

Russell Research

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Jobless recoveries and misplaced points of maximum bond market pessimism

In the two previous jobless recoveries, the yield on the benchmark 10-year Treasury bond hit bottom far into the recovery period when short-term interest rates already had been low for a lengthy period and the cyclical downswing in short-term interest rates was well past the halfway point. A paradox about jobless recoveries is that they are unpleasant surprises but investors can only detect them gradually, such that by the time their fears are confirmed, the worst has passed already. Many features of the late bond market yield bottoms from the two previous jobless recoveries appear to be present in the third quarter of 2010.

Investor dismay builds during jobless recoveries

The last three recessions in the United States have been followed by slow rebounds in GDP and, especially, employment. In some ways, each of these jobless recoveries has been an unpleasant surprise and, in each case, investors have reacted with gradually rising dismay. The first source of dismay is that the economy is failing to deliver a period of above-trend, snap-back growth following a recession. Typically sufficient snap-back growth takes place to undo much of the output loss relative to where GDP would be if growth had continued at a constant 3 percent trend rate. Across all post-war recessions, the permanent output loss due to recession is only about 1½ percent of GDP on average [Dueker (2006)], thanks to the snap-back growth phase that follows most recessions. The example par excellence is the snap-back growth after the 1981-82 recession when real GDP growth averaged 7 percent in the first 6 quarters of the economic expansion.¹ A second source of dismay is that investors are concerned with the possibility that the economy might slip back into recession—a double-dip scenario. A final source of dismay is that investors start to

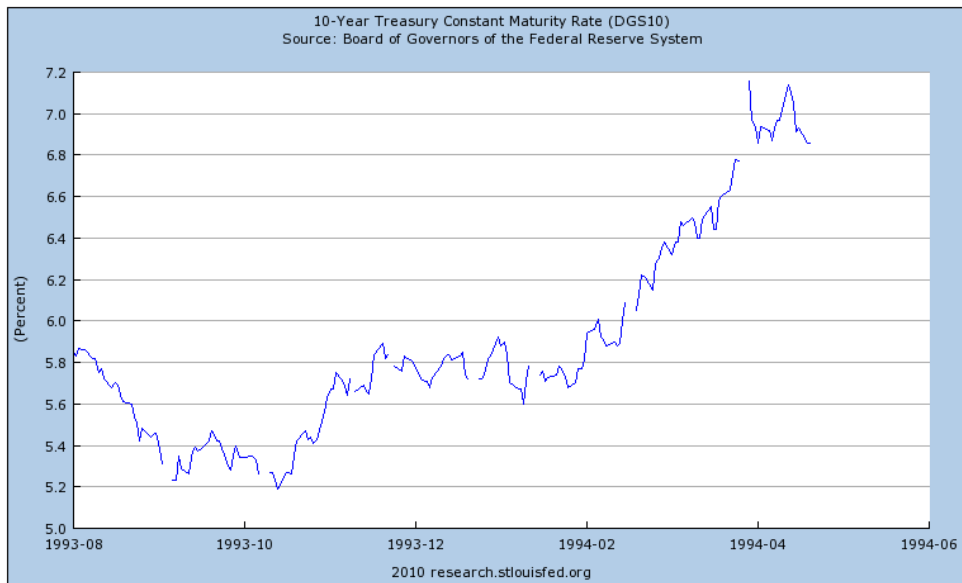
¹ Federal Reserve Bank of St. Louis. FRED Graph.
<http://www.research.stlouisfed.org/fred2/series/GDPC96?cid=106>. 2010.

question whether something is broken in the economy, implying that the expansion itself might be sub-par, not just the recovery period.

The upshot of these three sources of investor wariness is that the degree of pessimism builds across time and reaches its crescendo well after the end of the recession. By this time, however, the economy might actually be past the latter two risks. Furthermore, the estimates in FRB of St. Louis *Review* (Dueker 2006) suggest that unless the economy enters the above-trend, snap-back growth phase right at the end of the recession, the window of opportunity has closed for that recovery. If this is true, the slow recovery should be treated as a foregone conclusion right away and not as an ongoing source of disappointment.

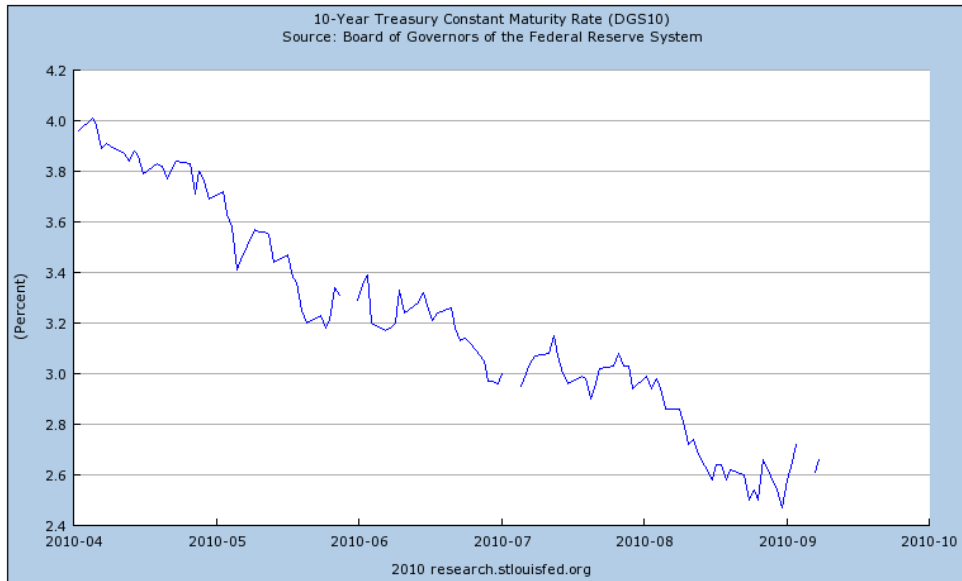
The record of the bond market in the last three jobless recoveries, in contrast, suggests that the point of maximum bond-market pessimism concerning the economy's recovery occurs late in the recovery—perhaps too late in the sense that bond yields ended up reversing course in short order. The daily data on the benchmark 10-year Treasury bond shows that the yield hit bottom at 5.19 percent on October 15, 1993—2 ½ years after the end of the formal recession. By February 1994, the yield was over 6 percent and by April 1994 it was over 7 percent, as shown in Exhibit 1. Similarly, on June 13, 2003, the 10-year Treasury yield bottomed at 3.13 percent and then it was over 4 percent by mid-July 2003, as shown in Exhibit 2. The latter date was about 1 ½ years after the end of formal recession in November 2001. In both of these cases, the economy was poised for a period of consistent improvement in the unemployment rate by the time the bond market pessimism was at its maximum.

Exhibit 1



Source: Federal Reserve Bank of St. Louis

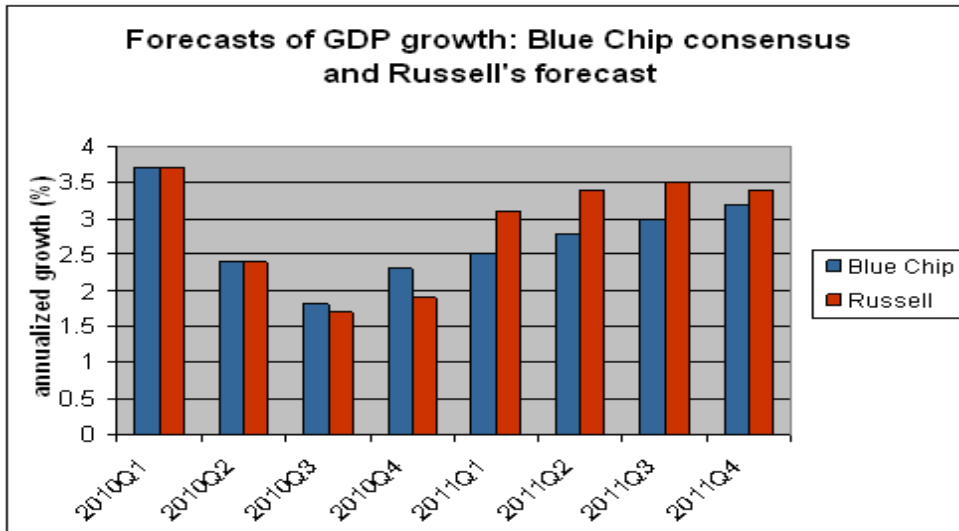
Exhibit 3



Source: Federal Reserve Bank of St. Louis

This is not to claim that Russell's GDP forecasts are strong for the remainder of 2010. Instead, our forecasts are that the economy will have to claw its way gradually back to mediocrity (trend growth and little better) in 2011, as seen in Exhibit 4.

Exhibit 4



Source: September 2010 issue of Blue Chip Economic Indicators

One difference between the current bottom and the two previous points of maximum bond market pessimism is that this one would have occurred only 13 months after the end of the formal recession in July 2009, as dated by my Business Cycle Index (Engemann and

Owyang 2010). I would attribute this difference to the length of the recent Great Recession in comparison with the two previous recessions, which lasted only nine and eight months, respectively. The unemployment rate barely had time to start climbing before those recessions ended. In the Great Recession, which was much longer in duration, the unemployment rate appears to have peaked at 10.1 percent in October 2009 only three months after the end of the formal recession.

The purpose of this discussion is not to belittle the consequences of a double-dip recession should one occur. Instead, the question concerns the probability of such an event. In fact, our scenario analysis suggests that even a mild double-dip recession would result in government debt growth about six percent per year above the growth rate of nominal GDP for a five-year period. For this reason alone, a double dip would enormously harm the fiscal situation of the U.S. government.

Double, double dip means trouble.

Economy trips, but it's only a stumble

Arguments against a double-dip scenario

The first argument for why the bond market should not price in a double dip is simply that the Federal Reserve can be expected to pull out all stops to try to prevent a double dip. The Fed knows how harmful a double dip would be in the current circumstances to the federal government's long-term debt picture. We would expect the Fed to undertake another round of Quantitative Easing (QE) if necessary, in a very earnest attempt to keep the economy out of a double dip and out of deflation.

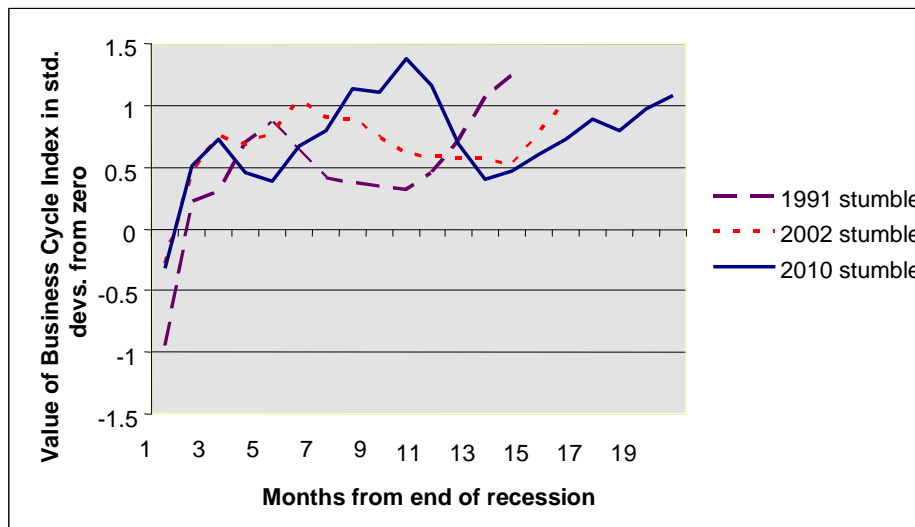
An obvious rejoinder to this argument is that Fed purchases of long-dated Treasuries ought to depress yields on those securities. This effect only holds, however, during the narrow window of time in which the Fed is actually buying securities. The underlying purpose of the QE policy is to generate inflation expectations of 2 percent and to normalize expectations about the economy's growth prospects. For this reason, one underlying aim of the policy is to lead long-term interest rates on a path toward normality, where the yield would be at least as high as the trend growth rate of nominal GDP—or at least 4 percent.

A second argument against a double dip is that the most cyclical, volatile sectors of the economy have little downside because they remain quite depressed. For the example, the latest Blue Chip forecasts suggest that housing starts are expected to be only 600 thousand units in 2010 and are expected to rise to 760 thousand units in 2011. The expected level of home construction in 2011 would still be considered mediocre by historical standards, but even this level would represent more than a 25 percent increase from 2010. Similarly, new vehicle sales are expected to finish 2010 with 11.5 million units, according to the Blue Chip. Looking ahead to next year, the Blue Chip expects new vehicle sales to be 12.7 million units in 2011. Thus, even with a projected 10 percent increase in sales, the level in 2011 would be well below the 16 to 17 million cars per year that had become commonplace in the last decade. Given that collapses in these volatile sectors tend to lead the economy into recessions, we currently see little room for these sectors to decline much from their already depressed levels. Thus, it is hard to see which of the economy's cyclical sectors has the downside room needed to push the overall economy into a double dip.

A third reason not to expect a double-dip recession is that the stumble in the U.S. economy between April and July 2010 would mark the third jobless recovery in a row in which the economy suffered a first-year stumble that did not lead to a double dip. In 1991, the stumble in the first year of the recovery hit bottom in December 1991, using the Business Cycle Index as the metric. In October 2002, the economy also hit a low point in that

recovery's first-year stumble. According to the Business Cycle Index through August 2010, the low point of the stumble took place in July 2010; business cycle conditions then improved a bit in August and the current forecasts call for further improvement in the months ahead. Exhibit 5 superimposes the paths of the Business Cycle Index during these three jobless recoveries and highlights the first-year stumbles that do not lead to double dips. It is not unusual, then, to see some business cycle backsliding in the first year of the economy's recovery from recession when it is a jobless recovery.

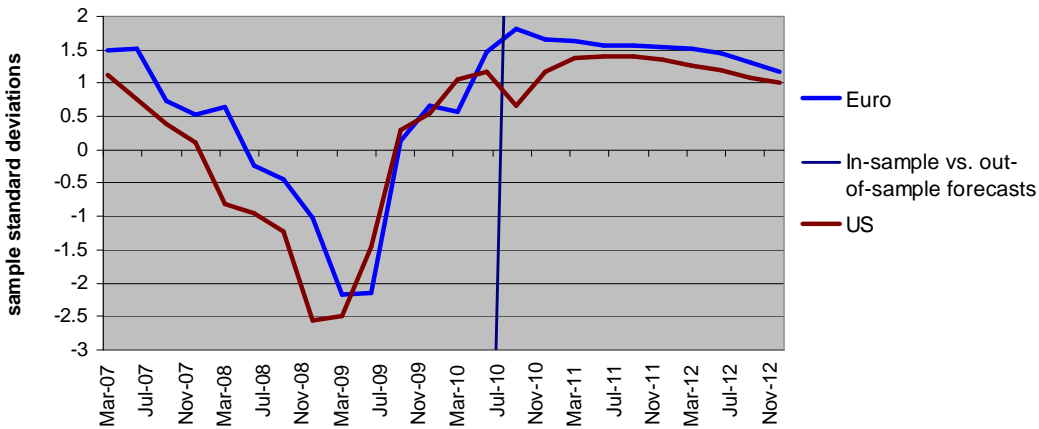
Exhibit 5



Source: Business Cycle Index as of September 2010

A fourth argument against a double-dip recession in the United States is that the rest of the world is less likely to follow the United States into a double-dip recession. In this case, what would be the idiosyncratic shock that the U.S. economy would suffer that is not shared elsewhere? Exhibit 6 shows the U.S. Business Cycle Index and a similarly-constructed Eurozone Business Cycle Index, along with out-of-sample forecasts of each. Despite austerity-related downturns in several European countries, such as Greece, the European economy as a whole has not experienced a first-year stumble and is not expected to experience a recessionary downturn. The forecast for the U.S. economy is that it will return to a moderate plateau like Europe's, rather than continue down. This is not to say that Europe's projected business cycle conditions will not deteriorate to some extent. Exhibit 5 suggests that Europe's BCI will decline a bit, but not to recession territory, which starts at a BCI value of zero.

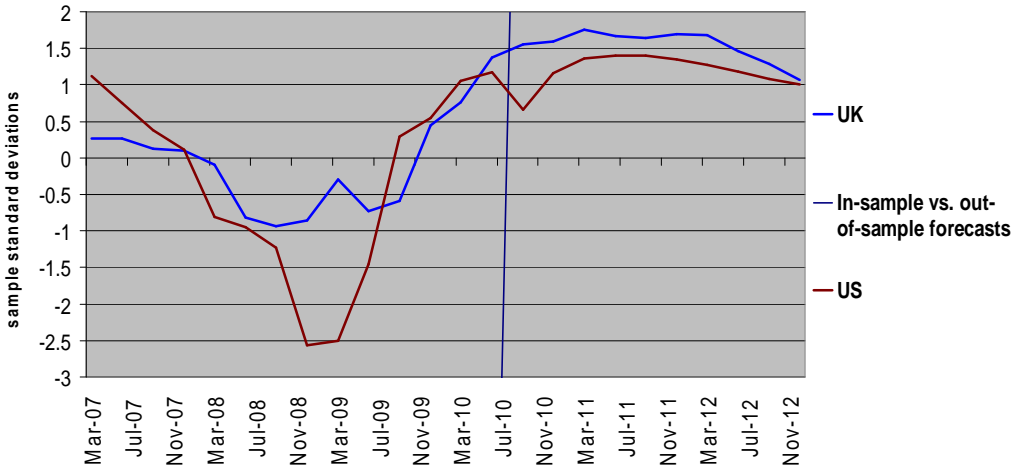
Exhibit 6: Eurozone and U.S. Business Cycle Indices



Source: Russell's Economic Outlook July 2010

Similarly, the Business Cycle Index for the UK also shows that the UK did not share the recent stumble in business cycle conditions that the U.S. experienced (see Exhibit 7). Again it begs the question as to what idiosyncratic shock might the U.S. economy suffer that is not present in Europe or the UK?

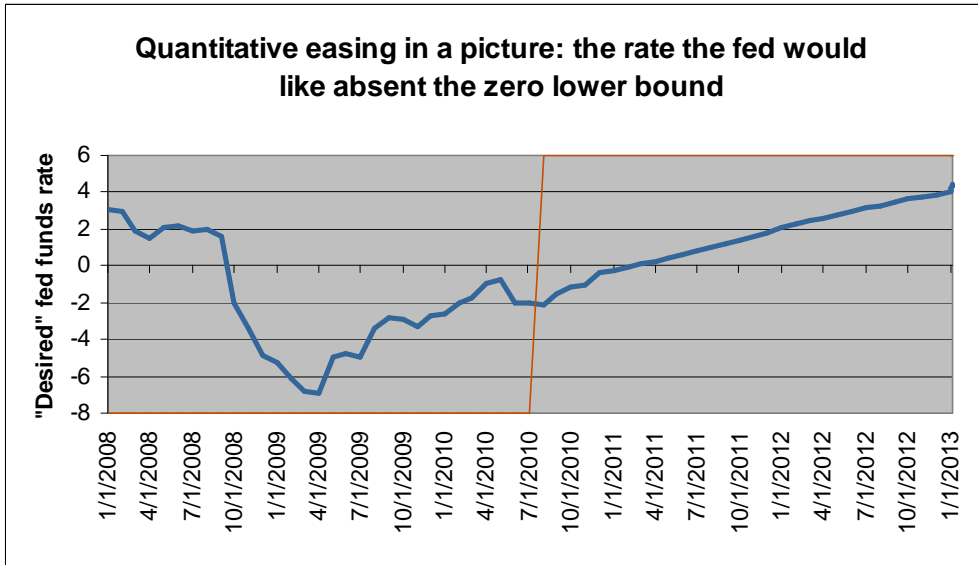
Exhibit 7: UK and U.S. Business Cycle Indices



Source: Russell's Economic Outlook July 2010

Finally, another reason for long-term Treasury yields to rise in the United States is that the shorter end of the U.S. yield curve might have gotten too low. The two-year Treasury yield, in particular, might have undershot its mark. If one makes the simplifying assumption that the two-year Treasury yield will be equal to the average of the federal funds rate in the next two years, then the forecast below, which is from a model of the target federal funds rate, suggests that the two-year Treasury yield should be close to 1.0 percent in September 2010, rather than its current value of only about 0.50 percent. If the two-year rate is ripe for a correction, then that revision to expectations would affect the entire yield curve and lift long-term rates as well.

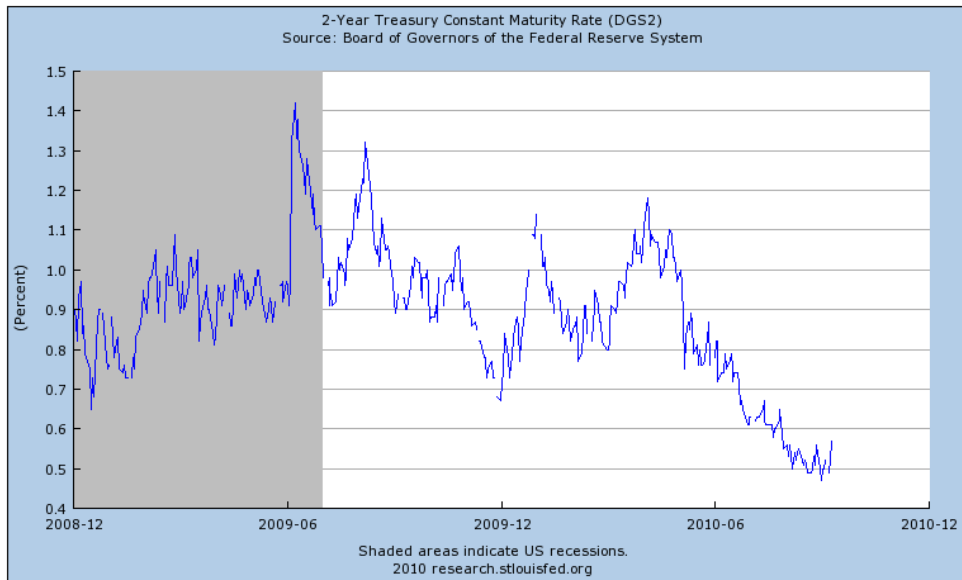
Exhibit 8



Source: Russell calculations based on target fed funds rate data. Shown for illustrative purposes only.

At present, it is especially perplexing that the two-year Treasury yield is now lower than it was in January 2009 (see Exhibit 9). As prima facie evidence that the two-year Treasury yield has undershot, we can ask how is it possible that the expected duration of the Fed's near-zero interest-rate policy would be longer now than it was in January 2009— when the policy was only a month old and the economy was in the throes of recession?

Exhibit 9



Source: Federal Reserve Bank of St. Louis

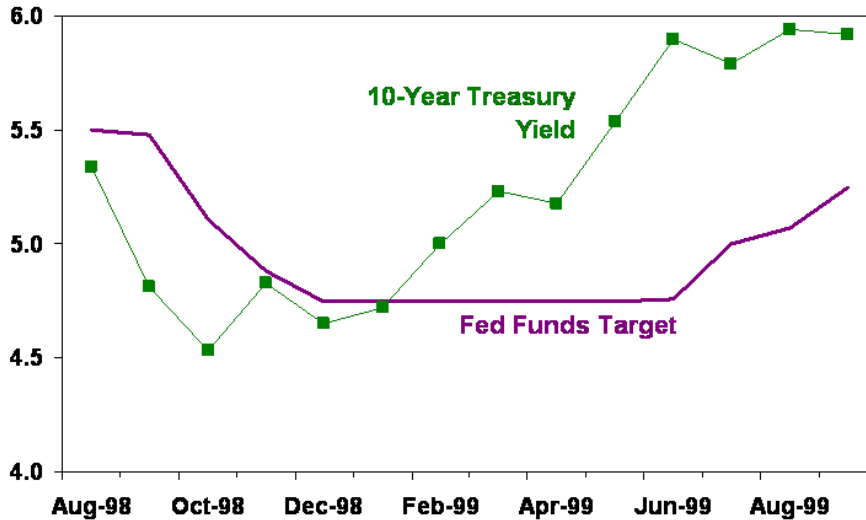
One of the only ways to make sense of the two-year rate now is to assume that the market was not predicting a jobless recovery in January 2009 and now it has fully priced one. Forecasts at the time (Dueker 2008), however, indicated that a jobless recovery was the baseline scenario. This thinking would make sense if the market did not expect the Fed to raise the fed funds rate for about 2 ½ to 3 years after the end of the formal recession, given that the recovery turned out, surprisingly, to be a jobless one. This timeline would match the Fed's pattern in the jobless recoveries following the ends of recessions in 1991 and 2001 when the recoveries were jobless. In today's context, this timeline would indicate a Fed rate hike in the first part of 2012 and would help explain the drop in the two-year rate as the jobless nature of the recovery unfolded.

As mentioned above, however, it is dangerous to apply rules of thumb from the previous two short recessions to the Great Recession: the unemployment rate barely had time to start climbing before the short recessions ended. In the Great Recession, the unemployment rate appears to have peaked only three months after the end of the formal recession. If, instead, we apply a rule of thumb regarding the number of months that elapse between the date of the peak in the unemployment rate and the first Fed rate hike, we find 19 months after the peak in the unemployment rate in June 1992 and 12 months after the peak in the unemployment rate in June 2003. Given an apparent peak in the unemployment rate at 10.1 percent in October 2009, this rule of thumb would not support the idea that the Fed would wait until 2012. Moreover, if we go back to the Blue Chip consensus forecast in January 2009 regarding when the unemployment rate would peak, the projection was that it would do so in 2009Q4, which turned out to be correct. The difference is that the projected peak was only 8.4 percent, versus the 10.1 percent outcome. Thus, another interpretation of the market's two-year expectations is that the Fed will not raise the short-term interest rate until the level of the unemployment rate is back to some threshold level, and the date at which this level will be reached has moved out significantly.

In the current context, it is worth remembering that the economy sometimes hits relatively long flat spots in which the unemployment rate comes down very slowly. For example, between May 1984 and November 1986 it took the economy 2 ½ years for the economy to reduce the unemployment by one-half of a percentage point—from just under 7½ percent to just under 7 percent. The difference is that now the economy is projected to have a long flat spot to get the unemployment rate from about 9½ percent to 9 percent. As the bond market became aware of this flat spot, it found another reason to extend the projected date of the first Fed rate hikes.

Nevertheless, it remains a stretch to accept the notion that the expected duration of the Fed's near-zero interest-rate policy is now longer now than it was in January 2009. In any case, the Fed certainly would like to avoid the 1999 scenario when it allowed the 10-year Treasury yield to rise by almost 150 basis points before it raised the fed funds rate (see Exhibit 10).

Exhibit 10



Source: Data from Federal Reserve Bank of St. Louis. Last date shown is September 1999.

Some portfolio perspective

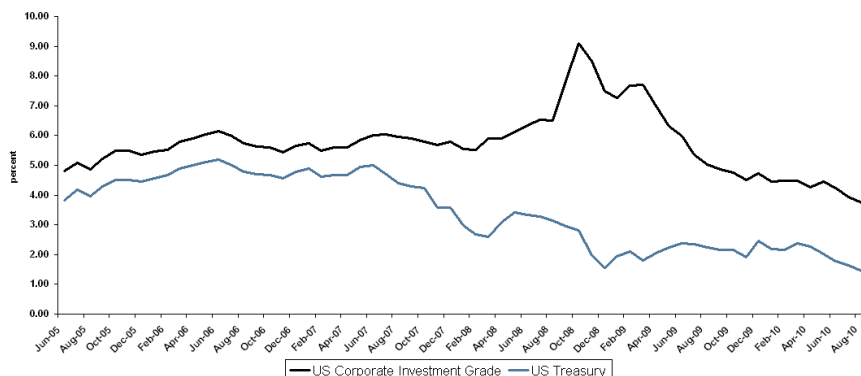
If long-term Treasury bonds appear to be overpriced when the yield on the 10-year rate is in the neighborhood of 2 ½ percent, it is important to keep in mind that the term “bubble” does not pertain to fixed-coupon bonds and neither do bonds experience massive capital losses from the size of yield swing that we might contemplate. For example, if the current market yield at the 10-year point on the yield curve were to jump from 2.5 percent to 3.5 percent, a 10-year bond with a 2.5 percent coupon and quarterly coupon payments would lose about 8.4 percent of its value. A bond portfolio with a mix of maturities would have an average duration less than the duration of a 10-year bond, which is 8.81 years for the bond described here. In this case, the capital loss on a bond portfolio would be significantly less than 8.4 percent, even with a dramatic parallel shift in the yield curve of 100 basis points. Dramatic events in bond investing pale in comparison with the volatile swings in equity markets.

Implications for corporate bonds

Returns on corporate bonds could differ from those on Treasury bonds because the spread between corporate bond yields and Treasury yields does not have to remain constant as the Treasury yield curve shifts. Exhibit 11 illustrates that in late 2008 and early 2009, this effect dominated corporate bond returns, as corporate bonds experienced outsized price declines and then equity-like returns on the rebound. In 2010Q2, in contrast, the spread has remained fairly constant as Treasury yields have declined. Blue Chip consensus forecasts of Baa corporate and 10-year Treasury yields suggest that the spread is not expected to narrow by more than 20 basis points in 2011, even as the 10-year Treasury yield is expected to rise to 3.8 percent by 2011Q4. Given this outlook, we would expect corporate bonds to share most, but not all, of any capital loss that Treasury bonds were to experience; in addition, the higher coupon yield on corporate bonds would help cushion the overall return.

Exhibit 11

U.S. Investment Grade Credit and Treasury Yields



Source: Data from Factset

Conclusions

If one reads the 10-year Treasury bond yield as a forecast of nominal GDP (spending) growth in coming years, then the roughly 2 ½ percent yield at the end of August 2010 seems to suggest that the market was pricing in a double-dip recession. The first reason to say this is that Russell’s scenario analysis suggested that a double-dip recession would likely entail an average nominal GDP growth rate of 2.6 percent in the next five years. The second reason to say this is that non-double-dip scenarios in which nominal GDP growth would average 2 ½ percent do not seem plausible for the United States. Suppose we take a “New Normal” forecast that the medium-term real growth rate will be only about 2 percent. In this case, the inflation rate would have to be fairly steady at 0.5 percent to imply 2 ½ percent nominal GDP growth. I would contend that the Federal Reserve would not allow the inflation rate to languish at only 0.5 percent while real growth remained disappointing at only 2 percent. The Federal Reserve takes seriously its implicit mandate to provide the economy with enough nominal spending growth to accommodate robust real growth, whether or not robust real growth is attained.

Germany and Japan, in contrast, are capable of having long periods of low nominal GDP growth that are not associated with a recession. Germany can have periods of growth stoppage and is likely to experience inflation near zero because peripheral EMU countries, such as Greece, Ireland and Portugal, are likely to experience outright deflation for several years.

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The Business Cycle Index (BCI) forecasts the strength of economic expansion or recession in the coming months, along with forecasts for other prominent economic measures. Inputs to the model include non-farm payroll, core inflation (without food and energy), the slope of the yield curve, and the yield spreads between Aaa and Baa corporate bonds and between commercial paper and Treasury bills. A different choice of financial and macroeconomic data would affect the resulting business cycle index and forecasts.

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