



Compound Interest

AUGUST 2010

A Loaded Gun

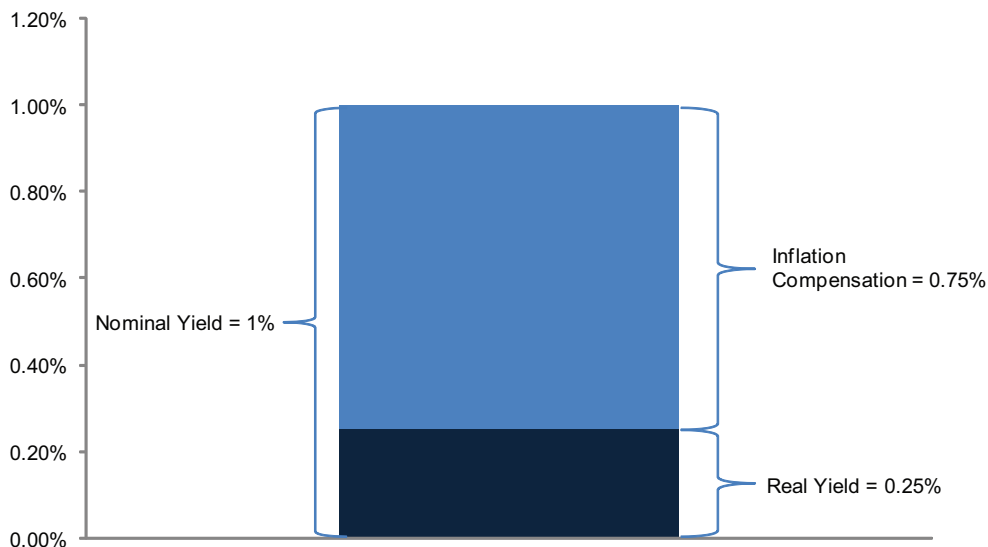
As U.S. economic growth seems to be moderating and with inflation already extremely low, deflation has become a more prominent concern. However, we often hear that the Federal Reserve is “out of bullets” as it has already pushed short-term interest rates to zero. Nothing could be further from the truth. The Fed has many options, some of which it is already implementing while others seem to be under active consideration. In this piece, we will examine the various options available to the Fed, some more likely to be implemented than others, and the potential consequences for markets.

To many, the thought of actually encouraging inflation seems irresponsible. But consider

how beneficial just a small increase in inflation expectations could be. Right now, corporations, banks and individuals alike are holding record amounts of cash. Why hold cash when the rate they are earning on that money is zero? Corporations are protecting themselves against another liquidity crisis; last time, many companies were caught trying to roll over debts at the wrong time. Banks are protecting themselves against future losses. Individuals remain worried after watching risk assets plummet. In all cases, cash looks like a riskless asset to a group of economic agents that are still very risk averse. In a world of no inflation, cash is indeed riskless.

To put it in more technical economic terms, while *nominal* interest rates cannot fall below zero, *real* interest rates can. The difference between the two

figure 1. Real vs. Nominal Rates





is the rate of inflation. For example, when individuals invest in some instrument that pays a 1% rate, that is the nominal rate. If inflation is only 0.75%, then the real rate is 0.25% (1.00% - 0.75%). Notice that if inflation were 2% or 3% but the *nominal* rate were still only 1%, then the real rate would be negative.

This is critical because if the real rate of interest goes negative, then it implies that investors in that 1% instrument are losing money in real terms. In other words, inflation is wiping out all of their nominal gains and then some. Right now, many are assuming inflation is either extremely low or even negative. Therefore, even at near zero nominal rates, the real rate is not too bad.

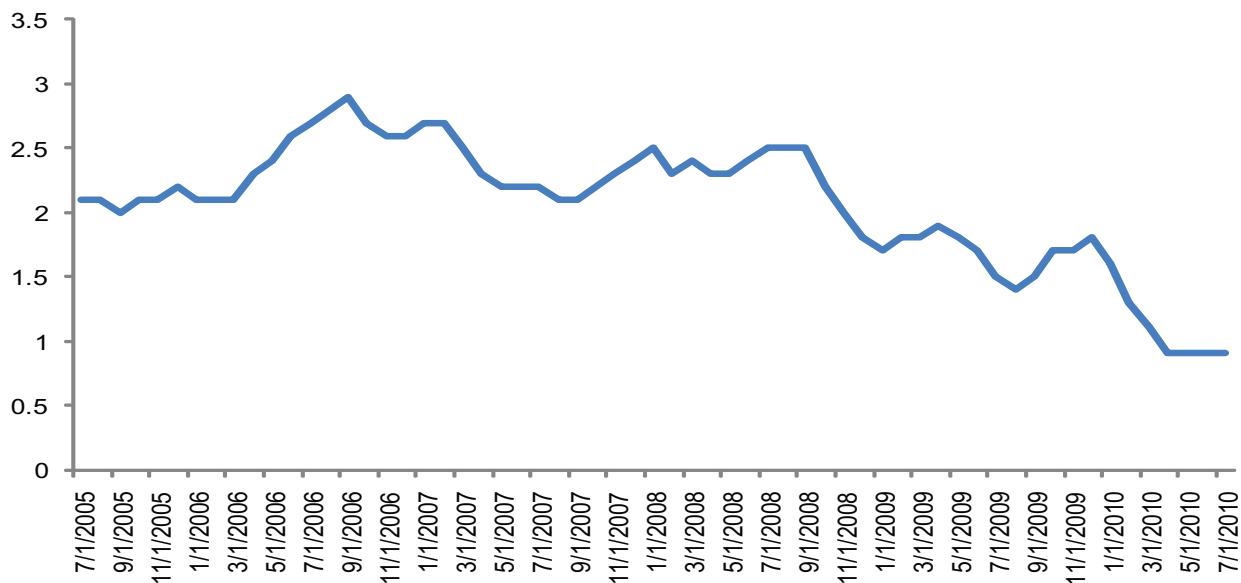
In fact, rising money balances are telling us that interest rates are *too high*. If the equilibrium real rate of interest were above zero, then no one would be willing to buy zero yielding assets. Or

put another way, if interest rates were too low, corporations would be lining up to borrow money. Instead, they continue to build cash balances. This tells us that the real rate of interest needs to fall.

If the Fed could manage to create inflationary expectations of even a modest 3%, it would result in a significant disincentive for economic agents to continue to hold unproductive cash balances. Corporations would spend their cash hoard, either through expansion of operations or distributions to shareholders. Banks could no longer afford to hold tremendous excess reserves. Individual investors would look for more profitable assets. Whereas now cash seems safe, introduce a little inflation and suddenly cash becomes a sure loser.

Can the Fed create inflation expectations? Consider the nature of inflation, said to be “too much money chasing too few goods.” If deflation is

figure 2. Core CPI Year over Year (%)





the problem, it must be that there is not enough money chasing our goods. Therefore, the Fed simply needs to pump more money into the system, and the deflation problem is solved. While it is true that the Fed can no longer use its traditional policy tool of lowering short-term interest rates further, this does not prevent the Fed from injecting more money into the system. As Ben Bernanke said in 2002, "The U.S. government has a technology, called a printing press, that allows it to produce as many U.S. dollars as it wishes..."

How will the Fed use its printing press to create more inflation expectations? On August 10, the Fed announced it would be reinvesting cash flow from its existing asset portfolio, but this does not involve any new money creation. In order for the Fed to have a meaningful impact on inflation expectations, the FOMC will have to make a credible commitment to higher inflation levels. What if Ben Bernanke stood behind a podium and announced that the Fed would do whatever it took to get inflation above 2%? What if he said the Fed would buy government bonds in whatever quantity necessary, with no stated limits on amount or timing of purchases? If the pledge is credible, the Fed can create inflation expectations.

If the Fed succeeds in forcing firms to utilize their cash hoard, stock performance could be fairly strong, particularly for the right companies. Adroit firms will use this opportunity to adjust their capital mix to more debt, minimizing their cost of capital now while rates are very low. As time passes, more firms will be coming to the debt markets, not only pushing interest rates higher but also likely pushing credit spreads wider. Currently many firms are simply refinancing old debts at better rates. But it will be the companies that make good investments with cheap capital that will be long-term winners.

One would expect that bond market performance would be poor as inflation expectations increase. However the overall direction of rates is very difficult

to predict under these circumstances. Given that the Fed will be buying Treasury bonds directly, potentially in very large numbers, it is entirely possible that rates will actually fall. One thing that is clearer is that if inflation expectations increase, then very long-term bonds (20 years and longer) will underperform intermediate-term bonds (5-10 years) even after adjusting for duration differential. The longer the bond, the more one must be compensated for future inflation. By concentrating a bond portfolio in intermediate-term cash flows, we can maintain reasonable portfolio yield as well as avoid undue re-investment risk should rates remain low, while at the same time, avoid the worst of a world of increasing inflation.

The Fed indeed has plenty of bullets, which is good news in a sense. But a loaded gun is dangerous. While the economy is better off with a little inflation than deflation, it will be difficult for the Fed to create *just enough* inflation. The Fed is going to be forced to use its most powerful weapon, and the longer-term consequences are difficult to discern.

Thomas D.D. Graff, CFA
Fixed Income Analyst and Trader

Brown Advisory is the trade name of Brown Investment Advisory & Trust Company, Brown Investment Advisory Incorporated, Brown Advisory Securities, LLC, Brown Advisory LLC, Brown Advisory Cavanaugh, LLC, Brown Advisory Ltd., Brown Advisory Insurance Agency, Alex. Brown Investment Management, LLC and Winslow Management Company.