

## **Ben S Bernanke: The economic outlook and monetary policy**

Remarks by Mr Ben S Bernanke, Member of the Board of Governors of the US Federal Reserve System, at the Bond Market Association Annual Meeting, New York, 22 April 2004.

The references for the speech can be found on the Board of Governors of the Federal Reserve System's website.

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I am pleased to have the opportunity to address the members of the Bond Market Association. I know that you have a keen interest in the likely future course of the economy and of monetary policy, so I will use my time today to comment on both topics. I will begin with the economic outlook, discussing prospects for economic growth, the labor market, and inflation, and conclude by drawing some implications for monetary policy. As always, my views are my responsibility alone and are not to be ascribed to my colleagues in the Federal Reserve System.<sup>1</sup>

### **The prospects for economic growth**

Broadly, the economy has shown substantially increased vitality since the middle of last year, and with the passage of time the economic recovery has shown increasing signs of becoming self-sustaining. Judging from the most recent data, growth in domestic spending appears consistent with growth in real gross domestic product (GDP) in the range of 4-1/2 to 5 percent for the first quarter and at a rate of 4 percent or higher for 2004 as a whole. One reason for increased confidence that the recovery is becoming self-sustaining is that the expansion of aggregate demand has become more broad-based, with households, firms, and government all making contributions to spending growth.

Household spending, which has not slackened significantly at any point in the past three years, has continued its advance, supported by positive wealth effects and tax cuts. Except for a modest decline in auto sales (relative to the strong pace of the previous quarter), consumer expenditures on most major categories of goods and services were well sustained in the first quarter, as recent data on retail sales testify. Household spending is likely to continue to grow at a solid pace for the remainder of this year, especially if the job market improves as expected.

A question that many have asked is whether household spending, including spending on new homes, will remain strong if interest rates rise. I think that consumers are not badly positioned for a normal cyclical increase in interest rates. The balance sheets of most households are in good shape: Perhaps most important, the ratio of household net worth to income is relatively high, not far below its pre-recession level. Also, households took advantage of low long-term rates during the last cycle to reduce their exposure to short-term and high-interest debt. Although household debt burdens have risen, most household debt today is in the form of mortgage debt, of which some 85 to 90 percent is at fixed rates and thus insulated from interest-rate increases.

The decision to purchase a home is probably the most interest-sensitive decision made by households. Private housing starts rebounded in March from a possibly weather-related dip in February, and sales of new and existing homes during the first quarter remained close to record levels. I expect residential investment to continue strong this year. Mortgage rates have risen in the past month but remain low relative to historical experience, while new household formation, improved job prospects, and income growth should ensure a continued healthy demand for housing. However, residential investment is unlikely to rise much further from current high levels and thus its contribution to GDP growth over the next year or two can be expected to decline.

Energy price increases have reduced households' real disposable personal income by about \$30 billion since December. This development will probably shave a tenth or two from the growth in personal consumption expenditures in 2004 but thus far, at least, the rise in energy prices does not materially affect the outlook.

A key factor in the economic turnaround in the third quarter of 2003 was the resurgence in business fixed investment, particularly in equipment and software. That component of spending seems set to

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<sup>1</sup> I thank Charles Struckmeyer, Jeremy Rudd, Jonathan Pingle, and other members of the Board staff for assistance.

continue to expand as output grows, profits improve, and firms become more confident in the durability of the recovery. Double-digit growth in real spending on equipment and software seems quite possible this year, in part because the expiration of partial expensing allowances at the end of 2004 will lead some firms to move forward investment they otherwise would have made in 2005. Given the very low inventory stocks currently held by businesses, inventory investment should also support growth. In contrast, nonresidential investment remains weak, reflecting low capacity utilization rates in factories and high vacancy rates in office buildings, and the improvement in that sector seems likely to be gradual.

The Federal government's budget deficit is expected to peak this year at something between \$450 billion and \$500 billion. Both increased government expenditures and reduced taxes will support growth in aggregate demand in 2004, though fiscal policy will provide somewhat less impetus and may even be slightly restrictive in 2005. U.S. exports are likely to continue their recent rise, because of a weaker dollar and economic recovery among our trading partners. However, rising U.S. incomes will spur imports as well. On net, the external sector will probably continue to be a slight drag on U.S. growth, and little if any progress is likely to be made in closing the current account deficit this year.

### **The state of the labor market**

As you know, the recovery in labor markets has not kept pace with the recovery in output, an issue that has been central in recent debates about economic policy. As has been widely noted, the leading explanation for the slow recovery in the labor market has been the remarkable ability of employers and workers to increase labor productivity. Over the four quarters of 2003, output per hour in the nonfarm business sector is estimated to have risen 5.4 percent, up from an already robust 4.3 percent gain the previous year. Output per hour probably grew at a rate exceeding 4 percent in the first quarter of this year, accounting for the lion's share of growth during the quarter. Although these productivity increases are unalloyed good news for the U.S. economy in the longer term, in the short run they have allowed firms to expand production rapidly while adding fewer workers than would be normal in a cyclical expansion. I and many others have argued that this situation cannot persist: As managers exhaust the possibilities for outsized productivity gains and become convinced of the durability of the expansion, they should become increasingly more willing to add employees (Bernanke, 2003b). Unfortunately, the pace of productivity gains and hence of employment growth has proved difficult to forecast.

If we look past the erratic month-to-month changes in payrolls, the labor market does appear to be gradually improving. On average, private nonfarm payrolls grew by 161,000 per month in the first quarter, up from 58,000 per month in the fourth quarter of 2003. Recent employment gains have not been confined to a few industries. For example, in March the one-month employment diffusion index, which measures the proportion of industries with expanding employment relative to the share of industries with contracting employment, reached its highest value since July 2000. Initial claims for unemployment insurance have also been falling and are now at pre-recession levels. The decline in initial claims is consistent with other data that suggest that the pace of layoffs has slackened considerably. The rate of new hiring has been exceptionally sluggish for the past several years, however, and the available evidence suggests modest improvement at best in hiring rates so far this year.

Although the labor market appears to be sitting up and taking fluids, it has not hopped out of bed and begun a round of jumping jacks. Despite the strong payroll gains in March, nonfarm payrolls remain 343,000 below their level of November 2001, the official trough of the recession, and private nonfarm payrolls are more than half a million below the trough level. The average workweek of production and nonsupervisory workers declined slightly in March; at 33.7 hours, the workweek is low on an absolute basis and barely above the 33.6 hours average attained during the third quarter of last year, the lowest quarterly figure in 2003.

The data I have cited thus far come from reports provided by employers, through what is known as the payroll survey. Much has been made of the differences between the results of the payroll survey and those from the household survey, which is based on the responses from a random sample of households.<sup>2</sup> When its coverage is adjusted to be comparable to that of the payroll survey, the

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<sup>2</sup> Formally, the payroll survey is known as the Current Employment Statistics survey and the household survey as the Current Population Survey. The Bureau of Labor Statistics produces both surveys.

household survey shows a net gain of about 1.7 million jobs since the November 2001 trough, compared with the already noted loss of more than 300,000 jobs reported by the payroll survey. Since June of last year, when the pace of output growth picked up significantly, employment as measured by the household survey (on a comparable payroll basis) has risen by 1.42 million jobs, more than double the increase of 689,000 jobs reported by the payroll survey. Recent revisions of both surveys - in the case of the household survey, to take into account the likelihood that immigration to the United States since 2003 has been below earlier estimates - have only modestly reduced the gap in estimated job creation.<sup>3</sup>

Although resolving the differences between the two surveys is important, my own assessment of the labor market does not change markedly even if substantial credence is given to the data drawn from the household survey. For example, although the unemployment rate (measured by the household survey) has fallen to 5.7 percent from its peak of 6.3 percent last June, that rate remains high relative to recent experience and in comparison to most plausible recent estimates of the sustainable rate of unemployment. The evidence suggests, moreover, that the official unemployment rate of 5.7 percent understates to some extent the true amount of slack in the labor market. Notably, to a greater degree than in past cycles, discouraged job seekers have been withdrawing from the labor market rather than reporting themselves as unemployed. According to the household survey, the labor force participation rate has actually declined significantly since the official trough of the cycle, from 66.7 percent of the working-age population in November 2001 to 65.9 percent in March 2004.<sup>4</sup> From its peak last June, the unemployment rate has fallen by 0.6 percentage point, from 6.3 percent to 5.7 percent. However, during the same period, the labor force participation rate also fell by 0.6 percentage point, from 66.5 percent to its current value of 65.9 percent. The net result is that the employment-to-population ratio has barely changed since the middle of last year. Thus even the household survey, its relatively more encouraging job-creation numbers notwithstanding, paints a picture of ongoing softness in the labor market. So long as the labor market is weak, the economic recovery will be incomplete. Indeed, by reducing confidence and spending, a failure of the labor market to improve could conceivably threaten the sustainability of the expansion.

One way to see the extent of the slack in the labor market, as measured even by the household survey, is to ask how much job creation would be needed to bring the unemployment rate down further. Underlying the household survey's employment calculations is an estimate that the adult non-institutional population grew in March by 193,000 people. If the population grows by the same absolute amount in April and the labor force participation rate remains unchanged at 65.9 percent, the labor force will grow by about 127,000 during the month. To keep the unemployment rate at 5.7 percent in April, then, household employment (as opposed to payroll employment) would have to grow by 120,000 jobs. To reduce the unemployment rate under these assumptions, of course, more than 120,000 net new jobs would be needed.

The standard calculation I just presented was based on the assumption that the rate of labor force participation does not change, an assumption that may not be valid during a cyclical recovery in the labor market. If people perceive a significant improvement in the job market, new job seekers may enter or re-enter the labor force as employment grows. To illustrate the possible implications, let us suppose that improving job prospects lead the participation rate to rise 0.1 percentage point in April, from 65.9 percent to 66.0 percent. (Remember, the rate was 66.5 percent as recently as last June.) This increase in the participation rate would imply a total increase in the labor force (including the portion attributed to the rise in population) of some 350,000 people and hence a need for more than 330,000 net new jobs to keep the unemployment rate from rising. The implication is that, with the labor market still in a relatively early stage of its cyclical recovery, an unusually high rate of job creation may be required for a time to bring the labor market back into balance.

In short, the unusual rate of productivity growth has driven a wedge between the recovery in output and the recovery in the labor market, leaving considerable cyclical slack in the labor market despite

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<sup>3</sup> Although recent additions to payrolls are much greater according to the household survey, as of March 2004 the payroll survey reports a higher level of employment, by about 600,000 jobs, than the household survey (on a comparable payroll basis). At face value, this fact seems to be a bit of evidence against the view that the payroll survey systematically undercounts some jobs that are being captured by the household survey. Bernanke (2003c) provides more discussion of the two surveys.

<sup>4</sup> Conceivably, part of the decline in the participation rate could reflect factors other than simple discouragement. However, I will proceed under the plausible assumption that most of the decline is a response to labor market conditions.

ongoing growth in output. The economic recovery will not be fully realized, in my view, until the labor market has established a more normal cyclical pattern of expansion.<sup>5</sup>

### The outlook for inflation

Forecasts of inflation, particularly core inflation (which excludes the more volatile energy and food price components), are of course another key input to monetary policy decisions. The core inflation data for the past couple of months have been slightly above market expectations. More time will be needed to assess the significance of these recent numbers; possibly, they may reflect the unwinding of some downward surprises to core inflation late last year. Based on the information currently available, my own best guess is that core inflation has stopped falling and appears to be stabilizing in the vicinity of 1-1/2 percent, comfortably within my own preferred range of 1 to 2 percent.

The dominant fundamental factors influencing the inflation outlook are the ongoing resource slack and the remarkable rate of productivity growth. Together, these factors imply that unit labor costs will either continue to fall or at least remain quiescent. Moreover, price-cost margins are at high levels (as can be seen in the strong growth of profits), providing an additional cushion for absorbing any inflation pressures that may emerge on the cost side. These forces should largely offset the effects on core consumer price inflation of the rising costs of raw materials - the byproduct of the gathering global recovery and continuing rapid growth in East Asia - and last year's decline in the foreign exchange value of the dollar. As I discussed in some detail in a speech earlier this year (Bernanke, 2004a), the direct effects of commodity price increases and a depreciating dollar on inflation at the consumer level are generally small. This modest direct impact reflects the small share of total costs accounted for by raw materials and imported inputs as well as the fact that a portion of cost increases tends to be absorbed in producers' margins.

In thinking about the implications of higher commodity prices for inflation, one should also make the distinction between a one-time rise in commodity prices and an ongoing process of commodity price inflation. Commodity prices can only contribute to inflation at the consumer level when they are rapidly rising. Commodity prices may well remain high in an absolute sense over the next few years because of the high global demand for raw materials. Yet if the *rate of increase* in commodity prices slows significantly, as is implied for example by futures prices, the effect of commodity prices on the rate of inflation will eventually become negligible. Similarly, dollar depreciation contributes to inflation only to the extent that it is ongoing; we cannot predict whether last year's decline in the dollar will continue, of course, but so far this year it has not.

In describing what I consider to be the most likely scenario for inflation, I do not wish to convey an unwarranted degree of certainty. Like employment, inflation is difficult to forecast. One factor that may be of great importance in inflation determination but can be particularly hard to gauge is the state of the public's inflation expectations (Poole, 2004). For example, wages and prices that are set for some period in the future will of necessity embody the inflation expectations of the parties to the negotiation; increases in expected inflation will thus tend to promote greater actual inflation. More subtly, my conclusion that the effects on inflation of transitory changes in commodity prices or in the value of the dollar tend to dissipate in the longer run depends on the assumption that the public's inflation expectations are well anchored. If expectations are not well tied down, inflationary impulses that are in themselves transitory may become embedded in expectations and hence affect inflation in the longer term. Therefore, an essential prerequisite for controlling *inflation* is controlling *inflation expectations*.

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<sup>5</sup> My presumption that the current slack in the labor market is primarily cyclical, rather than structural, is based on several observations. First, the recent high rates of productivity growth are clearly above secular trends and suggest that firms have been working employees more intensely, deferring maintenance, and taking other temporary measures to raise output, behavior that is characteristic of the early stages of an employment expansion. Second, I see little evidence (for example, in the job flows data) to suggest that the pace of structural change today is greater than it was after the 1990-91 recession or in the expansion of the mid- to late-1990s. Third, factors affecting labor supply and the efficiency of job matching, including demographic changes, greater worker experience and education, increases in incarceration rates, increases in disability rolls, increased use of temporary help firms, and increased job search through the Internet, suggest strongly that the sustainable rate of unemployment has steadily declined since the mid-1980s, to a level below the current rate. The relatively sharp disinflation of recent years is consistent with that view. Finally, an increasing tendency of low-skilled workers to leave the labor force rather than remain formally unemployed has also likely lowered the sustainable rate of unemployment (Juhn, Murphy, and Topel, 2002).

Assessing the current state of inflation expectations in the United States is not entirely straightforward. Survey measures of near-term inflation expectations, including those based on interviews of professional forecasters, individual consumers, and firm managers, have in some cases ticked up slightly in recent months, though long-term inflation expectations appear stable. The spread between the yields on Treasury debt and inflation-indexed Treasury securities of similar maturity, known as the breakeven inflation rate and conventionally treated as an indicator of expected inflation, has also risen.

From a policy perspective, a difficulty with all these measures is that they reflect expectations of headline inflation rather than the core inflation measures usually emphasized in the monetary policy context. Headline inflation has of course been significantly affected by the recent surge in energy prices. The breakeven inflation rate derived from indexed Treasury securities has additional problems as a measure of expected inflation. As I discussed in a recent speech (Bernanke, 2004b), breakeven inflation may differ substantially from the market's true expectation of inflation because of possibly time-varying risk and liquidity premiums. I will discuss inflation expectations further in the context of monetary policy, to which I turn next.

### **Monetary policy**

The federal funds rate stands at a historically low level of 1 percent, and the Federal Open Market Committee (FOMC) has declared its intention to be "patient in removing policy accommodation." As a number of my FOMC colleagues have noted in various public venues, inevitably the funds rate will have to return to a more normal level. What considerations should the Committee keep in mind as it plans this normalization process?

Before addressing this question, I would like to point out that, in an appropriately broad sense, monetary conditions in the United States are already in the process of normalizing. I base this statement on my view that the stance of monetary policy should be judged not only by the current setting of the federal funds rate but also by the level of rates that are tied directly or indirectly to expectations about the future path of monetary policy, of which the yields on Treasury securities are the leading examples. In part because of the FOMC's communication strategy, which has linked the future stance of policy to the level of inflation and the extent of slack in resource utilization, market interest rates have generally responded continuously and in a stabilizing manner to economic developments.

The March employment report, which cited an unexpectedly high rate of job creation, provides a recent example. Treasury yields rose sharply on its release as market participants traced out the report's presumed implications for monetary policy. Mortgage rates, corporate bond rates, and other yields and asset prices moved in sympathy, with important effects on the cost of borrowing and hence, presumably, on aggregate demand. For practical purposes, therefore, monetary conditions tightened significantly the day of the March employment report, notwithstanding the fact that the federal funds rate itself was unchanged. This episode illustrates both the power and the importance of clear communication by monetary policymakers about their objectives and their evaluation of economic conditions.

With respect to future decisions about the policy rate, for me two considerations are most relevant: first, the degree of confidence one can place in the sustainability of the economic expansion and, second, the evolution of inflation and inflation expectations.

As I have indicated, the economic expansion is showing increasing signs of being both strong and self-sustaining. However, to my mind, some uncertainty about that sustainability remains, arising primarily from the slow recovery of the labor market. Indeed, if one takes into account the long delay between the official recession trough and the trough in employment, the labor market today remains at what effectively is an early stage of its normal cyclical expansion. Although the recent improvement in employment is encouraging, from the data in hand it is not yet clear that employers have overcome their reluctance to hire at a normal pace. Additional confirmation that the recovery in the job market is both sustainable and quickening would be most welcome.

Regarding inflation, as I noted earlier, the economic fundamentals appear consistent with core inflation's remaining under control, in the general range of 1 to 2 percent. In particular, I see no indication that the U.S. economy is in imminent danger of overheating, productivity growth is keeping the lid on labor costs, and the effects on inflation of the increases in commodity prices and the decline in the dollar to date, which are likely to be small in any event, may well have dissipated a year from now. As I have acknowledged, however, there are risks to my relatively sanguine inflation forecast. In

particular, a rise in the public's expectations of inflation, whether "justified" by underlying forces or not, may put upward pressure on the actual rate of inflation. Moreover, expectations of inflation can themselves be destabilizing, as when an "inflation scare" in the bond market inappropriately raises long-term yields, with adverse effects for the real economy. To avoid instability in expected inflation, and the volatility in actual inflation, output, and employment that might result, I believe that the Federal Reserve should maintain at all costs its hard-won credibility for keeping the inflation rate low and stable. That involves, at a minimum, formulating policy with a close eye to indicators of inflation and inflation expectations. More generally, as I have suggested in earlier talks, I believe that the FOMC's credibility and clarity would be enhanced if it announced the inflation range with which it would be comfortable in the medium term (Bernanke, 2003a, 2003b). In particular, policy would be both more coherent and more predictable if FOMC members shared an explicit common objective for inflation at the medium-term horizon.

To conclude, monetary policy is now in a transition phase. That short-term interest rates must eventually be normalized is a given. However, the remaining uncertainty about the likely paths of both employment and inflation of necessity implies that the timing of policy changes at this point also remains uncertain. Like my colleagues on the FOMC, I will continue to watch the relevant data very closely. The challenge that lies before the Committee is to manage policy in a way that permits the economy to realize its productive potential while simultaneously maintaining firm control of inflation and inflation expectations.