

U. S. Bond Market Outlook

Near to mid-term returns from the U. S. bond market are likely to be below average in line with our below-average return expectations for U. S. equities. Faced with the threat of a major liquidity crisis and an impending recession, the Fed has reduced short-term rates to levels near to—if not equal to—the historic low levels of 2003. Longer-term Treasury rates have followed suit as investors have shed credit risk and moved to the security of Treasury notes and bonds despite the increases in headline inflation. Although credit spreads have increased substantially for all credit-risk bearing instruments, the wider spreads are of comfort only for holders of the most highly-rated corporate bonds and mortgage-backed securities, as the wider spreads are not adequate compensation for the elevated default risk for higher risk securities at this point in the economic cycle. With the combined risks posed by future higher interest rates and increased default levels, all segments of the U.S. bond market are expected to produce returns below their long-term averages (see the table on page 4).

Figure BMO.1 (charts and graphs can be found on pages 6 through 11) compares yields on 3 month and 10 year Treasuries with the target Federal Funds Rate from 1985 to date. Although the 3 month T-bill yield fell well below the target Fed Funds rate earlier this year, the market does not appear to anticipate any further easing by the Fed, and the spread between the target Fed Funds rate and the bill yield has narrowed substantially since April. Based on the pricing of options contracts on Fed Funds futures at the start of September, the market expects the Fed to maintain a 2.00% Fed Funds rate until late in the year, with implied probabilities of 80% to 90% that no changes will occur before December.

The 10 year Treasury rate remains near to its historic low level. Despite the impact which higher energy, commodity, and food prices have had on consumer prices, the bond market does not appear to have built in a higher inflation premium into its longer-term expectations. The core consumer price index (CPI), CPI without food and energy, continues to show inflation at approximately 2%. So long as inflation at the core CPI level remains moderate, bond market expectations of longer-term inflation will continue to support long-term Treasury yields in the 4% to 5% range. Should core CPI increase, however, two things are likely to occur. Long-term bond yields will increase, and the Fed will be forced to raise short-term rates to reduce core CPI.

Core CPI has been much maligned in the popular press lately. “Who can live without food and energy?” goes the common complaint. Unfortunately, the common complaint misses the point of tracking core CPI. Core CPI shows the extent to which headline inflation is affecting other costs and labor costs in particular. Commodity and basic material prices are important, but labor costs account for most of the cost of making things or providing services. Inflation will remain under control provided that labor costs remain under control. Core CPI is one way of tracking labor cost inputs because it factors out food and energy. If workers expect and are successful at negotiating for

increases that will keep pace with increases in headline inflation, core CPI will increase at rates comparable to total CPI. So far this has not happened, and the longer-term outlook for bond rates and inflation remains sanguine.

Investors should not overlook the risks posed by higher commodity and food costs. The Fed and central bankers around the world are faced with the challenge of maintaining output at levels that will discourage workers from expecting their compensation to keep pace with cost increases at the gas pump or grocery store. Two outcomes are possible. Either workers accept higher food and energy costs and the equivalent of a tax increase on their income and a reduction in their disposable income; or, workers insist on pay increases to offset their higher living costs. In the first case, economic activity will be depressed because of the decrease in disposable income. In the second case, stagflation will set in unless central bankers have the mettle to increase rates and depress output to prevent higher inflation expectations from getting factored into labor costs. Neither alternative is a pretty one.

For now, core CPI is within the range that the Fed can accept, and long-term inflation expectations in the bond market are modest. Figure BMO.2 shows the difference between the yield on regular coupon-paying Treasuries and the rate on inflation-protected Treasury bonds (TIPS). The expected inflation rate as gauged by figure BMO.2 increased from January through July to approximately 2.5% but decreased in August to 2.0% to 2.2%. Even at the modestly higher levels of earlier this year, inflation expectations have been within the lower end of the range of the past four years.

Figure BMO.3 shows the rates on TIPS, which have increased from the low points they reached in March of this year but are still below their average and median rates since 2003. The significant decrease in the rates on TIPS, particularly for shorter-term maturities, has prompted some commentators to question whether the difference between TIPS rates and yields on traditional Treasuries is a reliable indicator of future inflation expectations. If investors are concerned about future inflation to the point that they will accept a real rate on TIPS of less than 2.0%, how reliable can the spread between TIPS and Treasuries be as an inflation indicator?

We continue to believe that the spread between TIPS and comparable Treasuries is a meaningful indicator—if not a precise measure—of future inflation expectations. If bond investors had lost faith in the ability of the Fed to keep longer-term inflation expectations anchored at less than 3.0%, it is difficult to understand why they would be accepting yields of less than 5.0% for long-term bonds. Certainly, the aversion to credit risk has made Treasuries more expensive and reduced their yields. Nonetheless, we do not believe the market is ready to swap credit risk for interest rate risk. It is worth noting that the spreads between long-term Treasuries and long-term TIPS, which have not experienced as dramatic a drop in rates as the shorter maturities, provide a measure of expected inflation consistent with the spreads at 5 years.

The yield curve has been consistently upward sloping since March of this year, indicating that the bond market has expected no further rate cuts by the Fed after the April cut to 2.0%. Figure BMO.4 shows the evolution of the yield curve since early 2007. Since January 2007, short term rates have dropped between 3.20% and 3.40% in keeping with the Fed's reduction of 3.25% in the target Fed Funds rate over the period. Longer term rates have also declined, but more moderately, with the 10-year Treasury yield decreasing by approximately 0.70%, and the 20-year Treasury yield decreasing less than 0.50%. The decline in short term rates resulted in negative real rates of interest for maturities of less than two years from February through July of this year. Moderating inflation expectations in August were enough to leave the 1-year Treasury yield with a marginally positive real return, but real returns on 3- and 6-month Treasuries were still negative. Figure BMO.5 shows the yield curves reported in figure BMO.4 with expected inflation subtracted from the yield. Investors holding 3 and 6 month Treasuries throughout 2008 have paid for their security and liquidity with significantly negative real returns on their investments. Measured against actual subsequent CPI inflation, real returns on T-bills were between -4.5% and -9.0% in the first half of 2008.

Forward rates derived from the late August yield curve indicate that the market expects rates to increase over the next five years. Figure BMO.6 shows the 12-month and 36-month forward spot rates implied by the average Treasury yield curve for the week ending August 29. According to the implied forward rates, short-term rates will increase approximately 0.60% in twelve months, while long-term rates will increase between 0.10% and 0.35%. Within thirty-six months, the 6 month spot rate will increase to 3.8% while the 10 year spot rate will reach 4.8%. Although implied forward rates are by no means definitive, they are a reasonable measure of current market sentiment.

Although interest rates have declined across the yield curve over the past twelve months, borrowing costs for virtually everyone other than the U. S. Treasury have stayed the same or increased as credit spreads (the risk premiums that borrowers pay on top of the risk-free, Treasury rate) have widened for virtually all borrowers. As commentators have noted for many months, the market has become much more risk averse, and investors expect to be more amply rewarded for accepting credit risk. The aversion to risk has translated into lower bond prices and higher yield spreads over comparable Treasuries. The days of narrow spreads are gone; and in most every case, credit spreads are now above historical medians.

Figures BMO.7, BMO.8, BMO.9, BMO.10, and BMO.11 show how credit spreads have changed in four different markets: financial commercial paper, investment grade corporate bonds, high-yield corporate bonds, and agency-backed mortgage-backed securities. In each of these four markets, credit spreads are significantly above median levels. Although each market has its peculiar concerns driving wider spreads, many of the concerns have their source in the same origin, the sub-prime mortgage crisis and its impact on the financial system and economy.

The good news for bond market investors is that the wider spreads are likely to provide some return insurance for current investors in some markets. In particular, we expect this to be true for high-quality fixed-income instruments such as AAA corporate bonds. This will not be true for every market, however, and particularly for high-yield bonds. Although academic studies have shown that, on average, the credit risk premium on high-yield bonds is sufficient to provide excess returns on the asset class long term, historical defaults on high-yield bonds during recessions have spiked dramatically. Even at the current elevated levels, credit spreads on high-yield bonds as an asset class are not sufficient to cover near to mid-term default risk should the U. S. economy enter a recession and high-yield bonds experience the level of defaults typical of past recessions.

Edward Altman of the Stern School of Business at New York University has done definitive studies of high-yield bond default rates. From 1971 to 2006, the median annual default rate, by dollars outstanding, is 1.80%. However, the arithmetic average for the same period is 3.17% per year, and the compound average is 4.24%. The average rates exceed the median rate to the extent they do because of periods of high default rates during and immediately following recessions. Default rates in 1990 and 1992 exceeded 10.0%, and rates in 2001 and 2002 were 9.8% and 12.8% respectively. Although investors do not realize the full dollar impact of defaults because of recoveries, those recoveries have averaged less than 40% of defaults. Because of the possibility of high credit losses—more than current spreads will pay for, in our judgment—high yield bonds are likely to produce very modest returns over the near to mid-term.

Taking into account the implied forward rates in the yield curve, the current levels of credit spreads, and the impact of the economy on cash flows and defaults, we expect every sector of the U. S. bond market to yield below-average total returns for the next three to five years. The following table shows the expected total return for each sector compared with a long-term arithmetic average. Note that the averages for TIPS, high-yield corporate bonds, and mortgage-backed securities are for shorter periods of time.

Asset class	Expected Annual Return 3 – 5 Years	Long-term Arithmetic Average of Annual Total Returns	
		Return	Time Period
Intermediate-term Treasuries	3.50%	5.48%	1926 – 2007
Long-term Treasuries	4.20%	5.84%	1926 – 2007
TIPS (inflation-protected Treasuries)	4.40%	7.63%	1998 – 2007
Long-term corporate bonds (investment grade)	5.10%	6.16%	1926 – 2007
High-yield corporate bonds	5.40%	10.93%	1980 – 2007
Mortgage-backed securities (fixed-rate agencies)	5.50%	6.67%	1992 – 2007

A final note on Fannie Mae and Freddie Mac – on Sunday, September 6th, the United States government took over these two key mortgage credit providers. The Federal

National Mortgage Association (FNMA or Fannie Mae) and the Federal Home Loan Mortgage Corporation (FHLMC or Freddie Mac) were government sponsored private enterprises that facilitated the supply of mortgage credit by buying mortgages from banks and savings and loans, packaging them into securities, and selling the securities to investors. They made mortgage credit available to parts of the country where banks and thrifts had few deposits to lend, and they established minimum underwriting standards for loans to be acceptable for securitization. Their guarantee of the payment of interest and principal facilitated the sale of the securities to investors. As of June 2008, Fannie Mae and Freddie Mac were the guarantors of approximately \$4.0 trillion of mortgage-backed securities besides owning approximately \$1.5 trillion directly. Both Fannie Mae and Freddie Mac maintained their underwriting standards throughout the sub-prime mortgage boom, but both have been hurt by the collapse in housing prices and increased rate of foreclosures brought on by the abuses of sub-prime mortgage boom.

As is evident from figures BMO.10 and BMO.11 especially, credit spreads on Fannie Mae mortgage-backed securities have increased dramatically since mid-2007, from a median level of 1.2% to over 2.0% in August. This increase has translated directly into higher borrowing costs for home buyers. Although several prominent bond managers have commented that the government takeover of Fannie Mae and Freddie Mac should restore liquidity to the mortgage market and reduce borrowing costs to home buyers, we are more cautious. Both agencies face mounting losses, and it is not immediately evident to us that the old business model will work throughout the foreseeable future. Credit spreads may stay elevated for some time, and the future equilibrium level may need to be higher than in the past. Our near- to mid-term return expectations for fixed-rate mortgage-backed securities are consistent with this view and do not assume that credit spreads will revert to their historical median level in the near future.

Bond Market Outlook Charts

AVERAGE MONTHLY YIELDS ON U. S. TREASURIES VERSUS TARGET FED FUNDS RATE

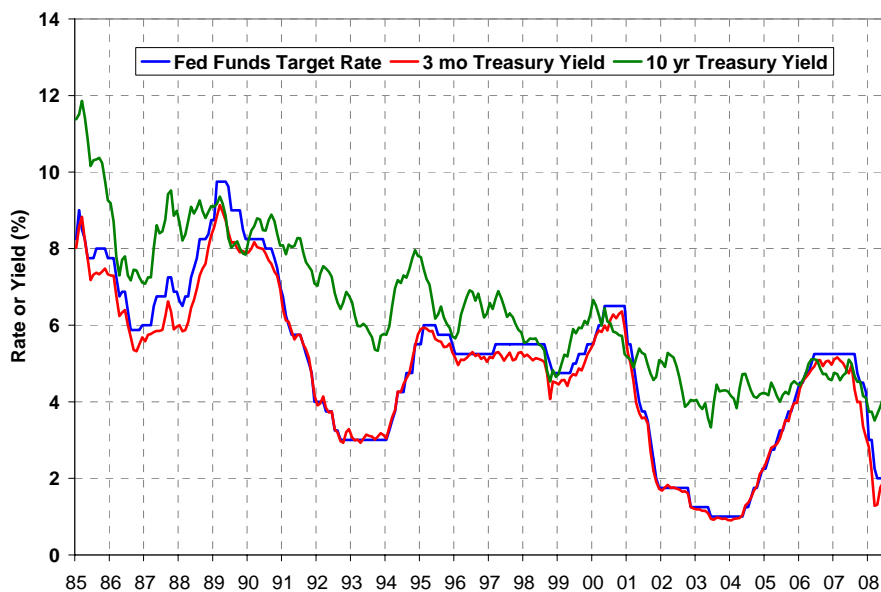


Figure BMO.1: Average monthly yields on U. S. Treasuries versus Target Fed Funds Rate
Source: Federal Reserve Board

EXPECTED INFLATION RATE

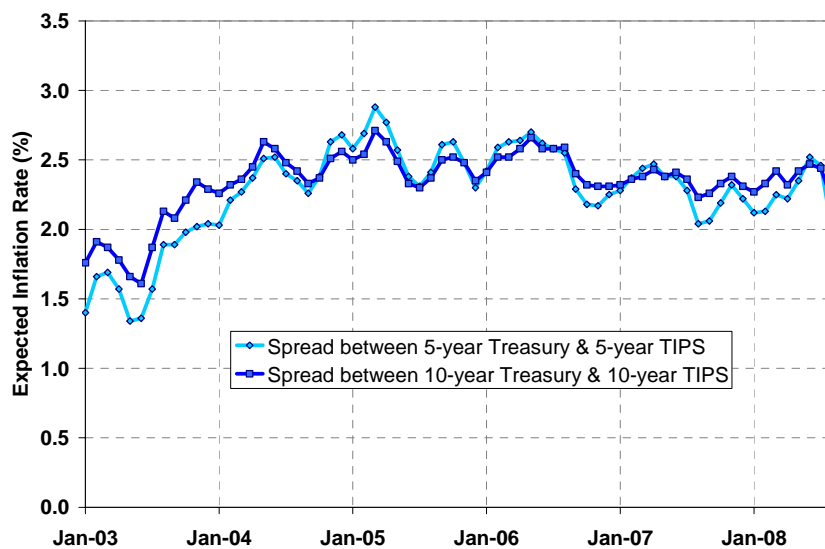


Figure BMO.2: Expected Inflation Rate, based on the spread between Treasury yields and TIPS rates (monthly averages)
Source: Federal Reserve Board and *Advisor* calculations

AVERAGE MONTHLY RATES ON U. S. TREASURY INFLATION-PROTECTED BONDS

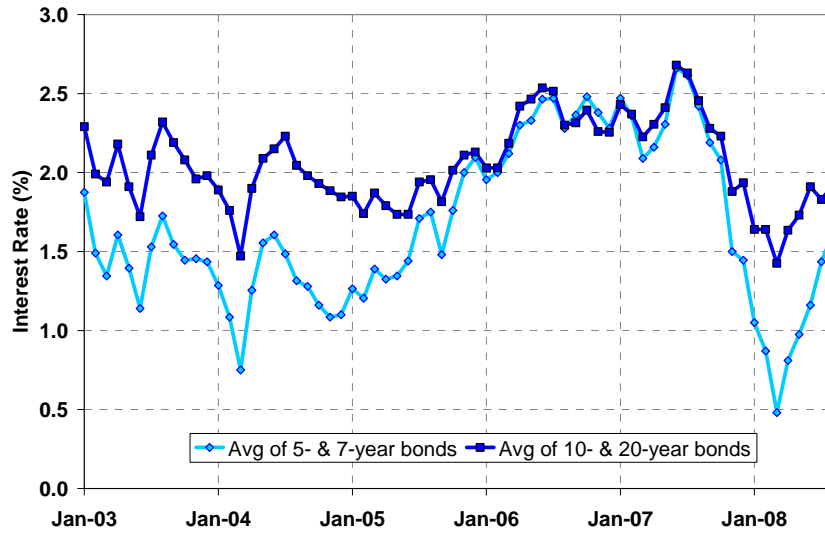


Figure BMO.3: Average monthly rates on U. S. Treasury inflation-protected bonds
Source: Federal Reserve Board and *Advisor* calculations

TREASURY CONSTANT MATURITY YIELD CURVES

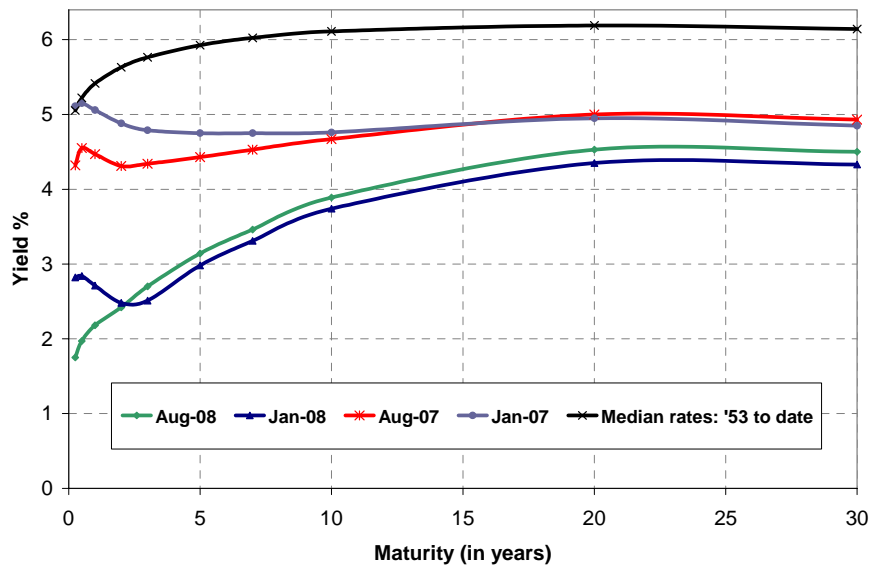
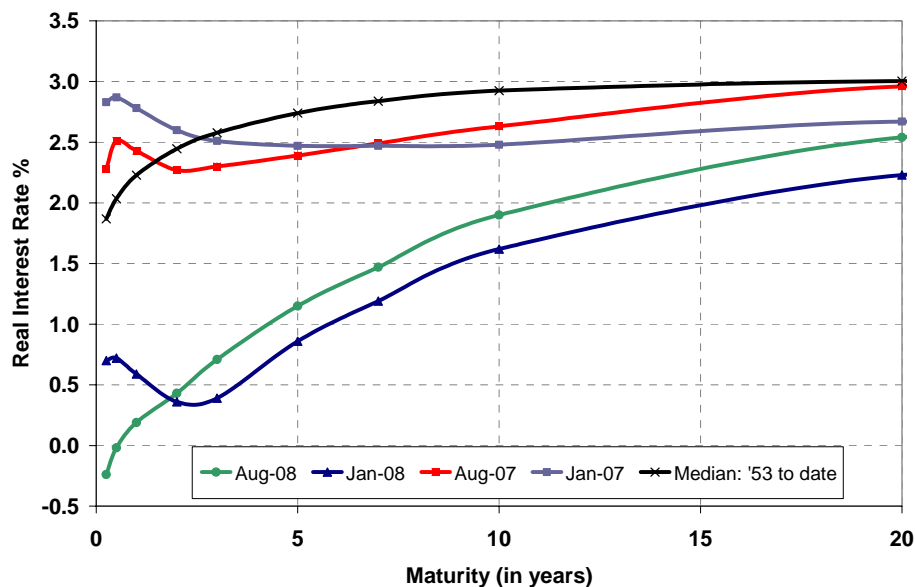


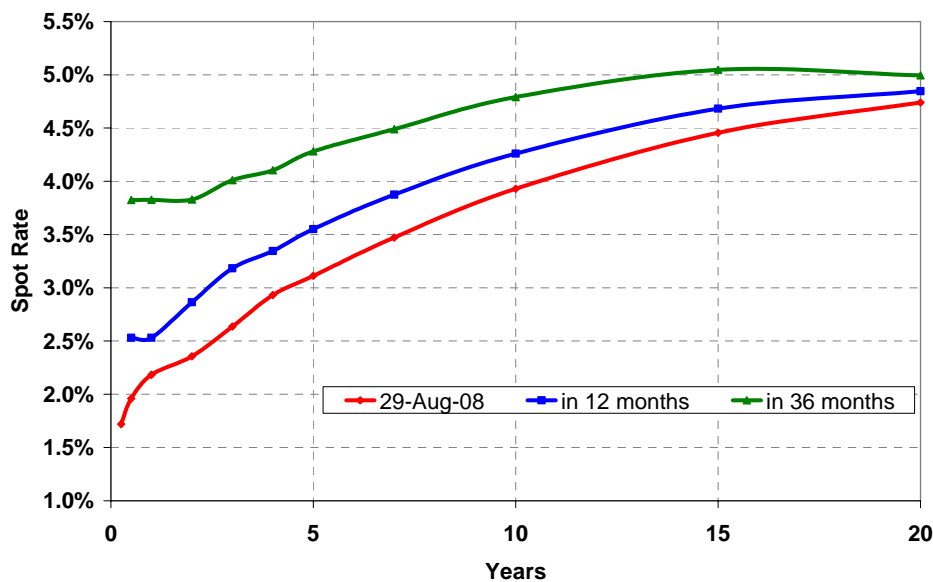
Figure BMO.4: Treasury Constant Maturity Yield Curves, based on average monthly yields
Source: Federal Reserve Board and *Advisor* calculations

REAL INTEREST RATE YIELD CURVES



BMO.5: Real Interest Rate Yield Curves (Treasury yields less inflation expectations)
Source: Federal Reserve Board and *Advisor* calculations

CURRENT AND FORWARD SPOT-RATE CURVES



BMO.6: Current and Forward Spot Rate Curves
Source: *Advisor* calculations and Federal Reserve Board

SPREAD BETWEEN 3 MONTH FINANCIAL COMMERCIAL PAPER AND 3 MONTH TREASURY YIELD

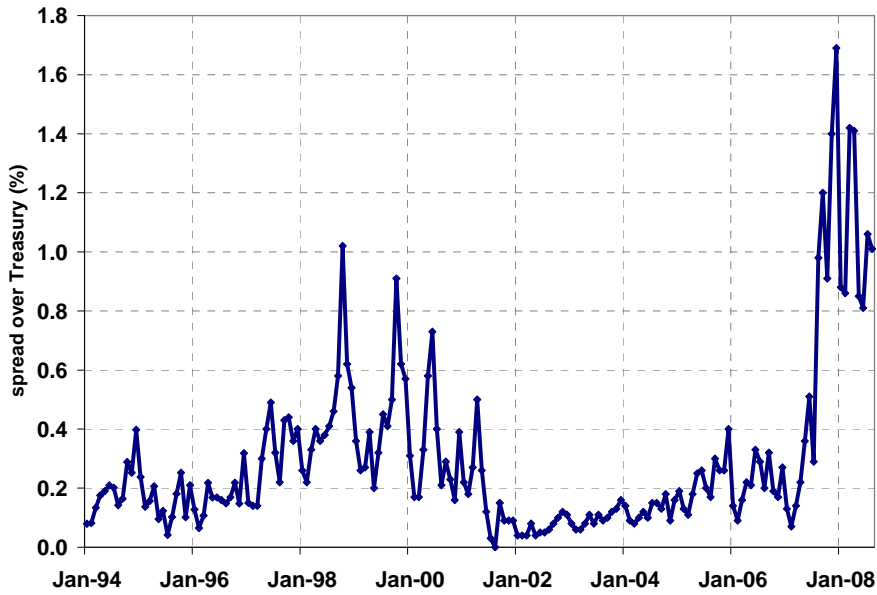


Figure BMO.7: Spread between 3 month Financial Commercial Paper and 3 month Treasury Yield
Source: Federal Reserve Board and *Advisor* calculations

INVESTMENT-GRADE CORPORATE BOND YIELD SPREADS TO TREASURY

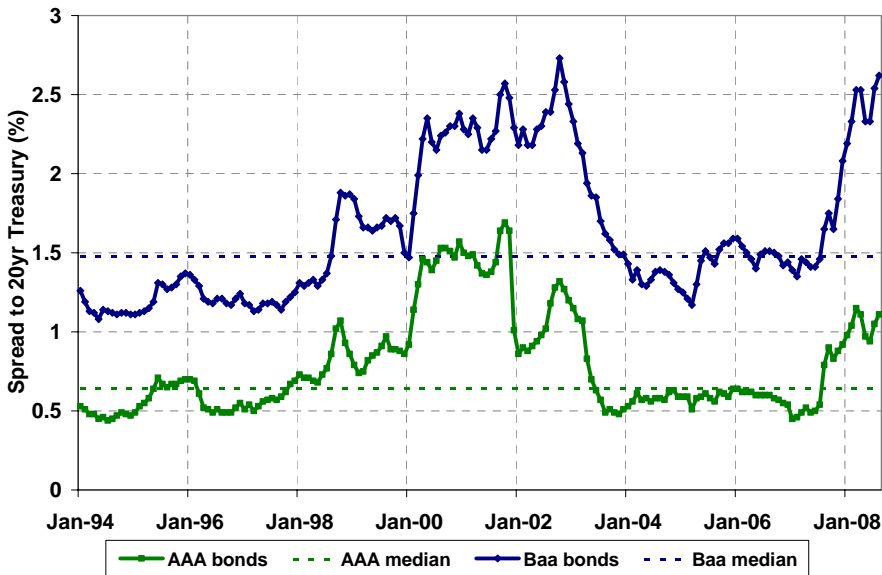


Figure BMO.8: Investment Grade Corporate Bond Yield Spreads to Treasury
Source: Federal Reserve Board and *Advisor* calculations

HIGH YIELD CORPORATE BOND SPREADS TO TREASURY



Figure BMO.9: High-yield Bond Spreads to Treasury
 Source: Merrill Lynch, Federal Reserve Board, and *Advisor* calculations

MORTGAGE RATES versus MBS YIELDS versus 10 TREASURY YIELDS

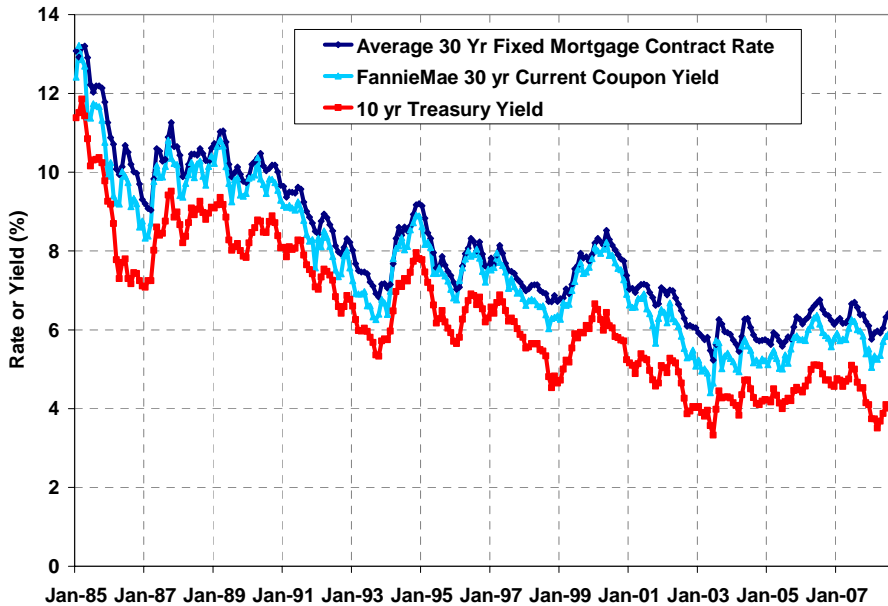


Figure BMO.10: Mortgage Rates and MBS Yields versus 10 Year Treasury Yields
 Source: Federal Reserve Board, Bloomberg

MORTGAGE-BACKED SECURITIES SPREADS

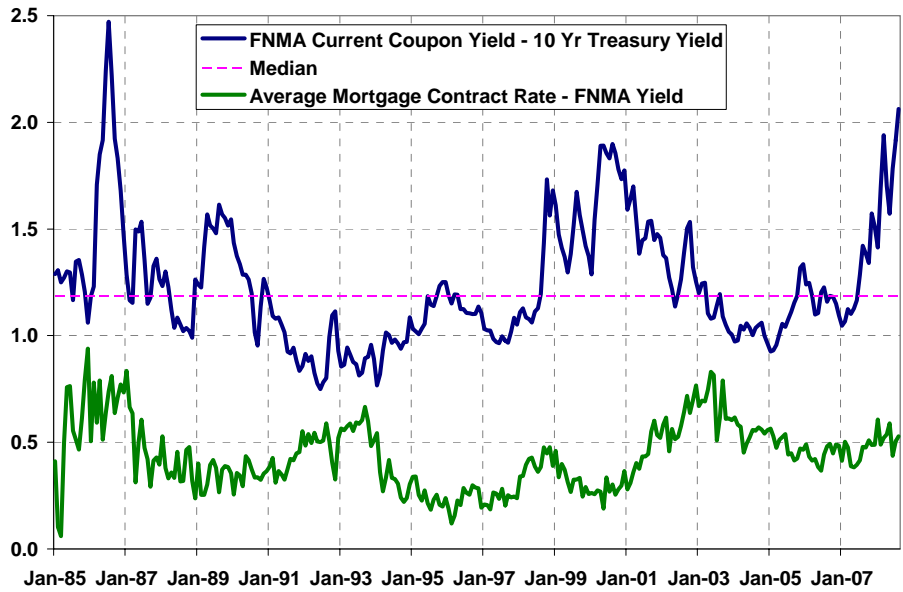


Figure BMO.11: Mortgage-backed Securities Spread over 10 Year Treasury Yields
 Source: Federal Reserve Board, Bloomberg, and *Advisor* calculations