

Managing Bond Risk in a Low Interest Rate Environment CONTINUED

guaranteed by Ginnie Mae, Fannie Mae or Freddie Mac, and taxable or tax-exempt municipals. There are also opportunities in selected areas of high yield and emerging market sectors.

Taxable municipals are a good example of an opportunity in a less mature sector. Later this year, these securities will be included in the Lehman Aggregate Index. Once a sector is incorporated into the major indices, it becomes more widely followed and analyzed. The key is to try to stay two or three steps ahead of market sector efficiency by researching less-widely followed or heavily-weighted sectors and buying before they become more closely followed. Another example is CMBS, which we have invested in for nearly a decade but which were added to the Lehman Aggregate just three years ago. When CMBS were added to the indices, they appreciated.

**Strategy #4: Emphasize Granularity**

By granularity, we mean very small or granular position sizes, which limits exposure to individual credits.

Granularity helps ensure that an unanticipated blow up in any single portfolio issue will not devastate total portfolio performance. We recommend limiting any single issue to no more than 1.0% total portfolio weight. We then overlay our credit opinion in order to determine whether we will take an overweight, neutral or underweight portfolio position. For example, Ford represents 0.74% of the Lehman Aggregate Index, but

we hold 0.37% of the issue in our portfolios, as a precaution to any "event risk" at Ford, whether it might be product liability (i.e. Ford Explorer tire problems), an underfunded pension plan, or accounting problems.

Finally, we recommend investment in several different sectors, utilizing those uncorrelated to the "big three." Examples are selected emerging markets, RMBS, high yield, and to a lesser extent, Yankee Bonds and taxable municipals.

**SUMMARY**

In review, we suggest institutional investors:

- Underweight Treasuries (risk is shifting from credit and prepayment risk to interest rate risk).
- Emphasize Intermediate Maturities (five to ten-year maturities)
- Enhance the Opportunity Set (seek value beyond the conventional sectors to add diversification and enhance yield).
- Emphasize Granularity (mitigate credit risk through greater issue and sub-sector diversification, such as corporate alternatives).

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# PHOENIX INVESTMENT PARTNERS

QUARTERLY INSTITUTIONAL INSIGHTS

Fall 2003

## Managing Bond Risk in a Low Interest Rate Environment

**INSTITUTIONAL INVESTORS RECOGNIZE THERE ARE THREE PRIMARY RISKS ASSOCIATED WITH THE FIXED-INCOME MARKETS: INTEREST RATE RISK, CREDIT (DEFAULT) RISK AND PREPAYMENT RISK. IN TODAY'S MARKET ENVIRONMENT, HISTORICALLY LOW INTEREST RATES POSE THE GREATEST DANGER TO FIXED INCOME PORTFOLIOS IN THE FORM OF INTEREST RATE RISK. THE SUDDEN AND DRAMATIC ESCALATION OF INTEREST RATES IN RECENT WEEKS CAUGHT MANY INVESTMENT MANAGERS AND INVESTORS OFF GUARD, AND POINTEDLY ILLUSTRATES THE DANGER. THE FOCUS OF THIS ARTICLE IS ON HOW TO MANAGE EACH OF THE THREE MAJOR FIXED INCOME RISKS IN THE CURRENT LOW INTEREST RATE ENVIRONMENT.**

During the prolonged slump in equity markets, the fixed-income portion of institutional portfolios helped offset equity market weakness by providing solid returns. The apparent economic recovery, accompanied by recent interest rate jumps, now threatens some fixed-income strategies.

**CREDIT RISK**

During the past two years, the most serious threat to fixed-income investors has been credit risk or default risk, the possibility that the issuer of a fixed-income security might fail to make timely principal or interest payments. Credit risk was exacerbated by numerous credit

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**WE CONTINUE TO BELIEVE FIXED INCOME REMAINS A KEY COMPONENT OF A DIVERSIFIED PORTFOLIO, PROVIDED FIXED INCOME RISKS ARE IDENTIFIED AND APPROPRIATELY MANAGED BY EMPHASIZING KEY STRATEGIES.**

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**BUSINESS UPDATE**

AS OF JUNE 30, 2003

Assets Under Management \$56.5 billion

New Institutional Business 33 accounts

New Institutional Assets \$976.9 million

downgrades, defaults and accounting scandals in the corporate sector, which reached record levels in 2002. According to Moody's both the downgrades and defaults appear to have peaked during the first half of 2003. The environment seems to be improving on this front, and while many investors still have credit concerns, credit risk seems to be abating. While our view is that the worst is behind us, credit risk management remains essential in fixed income portfolio management.

**PREPAYMENT RISK**

Over the last three years, falling interest rates triggered an avalanche of mortgage refinancings. As the pace of these prepayments escalated, Wall Street analysts reassessed prepayment expectations and came to regard Mortgage-Backed Securities (MBS) durations as extremely volatile. At the height of the refinancing boom the duration of the Lehman Brothers Mortgage Index shortened to less than a year, as the ten year Treasury notes fell to nearly 3% in early June. When interest rates spiked 100 basis points (bps) over six weeks in June and July, investors were rudely reminded of the other side of the prepayment risk equation, extension risk. Suddenly, a MBS that was supposed to behave like a two-year note acted like a ten or fifteen year security as homeowners curtailed prepaying (and refinancing) their mortgages. If interest rates continue to rise, MBS' durations will extend further.

Prepayment risk remains a concern but if rising interest rates prevail, that risk is more likely to be one of extension than prepayment.

**INTEREST RATE RISK**

Currently, our view is that interest rate risk is the biggest risk faced by investors. As a rule, the longer a security's duration, the greater the interest rate risk. Periods of significant interest rate volatility can dramatically affect total return. When exceptionally low interest rates revert to historic norms, investors hold-

ing longer duration securities are more vulnerable to negative returns due to the magnitude of price change.

The following charts analyze total returns for various duration issues in two different interest rate environments, one where rates rise 100 bps over a one year period, and the other where rates remain unchanged.

**INTEREST RATE RISK - TOTAL RETURN ANALYSIS**

Issue	1 Year Total Return (Rates Rise 100 bps)
Corporate - 5 year	+2.09%
MBS - 5 year	+1.08
Treasury - 5 year	+1.05
Treasury - 10 year	-3.12
Treasury - 30 year	-8.20

Source: Salomon Brothers. Past performance is not indicative of future results.

The vulnerability of longer duration issues is apparent in this example. A one-year, 100 bps interest rate spike can cause a negative return of 8.2% on a 30-year treasury bond, while shorter duration higher yielding bonds perform quite well.

**BENEFIT OF ROLLING DOWN THE CURVE**

Issue	9/16/03 Yield	1 Year Total Return (Rates Unchanged)
Treasury - 5 year	3.18%	4.96%
Treasury - 10 year	4.29	5.97
Treasury - 30 year	5.18	5.91

Source: Bloomberg. Past performance is not indicative of future results.

Given the current steepness of the yield curve, investors may be tempted to buy longer maturities to gain a yield advantage, but as the second chart shows, in terms of total return, that yield advantage quickly gets watered down in a rising interest rate environment. When the yield curve is steep, as it has been in recent times, "rolling down the curve" to intermediate or short duration issues produces total return advantages in both flat and rising interest rate environments. Those who speculate that rates will remain relatively flat argue they would rather clip a 5% coupon for a 30-year

bond than a 3% coupon on a five-year note. However, when the benefit of rolling down the curve is factored in, the apparent 200 bps yield advantage of the 30-year bond versus the 5-year note is diminished by approximately 100 bps on a total return basis.

Considering the current economic and investment environment and the attendant risks for fixed income investors, one might question whether bonds continue to be a viable part of a fund's asset allocation. We continue to believe fixed income remains a key component of a diversified portfolio, provided fixed income risks are identified and appropriately managed by emphasizing the following four strategies.

**MANAGING AROUND THE CURRENT RISKS**

**Strategy #1: Avoid Treasuries**

Improving economic fundamentals have reduced credit and default risk and rising interest rates have transformed prepayment risk into extension risk; therefore interest rate risk remains the greatest threat. This is particularly true of treasuries because they lack the spread or incremental yield buffer against rising interest rates. Another concern about treasuries is the anticipated spate of new issuance in support of the growing budget deficit. While treasuries lack credit risk, they have significant interest rate risk; although they have performed well in the recent past, they exhibited extreme weakness when interest rates spiked in June and July. With interest rates continuing to be at historic lows and likely to rise as economic activity strengthens (spurring inflationary pressures), treasuries are most vulnerable to rate spikes.

**Strategy #2: Focus on Intermediate Securities**

If interest rates continue to rise, intermediate maturity bonds will hold their value better than long maturities. Among intermediate securities, corporate credits are less volatile to changes in interest rates. Any yield disparity between intermediate and long maturities will be largely offset by "curve rolldown."

The concept of rolling down the curve is a vital consideration in a steep yield curve environment.

The yield curve represents points in time. Over time, bond durations shorten, and because of the steep yield curve, drop considerably in yield, resulting in a higher price.

Referring back to the chart on page 2, if interest rates remain flat, a five-year treasury note with a yield of 3.18% (income) has a total return of 4.96%. The extra 1.78% is gained as a result of the bond aging and rolling down the yield curve.

In assessing performance, it is important to evaluate the total return and not just the current yield. The rationale that one can gain 200 bps by owning a 30 year bond versus a five year security is inaccurate because longer maturity bonds may forfeit most of their yield advantage in a rising rate environment. If rates rise just 100 bps, a 30-year treasury sputters to a negative 8.2% total return.

Thus, from a price perspective, a long maturity is desirable only if interest rates go lower. In the current low interest rate environment, most analysts believe rates will remain flat or rise, rather than go even lower. If rates do rise, shorter term maturities are likely to outperform.

**Strategy #3: Enhance the Opportunity Set**

As the fixed-income market has grown, it has also become increasingly segmented. In its earliest incarnation, it was composed of two sectors: treasuries and corporates. In the 1970's, mortgage-backed securities entered the arena. Today, additions such as Commercial MBS and Asset-Backed Securities (ABS) have swollen the number of sectors to ten or eleven, some not included in the major indices or less heavily weighted, offering significant opportunities for value.

To enhance total return, a fixed income investor should consider searching for opportunities in less closely followed sectors. Among these are Commercial MBS (CMBS), Residential MBS (RMBS) which are not