

ARE U.S. TREASURIES HEADED FOR THE ENDANGERED SPECIES LIST?

By Ronald E. Desautels and Mary Jo English

Burgeoning federal budget surpluses have prompted the Treasury Department to announce it will reduce the supply of Treasury bonds, which has caused a general rally in long-term bonds and, more importantly, changed the pattern of yields among Treasuries, producing an inversion in the yield curve.

Are U.S. Treasuries becoming an endangered species?

While it may be a bit premature to pose this question, the U.S. Treasury has announced two very significant realignments of its debt—changes that have major implications for the entire bond market. First, the Treasury will issue fewer new securities at its regular auctions and, second, it will buy back large amounts of currently outstanding issues.

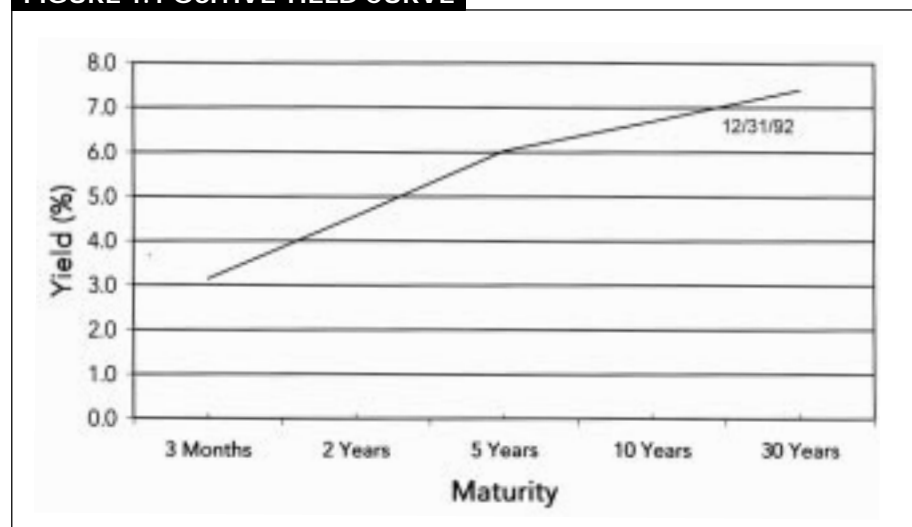
Both of these moves, which will reduce the supply of Treasury bonds, are the result of burgeoning federal budget surpluses brought on by moderate spending restraint in Washington and the unprecedented U.S. economic expansion. This has boosted tax revenues far beyond expectations (including soaring capital gains taxes from the booming stock market).

The main effect of the surplus has been a general rally in long-term bonds but, more importantly, it has caused the pattern of yields among Treasuries to change substantially, producing an inversion in the Treasury “yield curve.” That sounds obscure and technical to the many investors who don’t know much about bonds. But it does have important ramifications for the financial markets.

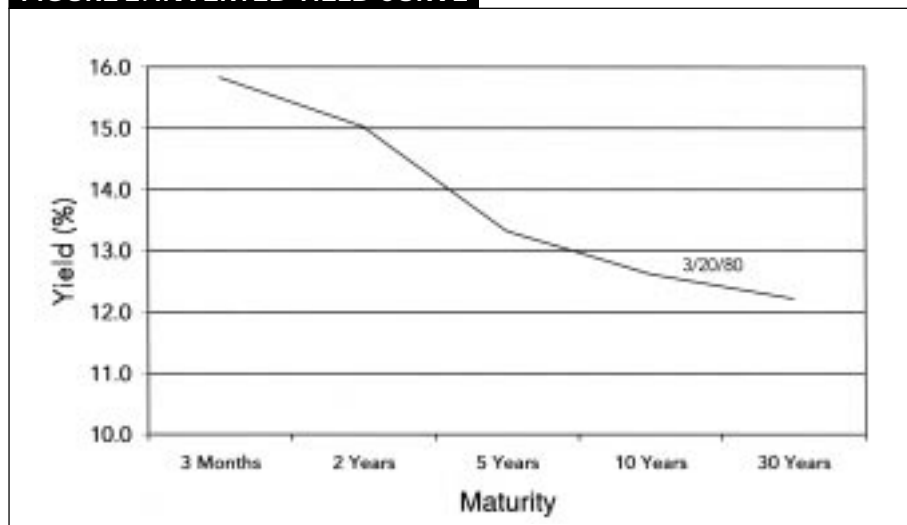
THE YIELD CURVE

Normally, if the word normal can be applied to any financial market, bonds with longer maturities sell at higher yields than bonds of similar quality that will be paid at par within a few years. The reason for this is that it is more difficult to forecast what economic and financial conditions will be many years ahead, and changes in such conditions have a magnified impact on bonds that are further away from being redeemed at par value (\$1,000) when they mature.

FIGURE 1. POSITIVE YIELD CURVE



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FIGURE 2. INVERTED YIELD CURVE

Therefore, longer-term bonds are much more volatile in price than short-term bonds of similar quality, and that added element of risk usually leads investors to demand a higher yield from such bonds.

Accordingly, the normal yield curve is one in which each successive year out on the maturity scale has a higher yield. The so-called positive yield curve is depicted in Figure 1.

The opposite pattern is an inverted yield curve, in which longer-term bonds yield less than issues with shorter maturities; this is illustrated in the March 20, 1980, yield curve in Figure 2. On occasion, there can also be flat curves and any sort of combinations of these three primary patterns.

Yield curves were strongly inverted in the late 1970s and early 1980s, the period of Federal Reserve Chairman Paul Volcker. At that time, the Fed was aggressively raising short-term interest rates to help bring inflation under control. That increase in rates was the main cause of the double-dip recession and weak economic environment of the early 1980s.

Despite the pain of high interest rates then, their effects were very positive because they squeezed high inflation out of the U.S. economy and laid the groundwork for the long low-inflation period that has pre-

vailed for nearly two decades.

The March 1980 yield curve (Figure 2) was a typical inverted pattern, in which three-month Treasury bills yielded almost 16%, while 30-year Treasury bonds were around 12%. The spread of minus 3.5% (350 basis points) was close to a record, and it reflected longer-term bond investors' expectation that inflation would decelerate markedly.

Flat yield curves are unusual, but that was the general pattern in late 1989-early 1990 when the U.S. economy was expanding slowly and inflation was benign. At that time, the yield spread between the two-year and 30-year Treasuries was only 4 basis points. This meant there was only a very small risk premium provided to investors who were willing to assume additional maturity or duration risk along the Treasury curve.

The Treasury curve of late 1992 and early 1993 was positive (see Figure 1). That period was marked by an expanding U.S. economy, decreasing unemployment, tight labor markets and concern over accelerating inflation. The rationale was that if inflation did pick up steam (which, in fact, it did not), investors would need a premium rate of interest in order to absorb the risk of price declines in their bonds caused by a general rise in interest rates (rising

interest rates cause the prices of existing bonds to drop and their yields to rise to match higher rates provided by newly issued bonds). This is why the yield spread between three months and 30 years was 425 basis points—a hefty inflation premium that seemed justified at the time.

TODAY'S CURVE

The yield curve inversion that developed in the past few months was a surprise to most investors. After all, the economy was booming, and although the Federal Reserve was raising short-term interest rates to forestall potential inflationary pressures, the bond market perceived that the Fed's efforts might be too small and a little too slow. For this reason, in January 2000, long-term rates were hovering just below 7%, pricing in higher inflation expectations, while the shortest interest rate (on federal funds) was 5.5%. Thus, we had a positive yield curve (see the dashed yield curve in Figure 3).

Two factors then came into play to produce dramatic change in the levels of long and short rates, shifting to a modest inversion in the yield curve (shown in Figure 3). The new assumptions were that short-term rates would be raised further by the Fed (at a fast clip) and if that struck down the higher inflation expectations that had been built into the long end of the yield curve, long-term rates would fall. So they did. An inverted curve is typically an indicator that the market expects the economy to slow down and inflation to stay under control—sort of a bad news/good news story.

The second factor that contributed to the inversion was the growing U.S. budget surplus referred to earlier that has allowed the Treasury to start retiring a lot of its bonds.

DEBT REDUCTION STRATEGY

To utilize the surprisingly large amount of black ink now being

FIGURE 3. 2000 YIELD CURVES

generated in Washington, the Treasury has stated that it will no longer “roll over” all the Treasury bonds that mature from month to month and that it will buy back outstanding longer-term issues well before they are scheduled to mature.

This has two main benefits:

- Keeping the average maturity of the Treasury’s outstanding debt from rising as short-term bonds mature and are not fully replaced with new issues of short bonds, and
- Maximizing the savings in interest payments. If the average maturity of the outstanding debt were to rise, interest savings would not be as great because longer-term bonds typically carry higher interest rates.

At the beginning of this year, the Treasury stated it would issue fewer two-, five- and 10-year bonds, and “significantly” less 30-year debt, maybe less than half the amount that was sold in fiscal year 1999. (Some analysts would not be surprised if the Treasury discontinues 30-year bond issuance entirely in the near future.) This news has caused the 30-year bond and other long-term bonds to stage a strong price rally in 2000. And when bond prices rise, yields fall.

In its buyback program, the Treasury has thus far focused on the

long end of the yield curve (the year 2015 and beyond). Because these bonds have long average maturities and high interest coupons, their retirement will cause the desired stabilization of the average maturity of the remaining outstanding debt and the equally desired savings in interest payments.

At the expected year 2000 repurchase rate of \$30 billion, the Treasury could buy back over \$100 billion of bonds in the next few years, nearly one-third of the total value of Treasury bonds maturing in 2015 and after. In recent months, the bond market has realized the tremendous size of this buyback, and consequently these particular bonds have surged in price, causing the yields to fall. So an endangered species has become quite valuable.

Many types of investors have historically had a need for long-term Treasuries. The realization that their supply in the market is starting to diminish rapidly has compounded the Treasury yield curve inversion. Insurance companies and pension funds (with long-term financial liabilities) are natural buyers of long-term Treasuries, although insurance companies have been buying and holding fewer such bonds over the past few years as their focus has shifted toward variable annuities and other equity products. Also, many

central banks hold a portion of their foreign exchange reserves in U.S. Treasury bonds, although many of these holdings are in shorter maturities.

Another source of demand for U.S. Treasuries has materialized in times of financial crises. Back in 1990, when Russia defaulted on its debt and the infamous hedge fund, Long-Term Capital Management, was on the brink of bankruptcy, the investment community was paralyzed and there was a capital flight to the world’s favorite risk-free asset, U.S. Treasury bonds.

If the Treasury market were to be substantially diminished in size, it remains to be seen what asset would fill this void. But whatever Treasury issues remain will be the preferred safe haven in times of financial crisis or equity market volatility. Certainly the violent fluctuations in stock prices during recent months have helped push up Treasury bond prices this year.

WHY DOES IT MATTER?

Aside from its impact on Treasury bond investors who have been struggling to catch up with shifts in market perceptions and the actuality of shifts in yields, there are longer-term implications from the shrinking availability of U.S. Treasury bonds. This may or may not continue, depending on whether the inhabitants of Washington maintain fiscal discipline and keep Federal budget surpluses at healthy levels.

Of utmost concern to fixed-income market participants is the possible demise of the Treasury curve’s role as the benchmark by which all non-Treasury bonds are valued. The Treasury market has been the principal yardstick for valuing non-Treasury bonds (just as the S&P 500 has been the primary benchmark for stocks.)

For example, a corporate bond’s yield is comprised of the appropriate maturity Treasury bond’s interest rate plus the risk premium or “spread” associated with that particular

corporate bond (based on how risky the market views the bond's eventual payoff). However, the volatility and yield curve inversion in the Treasury market has introduced new dynamics to the valuation of corporate bonds, which trade at higher yields than Treasuries because of their business risks.

Now that the pattern of Treasury yields is being distorted by the shrinking supply of bonds in different maturities, the key question is: What will be used as a benchmark curve in order to price non-Treasury bonds?

It would appear that the most appropriate benchmark to use would be the large debt of Fannie Mae or Freddie Mac. Both of these mortgage agencies (which have "implied" federal backing but not the "full faith and credit" of the U.S. government guaranteeing their principal) have already stepped into the valuation vacuum created by reduced Treasury supply. The agencies sponsoring Fannie Maes and Freddie Macs regularly issue debt from three-month bills to 30-year bonds and release future issuance schedules, as the Treasury used to. They also have a full stable of varying maturity debt issued.

It would therefore seem a logical extension to afford these agencies the

new benchmark status, as long as they continue their current role as "government-sponsored enterprises."

Another alternative is the interest rate swap market that currently trades with a very high correlation to agency yield spreads. Interest rate swaps are basically exchanges of interest rate exposures between two parties of floating-rate and fixed-rate debt cash flows. They are used by market participants for the management of interest rate risk. An additional alternative would be for investors to use a combination of measurement tools, including perhaps certain top-quality (AAA) corporate issuers.

Major shrinkage in the supply of Treasury bonds may prove difficult for the rest of the world as well. Many foreign governments use Treasuries as a means of handling their dollar-denominated reserves (generated by net exports to the U.S.), to manage exchange rates, and as a vehicle of safety when world conditions deteriorate (as in the Asian and Russian financial crises in the 1990s).

CONCLUSION

Even committed equity investors who have little or no interest in bonds in the current ebullient stock market should pay some attention to what

goes on in the fixed-income world. Shifts in interest rates can have significant repercussions on the economy and on stock prices.

Of course, many of the statements in this article hinge on a continuation of the current business expansion and of large government surpluses that will allow the Treasury to maintain the aggressive proposed debt reduction schedule.

Higher interest rates, driven by accelerating inflation, have always been the primary trigger for business recessions and recent Consumer Price Index reports have raised concerns about higher inflation in the months ahead. So interest rates may be headed upward, even at the longer maturities.

While Fed chairman Alan Greenspan may have been premature in expressing concern about "irrational exuberance" several years ago, it is hard to argue with his statement before the House Banking Committee in late February that "It would be imprudent . . . to presume that the business cycle has been purged from market economies so long as human expectations are subject to bouts of euphoria and disillusionment."

So all investors should keep a weather eye on developments in the bond market. ♦

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