State of the U.S. Economy

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I'm delighted to once again participate in an AAIM program. These sessions always help me to pull together my thinking and, I hope, to convey some useful information to you as well.

About 14 months ago, if you'll recall, I spoke to AAIM on my outlook for the U.S. economy in 2003. At that time, there remained considerable uncertainty about the likely course of the economy. The uncertainty stemmed from several developments that had buffeted the economy over the previous couple of years. These included the stock market bust, the 2001 recession, the terrible events of 9/11, the war in Afghanistan and prospect of war in Iraq, rising energy prices and several corporate governance scandals. Despite the fact that these shocks put the economy through a wringer, I and most of my colleagues thought that the nation's economy was in the process of transitioning from a period of recession and slow growth to a period of solid and sustained economic growth. The economy enjoyed a firm foundation built upon low and stable inflation and strong productivity growth.

In fact, the economy did enjoy healthy growth last year. The real surprise was unusually high productivity growth and disappointingly slow employment growth. We should never complain about robust productivity growth; we can and should complain that output growth was not rapid enough, given the productivity growth, to yield robust job growth.

In my remarks today, I will review some of last year's key developments. I'll then turn to a framework that I find helpful in thinking about the outlook. This framework, known as growth accounting, is especially helpful at this juncture because it allows us to sort through some of the current tensions in the data that have spurred a lot of discussion. I'll then conclude with a few brief remarks about the inflation outlook and how the Federal Open Market Committee (FOMC) can best ensure that our economy grows at its maximum sustainable rate of growth with low and stable inflation.

Before proceeding, I want to emphasize that the views I express here are mine and do not necessarily reflect official positions of the Federal Reserve System. I thank my colleagues at the Federal Reserve Bank of St. Louis for their comments. Kevin Kliesen provided especially valuable assistance. However, I retain full responsibility for any errors.

A LOOK BACK AT 2003

In many respects, 2003 was a fine year for the U.S. economy. Compared to 2002, economic growth was stronger and inflation slightly lower. Moreover, corporate profits rose sharply and, in response, the stock market rallied convincingly. Through it all, nominal interest rates declined modestly and the growth rate of labor productivity rose for the third straight year, registering its quickest pace since 1965.

If I had known these outcomes at the beginning of 2003, I would have expected a fairly brisk upswing in private-sector employment. Alas, as we all know by now, that was not the case, as the labor market continued to confound forecasters and economists. Productivity growth was not just strong but almost off the charts. As a consequence, employment gains were minimal, as they have been since the trough of the recession in November 2001. Whether measured by the number of jobs, as reported in the establishment survey, or by the number of people working, as reported in the household survey, employment did not keep pace with estimated population growth. I'll talk a bit more about this development later. For now, let me turn to some of the key developments that occurred last year, and whether they might similarly affect economic activity this year.

About this time last year, the consensus of private-sector forecasters, and of the Presidents and Governors of the FOMC, was that real GDP would increase by a bit more than 3¼ percent from the fourth quarter of 2002 to the fourth quarter of 2003, after increasing about 2¾ percent in 2002.[1] Given the fairly sharp downturn in real business fixed investment between the fourth quarter of 2000 and the fourth quarter of 2002 (12.75 percent), many economists believed that a key element underpinning the forecast for 2003 was an upturn in business capital spending. While adverse shocks had restrained the pace of business purchases of capital goods since late 2000, forecasters agreed that the economy would continue to underperform unless firms were willing to commit scarce resources to replacing or upgrading their plant and equipment.

In the first quarter of 2003, real business fixed investment continued to decline. In hindsight, it appeared that some industries were still working through excesses that had built up over the prior few years. Investment spending was also constrained by an abundance of business caution. Although consumer expenditures over the first half of 2003 were increasing modestly faster than they were over the last half of 2002, households were also exhibiting an unusual degree of caution over the first half of the year. With expenditures by consumers and businesses relatively weak, real GDP growth remained disappointing, turning in gains of 2.0 and 3.1 percent at an annual rate in the first and second quarters of 2003, respectively.

Beginning around mid-year, economic conditions started to improve. As many had hoped and expected, the pace of business fixed investment began to pick up noticeably, as did the pace of consumer spending. For the year, real expenditures on equipment and software rose nearly 9 percent, which was about what the Blue Chip Consensus had expected. However, contrary to expectations, business outlays for structures fell for the third consecutive year. Also helping to boost economic growth was a sharp upturn in exports of goods and services. In all, with the pace of output growth rising to more than a 6 percent rate over the last half of the year, real GDP is estimated to have increased 4.3 percent over the four quarters of 2003, noticeably faster than had been expected at the beginning of the year. Even more impressive, this gain was all in final sales, as inventory investment declined modestly.

The roughly 1 percentage-point difference between what the consensus of the FOMC and private-sector forecasters expected for 2003 and what actually happened can be traced, in large part, to a few key developments. First, real consumer expenditures on durable goods were much stronger than expected. In particular, helped by generous incentives, sales of new cars and light trucks stayed above 16 million units for the fifth straight year. Second, to the surprise of many, the housing industry continued to power ahead. According to the Blue Chip Consensus at the end of 2002, growth of real residential fixed investment was expected to decelerate from about 7 percent in 2002 to around 2 percent in 2003. Instead, real housing expenditures increased by a bit more than 10 percent, as new home sales reached a record high for the third straight year. Finally, the economy received a boost from larger-than-expected increases in real federal defense expenditures.

While it is possible that future data revisions will change the pattern of economic growth in 2003, what matters for our purposes today is why

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1 Private-sector forecasts for 2003 are taken from the December 2002 Blue Chip Econometric Detail. The FOMC projections for 2003 were published in the *Monetary Report to the Congress*, which was released on February 11, 2003.

last year's forecast went astray. However, I do want to emphasize that the size of the forecast error was well within normal bounds. Although identifying the size of the consensus forecast error is straightforward, pinning down the exact reason why the forecast went off track is not so easy. Nor is it easy to determine whether the forces that produced these errors can be expected to have similar influences this year.

Clearly, the most significant unexpected development in 2003 was the continued strong growth of labor productivity. The Blue Chip Consensus projected that the annualized growth of output per hour in the nonfarm business sector would average 2 percent over the four quarters of 2003. Instead, labor productivity growth averaged 5¼ percent, a large forecast error. Faster growth of labor productivity not only kept real after-tax income growth at elevated rates, which boosted consumer expenditures, but it helped to keep aggregate price pressures at bay. As core inflation rates drifted lower in 2003 compared with 2002, nominal interest rates did as well. Besides the obvious benefits to the housing sector, and to the producers of big-ticket items like motor vehicles and appliances, households and businesses also benefited from lower interest rates by refinancing outstanding debt.

But perhaps the most important influence of strong productivity growth on the economy over the past couple of years has been on the domestic labor market. Let me now turn to the second part of my talk to discuss this important issue.

A FRAMEWORK FOR THINKING ABOUT THE OUTLOOK

When people ask me about my outlook for the economy, I emphasize that my views are largely informed by looking at a consensus of several forecasts. As an informed consumer, however, I do not buy the product uncritically. Besides examining the usual forecast detail concerning expectations for major components of GDP, I often find it useful to employ a simple growth accounting framework, which emphasizes the supply side of the economy. In its condensed form, this framework relates the growth of labor input to the growth of real GDP. Labor input is analyzed by starting with growth in the working age civilian population. Then, we calculate the percentage of the working age population that is employed. Finally, we examine the hours each worker puts in. The relationship between the output variable and the labor hours input variable is the growth of labor productivity—output per hour in the nonfarm business sector. Each year, the *Economic Report of the President* publishes such a table.

This simple framework is especially useful when analyzing economic conditions today, since it reminds us that economic growth ultimately is a function of employment (or aggregate hours worked) and how productive those workers are. From the fourth quarter of 2002 to fourth quarter of 2003, total hours worked—which is simply the number of jobs times the average number of hours worked at each job—declined 0.9 percent. This was the third consecutive yearly decline in hours worked, something not seen since 1980-82. However, since real GDP continued to increase, it follows that economic growth over this period resulted from ever faster increases in labor productivity growth.

As an aside, one of the conundrums in the data of late has been the divergence between the two primary measures of employment, as reported on the first Friday of each month by the Bureau of Labor Statistics. Briefly, one survey—the household survey—counts the number of people employed. The other survey—the establishment survey—counts the number of jobs. The two surveys do not come up with the same count for several reasons. One, for example, is that some people hold more than one job for pay, and therefore appear more than once in the establishment survey but only once in the household survey. Over time, however, the two measures tend to track each other fairly closely.

But since November 2001, establishment employment has declined a little more than 0.75 percent, while household employment has increased a little more than 1.5 percent. While this discrepancy has generated many more questions than answers, both surveys nevertheless show that the labor market remains unusually weak at this stage of the business cycle compared with the norm.

Most economists view the payroll estimate as the more reliable of the two employment measures. Still, until we see future data revisions or satisfactory explanations of the divergence of the two employment measures that resolve the unusual discrepancy, it is appropriate to withhold firm judgments on some issues, especially those related to likely future productivity growth trends.

In any event, it is hard to escape the conclusion that in 2003 firms in the aggregate were still unwilling to compete aggressively in the labor market because they continued to reap impressive productivity gains from their existing stocks of labor and capital. What we do not know is whether firms had excess labor which is now becoming more fully utilized or whether underlying productivity growth is now higher. For example, if Firm XYZ had underutilized workers it might be able to produce 20 widgets per worker hour quite easily whereas it had been producing 15 per hour. However, if demand rises further it might not be easy to produce 25 widgets per hour, and the firm would have to add workers to meet higher demand. On the other hand, if structural productivity growth is now on a new higher growth track, then higher demand might be met with the same number of workers producing ever more widgets per hour. Data showing that output per hour rose last year from 15 to 20 widgets just does not distinguish between these two explanations.

In the aggregate, then, it's not that productivity growth is too high; the issue is simply that real GDP growth is not strong enough to generate new jobs given that productivity growth. As a matter of arithmetic, unless we see real GDP growth in excess of labor productivity growth on a sustained basis, we won't see much job creation.

OUTLOOK FOR 2004

I do not remember a time in my professional life when uncertainty about productivity growth played such a large role in uncertainty about employment growth. Usually, uncertainty about employment growth is a consequence of uncertainty about GDP growth. Certainly, we are faced with the usual uncertainty about GDP growth but now the productivity puzzles makes an employment forecast more than typically hazardous.

Based on past experience, it seems highly improbable that labor productivity growth can continue to outstrip the growth of real GDP indefinitely, particularly when population growth remains around 1 percent. To believe otherwise implies further declines in the employment-to-population ratio. That would involve a growing labor market disequilibrium, whereas normal economic forces tend to reduce such a disequilibrium over time. If productivity growth remains extremely high, it seems likely that rising business profits and declining unit labor costs will be spurs to new hiring. Output growth would then rise sufficiently above productivity growth to be consistent with satisfactory employment growth. If productivity growth is less rapid than last year, then that outcome would also point to higher employment growth.

This analysis leads me to expect higher employment growth in 2004, which would lead to a rising ratio of employment to population—a normal characteristic of the economy when real GDP is growing at a healthy clip. It is also reasonable to expect to see hours worked begin to rise, both because employment rises and because average hours worked per week rises. Judging from the last two business expansions, hours growth of somewhere between 1 and 2 percent seems reasonable. Although projecting productivity growth is obviously hazardous, a projection of around 3 percent seems plausible to me. The hours and productivity projections add up to real GDP growth of between 4 and 5 percent in 2004. I think these projections are sensible best guesses, but I also believe that there is no reason to rule out the possibility of a considerably higher outcome. The normal forecasting uncertainty suggests that we need to consider an error band of roughly plus or minus 1½ percent for the GDP forecast over the next four quarters.

The net of these forecasts yields significant increases in employment. The Blue Chip Consensus expects monthly nonfarm payroll employment gains to average a little less than 170,000 in 2004. Similarly, the recent *Outlook* survey by the National Association for Business Economics projects that monthly job gains will average 150,000 per month in 2004. These projected rates of job creation are well below those seen during the 1980s business expansion, when payroll employment increases averaged about 230,000 per month, and during the 1990s expansion, when payroll employment increases averaged roughly 200,000 per month. Nevertheless, the consensus employment projections for 2004 seem consistent with a world of both higher productivity growth and slightly lower population growth compared to the previous two expansions.

Since employment gains of roughly 125,000 per month are necessary to keep up with the 1 percent annual rate of growth in the labor force, the projected employment growth in excess of that means that we should expect some decline in the unemployment rate by the end of the year from its current 5.6 percent rate.

THE OUTLOOK FOR INFLATION

Besides the rebound in structural labor productivity growth observed since 1995, probably the most important domestic economic development over the last quarter century has been the achievement of price stability—or, at least, something pretty close to it. Today's low and relatively stable rate of inflation is far removed from the inflation experience from the late 1960s to the early 1980s—a period referred to in the economic text-books as The Great Inflation. Memories of the Great Inflation are fading; many fail to appreciate how important this development is.

In any walk of life, sustained high performance adds to the credibility of those responsible for the outcome. Most people understand that the Federal Reserve has the primary responsibility to achieve the goal of price stability, and as a consequence of sustained excellent results on that front the Fed's credibility with the markets and with the public is high. That credibility is important for a number of reasons. One of the most important is that the Federal Reserve, in setting its interest rate target during times of uncertainty, does not have to worry that markets will quickly come to expect higher inflation. The markets understand the Fed's commitment and are patient with us. That, in my view, is the underlying reason why the FOMC, in its policy statement at the conclusion of its last meeting could say, "the Committee believes that it can be patient in removing its policy accommodation."

When viewed through this lens, maintaining existing core rates of inflation around their current levels makes a lot of sense. From December 2002 to December 2003, the chain-type price index for personal consumption expenditures—the PCE price index—increased by a little less than 1.5 percent, while the core PCE price index rose by a little less than 1 percent. Keeping inflation low and stable depends importantly, though certainly not entirely, on keeping inflation expectations in check. If financial markets, consumers, and producers view this outcome as consistent with the Fed's long-run goals, then I see no reason why we should not see a similarly benign inflation outcome this year; however, I would expect to see the gap between the total and core measures narrow, since over time they tend to be numerically close to each other.

Managing inflation expectations requires appropriate responses to economic fundamentals. Unexpected developments have the potential to alter the FOMC's assessment of the appropriate stance of monetary policy. Clearly, unexpected developments can't be anticipated; if they could, our forecast errors would converge to zero and the FOMC would only have to meet once a year or so.

Many observers have noted that the current federal funds target rate of 1 percent cannot remain in force indefinitely. That knowledge is built into the term structure of interest rates. The 5-year Treasury rate, for example, is higher than the 1-year rate because the market expects rates to rise over time. It is not possible to predict the timing of adjustments to the federal funds rate target, but we are fortunate that the market understands the issue so well. I am sure that there will be bold headlines, probably on the front pages of newspapers, when the FOMC announces the first rate increase. Such a headline will be misleading in one sense, rather like a headline reporting that an airline flight arrived ten minutes early or ten minutes late. Headlines should really be reserved for unexpected developments, like plane crashes. Fortunately, there is absolutely no reason to anticipate monetary policy headlines of that sort!

CONCLUDING REMARKS

I've outlined a scenario for 2004 that appears quite promising: Continued strong real GDP growth—perhaps even stronger than last year's robust growth; a core inflation rate remaining around 1 percent, or perhaps a little higher; and, finally, sustained increases in payroll employment that are substantially stronger than those seen over the past five months, which saw an average of about 75,000 per month. If this outlook comes to pass, I'm sure that a year from now we will all agree that 2004 was a banner year.