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## **Seismic Shift Ahead: What Will a New Fed Head Portend?**

by: Lakshman Achuthan

*[Editor's note: In this article, author Lakshman Achuthan details a possible seismic shift on the horizon at the Federal Reserve in a post-Alan Greenspan era. Understanding the interaction between inflation, Fed policy and leading indicators of inflation will not be directly useful for day-to-day trading. But it will provide individual traders with a larger framework from which to better grasp the various data releases that often confuse and jerk the market around. This background can sharpen a trader's sensitivity to key events and allow individuals to discount some data to which the market overreacts, while seizing opportunities that may be overlooked.]*

Once again, Alan Greenspan's term at the helm of the Federal Reserve Board is drawing to a close, and this time the odds are that he actually will retire. What will this mean for the way in which monetary policy is conducted in a post-Greenspan era? One thing seems certain: things will change. But why should you care?

It's important because of how closely the markets hang on the Fed's words and actions for some hint of where interest rates are headed and the subsequent reactions in the financial futures markets. This may not be obvious, but when Greenspan is no longer heading the Fed, there's likely to be a seismic shift in the way short-term interest rates are managed. However, chances are that the press will make it seem as though there's plenty of continuity and that the risks associated with Fed policy won't have changed much. There's a good chance, however, that an "inflation-targeting" approach will be introduced by the new head of the Fed and also that the results will be quite different than what we've become used to during the Greenspan years. Understanding the basics behind the likely shifts in the conduct of monetary policy can help orient investors and traders properly before the fireworks actually begin.

### **A New World for Monetary Policy**

At the forefront of those posturing for control are advocates of inflation targeting. Under this scenario, the Fed would set short-term rates based on

some sort of rule that is supposed to keep Consumer Price Index (CPI) inflation within an explicit band. Within the economic community, the Taylor rule (more on that later) is the most popular version of this approach, which tries to measure inflation pressures based on the gap between the actual and potential output of the economy. This view recently gained a stamp of approval when the 2004 Nobel Prize in Economics was awarded to economists whose work supports the notion of explicit inflation targeting. But a key concern for traders, the market and the economy is if this notion would really work.

### **Could Tie Policy Markers' Hands**

While most futures traders are merely concerned with price blips up and down on the screen, this background information may be crucial to the markets in the years ahead. So what are the risks associated with so-called inflation targeting? First is the fact that shifts in monetary policy could be delayed when speed is of the essence. Second, inflation targeting assumes that we can properly measure the economy's potential...or even measure inflation itself.

Both of these assumptions have yet to be proven. So, is there a better way? Perhaps, and the U.S. Future Inflation Gauge (USFIG) may hold the key (we'll get back to that later).

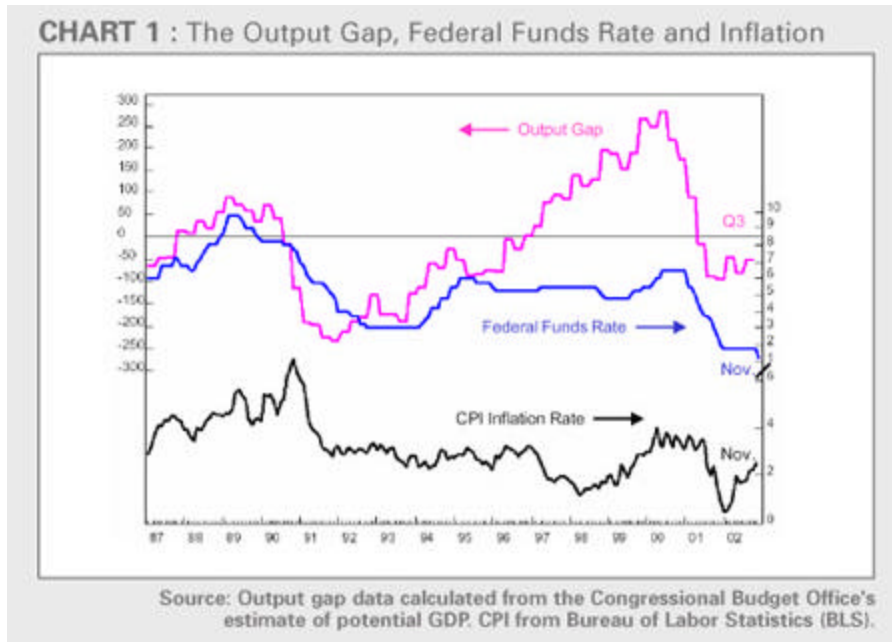
### **Why the Fed Eases and Tightens**

First, let's think back to some of the basics of Economics 101. Very simply, conventional wisdom holds that when an economy's output is below its potential, inflationary pressures decline. It's also an economy in need of stimulus. In this situation, monetary policy should be eased. Conversely, when an economy's output rises above its potential, inflationary pressures mount, thus creating the need for monetary policy to be tightened. The degree to which economic growth is above or below its potential is measured by the "output gap" between actual Gross Domestic Product (GDP) and estimated potential GDP.

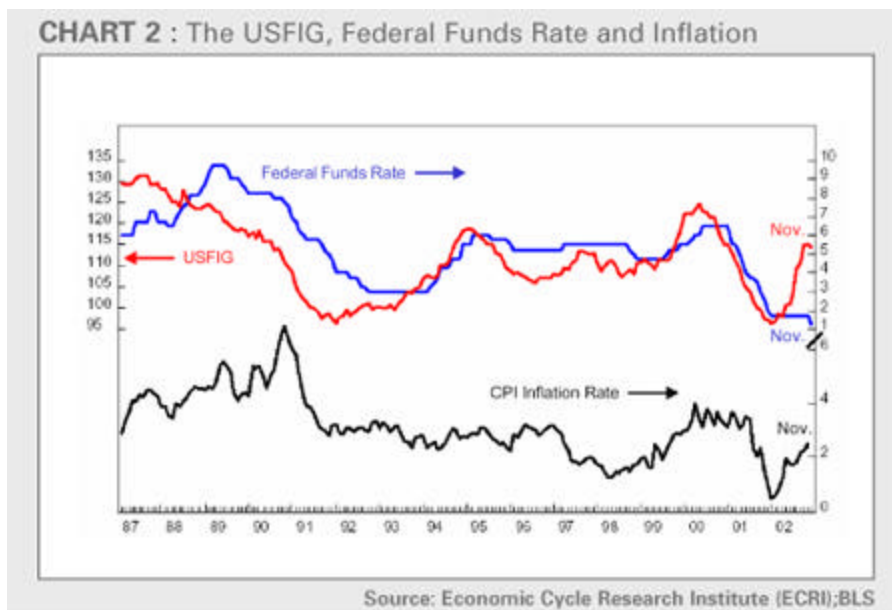
### **Did the Rule Work?**

Some proponents of inflation targeting are solidly behind the so-called Taylor rule, meaning that the funds rate should change in line with the output gap, as well as the gap between actual inflation and the central bank's target. This rule is widely perceived to have done a reasonably good job in capturing actual Fed policy moves, at least through the mid-1990s. However, as Chart 1 shows, when the U.S. economy experienced strong growth without inflation in the late 1990s, the output gap soared but

inflation did not – even though the Fed did not raise rates until 1999. In other words, the relationship between the output gap and the funds rate seems to have broken down.



As Chart 2 illustrates, however, the USFIG had a closer relationship with the movements in the funds rate during the same period – including the late 1990s when the Taylor rule stopped working.



Starting in 2002, while the USFIG clearly had risen, the Fed kept rates low. What does the historical relationship between the USFIG, the funds rate and inflation suggest about the implications of this divergence?

To explore this issue, Economic Cycle Research Institute (ECRI) analyzed the USFIG, the funds rate and U.S. inflation, using monthly data from the beginning of the Greenspan era. The results support the view that the three variables are co-integrated, meaning that they move in a related fashion.

### **The Three Match Up Well**

Quite simply, over time the three measures – the USFIG, the funds rate and inflation – seem to have a long-run relationship that can help traders with big-picture background information on the likely direction of long-term bond prices and interest rates. While in the short term the three may drift in different directions, there are fundamental (economic) forces that inevitably will draw them back close to each other. Thus, if we know what two of these three variables are doing, the co-integration relationship should tell us what the third variable is likely to do. Let's look at some examples.

Suppose the USFIG had begun to rise from low levels, and within a few months, inflation had started to bubble up. The co-integration of the three variables means that, in due course, the funds rate also would rise, presumably as the Fed moves to cap off the emerging rise in inflation. Alternatively, if the Fed were more pre-emptive, it would raise the funds rate early, thus dampening inflationary pressures. This would result in the USFIG and inflation not rising as much as they might have without the preemptive Fed action. When the Fed moves aggressively and preemptively against inflation in line with cyclical swings in the USFIG, it suppresses the volatility of the inflation cycle. In effect, the strong cyclical volatility of inflation is transferred to the fed funds rate.

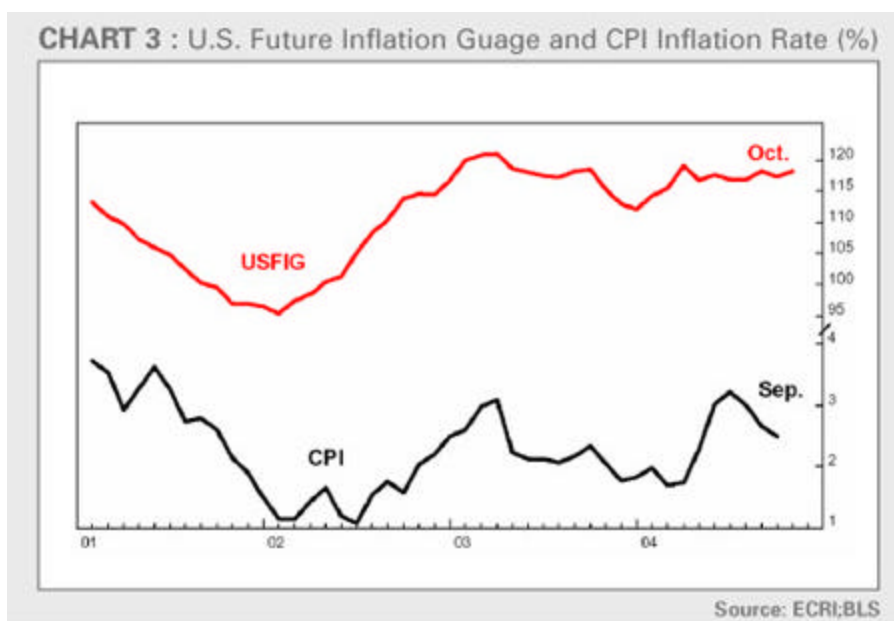
Finally, suppose the Fed were to keep the funds rate down because of other worries, even as the USFIG was clearly rising? The expected outcome would be an eventual significant rise in inflation and/or a stronger rise in the funds rate as the Fed moved to catch up and get ahead of the curve. This is essentially what happened in 2002 before the Iraqi War-related slowdown checked a further rise in inflation. You get the idea.

### **Does Inflation Targeting Work?**

ECRI also analyzed the co-integration of a different set of variables – the output gap, the federal funds rate and U.S. inflation – again using monthly

data from the beginning of the Greenspan era. In this case, the evidence does not support the conclusion that the three variables are co-integrated, which is consistent with the breakdown of the Taylor rule in the late 1990s. Thus, even though the output gap, being negative, pointed to a lower funds rate, actual inflation didn't stay down as suggested by the Taylor rule. Essentially, in 2002-03, the Taylor rule again provided misleading cues as inflation turned up despite the negative output gap.

The bottom line is that inflation pressures haven't declined sharply (see Chart 3). The co-integration between the USFIG, the funds rate and inflation suggests that there may be a more noticeable increase in actual inflation, and/or an increase in the funds rate. That is precisely what we've seen as of late.



### **Taylor Rule Failed**

While the Taylor rule is interesting in theory, it has failed in practice. Going forward, if inflation targeting using the Taylor rule were to be implemented, it could result in a false sense of security for the marketplace. Instead of a live person like Greenspan judging the myriad of factors that constantly are tugging at the economy, the Fed could be constrained by formulas and rules, which haven't always worked. Traders should not underestimate the risk that policy might not act the same going forward.

### **The FIG Has You Covered Either Way**

Because we can't expect Greenspan to be Fed chairman forever, what can

be done to maintain some of the success that the Fed has enjoyed under his tenure? The suggestion of inflation targeting, while interesting, comes with many new risks. One possibility is to take advantage of the close interrelationship among the FIG, inflation and the fed funds rate, which provides a useful framework within which to consider monetary policy options. But that relationship also suggests that even if the USFIG is not used to help guide policy decisions, it'll provide good clues as to the upcoming course of inflation – which in turn pressures bond futures prices and long-term interest rates. Either way, the USFIG has you covered. (For those interested in monthly updates for the USFIG, they are available at [http://www.businesscycle.com/free\\_data/](http://www.businesscycle.com/free_data/).)

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