

Monetary Policy and the Wisdom of Wayne Gretzky

Presented to the 31st Annual Economic Seminar

Sponsored by the Simon Graduate School of Business, Rochester Business Alliance,
and JPMorgan Chase & Co.

Rochester, NY

December 1, 2009

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The views expressed today are my own and not necessarily
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Introduction

I am pleased to return to Rochester and see so many familiar faces and old friends here at this 31st Annual Economic Outlook Seminar. I lived here for more than 25 years before moving south to Philadelphia three years ago. Yet, when I return for these visits, I am reminded of Rochester's charm, hospitality and, of course, its winters.

As many of you know, I grew up in Alabama and it was not until I went to graduate school in Chicago that I came to appreciate the extent to which the North could offer three things in great supply: cold, snow, ... and, of course, hockey!

This realization was driven home to me here in Rochester. As my children were growing up, I found that there was a way to combine all three of these things into one event — “early morning hockey practice.” Driving through the cold and snow to a 6:00 a.m. hockey practice at Lake Shore was always an exhilarating way to start the morning. Yet, as I learned more about the game of hockey, I found that hockey players could teach us things that are relevant and useful in other disciplines, including, believe it or not, monetary policy.

Hockey great Wayne Gretzky was once asked about his success on the ice. He responded by saying, “I skate to where the puck is going to be, not to where it has been.” He didn't chase the puck. Instead, Gretzky wanted his hockey stick to be where the puck would be going next. He scored many goals with that strategy, and I believe monetary policymakers can better achieve their goals, too, if they follow the Gretzky strategy.

Good monetary policymakers, like good hockey players, must be forward-looking in their actions. Setting policy that is appropriate for where the economy is today, or has recently been, is not likely to deliver the kind of economic outcomes we desire. Anticipating where the economy is headed is important because monetary policy actions affect the economy with long and variable lags. The major impact of policy often comes only after several quarters, or sometimes several years.

Of course the state and evolution of the economy as we see it today is relevant for shaping the outlook for the future. So policymakers are always revising their outlook as the data and the economy evolve. This is why you frequently hear policymakers say that future policy decisions are data-dependent.

Gretzky, like all great hockey players, excelled, in part, because of his ability to anticipate. That does not mean he always anticipated accurately. Sometimes his forecast turned out to be wrong and the puck went in another direction. But that does not mean that his strategy was wrong, only that his execution needed improvement. The more you understand the game or the economy, the better your forecasts will be. Monetary policymakers similarly must be forward-looking despite the difficulties, uncertainties, and challenges that entails.

So let me explain how I see the outlook for the economy and inflation as well as some of the uncertainties that are influencing our policy choices.

The Outlook for Growth and Employment

A year ago I told you that “Growth in the first half of 2009 is likely to be weak, with improvement in the second half of the year.” That statement certainly reflects the pattern of growth we have seen this year, although I must admit that the very sharp decline in real GDP in the first quarter of this year was larger than I expected. As a result, growth for the year will be lower than what I projected a year ago. Nevertheless, growth declined only slightly in the second quarter, increased at a 2.8 percent annual rate in the third quarter, and is continuing to grow at a similar pace in the fourth quarter. I believe the economy is now in a recovery, and I have become more confident that it will be a sustainable recovery even as the fiscal and monetary stimulus programs begin to wind down.

The long decline in housing activity appears to have bottomed out, as home sales and housing starts have come off the lows they reached earlier this year. Home prices appear to have stabilized during the past few months and have even started to rise in some areas. The commercial real estate market, however, has not turned the corner and poses some risk to small- and medium-sized banks whose portfolios are heavily concentrated in this sector. Nevertheless, my view is that these risks will lessen as the economy recovers.

A number of indicators of manufacturing and industrial activity have become more positive in recent months. Industrial production has now increased for several months in a row. The Philadelphia Fed’s Business Outlook Survey of manufacturing activity returned to positive territory in August and has continued to be positive since then. Other manufacturing surveys have also been signaling that manufacturing activity is beginning to expand.

The strength of consumer spending, however, is harder to judge. In part, that is because auto sales were pulled forward into the summer months by the “cash-for-clunkers”

program. Moreover, this rebate program likely diverted some spending toward automobiles and away from other goods and services that households may have been planning to buy. So, it remains unclear exactly how much the cash-for-clunkers program actually stimulated total spending, as some claim, or whether it just redistributed it. Thus, determining the underlying trend in consumer spending is difficult.

Of course, the most important factor for consumer spending is the growth of personal income, which on balance has been quite flat since early this year. I am not expecting very strong growth in consumer spending in the coming quarters, since unemployment will remain high for some time, which will restrain income growth. Even so, recent monthly data have shown some increases in consumer spending outside of autos and gasoline, which is encouraging.

Looking ahead to next year, I expect real GDP growth from the fourth quarter of this year to the fourth quarter of 2010 to be about 3 percent. I expect similar real GDP growth in 2011. These rates of growth are more modest than what some forecasters anticipate, but they are slightly above what I believe is the underlying trend growth of the economy of about $2\frac{3}{4}$ percent.

This time last year the Survey of Professional Forecasters predicted the unemployment rate in the fourth quarter of 2009 would reach 7.7 percent. That turned out to be overly optimistic as we now know. The current rate is now over 10 percent. I anticipate that the unemployment rate may edge slightly higher before beginning a gradual decline.

Keep in mind that changes in the unemployment rate and employment growth typically lag output growth, so even with better real GDP growth over the next few quarters, the unemployment rate and payroll employment will take a little more time to show much improvement. So far, the most encouraging sign from the labor market is that job losses in recent months have been smaller than earlier in the year and continue to trend down. Nevertheless, I am optimistic that payroll employment will start to rise during 2010 and the unemployment rate will fall by the end of next year. Yet, the recovery of jobs from this very severe recession will take time. It is likely to take a couple of years before we see the unemployment rate back to more acceptable levels.

One contributing factor to the better outlook is the steady improvement in financial conditions. The recovery of financial markets from this crisis, however, is not complete and more time will have to pass before we can be fully confident in the health of the financial sector. Indeed, we probably will not be able to determine how well the financial system has healed until the Federal Reserve withdraws the extraordinary amount of support it has provided. By design, many of the liquidity facilities were priced so that they would be less attractive as markets improved. So I have been encouraged as banks and other borrowers have relied less on the Fed's lending facilities and have relied more on financial market funding over the last six months or so.

Uncertainty still looms large. Large fiscal deficits and the prospects for significantly higher taxes to fund new programs have made many businesses reluctant to undertake

new investments or to rehire workers. This may not diminish until greater clarity is offered by Congress and the administration about the prospective path of fiscal policy. This policy uncertainty could contribute to a weaker than otherwise recovery and its resolution may affect longer term prospects for the economy.

The Outlook for Inflation

The outlook for a strengthening economy is gaining focus, yet the outlook for inflation is becoming more uncertain. At the beginning of this year there were growing concerns that falling prices, not rising prices, were the more serious risk. Headline CPI, after all, fell at an 8 percent annual rate in the fourth quarter of 2008 and at about a 2.5 percent annual rate in the first quarter of 2009.

On the surface, these were extraordinary numbers. But in my view, they largely reflected the reversal of the dramatic rise in oil prices from late 2007 and the first half of 2008. Oil prices went from about \$70 a barrel in mid-2007 to more than \$130 by mid-2008 and then back down to about \$40 in January 2009. Since then, oil prices have risen again, but have been fluctuating between \$60 and \$80 since the spring. The stabilization in oil prices led to the end of the deflation seen in the first quarter. For the second and third quarters of this year headline CPI inflation averaged about 2.5 percent at an annual rate — a vast difference from the over 5 percent deflation of the previous two quarters. What we call core CPI, or CPI excluding food and energy, exhibited a similar but, as you would expect, a less dramatic pattern. Core CPI inflation averaged just 1 percent over the last quarter of 2008 and the first quarter of 2009, but in the second and third quarters of this year, core CPI inflation averaged about 2 percent. On a year-over-year basis, it seems to be settling in at around 1.5 percent.

My interpretation of this pattern is that market fears of deflation were probably exaggerated in early 2009, being driven substantially by falling oil and commodity prices. Any risk of a sustained deflationary episode has now greatly subsided. This interpretation is consistent with various consumer and market measures of expected inflation, which fell noticeably in the early part of the year, but have risen since then. Contributing to these subsiding fears is the fact that monetary policymakers made it clear that we would not permit deflation to take root.

So, we should all be pleased that the near-term prospects for either deflation or inflation seem mostly benign. Unfortunately, the prospects for inflation over the next two to five years are much more uncertain, in my view, and apparently in the view of the market as well.

Ultimately, inflation is a monetary phenomenon and there is no question that current monetary policy is extraordinarily accommodative. The Federal Open Market Committee has maintained the federal funds rate near zero for just about a year now and the Fed has more than doubled its balance sheet in the process. Without appropriate steps to withdraw or restrict the massive amount of liquidity that we have made available to the economy, the inflation rate is likely to rise to levels that most would consider

unacceptable. The great challenge facing the Fed is getting those “appropriate steps” right.

The task is made more difficult, in part, by competing views of the economic forecast and the underlying structure of the economy driving that forecast. One commonly held view is that the economy is very weak now and, more important, that during the economic recovery, high rates of unemployment and very low rates of resource utilization will prevent inflationary pressures from arising for quite some time, perhaps years. This perspective suggests there is no danger that excess liquidity will generate inflation in the foreseeable future. According to this view, the Fed need not worry about withdrawing the liquidity or raising rates anytime soon because the inflation forecast will remain quite tame.

An alternative view shared by many others is that the just-described conventional wisdom misses the mark and without a more deliberate policy of reducing liquidity and raising interest rates sooner rather than later, we could very well see inflation become a serious concern. In this view, inflationary expectations play an important role in the dynamics of inflation. It is the Fed’s credibility to keep inflation low and stable that is key to anchoring those expectations. So, the Fed must act in a way that assures the markets and the public that it will take the necessary steps to keep inflation low and stable. If it does not do this, expectations can become unanchored and inflation will rise regardless of the amount of unemployment in the economy.

This view is consistent with both theoretical and empirical evidence that finds that economic slack or low resource utilization is not a very reliable predictor of inflation.¹ Moreover, several empirical studies have shown that economic slack is difficult to measure with any accuracy.² So making policy decisions based on measures of such slack and particularly on forecasts of slack many quarters ahead becomes problematic. Indeed, the failure to act in a way that keeps expectations of inflation anchored can easily trump economic slack in determining the path of inflation. Recall that some of the highest inflation rates this country has seen in the post-World War II era occurred in the late 1970s when we had high rates of unemployment and low resource utilization.

So what’s the bottom line? While policymakers may have different outlooks for the economy and inflation over the next couple of years, our objectives are the same. The

¹ For research on this subject, see Stephanie Schmitt-Grohe and Martin Uribe, “Optimal Simple and Implementable Monetary and Fiscal Rules,” *Journal of Monetary Economics*, 54, September 2007, pp. 1702-25; Andrew Atkeson and Lee I. Ohanian, “Are Phillips Curves Useful for Forecasting Inflation?” Federal Reserve Bank of Minneapolis *Quarterly Review*, 25 (Winter 2001), pp. 2-11; Michael Dotsey and Thomas Stark, “The Relationship Between Capacity Utilization and Inflation,” Federal Reserve Bank of Philadelphia *Business Review*, Second Quarter 2005, pp. 8-17; and Stephen G. Cecchetti, “Inflation Indicators and Inflation Policy,” *NBER Macroeconomics Annual 1995*, pp. 189-219.

² See Athanasios Orphanides and Simon van Norden, “The Unreliability of Output Gap Estimates in Real Time,” *Review of Economics and Statistics*, 84, November 2002, pp. 569-83. See also Susanto Basu and John Fernald, “What Do We Know and Not Know About Potential Output?” Federal Reserve Bank of San Francisco, Working Paper Series 2009-05, March 2009.

Fed does not wish to see inflation rise to unacceptable levels and I plan to act with that objective clearly in mind.

Implications of the Outlook for the Gretzky Strategy

Wayne Gretzky emphasized that anticipation was important to being a successful hockey player. Failing to anticipate in hockey means that you always end up chasing the puck and never catching it. Since monetary policy works with a lag, policymakers must also anticipate and be forward-looking in their actions. Failing to do so would mean that policy would always be behind the curve — playing catch-up so to speak. The result would be greater instability in the economy and a failure to achieve our policy objectives.

As I said, my projection is for an economic recovery with growth around 3 percent for the next two years. Stronger economic growth means stronger demand for credit, which in turn means upward pressure on real or inflation-adjusted interest rates. When economic growth is higher, the levels of market real interest rates should rise — at least assuming that the central bank doesn't try to keep them from rising by pumping even more liquidity into the economy. Of course, higher growth today combined with businesses and consumers that are forward-looking produces higher levels of output in the future.

In my view, the higher levels of resource utilization in the future signaled by today's growth implies that real interest rates will rise, which calls for the federal funds rate to increase as well — as long as inflation is near its desired levels and inflation expectations are well-anchored. Note that increases in interest rates may be appropriate before unemployment or other measures of resource slack have diminished to acceptable levels. Failure to act in this manner risks continuing to inject liquidity into a growing economy at a rate that will create inflation above desirable levels later in the cycle. If this were to happen, the Fed would lose its credibility to preserve low and stable inflation.

This forward-looking approach to policy is symmetric in that, as economic growth weakens and the demand for credit declines, real interest rates will fall and so should the federal funds rate. This would occur before the slower growth is likely to show up in conventional measures of resource slack such as unemployment. Thus, whether the economy is strengthening or weakening, this view says that policy moves before measures of unemployment or other measures of resource slack provide a clear signal. Focusing on the short term rather than thinking ahead to the intermediate to longer term can lead to policy chasing the puck, so to speak, and thus always being out-of-sync with its goals and objectives.

Taking forward-looking policy actions is not an easy task. There are many real interest rates; they are not easily observed or measured; and they can be quite volatile. Thus, judging the appropriate response of policy at any point in time is fraught with challenges. We must assess what the current data and market interest rates are telling us about the future. But no one said hockey was easy either. Wayne Gretzky was not the fastest, nor

the biggest, of hockey players, but no one was as gifted as he was in looking ahead and anticipating where the puck would be, which is why he is known as the Great Gretzky.

Such forward-looking policy is equally important when it comes to inflation. Since expectations play an important role in the dynamics of inflation, it is important that policy act in a manner that keeps expectations well-anchored near the Fed's inflation objective. Policy must resist actions that may drive inflation above or below the level deemed consistent with price stability or lead the public to believe that inflation will drift above or below that level. If expectations do become unanchored, then the Fed will have lost its credibility and either inflation or deflation could arise. Moreover, the cost of regaining the Fed's credibility may be great. So, anticipation and forward-looking policy are essential if the Fed is to achieve its goal of low and stable inflation.

In the current circumstances, the Fed will need to withdraw the extraordinary amount of liquidity it has provided to financial markets to ensure that the public does not lose confidence in its commitment to keep inflation low and stable. If it fails to do so, rising inflation expectations could prompt workers to demand higher wages and firms to demand higher prices to head off the expectation of higher costs, thus setting off a burst of inflation. For me, this risk bears careful monitoring.

Conclusion

In conclusion, the economy is emerging from a severe recession with a low level of economic activity and a low rate of inflation. Improvements in the job market will lag behind the rest of the economy as they typically do. Conditions in financial markets have been improving, and the need for the Fed's extraordinary provision of liquidity will continue to dissipate in the coming months. Withdrawing that liquidity in a timely manner will be important in keeping the outlook for inflation and inflation expectations low and stable.

But to conduct monetary policy we need to be forward-looking and, looking ahead, I see an economy that will be growing over the next two years, which means real interest rates will be rising. As they do, the federal funds rate should be permitted to rise with them. By doing so, the Fed can promote stable inflationary expectations and achieve its goals of price stability and sustainable growth. If it fails to do so, it risks missing its goals and creating unnecessary instability in the process.