

January 2002

A Letter From



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Senior Vice President, Global Debt Funding

Congress created Freddie Mac in 1970 to help make the dream of decent, accessible housing a reality for all Americans. We do that by linking the nation's mortgage markets to the world's capital markets, ensuring a reliable source of mortgage money. Since our inception, we have provided financing for 1 out of 6 American homes and produced an unbroken record of profitability and growth.

The engine powering this performance is our business model. It is the means by which we compete in the marketplace . . . and it is the basis for our future growth.

2001 Results

Central to our business model is our global debt-funding program. With broad-based dealer and investor support, we continued to make great strides in bringing greater liquidity, innovation and transparency to the market. Milestones we achieved in 2001 include:

- The launch of our Reference Notes<sup>®</sup> auction process—the first time any non-sovereign issuer used an auction program for term-debt issues, enhancing price transparency with the commencement of “when-issued” trading
- The first internet-based debt repurchase operation in the market
- The first multi-currency financing calendar, establishing a new standard for predictability for government, agency and corporate issuers
- Increasing global distribution of Reference Notes—international distribution of Reference Notes exceeded 30% in 2001, up from 5% since the inception of the program in 1998
- Wide acceptance of €Reference Notes<sup>SM</sup>—€Reference Notes are among the most actively traded non-sovereign issues in the Euro bond market

After the events of September 11th, we were honored to lead the reopening of both the U.S. Dollar and Euro term funding markets. This was a step we took working closely with the dealer community that demonstrated the strength of Freddie Mac's debt program and the fixed income marketplace.

Our Focus in 2002

Over the next decade, the U.S. housing market is forecasted to grow by several trillion dollars. Maintaining a vibrant debt

securities program remains a top corporate priority because tapping global capital markets is vital to achieving Freddie Mac's housing finance mission.

We expect the agency debt market to continue to grow and investor appetite for a stable, liquid and predictable supply of AAA rated securities to remain strong.

Going forward we will look at:

- A more robust callable debt program that will keep pace with the demand created by the global low-interest rate environment
- New products to meet the unique needs of our investors through our recently formed product development unit
- Tools and techniques investors use to measure relative value
- Opportunities to increase transparency and predictability in the debt markets through innovation

In future editions of Reference Point, we will continue to address topics important to our investors. For example, we will look at measuring and managing interest rate risk—a priority for Freddie Mac as well as our investors. We will evaluate our effectiveness in delivering value to investors as we pursue our aspiration to be the world's premier issuer of high quality debt products. Finally, we will continue to present market insights and observations from noted market analysts, such as Lou Crandall of Wrightson Associates.

We are entering 2002 optimistic about the opportunities ahead and look forward to a successful year working to meet the needs of our investors.

2001 Global Debt Issuance

Instrument Group	Par Amount - US\$ Billions
Discount Notes (excluding Overnights)	337.73
Reference Bills <sup>®</sup>	569.00
<i>Subtotal Short Term Debt</i>	<i>906.73</i>
Medium Term Notes - Bullet	3.81
Medium Term Notes - Callable	129.90
FreddieNotes <sup>SM</sup>	5.90
€Reference Notes	13.51
Reference Notes	84.00
Subordinated Debt	3.00
<i>Subtotal Long Term Debt</i>	<i>240.12</i>
<b>Total (excluding Overnights)</b>	<b>1,146.85</b>

This Issue

*The Disconnect Between the Yield Curve and Market Expectations*

*by Lou Crandall of Wrightson Associates*



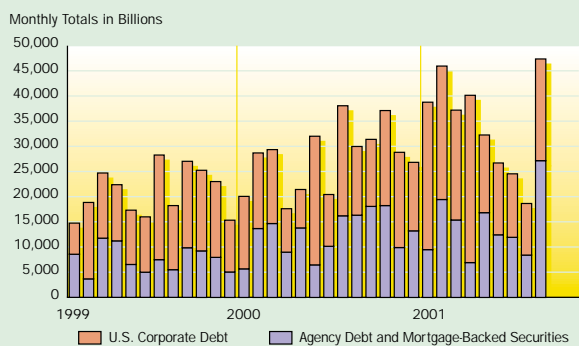
## The Disconnect Between the Yield Curve and Market Expectations

by Lou Crandall  
Wrightson Associates

The steep upward slope of the eurodollar curve has been a puzzle since the spring of 2001. At almost any point in the past two or three quarters, a snapshot of the short end of the yield curve would have implied that the market expected the Fed to tighten within six months—or even less. At no time, however, did a majority of market participants actually hold that view. The conventional wisdom throughout 2001 looked for a more generous monetary policy.

The puzzle still stands at the beginning of 2002. The shape of the eurodollar curve “predicts” that the first rate hike will materialize this spring—and that the Fed will inflict a cumulative tightening of 150 basis points or more on the market between now and the Congressional elections in November. The policy scenario implied by the eurodollar curve is not entirely implausible, but it does represent the outer limit of the range of reasonable forecasts. It is extremely difficult to imagine circumstances in which the Fed would tighten more than the curve currently implies, but it is very easy to conjure up scenarios in which the Fed tightens less—or even keeps easing for some time.

### Net Foreign Purchases in U.S. Corporate and Agency Debt

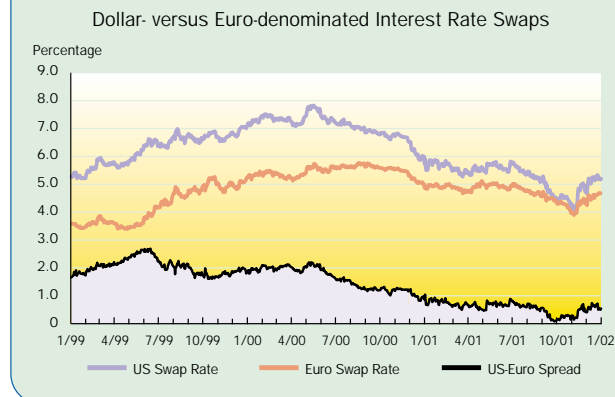


So the question is how the yield curve could remain so far out of step with the conventional wisdom—especially when the conventional wisdom has clearly had the best of the debate for months now.

### The Effect Of Long-Term Rates

The answer to the puzzle comes in two parts. The first has to do with the factors that dominate the long end of the yield curve. Interest rates at the very short end of the curve are dictated by the Fed, but rates at the long end reflect more global market forces. The massive U.S. current account deficit, which reached \$400 billion or so last

### U.S. and European 5-Year Swap Rates



year, means that the marginal investor for most U.S. asset classes resides overseas. This is particularly true for the U.S. corporate bond market, which saw record issuance of more than \$800 billion last year. At least a quarter of the new supply was placed with international accounts. Foreign investors were equally active in the GSE market, absorbing an estimated \$200 billion of agency bonds and Mortgage-Backed Securities (MBS). Obviously, such large volumes of debt can be sold abroad only if U.S. interest rates are attractive to international investors. In practice, this has meant U.S. fixed-income instruments have had to offer at least a modest yield pick-up over comparable European instruments at all but the shortest maturities. And European interest rates have remained relatively high due to the conservative policy stance adopted by the European monetary authorities in their efforts to reinforce the credibility of the euro in the months preceding its introduction at the retail level.

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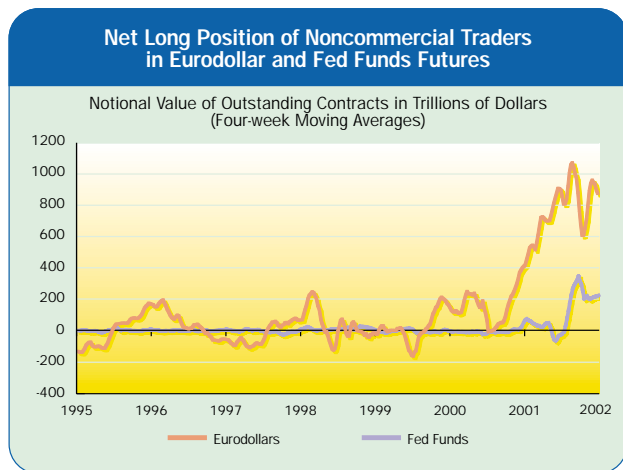
Of course, the premium required to attract foreign capital at the long end has varied over time. The spreads between longer-term U.S. and European interest rates began to narrow toward the end of last summer when the pace of U.S. corporate bond issuance slowed. At the time, the corporate sector was becoming more confident about the prospects for recovery, and so was becoming less willing to pay a premium to lock in access to long-term funding. After September 11, spreads tightened further—albeit for a very different reason. The initial drop in interest rates after the attacks triggered a wave of convexity hedging that reinforced the downtrend in rates. Convexity hedging plays a larger role in U.S. financial markets than it does elsewhere, which means that long-term interest rates fell faster at home than they did abroad during the October rally.

As discussed in the July 2001 issue of Reference Point, convexity-hedging cycles tend to be temporary—and self-reversing. Corporate bond issuance soared in October, spurred as much by heightened economic uncertainty as by lower interest rates. The resulting supply pressures were masked for a time by the dynamics of mortgage-related duration management, but eventually the burden of record new issuance began to weigh on the market. Once the downward momentum in long-term interest rates was broken, the unwinding of early hedging positions led to a violent correction. And, just as U.S. interest rates had fallen faster than global rates on the way down, they rose faster on the way up. By the end of November, the spread between longer-term U.S. and European interest rates moved back out to the levels that had prevailed in the first half of 2001.

#### Market Uncertainty

The need to sustain foreign capital inflows explains why the slope of the overall U.S. yield curve remains steep. It is more difficult to explain why so much of the steepening takes place at the front end of the curve at present. In most cycles, Fed policy expectations will dominate the money market yield curve out to at least nine or twelve months. In the current cycle, the gravitational pull of high long-term rates is being felt at shorter maturities than usual.

The fact that the yield curve has biased policy expectations for 2002 has not escaped the market's notice. Futures data show that speculative (or "noncommercial") accounts accumulated unprecedented net long positions in eurodollars and fed funds futures last year as traders bet against any early tightening. However, these speculative long positions have not been enough to bring the shape of the curve into line with actual market expectations.



Part of the problem may be that much of this year's corporate debt issuance has been swapped into floating rate payments. This has helped distribute the burden of the new corporate supply more evenly along the entire eurodollar curve, putting pressure on shorter as well as longer maturities.

*“The disconnect between the shape of the yield curve and general market expectations about Fed policy also reflects the decline in liquidity and market depth . . .”*

The disconnect between the shape of the yield curve and general market expectations about Fed policy also reflects the decline in liquidity and market depth that has been apparent in so many parts of the fixed-income universe over the past year or two. Credit market

volatility—both historical and implied—has soared as the number of market participants willing to take a view on fundamental trends has shrunk. In circumstances like these, the rise in volatility can be self-perpetuating. When declining participation leads to more erratic price movements, risk management limitations force the remaining players to scale back their exposures as well. Operating within these constraints, the market has been able to do little more than keep the yield curve's implicit forecast for near-term Fed policy within the bounds of plausibility. The yield curve is unlikely to become more representative of the actual balance of market opinion until the level of economic uncertainty begins to recede.

#### Summary

In most circumstances, increased economic uncertainty is associated with lower rather than higher interest rates. Clearly, the uncertainty in the current environment has contributed to the low overall level of interest rates. At the same time, though, economic uncertainties have slowed the decline of medium- and long-term interest yields relative to overnight rates.

*“The current shape of the yield curve seems to imply that the Fed will move quickly to tighten this spring and summer, but that does not mean that the majority of market participants actually hold that view.”*

The defensive funding behavior of the U.S. corporate sector has created heavy supply pressures at the long end, keeping the yield curve as a whole unusually steep. Moreover, those supply pressures are being felt at unusually short maturities because the spike in volatility has limited traders' ability to impose their policy expectations on the short end of the yield curve. The current shape of the yield curve seems to imply that the Fed will move quickly to tighten this spring and summer, but that does not mean that the majority of market participants actually hold that view.

Mr. Crandall is chief economist of Wrightson Associates and is the principal author of its market-leading newsletter, "The Money Market Observer" ([www.wrightson.com](http://www.wrightson.com)).

