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Global low interest rates: Hypotheses, implications and strategies

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More than seven years after the onset of the global recession, sluggish economic growth persists across all developed economies. Interest rates around the world hover at historically low levels. As of Oct. 1, 2015, the annual yield of 10-year government bonds was 2 percent in the United States, 0.5 percent in Germany, 0.3 percent in Japan and –0.2 percent in Switzerland, meaning the lenders must pay the Swiss government to hold their money!

WHY ARE INTEREST RATES SO LOW?

There are a few hypotheses as to why interest rates are so low:

1 | Federal Reserve Bank hypothesis
2 | Secular stagnation hypothesis
3 | Global savings glut hypothesis

The *Fed hypothesis* is intuitive, but in my opinion, the most unlikely. While the Fed sets the benchmark nominal short-term interest rate, and its monetary policy impacts inflation and inflation expectation over longer terms, its ability to affect medium- to long-term real (inflation-adjusted) interest rates is limited. The goal of the Fed's monetary policies was to bring the short-term federal funds rate closer to market equilibrium. If the Fed wants to artificially push interest rates below the market equilibrium rate (i.e., the cost of borrowing is below the investment returns), the economy would overheat, leading to inflation. Seven years after the onset of quantitative easing (QE) programs, the inflation index in the United States is still only 1.3 percent.

The *secular stagnation hypothesis* suggests that an economy, after a huge financial shock, would experience inadequate aggregate demand for many years. Demographic shifts (aging and slow population growth), reduced capital intensity (social media replacing steel-making), tepid private capital investment and depressed household consumption would chronically prevent the economy from reaching full potential. If the return on capital is very low, then the real interest rate needed to achieve equilibrium real interest rate (at full employment) will likely be very low as well.

The recent pattern of slow economic growth, low capital spending, subdued household consumption, low inflation and low real interest rates is consistent with this hypothesis. However, skeptics point to its lack of international dimension. Secular stagnation requires that capital returns be permanently low everywhere, not just in the home economy. Availability of profitable capital investments globally should help defeat local secular stagnation because outflows of financial capital weaken home currency, promote exports and raise domestic production, which helps the home economy reach full employment and close the output gap.

The *global savings glut hypothesis*, championed by former Fed Chairman Ben Bernanke, attributes the low global interest rates to a global excess of desired saving over desired investment, emanating largely from China and other emerging Asian economies, and oil producers such as Saudi Arabia, to reduce borrowing and build international reserves.

WILL THE INTEREST RATES REMAIN LOW?

In the eurozone, Germany's large and persistent trade surplus puts the burden on less competitive trading countries to undergo painful fiscal austerity measures to become more competitive. As the largest economy in the eurozone, Germany effectively relies on foreign rather than domestic demand. Today, the unemployment rate in Germany is 4.5 percent, while the unemployment rate in the ex-Germany eurozone is 13 percent. Because the eurozone is short on aggregate demand, if Germany continues to pursue imbalanced export policies without taking large fiscal and structural measures to increase domestic demand, the eurozone could fall into the secular stagnation trap. This implies the extremely low interest rates in the eurozone could persist for many years.

In the United States, excessive savings are in decline due to a variety of geopolitical and socioeconomic reasons:

1. In China, the very high investment rate of the past 30 years is not sustainable due to the exhaustion of the reserve of farmers and a slowdown in the rate of technological catch-up. Excessive supply, excessive leverage in the private sector and irrational exuberance in assets (stocks and housing) markets are the classic patterns for recession in a capitalist market economy. After the recent stock market crash, Bank of China employed a small portion of its $2 trillion foreign reserve to defend the depreciation of the yuan.
2. Oil prices have dropped from more than $100 a barrel last year to about $40 a barrel, and remain low. The excessive savings from oil producers are expected to decline significantly. Saudi Arabia has to draw on its foreign reserve to support domestic social programs.
3. The current account balances among other emerging economies started to decline a few years ago, and their foreign reserves have stabilized and even started to decline moderately.

These factors, combined with sustainable U.S. growth and a near full employment, may drive the real interest rate to escape the zero and start to normalize.

WHAT ARE THE IMPLICATIONS OF LOW INTEREST RATES?

The long-term government bond has three components: expected inflation, expectation of the future real short-term interest rate and a term premium. In the United States, inflation is about 1.3 percent. The short-term interest rate is expected to remain low, at about 0.25 percent. Given that the yield of 10-year Treasury bonds is 2 percent, the implied term premium is only 0.45 percent, which is substantially below the historical average of 1.6 percent.

The low-term premium reflects the market consensus of low inflation risk and low uncertainty about likely future interest rates. In a low, stable inflation or disinflationary environment, holding longer-term bonds not only increases portfolio yields due to positive carry and rolldown, but it also reduces the diversified portfolio risk. Holding longer-term bonds can also provide a hedge against deflation risk and meet new regulatory requirements for safe, liquid assets. With all of these benefits, investors should be willing to accept low compensation yield for holding bonds rather than short-term securities or cash.

Many actuaries worried that unconventional QE programs had artificially inflated the U.S. equity markets, and subsequent unwinding and eventual removal of the programs would inevitably cause stock markets to crash. The excessive worry might be misplaced, for two main reasons:

1. As argued by Bernanke, the QE programs just helped return the stock market to its normal trend.
2. The dividend yield on Standard & Poor's 500 index is on par with the 10-year Treasury yield. Any large decline of the index price would only make its dividend yield more appealing relative to yields of Treasury bonds.

However, for life insurance companies, persistent low interest rates have created asset and liability mismatch problems because their long-term liability assumptions are greater than the current market yields. As higher-yielding bonds mature and are replaced with lower-yielding bonds, the book yield of the investment portfolio will be insufficient, and liabilities will grow due to carry.

STRATEGIES IN RESPONSE TO GLOBAL LOW INTEREST RATES

To address the challenges to insurance companies worldwide created by the persistently low interest rates, we have invited a few experts to present their strategies on how to cope with the complex issues facing investment actuaries today in this issue of *The Actuary*. These authors are from a large insurance asset management firm, a large European insurer, an Asian consulting firm and two global investment banks. By combining opinions and insights from experts of different practices, perspectives and geographies, we intend to offer a comprehensive view on this complicated, yet critical, issue. ■

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