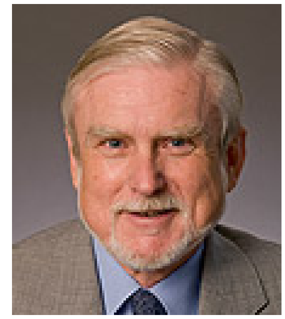
INTEREST RATE NORMALIZATION



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We expect a gradual interest rate normalization to occur during a prolonged multiyear economic expansion. We believe the U.S. has entered the second half of a seven-year economic expansion, with the past pattern of four years of real GDP growth near 2% to be followed by three years of real GDP growth near 3% in 2014, 2015 and 2016. The lesson of economic history is that a rise in interest rates is a normal pattern in prolonged economic expansions. The onset of the normal cyclical rise in interest rates was delayed this cycle by (1) the severity of the financial crisis and subsequent recession, (2) a slower-than-normal economic recovery, and (3) the extraordinary Federal Reserve actions designed to hold down bond yields below their free-market levels. Now, however, a more normal cyclical pattern of rising interest rates is beginning to emerge. Interest rates are returning to an "old normal" cyclical pattern.

The U.S. has benefited from declining interest rates for about three decades. We outlined the logic for a persistent decline in long-term yields in our May 25, 1981 Forbes column, entitled "Last Chance This Century." The actual long-term secular decline in bond yields lasted nearly 31 years, with 10-year U.S. Treasury yields peaking intraday at 16% on September 30, 1981 and troughing intraday at 1.37% in late July 2012, a decline of 1463 basis points over a period of more than three decades. Such an extreme low yield below 1.4% in July 2012 was only reached because the markets feared a total collapse of the European financial system last year, a risk which has faded.

We believe that the three-decade-long secular bond bull market is over. The long-term declining trendline of 10-year bond yields was destined to be broken sooner or later unless yields dropped another 1400 basis points over the next three decades, to minus 12% or below, which definitely does not seem likely. From that perspective, breaking the long-term downtrend in bond yields should hardly be a surprise.

The aftermath of the three-decade-long decline in interest rates is likely to be labeled a long-term secular bond bear market, but we prefer to view it in the context of the cyclical normalization of interest rates that we expect over a half-decade period, a return to a "secular neutral" center-of-gravity for interest rates. We do not expect a secular bond bear market which would carry 10-year Treasury bond yields back to 16%, or 12%, or 8% and maybe not even 6%. However, if we are correct to expect real GDP growth averaging about 3% or more for the next three years, 10-year Treasury bond yields are likely to eventually normalize at about 5% in 2017 at the end of a half-decade-long process of gradual interest rate normalization.

Following the recent rise to about 3% in 10-year Treasury yields since their secular and cyclical lows below 1.4% in July 2012, we expect that the pace of increase in 10-year Treasury bond yields should be more gradual for the next two years, probably followed by a more rapid spike in 2017, after the Presidential election of 2016. There was a dramatic start to the rise in bond yields and there may well be a dramatic end to the rise in bond yields (most likely in 2017, but possibly in 2018), but we believe that the bond market is in transition to a more gradual phase of upward drifting bond yields for roughly the next two years.

The economic impact of an interest rate rise is very sensitive to the cyclical stage of monetary policy. In our view, there are five stages of monetary policy: (1) aggressively stimulative, (2) stimulative, (3) neutral, (4) restrictive, and (5) aggressively restrictive. Not all interest rate rises are the same. A rise in interest rates due to strong real economic growth is better news than a

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rise due to an excessive rise in inflation. The economic consequences of a rise in interest rates when monetary policy is shifting from neutral to aggressively restrictive are quite negative, but that is not true of a rise in interest rates when monetary policy is shifting from aggressively stimulative to neutral, which is the near-term prospect.

The shift to restrictive or aggressively restrictive policy is usually triggered by the reality or fear of excessive inflation, hardly a description of the current economy. The yield curve often inverts at this stage. Historically, the yield curve has been a leading indicator. When short-term rates controlled by the central bank rise faster than free-market long-term rates, first flattening and then inverting the yield curve, that has generally been a warning sign for coming economic weakness and possible recession.

It is true that monetary policy shifts during the restrictive stage of the monetary policy cycle can damage the economy. If inflation surges above the central bank's tolerance limit and the Fed moves first from neutral to restrictive and then from restrictive to aggressively restrictive, the result can be a credit crunch, a recession and a sharp decline in profits. But that's not what is facing the U.S. today. We expect that it will be many years in the future before the Fed shifts to a restrictive or aggressively restrictive monetary policy, most likely at some point in 2017, but possibly in 2018.

The recent steepening of the yield curve tends to be more consistent with sustained economic expansion. The marginal profitability of expanding bank credit tends to be more favorable when the yield curve is steep. However, a special factor in this cycle is that the pace of expansion of bank credit is likely to be restrained by the aggressive tightening of bank regulation, including increased capital requirements. While monetary policy has been very stimulative, new regulations have placed major deleveraging pressures on most financial firms. As a result, net monetary policy after the regulatory drag is only stimulative even though gross monetary policy is aggressively stimulative. We believe that this regulatory drag on credit expansion helps explain why economic growth has been slow and inflation has been weak despite the Fed's monetary policy. The growth-dampening impact of increased financial regulation may gradually ease by the end of the half-decade period of normalization, as business models adjust. The resultant narrowing of the gap between gross monetary policy and net monetary policy after factoring in the regulatory drag would tend to motivate a tightening of Federal Reserve policy late in the half-decade-long period of interest rate normalization.

The Federal Reserve is contemplating a gradual move from an aggressively stimulative stance to a merely stimulative stance for gross monetary policy, in response to evidence that the U.S. economy is in a sustainable economic expansion. We doubt that this move to a somewhat less stimulative policy is going to disrupt the U.S. economic expansion in any major way, although it may create volatile housing data in the short run. It is occurring in response to reduced fears of downside economic risk rather than any unfavorable news of excessive inflation. Inflation is below the Fed's target and inflation expectations have been well-behaved. The reason that bond yields are rising is not because of any excessive inflation which the Fed must resist. Rather, now that the downside risks to the U.S. economy appear to have faded, the Fed intends to gradually taper back its program of creating an artificial scarcity of Treasury bonds and mortgage-backed securities available to private sector investors.

The markets have tended to treat the Federal Reserve's discussion of tapering quantitative easing as a signal that the timing of the first hike in the Federal funds rate is likely to be accelerated. However, we believe that the program of tapering QE3 should not be seen as a signal that a rise in the Federal funds rate will quickly follow. We continue to expect that the first Federal funds rate hike is likely to be postponed until well into 2015.

QE3 was adopted when the Fed feared downside risks to the economic expansion from the threatened fiscal cliff. QE3 was basically designed to force long-term interest rates below their free-market clearing level in order to drive up asset prices and support economic expansion. Prior to indications from the Federal Reserve on May 22, 2013 indicating potential tapering, there were clear signs of more aggressive risk-taking in many markets. Earlier in 2013, quantitative easing had been driving down perceptions of risk to extreme levels. This was discussed in Federal Reserve Governor Jeremy C. Stein's speech entitled "Overheating in Credit Markets: Origins, Measurement, and Policy Responses" on February 7, 2013. We do believe that excessively easy Federal Reserve policy contributed to (1) the internet bubble in 1999 and early 2000, (2) the housing bubble in the mid-2000s, and (3) the rapid growth in emerging country debt more recently. Concerns by central bankers and market participants about excessive risk-taking in response to hyperstimulative gross monetary policy thus seem appropriate. We believe that these concerns are one reason that the Federal Reserve wishes to taper down its quantitative easing purchases. Fortunately, the magnitude of domestic and international risk excesses has been more muted in this cycle than in earlier cycles and central bank concerns have risen earlier in the cycle, so the consequences are likely to be much less painful.

The Federal funds rate has been near zero for almost a half-decade, since December 2008, during the global financial crisis. We expect the Federal Reserve to keep the Federal funds rate near zero for another 18 to 24 months. If a near zero Federal funds rate persists for another 18 to 24 months, it will cumulate to a total of seven lean years for savers. While it may take a long time before the Federal funds rate returns to "normal," it is still relevant to review what the long-term norm for the Federal funds rate might be. We expect a half-decade long process for interest rate normalization, ending with a normal "neutral Fed funds rate."

The average real Federal funds rate (Federal funds rate minus inflation) over the 50 years ending in 2009 was about 2¼%. Assuming that the Federal Reserve achieves an average inflation rate at or near its 2% target, this precedent might imply an average Federal funds rate of about 4.25% in the long run.

When the Federal Reserve releases the economic projections of the Federal Reserve Board Members and the Federal Reserve Bank Presidents, it includes their estimates of the normal Federal funds rate that they expect in the long run. As of June 2013, the consensus of the Fed officials was that the Federal funds rate would be about 4% in the long run. Nine of the 19 officials surveyed chose 4%, four chose between 3.25% and 3.75% and six chose between 4.25% and 4.5%. The clear consensus in mid-2013 was that in the long run the Federal funds rate would be at or near 4%. However, it is also true that the Fed consensus about the Fed Funds rate in the long run has been gradually drifting down over time.

Even if the funds rate averages near 4% for the next half-century, which is certainly debatable, that hardly gives much guidance as to what the Federal funds rate will be for the next several years. The Federal Reserve can control the Federal funds rate but it cannot control the economic and market consequences of the Federal funds rate it chooses. Key to its decision about where to place the Federal funds rate is the central bank's dual mandate of price stability and full employment. We refer to this as its "dual domestic mandate," since the Federal Reserve's focus is on domestic U.S. price stability and domestic U.S. employment, with little focus on foreign economic fundamentals except to the degree that they influence U.S. inflation or U.S. economic activity. While foreign countries have complained about this "domestic dominance" in Fed decision-making, we see little prospect that it will change.

Core inflation is currently below the Fed's 2% target, which is one argument against the Fed raising the Federal funds rate any time soon. In addition, the current unemployment rate is about two percentage points above the 5.5% midpoint of the consensus of Fed officials about the lowest sustainable unemployment rate in the long run. In the June 2013 survey, the range of opinions among Federal Reserve officials about the long run sustainable unemployment rate was 5% to 6%. As long as inflation is not excessive, we believe that the first rise in the Federal funds rate is likely to occur when the unemployment rate finally begins to approach 6%. The speed of the increase in the Fed funds rate is likely to be influenced by the speed of labor market tightening and by the degree of inflationary pressure.

We do not believe that the U.S. economy is very inflation-prone. There is an excess supply of labor and foreign competition remains intense. In addition, the substitution for imported energy by increased domestic energy production has reduced the need to borrow from abroad to finance the current account deficit. Fears of a weak dollar trend which would drive up inflation have hardly proved correct. The dollar has strengthened recently, a disinflationary force. Overall, we expect a very gradual upward drift in the Federal funds rate from about mid-2015 to late 2016, probably followed by an accelerated rise in 2017, rising eventually towards 4%.

Will the Federal funds rate rise be (1) early and gradual or (2) late and rapid? We believe both that the rise of inflation will be gradual and that society's tolerance for somewhat higher inflation has probably increased. It has been three decades since the U.S. experienced double-digit inflation. The official central bank consensus in developed countries on an inflation target near 2% has not been abandoned, but we suspect there is less conviction that it is at the right level. The Federal Reserve might have had less of a problem with the zero bound in the Federal funds rate if the inflation target had been set higher than 2%. In the recent past, the chief economist of the IMF and other prominent economists have advocated higher inflation targets. The UK has persistently tolerated inflation above its inflation target on the forecast that inflation would fall in the future. We expect the Fed to retain its 2% inflation target, but believe that an aggressive pre-emptive tightening on the first signs of faster inflation is unlikely.

When they emerge, the initial signs of faster wage inflation may be regarded as a return to more normal compensation for labor rather than an emerging excess to be resisted. If there are early signs of some upward pressure on wage inflation by 2016, public opinion is hardly likely to support aggressive moves to resist it in an election year in a context where median incomes have been weak and the labor share of GDP is at or near its lowest level in half-a-century. We believe that it will require an extended period before inflationary pressures increase in any major way. In our opinion, the Federal Reserve will hold the Federal funds rate near zero for an extended period. It should finally begin to lift the Federal funds rate at some point in 2015 roughly seven years after it first set the Federal funds rate near zero. We do not expect the Fed to transition to a restrictive policy with a high real Federal funds rate until about 2017.

What about long-term yields? After a three-decade long decline in interest rates of more than 1400 basis points, we believe that the U.S. has begun a gradual normalization of intermediate and long-term interest rates. If bond yields are in a transition to a new "secular neutral" center-of-gravity, what level might that be? One standard might be the average growth rate of nominal GDP, the combination of real GDP growth and inflation. Over the next several years, we expect a real GDP growth rate close to 3% and inflation close to 2%, for a total nominal GDP growth rate of close to 5%. We would expect 10-year Treasury bond yields to gradually drift higher over the next two years, and then reach a "secular neutral" zone near 5% in 2017.

Overall, we expect a three-phase normalization of bond yields over a half-decade period: (1) a sudden rise from artificially depressed bond yields to free-market yields (most, if not all, of which has already occurred), (2) a prolonged gradual upward drift over the next two years in response to normal cyclical forces, and (3) a late spike in interest rates when Fed policy turns restrictive following seven years of economic expansion.

With QE3, the Fed has held down bond yields like a beach ball held below the surface of the water. Once it indicated that it might let go of quantitative easing, that beach ball jumped quickly to the surface, with the bond yield rising to its free-market level. From now on, however, if our economic forecast is correct, there should be a slower rise in bond yields as a gradually rising cyclical tide lifts the free-market level of bond yields. The recent rapid rise in bond yields made fundamental sense as the markets discounted the end of an artificial bond scarcity, but it is likely to be followed by a much more gradual upward drift over roughly the next two years as cyclical fundamentals evolve.