed corporate profits in 1996 and 1997, setting off a "virtuous circle" of growth. The higher-than-expected profits encouraged greater investment and higher stock market valuations, which in turn may have reduced the cost of capital. Households' equity wealth has more than doubled since the end of 1994, from \$4.5 trillion to \$10.8 trillion at the end of 1998. That surge has undoubtedly boosted real growth in consumer spending over the past few years, perhaps by 1 or more percentage points annually, as well as contributed to the housing boom.

The performance of the stock market in 1998 was especially surprising. Equities continued to appreciate even though growth in corporate earnings slowed dramatically. In fact, earnings of the companies in the Standard & Poor's 500 fell throughout 1998. Optimism about future earnings, expectations of lower interest rates, or a reduced aversion to risk may all have contributed to the stock market's strong performance. But many analysts are concerned that the market is vulnerable to a sharp correction.

Richard B. Freeman and William M. Rodgers III, Area Economic Conditions and the Labor Market Outcomes of Young Men in the 1990s Expansion, Working Paper No. W7073 (Cambridge, Mass.: National Bureau of Economic Research, April 1999).

Potential Sources of Uncertainty in CBO's Forecast

This economic outlook reflects CBO's view of the likely cyclical developments over the near term. It assumes that the experience of the 1996-1998 period (4 percent growth with gradually declining inflation) will not continue through the end of 2000. Instead, CBO predicts that compensation growth and inflation will increase gradually in the face of continued rapid economic growth this year and that GDP growth will slow in 2000. The *Blue Chip* consensus forecast is quite similar, with growth slowing to 2.5 percent in 2000 and inflation rising slightly. And recent statements by Federal Reserve Chairman Greenspan indicate concerns about developing imbalances that risk awakening inflation.

The actual outcome could deviate from that forecast, however, for a number of reasons. Some of them imply more optimistic outcomes—just as the past three years have turned out better than anticipated and some imply a worse combination of growth and inflation than CBO's forecast indicates.

On one hand, if the recent productivity surge reflects significantly greater changes in the underlying trend in U.S. productivity growth than CBO anticipates, and if the growth of real compensation per hour remains below productivity growth, the economy may be able to expand faster than 3 percent for many more years without a significant increase in inflation. Under such circumstances, long-term interest rates might drift downward from their recent uptick, and the Federal Reserve would not feel the need to raise rates further. Profit growth, stock market prices, and investment could remain quite strong, supporting robust economic growth through the end of 2000 and beyond.

On the other hand, CBO's assumption of 2 percent trend growth in productivity may be too high. If most of the recent surge is a temporary, cyclical response to the rapid increase in demand, then inflationary pressures and the outlook for profits may be worse than CBO is forecasting.

Similarly, the growth of compensation may remain subdued, or it may increase rapidly because of extremely tight labor markets and rising health care costs. CBO's forecast assumes that real compensation growth is only slightly greater than productivity growth for a few years. If it greatly exceeds productivity growth, however, inflation may increase more than anticipated.

An unwinding of the factors that have promoted strong, low-inflation growth may also cause a decline or persistent weakness in the stock market. A number of observers believe stock prices are substantially overvalued, and lower profits plus higher inflation and interest rates in the second half of this year could weaken the market severely. A significant correction could result in slower growth in consumer spending than CBO now envisions. It would also adversely affect housing markets.

Alternatively, a recession could arise through a more traditional boom-bust scenario, as greater-thananticipated growth (both at home and abroad) boosted inflation. That could lead the Federal Reserve to tighten its monetary policy aggressively, pushing the economy into recession. However, that scenario is less likely to result in recession this year or next year than in 2001 or later.