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A Perspective on the U.S. Economy

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Introduction

It is a pleasure to be here this morning to talk with you about the state of the U.S. economy. I am impressed that such a large group is willing to come to breakfast to hear an economist like me give a talk. By the time this is over, of course, some of you may wish you had decided to sleep in!

As many of you know, I joined the Federal Open Market Committee at a difficult juncture for the Committee and for the American economy. Growth in real gross domestic product, one of our best measures of overall health in the economy, has been sluggish. Financial markets have been struggling to return to normal operation since the current turmoil began in earnest 10 months ago. In addition, the housing sector has been extraordinarily weak for some time, with prices falling and sales of both new and existing homes on the decline. The Federal Reserve has responded to this situation by instituting an array of new lending facilities and sharply lowering interest rates through the fall of 2007 and into the first several months of 2008.

My intention this morning is to talk about these developments in the context of medium- and longer-term objectives for monetary policy. My sense is that the U.S. economy will be able to post stronger growth in the second half of this year despite the ongoing financial crisis and the drag from the housing sector. As I will make clear, such growth is likely to make the inflation outlook a more pressing concern for the Fed in the second half of this year.

Let me say before I continue that any views expressed here are my own and do not necessarily reflect the official views of the Federal Open Market Committee or the Federal Reserve System.

Before saying more about the current situation in the U.S. economy, let me provide some context for my current views by describing the goals and objectives of monetary policy as I see them.

A General Perspective on the Objectives of Monetary Policy

Over the past two decades, much has been said about the benefits of transparency and accountability in the conduct of monetary policy. Much has been achieved, both in the United States and abroad, to reach these goals. I applaud these developments, and I believe that progress in this direction can and should continue. Consistent with those principles, in my role as the newest participant on the FOMC, I want to talk for a few moments about my fundamental beliefs on the appropriate objectives of monetary policy.

One of the guiding principles from contemporary economic theory is that monetary policy should be conducted in a systematic and predictable fashion. The expectations of economic actors are critically important for the nature of equilibrium in the economy. These expectations evolve in part according to the outlook for future policy itself and the implications of that policy for the path of the economy. This view, once considered radical, is now widely accepted in academia and by monetary policymakers around the world. This perspective rejects an alternative view, common in an earlier era in macroeconomics, that policy actions are most useful when they surprise participants in financial markets and the public more generally.

Systematic monetary policy must start with a clear statement of the ultimate policy objectives. The Federal Reserve is commonly characterized as striving to foster price stability along with maximum sustainable employment. Other central banks, including the European Central Bank (ECB) and the Reserve Bank of New Zealand, for example, are charged with a

single mandate: to maintain price stability. In the 1960s, the dual mandate was perceived to require a policy tradeoff. Under the then-prevailing Phillips curve hypothesis, lower inflation could be achieved only at a cost of higher unemployment. Today, the consensus view is that there is no long-run tradeoff between inflation and unemployment. Indeed, a succession of Fed Chairmen—Paul Volcker, Alan Greenspan, and Ben Bernanke—have emphasized the complementarity of the two objectives: namely, that price stability is a precondition for maximum sustainable employment.[1] I agree with this perspective.

Moreover, I have been impressed during my 18-year career as a Fed economist in considering the contrast in the behavior of the U.S. economy between the high inflation period of the 1970s and the more-recent period of low inflation. Between 1965 and 1984, U.S. inflation rose to double-digit levels before falling again. Since that time, inflation has remained under better control. The earlier era was associated not only with higher and more variable inflation, but also with a more volatile real economy. My sense is that a monetary policy better-focused on price stability has made an important contribution to the improved stability on the real side of the economy that we have observed since 1984.

This stability has meant a lot to the average household in our nation: long periods of uninterrupted growth punctuated by just two mild recessions since the mid-1980s.

Price stability has multiple interpretations. In the late 19th and early 20th centuries, price stability meant that variations in the general level of prices would be transitory: the price index would revert to a mean. In recent policy discussions, price stability generally is interpreted as a small positive rate of inflation. Under these conditions, the level of prices does not revert to a constant, but trends upward. I accept this latter definition of price stability. There may be

[1] See, for example, Ben S. Bernanke, "The Benefits of Price Stability," February 24, 2006. <www.federalreserve.gov/newsevents/speech/bernanke20060224a.htm>.

theoretical and practical reasons to believe that the best price indexes we have available are subject to upward biases. While I am not a big fan of the upward-bias argument—after all, the best-available adjustments are already made to the indexes—I admit that I do not have better measures myself. My preferred definition of price stability is that trend inflation, correctly measured, is zero. In practice, this likely converts into a trend in measured inflation on the order of ½ to 1½ percent, depending on the particular price index referenced.

One important aspect of my definition of price stability, which I will revisit this morning, is that it concerns only the *trend* in inflation. Central banks cannot and should not try to control period-to-period fluctuations in any measured price index. Such fluctuations are largely transitory and reflect different movements of various relative prices. Price stability as a policy objective for a central bank must be focused on the longer-run behavior of the inflation rate. Given the current state of knowledge, a central bank that maintains a low and stable average rate of inflation over a horizon of two to three years should be judged successful at achieving price stability.

A sustained era of price stability requires that central banks create an environment in which financial market participants and the general public maintain the expectation that future inflation will remain low and stable. Such an environment frequently is characterized as having an "anchor for inflation expectations"; in some cases, the central bank establishes such an anchor for the economy by announcing an explicit numeric inflation target. The Reserve Bank of New Zealand was the first institution to choose this approach. During the 1990s it was followed by the Bank of Canada, the Bank of England, and the European Central Bank, among others.

The FOMC has chosen not to announce such a quantitative guideline, although many past and current participants on the Committee have expressed individual preferences or "comfort

zones" about ranges of inflation that they personally feel are appropriate objectives for policy. Within the past year, the FOMC has started publishing the ranges and central tendency of the inflation forecasts of the participants on a three-year horizon. These forecasts generally have been consistent with the revealed "comfort zones." In the media, midpoints of these forecasts are often associated with an implicit FOMC objective for trend inflation. This represents important progress concerning the transparency of the FOMC inflation objective. Still, there is some risk that if the evolving inflation situation appears inconsistent with the inflation objective that is inferred from the revealed preferences of the individual FOMC participants, the anchor for inflation expectations may start to drag or come completely loose.

I take some comfort that, even absent an explicit numeric inflation objective, the FOMC has achieved a nominal anchor for the economy over the past 25 years. The Committee accomplished this the old-fashioned way—the Fed earned credibility for the expectation of low and stable trend inflation based on the successful outcome of about 25 years of policy history. The Volcker disinflation in the early 1980s succeeded in stabilizing inflation around 4 percent per annum. After a mild and short-lived inflation breakout in the late 1980s, the Greenspan Fed produced a declining trend in inflation throughout the 1990s and into the first few years of the 21st century.

Despite this past success, it is my judgment that at the present time inflation expectations are fragile. By many measures, inflation has trended up in recent years. At the same time, available measures of long-term inflation expectations, whether from survey data or from Treasury inflation-protected securities spreads, have remained remarkably stable. My sense is that, absent stabilization or reversal of the recent trend in inflation, those expectations will begin to move higher. That is, market participants, businesses, and consumers will come to view higher

inflation as part of the economic landscape. These expectations will then feed into the equilibrium of the economy and will be difficult to reverse.

A breakdown in inflation expectations has not occurred yet, to be sure, but the risk is real. It is possible that a breakdown could happen over a very short horizon. Indeed, in the May 2008 University of Michigan/Reuters survey, the 12-month-ahead median expected inflation rate jumped to 5.2 percent (from 4.8 percent) and 25 percent of respondents reported expecting inflation in excess of 10 percent over the next 12 months! My sense is that these extraordinary readings were driven in part by recent exceptional increases in certain commodities prices, especially gasoline. Still, the 5-year-ahead median expected inflation has drifted up to 3.3 percent.

Despite these worrisome numbers, I think that the Fed can contain the potential for inflation expectations to drift higher. It is rule number one in modern central banking that inflation and inflation expectations be kept under control. Let me repeat that: It is rule number one in modern central banking that inflation and inflation expectations be kept under control. After a 10-month period in which the dominant policy concern has rightly been the state of financial markets, policy can begin to address pressing inflationary concerns during the remainder of the year. While it is too early to say that the financial market turmoil has completely abated, the Fed's new lending facilities combined with an environment of low interest rates have gone some distance to return markets to more normal operation.

Some Implications for the Current Policy Environment

In August of last year, the FOMC took the first of a sequence of policy actions that reduced the target for the federal funds rate 325 basis points, from 5.25 percent to 2 percent. The

initial actions were motivated by turmoil in credit markets. By the end of last year, evidence of slowing economic growth emerged. By early this spring, many commentators and some economic forecasters were predicting that the economy was in or about to enter a recession. The most recent Blue Chip consensus forecast projects positive growth in real GDP for each quarter in 2008, though the projected growth in the second quarter is close to zero. The most recent quarter-by-quarter outlook from the Survey of Professional Forecasters is almost identical to the Blue Chip consensus. Within the past month, forecasters have generally backed off substantially in their estimates of the probability that the economy is now in or will soon enter a recession.

These forecasts may have a more optimistic tone than many of you have heard earlier this year. I think this is because financial market turmoil is waning. A financial crisis is, naturally, a time of great uncertainty, as market participants are all wondering what will happen next. Forecasters have to take into account the possibility that the crisis will worsen to the point that a great deal of harm is done to U.S. financial markets. My sense is that, during the first several months of this year, some forecasts were putting a high probability on such an outcome. As the probability of especially severe damage to the financial system recedes, forecasts are being revised upward. This is complicating the inflation outlook for those projecting that significant economic slack would help to keep inflation in check.

Current consensus forecasts show no sign of relief for the near-term inflation situation. The Blue Chip consensus forecast for core CPI inflation for 2008 over 2007 is 2.4 percent. The forecast for 2009, at 2.3 percent, is essentially unchanged. The Survey of Professional Forecasters puts inflation at 2.3 percent in both years. These forecasts show little change from the inflation experience in 2007. Forecasts of *headline* CPI inflation are more disturbing, with

both the Blue Chip and the Survey of Professional Forecasters current forecasts in excess of 3 percent. This inflation outlook is not consistent with my view of price stability.

Still, given the current economic environment and the outlook for the next 18 months, my view is that policy is appropriately calibrated at this time. I see several reasons why maintaining the current policy is a good option for now.

First, the FOMC has already reduced the target federal funds rate by 325 basis points. These policy actions were preemptive and involved more aggressive rate cuts than in previous episodes, such as 1990-91 or 2001. The rate reductions were based on forecasts that economic activity would slow in the face of contracting housing activity and substantial turmoil in financial markets. Growth has indeed been slow, at least for the first half of 2008, but that cannot now be justification for further rate reductions. Surprises to forecasts of economic activity, if any, have been to the upside. Acting preemptively means that patience is required when circumstances play out in a way that is consistent with the forecast. Further action in the absence of substantial forecast errors would be double counting: in effect, reacting twice to the same concern.

Second, the full impact of monetary policy actions is not realized immediately. It is likely that additional stimulus to economic activity from the monetary policy actions taken in January and March will peak in the second half of 2008. In addition, there is a fiscal stimulus program in place that may shift some spending into the second and third quarters of this year. Any additional monetary policy actions must be judged by their expected impacts in the future in light of current forecasts of the evolution of the economy. The best judgment, as incorporated in current forecasts, is that the pace of economic activity will recover in the second half of 2008 and throughout 2009.

Third, at the current funds rate target of 2 percent, real interest rates are quite low by historical standards. Short-term real rates computed by subtracting near-term forecasts of headline inflation from nominal rates are significantly negative. Three- to six-month-ahead headline CPI inflation forecasts exceed 3 percent; some forecasts for this period exceed 3.5 percent. Three-month Treasury bill and prime nonfinancial commercial paper rates are less than 2 percent. Even when evaluated against forecasts of core inflation rates, these yields are zero to slightly negative in real terms. Five-year inflation-indexed Treasury note yields are essentially zero. In short, the Fed has created a low interest rate environment that should allow the economy to continue to adjust to the drag from the housing sector and the aftermath of financial market turmoil.

Headline versus Core Inflation

As I mentioned earlier, there are many different ways to measure and discuss inflation. Since July 2004, the FOMC has focused on inflation measured by the core PCE price index in the semiannual Monetary Policy Reports. I think everyone in this room is aware of the fact that, for most of the time since 2003, headline inflation has exceeded core inflation. What are the relative merits of focusing on core rather than the headline inflation?[2]

Core measures of inflation defined as excluding food prices have been constructed by the BLS at least since 1957. Core measures of inflation excluding both food and energy prices have been published since 1977. The rationale for these measures is not well documented, but it is likely that the original intent was to better reveal inflation trends. Historically real food prices exhibited large transitory movements. Some of the major changes in real energy prices in the

[2] For a discussion of this issue, see Mark Wynne, "Core Inflation: A Review of Some Conceptual Issues," *Federal Reserve Bank of St. Louis Review, Part II*, May/June 2008, pp. 205-228.

1970s and mid-1980s also proved transitory. Under these conditions, a focus on core measures gave policymakers a clearer indication of changes in the trend of inflation that was subject to policy control. Much of the volatility of these prices originated with supply shocks in particular markets: droughts, crop failures, abundant harvests, OPEC boycotts, political disturbances in major oil-producing countries, and the collapse of the world oil market. Supply disturbances of this sort do not produce the *persistent* spreads between headline and core inflation measures that have been observed over the past five years.

I believe that consideration has to be given to the hypothesis that different forces have driven the relative price of food and energy in the recent past—namely, shifts in demand in world markets. These forces are likely to persist for some time. In particular, I have in mind rapid increases in standards of living in large emerging-market economies. Associated with these increases in living standards are higher consumption of calories and higher consumption of energy and thus increasing demand in the global markets for these products. With low short-run elasticity of supply for food and energy production, these trends in demand generate trends in relative prices.

The best forecast is that China, in particular, will continue to grow at a rapid rate for the next decade. Longer-run elasticities of supply for agricultural products are likely substantially larger than short-run elasticities, and hence the trend in relative prices of food can be expected to moderate. Trends in relative energy prices may moderate with the emergence of new technologies. Nevertheless, a plausible case can be made that current trends in these relative prices will persist and that, therefore, headline measures of inflation will remain above core measures.

Should policymakers take into consideration persistent differences in headline and core measures of inflation? I believe that consistency requires attention to such differences in the formulation of policy. Unless there are compelling reasons to do otherwise, policy has to focus on the prices actually faced by households and businesses.[3] Persistent and substantial trends in other relative prices are not factored out in measuring overall inflation trends. The relative prices of computers, communications equipment, and consumer electronics, for instance, have been falling for decades. However, no one to my knowledge has argued that we are understating the fundamental trend in inflation because our core measures do not exclude these items.

Available price indexes may be viewed as reasonably good estimates of consumer purchasing power. Food and energy are significant components of consumer budgets, as witnessed by the abundant commentary on recent price changes. Monetary policy aimed at price stability cannot ignore continuing deterioration of purchasing power, regardless of the source. It is the overall trend in prices that is the inflation measure on which central bankers must concentrate. If, under current global market conditions, historical core indexes do not measure that trend appropriately, then it is necessary to develop filters that produce unbiased measures of trend inflation.

Conclusions

I appreciate having this opportunity to share with all of you some of my thoughts on the current state of the U.S. economy. While these are challenging times for monetary policymakers, I am cautiously optimistic that we can move into the second half of 2008 with reduced financial

[3] One recent analysis of this issue is by Bodenstein, Erceg, and Guerrieri (2007), which provides some support for focusing on core inflation when energy prices are volatile. I think this is a good example of the type of research required, but I also think that conclusions in this area will depend sensitively on the details of the model used and that the possibility of a relative price trend has to be addressed.

market turmoil, reduced drag from the housing sector, more rapid economic growth, and a renewed focus on keeping inflation low and stable.

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