# What Happens When Rates Rise?

By Martin Feldstein *Mon, Apr 1, 2013*

*The low interest rate on long-term Treasury bonds has also boosted demand for equities, farm land, high-yield corporate bonds, gold, and real estate. When interest rates rise, the prices of those assets will fall as well.*

Long-term interest rates are now unsustainably low, implying bubbles in the prices of bonds and other securities. When interest rates rise, as they surely will, the bubbles will burst, the prices of those securities will fall, and anyone holding them will be hurt. To the extent that banks and other highly leveraged financial institutions hold them, the bursting bubbles could cause bankruptcies and financial-market breakdown.

The very low interest rate on long-term United States Treasury bonds is a clear example of the current mispricing of financial assets. A ten-year Treasury has a nominal interest rate of less than 2%. Because the inflation rate is also about 2%, this implies a negative real interest rate, which is confirmed by the interest rate of -0.6% on ten-year Treasury Inflation Protected Securities (TIPS), which adjust interest and principal payments for inflation.

Historically, the *real* interest rate on ten-year Treasuries has been above 2%; thus, today's rate is about two percentage points below its historical average. But those historical rates prevailed at times when fiscal deficits and federal government debt were much lower than they are today. With budget deficits that are projected to be 5% of GDP by the end of the coming decade, and a debt/GDP ratio that has roughly doubled in the past five years and is continuing to grow, the real interest rate on Treasuries should be significantly higher than it was in the past.

The reason for today's unsustainably low long-term rates is not a mystery. The Federal Reserve's policy of "long-term asset purchases," also known as "quantitative easing," has intentionally kept long-term rates low. The Fed is buying Treasury bonds and long-term mortgage-backed securities at a rate of $85 billion a month, equivalent to an annual rate of $1,020 billion. Since that exceeds the size of the government deficit, it implies that private markets do not need to buy any of the newly issued government debt.

The Fed has indicated that it will eventually end its program of long-term asset purchases and allow rates to rise to more normal levels. Although it has not indicated just when rates will rise or how high they will go, the Congressional Budget Office (CBO) projects that the rate on 10-year Treasuries will rise above 5% by 2019 and remain above that level for the next five years.

The interest rates projected by the CBO assume that future inflation will be only 2.2%. If inflation turns out to be higher (a very likely outcome of the Fed's recent policy), the interest rate on long-term bonds could be correspondingly higher.

Investors are buying long-term bonds at the current low interest rates because the interest rate on short-term investments is now close to zero. In other words, buyers are getting an additional 2% current yield in exchange for assuming the risk of holding long-term bonds.

That is likely to be a money-losing strategy unless an investor is sagacious or lucky enough to sell the bond before interest rates rise. If not, the loss in the price of the bond would more than wipe out the extra interest that he earned, even if rates remain unchanged for five years.

Here is how the arithmetic works for an investor who rolls over ten-year bonds for the next five years, thus earning 2% more each year than he would by investing in Treasury bills or bank deposits. Assume that the interest rate on ten-year bonds remains unchanged for the next five years and then rises from 2% to 5%. During those five years, the investor earns an additional 2% each year, for a cumulative gain of 10%. But when the interest rate on a ten-year bond rises to 5%, the bond's price falls from $100 to $69. The investor loses $31 on the price of the bond, or three times more than he had gained in higher interest payments.

The low interest rate on long-term Treasury bonds has also boosted demand for other long-term assets that promise higher yields, including equities, farm land, high-yield corporate bonds, gold, and real estate. When interest rates rise, the prices of those assets will fall as well.

The Fed has pursued its strategy of low long-term interest rates in the hope of stimulating economic activity. At this point, the extent of the stimulus seems very small, and the risk of financial bubbles is increasingly worrying.

The US is not the only country with very low or negative real long-term interest rates. Germany, Britain, and Japan all have similarly low long rates. And, in each of these countries, it is likely that interest rates will rise during the next few years, imposing losses on holders of long-term bonds and potentially impairing the stability of financial institutions.

Even if the major advanced economies' current monetary strategies do not lead to rising inflation, we may look back on these years as a time when official policy led to individual losses and overall financial instability.