



A Historical Perspective on Where We Are in the Interest Rate Cycle

On September 20, 2006, for the second meeting in a row, the Federal Reserve failed to raise the target Federal Funds rate. Since then, legions of Fed-watchers have been flooding the airwaves, newspapers and our email inbox with their opinions on whether the Fed is establishing a new streak, or whether it will change course again on October 25.

One never knows for sure the answer to these questions. We do have an opinion, of course, which we'll get to by the end of this paper, but as we have said before, trying to predict interest rates is a losing proposition: You're bound to be wrong. So our philosophy is to try to manage our mortgage portfolios for a wide range of possible interest rate outcomes. While we can't predict the future, we do know where we've been, and sometimes clues to the future can be uncovered by reviewing the past. In other words, to figure out where we're heading, we have to understand how we got here.

Our historical rewind has an exact starting date: November 21, 2002. On that date, then-Fed governor Ben Bernanke delivered a speech to the National Economists Club in Washington, DC, entitled "Deflation—making sure 'it' doesn't happen here." Bernanke's speech was the most emphatic and specific of a series of speeches coming out of the Fed as core inflation was declining from the cyclical peak of 2.8% (year-over-year increase) in November 2001. When Bernanke made his speech the economy was still feeling the effects of the stock market collapse and the horror of 9/11. The Fed had just cut the Fed Funds rate 50 basis points to 1.25% at its November 6 meeting, its first cut since the prior December. Core CPI then stood at 2.0%. Unemployment was at 6%, and capacity utilization was dropping. The Fed, Bernanke said in his speech, was going to save the day. "I am confident that the Fed would take whatever means necessary to prevent significant deflation in the United States," he said, "and, moreover, that the U.S. central bank, in cooperation with other parts of the government as needed, has sufficient policy instruments to ensure that any deflation that might occur would be both mild and brief."

Why was the Fed so worried about deflation? While it is true that we observe falling prices in periods of deflation, many would argue that the falling price levels are merely the symptoms of deflation and not the cause. More specifically, the cause of deflation is generally agreed to be an increased demand for money that isn't offset by an increase in the money supply, or a drop in the money supply that isn't offset by a fall in the demand for money. To state it another way, deflation makes money more valuable: as prices fall, your dollar (or euro or yen) buys more. Think of deflation as an increase in the exchange rate of your currency against goods denominated in your own currency.

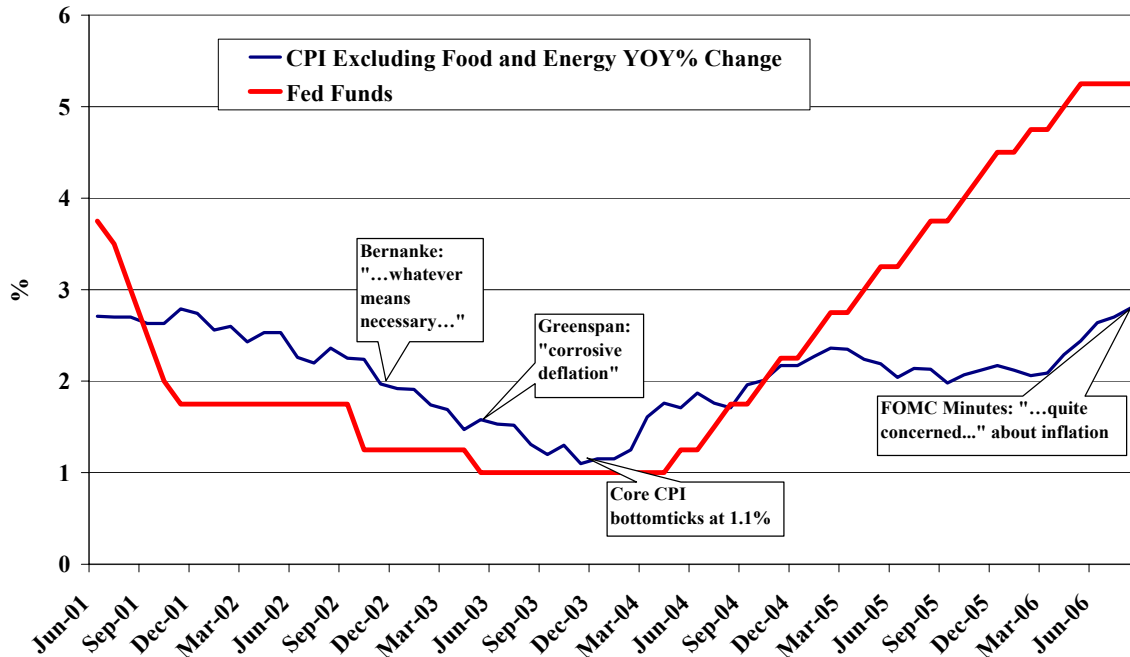
On balance, deflation would seem to be a pretty good thing if you are a consumer. Goods are generally cheaper and, if you are a corporate treasurer, as the price of replacing assets declines, more funds become available for other pursuits, such as research, marketing or paying dividends. If consumers put off consuming as they wait for prices to go lower, they will be saving or paying down debt, activities that would portend greater capacity to buy in the future. If you are trying to sell goods and services, deflation is potentially problematic if you are unable to lower your cost structure. Thus in the short run, deflation provides an incentive to reduce expenses and save, while providing a disincentive to borrow.

To a central banker, these positive aspects of deflation are generally overlooked because central bankers don't think in short-term horizons. Consider this statement by Alan Greenspan in a speech delivered to an IMF conference in Berlin on June 3, 2003: "So far as the issue of deflation is concerned, the issue we are concerned about is not the issue of deflation in the sense of falling prices per se, but the issue of corrosive deflation, that is a deflation that essentially feeds on itself, creates falling asset prices, which in turn brings down levels of economic activity through the wealth effect, contracting profit margins and a type of



weakness which we all at least theoretically conclude is far more of a concern than inflation... It's a difficult job to contain inflation, but we're not all that uncertain about it as we are with the issue of deflation."

When the Fed spoke



source: Bloomberg

The touchstone for any discussion of deflation is the Great Depression. Even more than the collapse of the stock market that presaged it, deflation was the dominant feature of the Great Depression. According to National City Bank (the forerunner to today's Citigroup), deflation and the resulting growing burden of debtors was a main cause of the nationally pervasive "psychological depression". From pre-Crash levels to the end of 1932, the Wholesale Price Index was down 35% and the Retail Price Index was down 40%. Farm and business commodities prices were down 63%, which prompted farmers to block highways and dump products rather than sell at market. Social unrest took hold, with demagogues like Huey Long and Father Coughlin gaining power and socialist and communist activities on the rise. By 1932, banks were failing in record numbers as thinly capitalized banks battled defaults and bank runs, unemployment reached 36% and GNP was only half what it was in 1929.

Much has been written about the Federal Reserve's role in precipitating or perpetuating the Great Depression. While arguments have been made on both sides of the argument, what is clear is that a) it did not stand idly by, but b) its efforts were largely ineffective. From January to July 1928 the Fed raised the discount rate from 3.5% to 5% to try to cool off the excesses in the economy and the stock market. Failing to slow things down, the discount rate was raised again to 6% in August 1929. Once the crash occurred in October, the Fed lowered its discount rate to 5% on November 1, 4-1/2% on November 15. By the end of 1930 the discount rate was down to 2%, where it roughly stayed. (The discount rate is problematic as a benchmark rate, but it is a viable time series to reflect monetary policy.) Some would argue that this was "easy" monetary policy, but if prices are falling faster, then in fact the Fed was "tight." But the Fed tried other means as well. It expanded its securities holdings massively, from about \$400 million in September 1929 to \$2.2 billion on March 1, 1933, just before the FDR-ordered bank holiday. Most of the purchases were of T-bills of less than a year in maturity, and 3-month bills fell in yield over the period from 4.6% to 0.30%. It was all for naught, however, as banks, too busy worrying about their own liquidity than their customers, continued to fail. The Fed's liquidity injection was the central banking equivalent of pumping air into a balloon with thousands of holes in it. (Former Goldman partner Barrie Wigmore's book, The Crash and Its Aftermath, 1985, is a useful guide to the financial markets during this period.)



Monetary policy was so ineffectual in pulling the country out of its deflationary spiral that it's not surprising a modern-day central banker would do everything he or she could to stave it off. The Federal Reserve of 1929 to 1930 brought the discount rate down from 6% to 2% in under two years as it grappled with the speculative excesses of the stock market bubble and a profound economic contraction. The Federal Reserve of 2001 to 2003 lowered the benchmark rate from 6.5% to 1% in 2-1/2 years, as it grappled with the tech-stock led market bubble and an economic slowdown. When Greenspan made the above-referenced speech in early June 2003, the last print on CPI was 1.6%, and three weeks later the Fed cut rates again to 1%. The Fed would hold rates there for a full year as core CPI would continue to fall until it bottomed at 1.1% in November and stayed there for three months. In easing so aggressively, the modern Fed may have outdone the Depression-era Fed.

If there is one significant difference between the US of 1930 and the US of the first half-decade of the 21st century, it is the health of the banking and mortgage finance system. From 1929 to 1932, bank loans on real estate or for businesses fell even as bank reserves and investments grew. One need only look at the growth of mortgage debt from 2001 to 2006 to understand how much credit has expanded. From the end of 2000 to the end of 2003, which book-ends the Fed's easing campaign, residential mortgage debt increased 25% from \$4.8 trillion to \$6 trillion. From then through the first quarter of 2006, mortgage debt has mushroomed by another 55%, to \$9.3 trillion. All told, mortgage debt has increased \$3.5 trillion in about five years (which is the equivalent size of the entire US nominal GDP as recently as 1983). The effects of this growth in mortgage debt on the economy are well-documented and, it can be argued, this debt bubble helped pull the US out of its recession.

Apparently successful in staving off deflation, the Fed began its now historic tightening campaign in June 2004, at which point core CPI had inched back up to a 1.7% YOY increase. Two years and seventeen consecutive FOMC meetings later, the Fed has pulled the Fed Funds rate to 5.25%. Today we have a situation that is diametrically different from November 21, 2002. Instead of aggressive dovishness, Fed-speak is now almost exclusively hawkish as core CPI is back up to 2.9% YOY. As the minutes to the last FOMC meeting indicated, "Many meeting participants emphasized that they continued to be quite concerned about the outlook for inflation. Recent rates of core inflation, if they persisted, were seen as higher than consistent with price stability, and participants underscored the importance of ensuring a moderation in inflation."

US monetary policy has lurched from one side of the boat to the other as the actions of the Fed have exacerbated the effects of the business cycle while it is ironically trying to protect us from it. A brief digression into economics to try to explain this: Interest rates are the price of money and, in a completely free-market economy, would be set like the price for any good or service—by supply and demand. According to Austrian School economists, in the case of money, supply and demand for it reflect the difference between present and future consumption, i.e., investment versus savings. Some call this the "natural" interest rate. Government or central bank control of the price of money and money supply disturbs this equilibrium because the interest rate no longer reflects the real supply of and demand for investment capital. A Keynesian would look to fiscal policy and aggressive government action to stabilize the economy due to its effects on aggregate demand, while a Monetarist would see monetary policy such as open market operations and the discount window as the way to influence output and prices. When economists talk of huge government spending programs (Keynesian) or the Fed keeping the Fed Funds rate "artificially low" (Monetarist), the implication is that these policy decisions will cause capital to be misallocated into investment at the expense of savings.

With this backdrop, it seems clear that what happened in the 1990s is a misallocation of capital into technology investment—both production and tech stocks—and the result was the stock market bubble. Ultimately the tech bubble burst in 2000, and Austrian economists would argue that the economy should have been allowed to go into a recession in order to liquidate unprofitable investments and free up capital for other purposes. Thus recessions are necessary; preventing them from occurring exposes an economy to other problems. As the Fed began to cut rates massively in 2001, the recession that should have occurred was made much shallower because capital was plowed into housing through the mortgage finance mechanism. As rates continued to be slashed to the ultra-low 1% by 2003—and held there for a year—



capital again was misallocated, this time into housing. The resulting mortgage debt bubble caused significant home price appreciation in many markets and a burst of spending based on borrowing against that appreciation that continued even as the Fed started tightening.

This, then, is where we are in the interest rate cycle: The Fed has been raising rates to correct the latest misallocation of capital—the mortgage debt bubble and attendant lift-off in home prices—and the early signs are that the housing slowdown has begun. (See Gary Gordon’s recent piece: “[Housing: Why We Expect a Hard Landing](#)”, October 4, 2006, on our website for some insight into this issue.) Home price appreciation has leveled off and even begun trending down in some markets, while mortgage activity has slowed from the prior year’s pace. There is still a tremendous oversupply of homes for sale, and many of the industries related to housing are showing signs of weakness. Economists are generally calling for a much weaker economy going forward as a result.

Trying to figure out what the Fed will do in the next five weeks is a challenge at this point in the business cycle. But trying to figure out what it will do in the next five years is actually a little more straightforward when viewed through the lens of history. If we understand that the Fed is basically in the business of using interest rates to manage the booms and busts of the business cycle, then we have to conclude that the Fed is now in a position to start cutting rates. Bernanke & Co. are now setting up to protect the economy against the economic fall-out of a weak housing market. We don’t know when this will happen, and we don’t know how far it will have to go. But it will have to go. In other words, it will use its monetary policy tools to avoid or weaken a recession (we would also expect to see the government use fiscal policy).

We have taken a fairly long-term historical sweep to try to understand the function and use of interest rates. Some would argue that it isn’t long-term enough, but as investors we don’t have enough time to position ourselves for a forecast based on a longer perspective. For as John Maynard Keynes said, “In the long run, we’re all dead.” Nevertheless, to close with the broadest possible perspective on interest rates, we leave the last word on this subject to Sidney Homer, author of one of the greatest feats in modern financial scholarship, [A History of Interest Rates](#). First published in 1963 and now in its fourth edition (with Richard Sylla; Homer himself died in 1983), Homer’s opus starts in ancient agrarian agricultures and records and analyzes the prevailing rates of interest over long periods in many countries. Homer was of the view that interest rates are a mirror of their times: “In the charts and tables of interest rates over long periods, students of history may see mirrored the rise and fall of nations and civilizations, the exertions and tragedies of war, and the enjoyments and abuses of peace. They may be able to trace in the fluctuations the progress of knowledge and technology, the successes and failures of political forms, and the long, hard, and never-ending struggle of democracy with the rule of tyrants and elites.” History may indeed tell where we are in the Homeric perspective on interest rates, but for us we’ll look to the next turn in the business cycle.

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