BACKGROUNDER

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Treasury Yields Forecast a U.S Future

Similar to Japan's Present, but Spain's is More Likely

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Last November 10, I wrote that U.S. long bond yields were at record lows in a bond market that had experienced, with some interruptions, a record 30-year secular bull run. From the 1981 double-digit interest rate peaks, as the U.S. Federal Reserve Board and other central banks sought to, and succeeded in, breaking the back of inflation, rates slid more than 10% from each maturity point on the yield curve, down to below 3%, even for the longest and most volatile maturities.

As interest rates fall, bond duration increases and approaches that of the bond's maturity.

Mea Culpa, but thesis still not dead, just resting

When I wrote that opinion piece, I contended that this very long bull run in bonds was destined to come to an end, if not right then, soon. Well, it could be "soon" in a *historical* context should we look back in a few months, quarters or years, but it did not turn out to be *imminent.* I will get into possible reasons a bit later.

Rates have continued to fall, and the 30-year Treasury, which I consider the true benchmark, yields just below 2.6%. In November, its yield was 2.9% or thereabouts. The change is small in absolute terms but important for capital appreciation. As interest rates fall, bond *duration* increases and approaches that of the bond's maturity.

Duration is rising and important to bond returns

Duration is the *present-value weighted average timing of the cash flows of a financial instrument* such as a bond. A zero-coupon bond has a duration equal to that of its maturity. A change in interest rates for a zero-coupon bond directly changes its price by the same percentage amount, times its maturity. A 0.3%, or 30 basis points, change in the yield will cause a 0.3% change in the price of the bond times its maturity or, in the case of a 30-year zero-coupon bond, 9%. For a conservative investment, this is a big move in a short period.

Treasury bonds are not principally issued in the zero-coupon mode (however, investment dealers can sell them that way as strips). Yet, their duration is already approaching their maturity, and fast, as interest rates decline. At today's 30-year yield of 2.9%, the (modified) duration is 20.07 years, so a further 10 basis point drop in rates will provide a gain of 2.0%; 0.25% will provide more than 5.0% in capital gain.The less-than-current inflation coupon adds to the return.

For 10-year Treasuries, which yield just 1.7%, it is even more pronounced. Their duration is 9.16, less than a year from maturity. A mere five basis point drop in rates gives a 0.46% price appreciation; 10 basis points give more than 0.9%; a 0.25% drop in yield gives 2.3%. As in the case of 30-year Treasuries, these gains dwarf the actual coupon yield and are most of the total return to the investor.

Investors, including banks, pension funds, hedge funds, ordinary individuals and corporations, have made huge gains in secure fixed-income paper that is backed in full by the U.S. federal government, and there is no chance of non-payment, even if it is with devalued, excess money created by the Federal Reserve.

This has been going on for decades but with some important and unpleasant interruptions when interest rates occasionally spiked. However, the last few years, since the financial crisis became obvious with the demise of several venerable financial institutions in the United States and starting in 2007, have been the most dramatic in the sheer magnitude of the money at stake and the returns earned.

The first impulse to buy bonds was that of safety.

Motivation for and causes of bond buying, interest rates plummeting

While some of the market participants might have been prescient enough to realize that rates could become very low and thus generate huge returns for bonds, even on a before-risk-adjusted basis, it seems more likely that the motivations are diverse and have changed over the past four or five years.

Bonds as a safe alternative in bad economy, uncertainty

The first impulse to buy bonds was that of safety. As financial institutions became suspect and the global economy, which determines stock market performance, turned sour, the only assuredly safe place to put portfolio funds was in bonds.

Federal Reserve buys bonds, lowering rates

The second motivation was the Federal Reserve's stated and demonstrated willingness to provide liquidity and, soon thereafter, its purchase of U.S. Treasury and other bonds, including mortgage-backed securities, in a program called Quantitative Easing, which occurred in two programs, QE One and QE Two, and which continues today with the purchase of long-dated maturities in a program called Operation Twist.

Demand for debt capital is low, lowering rates

The third reason interest rates on bonds have fallen is that banks in the United States and abroad are finding it difficult to lend money, as demand for loans is weak, because economic growth is slow in most large economies. Therefore, the need for capital to expand is also low.

Bank regulation changes, lending environment induce Treasury buying

Canada and Australia ... economies and currencies are subject to the whims of commodity markets, so their bond market performance, while good, has been a little more muted, and their market size is not large enough for big investors.

The fourth reason interest rates remain low is that these same banks have had greater restrictions placed on the quality of their assets, quality that is risk-based. U.S. Treasuries are considered risk-free (in a repayment sense) and do not require the banks to shore up their capital reserves, because these securities qualify as capital reserves.

Sovereign debt crisis makes the United States a preferred bond investor destination

The fifth reason rates have declined is the sovereign debt crisis. During the recession, many national governments in Europe had difficulty paying their expenses with tax revenue and were unable to increase their borrowing to accommodate their social welfare and bank bailout obligations. Most of these nations use the euro, so they were unable, unlike the United States, the United Kingdom, Canada and Japan, to let their own currencies take part of the financial burden away by devaluing them, as they had in the past. Several of these countries, principally Ireland, Greece and Spain, had bank-debt-fuelled real estate bubbles that had burst, leaving bad loans on the banks' books, mass unemployment, even lower tax revenue and higher social welfare expenses.

Rates had to come down in euroland, and for some nations, they have, but the euro has gone down in value slowly and erratically. U.S. rates, which might have been expected to *rise* to close part of the gap between the U.S. Treasury and the Greek and Spanish rates, lowered because of the dramatic drop in bond investment in Europe in favour of the less unattractive environment in the United States. While the U.S. fiscal situation has not been good for some time, the damage to banks was contained by 2009, and economic growth, although weak, had resumed that year. The euro and the sovereign debt crisis have gotten worse, so U.S. and foreign investors have continued to move money to North America.

Since the U.S. Treasury market is the biggest and most liquid in the world, it remains the primary destination for investors, although Switzerland and Denmark have also benefited to the point where they can sell bonds with negative interest rates. Canada and Australia do not have deficit, debt, growth or solvency problems, but their economies and currencies are subject to the whims of commodity markets, so their bond market performance, while good, has been a little more muted, and their market size is not large enough for big investors. The Japanese bond market is huge, but yields are low, and the country's fiscal outlook is bleak.

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Slower economic growth helps bonds

The sixth reason bonds have performed well and may continue to do so is that, starting in 2011, it looked as if worldwide economic growth was slowing down. This was partly due to the winding down of government stimulus measures in developed economies, partly due to the European crisis, partly due to China's efforts to cool its overheated, construction-dominated economy and partly due to escalating energy prices dampening consumer spending. All of these trends have persisted this year, although oil prices have eased of late.

Recent United States, global weakness makes bonds out glitter stocks

The seventh reason bonds have shone so brightly is related to the sixth reason. Stock markets began to falter last year as economic growth began to slow, and the outlook has deteriorated further. Share prices move with corporate profits, which cannot grow much if consumers and businesses do not experience growth in income. Corporations have become more cautious and are not spending much in capital investment for renewal or expansion. Another reason they are cautious is political, tax and regulatory uncertainty, especially in the United States. This uncertainty will continue until the presidential election on November 6 and likely beyond, as several issues will remain no matter who wins control of the White House, Senate or House of Representatives. So, bond markets have looked better than stock markets, which could give negative returns if profits decline or stagnate or if they look as if they will do so, and for a prolonged period.

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Bond buying as a winning, profitable, continued strategy

The eighth and final reason interest rates have declined so much is that some investors and speculators are betting that they will continue to do so. This is a self-fulfilling and self-reinforcing prophecy, one that has done so well for them for four years now, and one that experienced, highly technically adept, quick market experts can ride for some time and then get out quickly when it ceases to work for them. Whether or not they are willing to admit it consciously and explicitly, it is another profitable bubble for them. In addition, since duration has increased as rates have fallen further, the rate of decline of interest rates does not have to be as great for them to experience large gains. The Federal Reserve is a willing, indirect accomplice in aiding this process, since it helps accomplish their aim of suppressing long-term interest rates despite these rates becoming negative in real terms, i.e., after inflation. This process is financial repression.

Leverage, abetted by the Fed, amplifies returns, return on capital

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These sophisticated investors have another tool at their disposal that magnifies their gains: leverage. They can borrow at very low short-term rates at a small premium above that of the U.S. federal government, putting only a fraction of their capital at risk, since their collateral is high-quality government debt. The return on capital they have been receiving is enormous. This can continue for quite some time. Observers thought this would have ended long before now, but as with all bubbles, as the old adage regarding short selling goes, "Markets can be wrong longer than you can remain solvent."

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How the United States is, or is not, like other nations

The United States is not Spain, Italy, Ireland, Japan, Greece or even France, all of which have large debt burdens, long-term productivity and economic growth problems, expensive and unaffordable social welfare and entitlement programs, rigid labour markets, stifling regulation and much higher tax rates.

The U.S. economy is the most diverse, flexible and resilient in the world. There remains some tax room for deficit reduction. Capital markets are broad, deep and accessible, although perhaps not on the microcap level. There is entrepreneurial verve, dynamism, innovation, renewal and creativity, elements that are limited or absent in many other nations, particularly in Western Europe.

The United States has a growing population, which will provide future demand, future labour and future taxpayers to support programs and debt servicing. A huge, new, cheap energy resource in the form of shale gas and oil, along with abundant cheap labour, depressed real estate and new manufacturing technology, is beginning to make the United States a low-cost industrial location once more. However, some troubling similarities that have much bearing on the course of interest rates remain.

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U.S. Federal Government debt at or near worrisome levels

The U.S. federal government's debt, depending on what is netted against it, is at about 100% of GDP. Some economists consider this a tipping point; after escalation beyond this ratio, it becomes difficult for a nation to right itself fiscally without radical restructuring, default or something equally traumatic.

The U.S. federal budget deficit, about $1.2-trillion, is about 8% of GDP. Less than $300-billion of that, 2% of GDP, is interest costs, since interest rates are so low, and the government, perhaps unwisely, has been borrowing at the short end of the yield curve, where interest rates are very low, under 1%. Therefore, the rest of the deficit, more than $900-billion, 6% of GDP, is either *cyclical* or, worse, *structural.*

The *cyclical* part is caused by tax revenue being depressed by slow economic growth, unemployment insurance spending, aid to states, welfare and other formerly temporary benefits.

The *structural* part is *built in* by virtue of low tax rates, deductions, credits, exclusions, dysfunctional collection and permanently higher expenses for programs. Much of this has been intentionally enacted since the financial crisis began in 2008 and is now difficult, politically, to change.

Turning Japanese? Or not?

While Japan's situation is a more advanced case of what lies in store for the United States, the States, along with a larger and more dynamic economy and growing population, has the additional advantage of having the world's reserve currency.

In the 1990s, Japan experienced a real estate bust that strained government, personal and corporate finances for a long time. The government embarked on a stimulus program and greatly enhanced and modernized infrastructure. Debt also exploded. Japan's debt-to-GDP ratio is approaching 200%. The nation has the oldest average age in the world, the highest longevity, one of the lowest birthrates and little immigration. This rapidly shrinking and aging population is exacerbating the government's finances. Fortunately for Japan, it retains a current account surplus and a high savings rate, allowing it to finance itself without being dependent on capital inflow from foreign investors.

However, this surplus and savings are reaching their limits. Despite active financial repression from the Bank of Japan, which has kept interest rates even lower than they are in the United States, the country will soon be unable to finance its deficits or service its debt internally. Foreign investors may show some reluctance to accept low yields from a borrower that shows no sign of slowing its growth of debt, let alone reducing its total debt.

While Japan's situation is a more advanced case of what lies in store for the United States, the States, along with a larger and more dynamic economy and growing population, has the additional advantage of having the world's reserve currency. It also has the biggest capital markets, bond and stock, in the world. It is in no *immediate* danger of a default or a big spike in interest rates. Yet, it cannot be too complacent.

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One nation that does have some resemblance to the United States

There is one nation that has some uncomfortable similarities to the United States. It, too, had a privately financed real estate and construction bubble, with the bursting of that bubble having caused major asset damage to important banks that have taken a bailout. It, too, has a large budget deficit, some cyclical and some structural, with not enough growth to shrink it. Finally, it has persistently high long-term unemployment, high youth unemployment and heavy social welfare and entitlement spending burdens that are growing and will continue to expand with an aging population.

That nation is Spain, which actually has a *much lower* debt-to-GDP ratio than does the United States and a *lower* deficit as a percentage of GDP. However, it is suffering from the perception that it cannot grow out of its escalating debt-servicing costs; hence, the interest rates it must pay on the bonds it issues are much higher than those of comparable treasuries or even those of Germany, which, like Spain, uses the euro. Some regions in Spain are already in effective default, much like some municipalities and states in the United States.

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As part of the eurozone, Spain can no longer issue bonds in its own currency or allow that currency to devalue to the point where the country's exports are competitive and the demand for imports plummets, thus giving a boost to the economy, allowing Spain to grow and finance its expenses again. The United States is, for now, able to do this.

Threats to the continuing decline of U.S. interest rates

Most of these possible external shocks, which should cause U.S. rates to go up on anxiety, uncertainty and in competition with higher rates elsewhere, could actually have the perverse effect of further lowering U.S. rates.

There are a number of threats to the continued trajectory of lower U.S. interest rates:

External shocks

The first threat is external shocks: war in the Middle East, the South China Sea or Latin America; oil price escalation; a sharp, severe credit event, such as one or more defaults or effective defaults in the European Union or elsewhere. Most of these possible external shocks, which should cause U.S. rates to go up on anxiety, uncertainty and in competition with higher rates elsewhere, could actually have the perverse effect of further lowering U.S. rates. The reasons for this are the safe haven or alternative that the United States offers and the increased probability of recession or, at least, the much lower economic growth, which reduces credit demand.

Internal shocks

The second threat is an internal shock: another major credit downgrade of federal debt by a rating agency; a major liquidity or solvency crisis at a U.S. bank, other financial company or a municipal or state government; the currently mandated budget-slashing 2012 year-end sequestration or other drastic or dysfunctional action that reduces the perceived or real solvency or debt-servicing capacity of Washington. A large tax increase would do it.

Investors start to lose interest, while demanding more of it (sorry)

The third possible threat is the drying up of the buying of U.S. debt by investors, which could have one or more causes: a jump in inflation, possible with all the money creation, making realized returns fully negative; speculators and traders willing to borrow short and buy long gradually becoming fewer and fewer and finally reversing strategy; issuance of federal debt becomes too large to be absorbed easily and quickly; the Federal Reserve ends its financial repression and no longer buys bonds; the economy picks up, making investors favour stocks over bonds, at the margin.

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Debt-servicing difficulty

The fourth possible threat is the inability to finance or service debt easily and, as the United States is a net borrower from abroad, also put downward pressure on the U.S. dollar. This is not a near-term possibility, but *perceptions* of it could increase and become *self-reinforcing,* as they cause interest rates to climb and debt-servicing costs to escalate, making the federal deficit balloon, as happened in Spain.

Social security obligations to retired federal and state employees and the general population and healthcare spending are set to rise dramatically in volume over the next several years, and well beyond, and to occupy the bulk of government spending. The tax increases that are necessary to pay for them will hobble the economy and reduce the country's ability to fund these programs. Without reform, the programs will cause a large increase in government outlay and borrowing.

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Capital account flow helps dollar, current account outflow hurts it

As the United States' borrowing demands swell, the increased funding will come from abroad. Capital account flow will temporarily buoy the U.S. dollar and make U.S. exporters less competitive, but the increased flow of interest payments abroad will eventually make the currency decline, as it did in the late 1980s after an earlier large round of deficit financing. This currency decline will make investing less attractive, and interest rates will rise further to induce buying of debt by foreigners. It is impossible to predict when this will happen.

Conclusions, outlook and an exhortation to policy-makers, if any are listening

Although the United States very definitely is not Japan, it is starting to have more than just a passing resemblance to Spain.

I was wrong last November when I made the judgment that U.S. rates were unlikely to fall further. I am certainly not suggesting that, in the current dismal economic climate here and abroad, they will *not.* The United States is positively the best-looking major market in comparison to nearly all others. However, if it continues on its present course, rates will almost certainly have to rise.

Although the United States very definitely is *not* Japan, it is starting to have more than just a passing resemblance to Spain. It does not have to end up that way, but any budgetary and tax measures that have been mooted by any and all politicians thus far, if enacted this year or next, will tend to either lower growth or widen the deficit, with the latter putting upward pressure on rates in the near term and the former (i.e., lower growth) doing so later on in the longer term.

Serious budgetary and operational restructuring, major simplification of regulation, and tax reform including simplification are needed. The bond market can continue to flummox both observers and some participants for quite some time and then take its revenge on everyone later on, when least expected, even when predicted beforehand not only by me but by many others who now gaze in wonder. Olé!

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FURTHER READING

A Valuation Analysis of ATB Financial

By Ian Madsen

http://www.fcpp.org/publication.php/4048

NOTE:

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