

INVESTMENT UPDATE

In the bond market, nothing spells “boring” like the arcane topic of mortgage-backed securities. MBS, as they’re known, is the sector of the market that most conjures images of the pencil-necked, pocket protector-wearing, slide-rule fumbling, nerdy bond portfolio manager. It’s the topic of conversation, and the section of bond presentations, which causes most clients’ eyes to glaze over. Discussing mortgage securities, with their prepayments and negative convexity, is the bond market’s “third rail”: touch it (or talk about it) and you die.

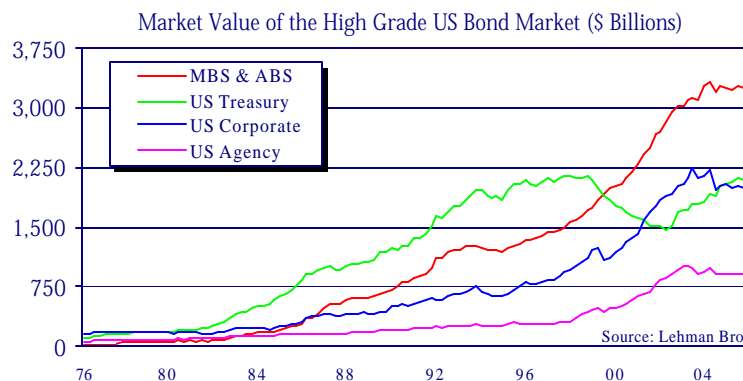
But that’s not going to stop us! As much as we might like to, we cannot help but talk about mortgage-backed securities, not because of some sick masochistic streak, but because they are ubiquitous—the MBS market is, by far, the largest sector of the US bond market. As the chart shows, when measured by the Lehman Aggregate Index, mortgage- and asset-backed securities comprise 40% of the US bond market (and this doesn’t even include the ever-growing adjustable rate mortgage segment, or large “non-conforming” loans). What’s more, *we like mortgage securities!* Over longer periods of time MBS have produced superior total rates of return, and possess quality, yield, decent liquidity...but we’re getting ahead of ourselves. Let’s back up a bit and examine the history of the mortgage-backed securities market.

The Federal National Mortgage Association (FNMA, more commonly known as “Fannie Mae”) was established in 1938, initially as a Depression-era Agency to support US banking and home ownership. The intent was for FNMA to provide liquidity to banks by buying home mortgage loans in exchange for cash, and to develop a secondary market for mortgage loans. This would encourage banks to lend money during financial dips, when credit would otherwise be scarce. In 1968, FNMA spun off the Government National Mortgage Association (GNMA, “Ginnie Mae”) in order to specifically encourage home ownership by low-income Americans and veterans by buying loans

sponsored by the Federal Home Administration, the Veterans Administration, and other government-supported programs (and therefore, driving down the cost of borrowing for these groups). GNMA was established as a wholly-owned agency within HUD, while FNMA became a quasi-governmental organization, and as such, was free to continue to purchase non-government sponsored loans from mortgage lenders. In 1970, the Federal Home Loan Mortgage Corporation (FHLMC, “Freddie Mac”) was established to further support the mortgage market. Like FNMA, FHLMC was established as a publicly-owned company operating within the oversight of the US government.

Up until the 1970’s, the secondary market for mortgages was limited to the buying and selling of individual loans, which didn’t do much to add liquidity to the mortgage market. In 1970, GNMA started the practice of packaging mortgages together and issuing mortgage-backed securities; FHLMC and FNMA followed in 1973 and 1982, respectively. The process works essentially the same way today as it did back

then: a lender makes loans to home buyers, pooling the loans with similar interest rates until the lender has enough to package. The lender calls one of the three agencies (based on the type of loan and their relationship to the agencies) and has the pool of loans packaged into a “pass through” security. The agency charges the lender a fee, slices out a small share of the interest rate for guaranteeing the security, stamps its name on the security and assigns it a unique “pool number.” The coupon rate on the security will be slightly lower (typically, 50 basis points, or 0.50%) than the average interest rate on the loans themselves; the agency takes a small amount of interest and the lender keeps the difference as the “servicing fee.” Thus, a mortgage lender may, over a period of time, create \$5 million worth of thirty-year mortgage loans with rates of approximately 5.50%, and call Freddie Mac and have them securitized into slightly less than \$5 million of FHLMC 30-year 5% pass-through securities. Now the lender has a govern-



ment-backed mortgage security that it can keep as an investment or easily sell in the secondary market.

Pass-through securities are so named because when the homeowner makes their monthly principal and interest payments to the institution that offered the original loan, the lender merely “passes through” the payments (less servicing and underwriting fees) to an intermediary who credits the bondholder. If the homeowner is late making the payment, the agency steps in and makes the principal and interest payments to the bondholder. This guaranty of timely payments is what separates the agency-backed MBS from “private label” mortgage bonds that are issued from time to time. But there are differences among the agencies as well: GNMA’s guaranty is on par with the US Treasury—the full taxing power of the US stands behind bonds issued by GNMA. Both FNMA and FHLMC carry an implied government backing—the so-called “moral obligation” that the government will step in and make timely payment of principal and interest if the agencies are unable to do so. The government backing, direct or indirect, has never been tested, as all three agencies are highly profitable and have always been able to make any payments when the homeowner has fallen short.

It is the very nature of the way these monthly mortgage payments are passed through to investors that make mortgage securities the darlings of the Propeller Head Crew. Unlike most bonds, which simply pay a coupon twice a year and return the bond’s principal back to the bondholder on its maturity date, MBS return a portion of the principal every month, throughout the life of the loan, as homeowners pay off their debt with each mortgage payment. These principal payments are variable from month to month, and can be highly sensitive to changes in interest rates. Homeowners may choose to pay off their existing loans, either in part (curtailment of principal) or in whole (typically by refinancing into a new, lower mortgage). Thus, MBS have *optionality*—these securities’ effective maturities change based on how homeowners prepay their principal. In addition to the question of average maturity, investment returns for MBS are equally dependent on what happens to prepayments—buying a mortgage bond well above par and having your principal returned back to you at par sooner than expected (especially while interest rates are falling) is what a bond nerd might call “sub-optimal!” Therefore, estimating future prepayments is essential to proper valuation of MBS, and modeling how these prepayments will change under various scenarios takes considerable analytical capabilities.

Good analytical systems are a relatively recent development. While the MBS market came of age in the 1980’s, growing from roughly 11% to nearly 30% of the high-grade US bond market, investors were mostly left to fend

for themselves to quantify the types of risk they were taking on. Systems were being developed—by and for the major Wall Street firms, as they extracted the maximum value out of a market still in its infancy. As documented by Michael Lewis in his first-hand account of the era, *Liar’s Poker*, the major brokerage firms held all the cards when it came to culling out the best bonds from the agencies and taking advantage of inefficiencies in the nascent MBS market. Growing analytical capabilities, in turn, spurred new products. Chief among these were collateralized mortgage obligations (CMO’s), securities that segmented the cash flows from mortgage loans into different classes, or “tranches” of bonds. Soon there was an explosion of new derivative collateralized securities, including asset-backed bonds.

Today, there’s a much more level playing field, and investment management firms willing to spend the money can buy analytical systems to give them the same computing power as the major Wall Street firms (who are now padding their profits from another relatively new and inefficient market: credit derivatives). Using these tools today, we find the MBS markets to be increasingly attractive, particularly given some of the risks that seem to be looming in other parts of the US high grade market. Our favorite sector for the past few years, the high grade corporate bond market, is running out of steam. The combination of historically narrow yield spreads over comparable -duration Treasuries and the peaking of the credit cycle point to a more difficult road ahead for corporate bonds. Agency debentures’ yields are also tight, and an expected increase in supply for this sector in the months ahead does not help their prospects. Likewise, there will be no shortage of new supply in the US Treasury market for the next few years as the US funds its fiscal deficit with heavy new supply of Treasury Bills, Notes and Bonds. Foreign demand has been sufficient to soak up the Treasury supply over the past few months, but we remain concerned that their demand for our bonds may not always be so strong. And heaven forbid that they actually become net sellers of our Treasury bonds.

Mortgage bonds, meanwhile, have one big tailwind: new supply of fixed rate mortgages is almost certain to slow in the months ahead. As the inflation of US housing prices slows (or as some are predicting, even declines), folks will be less inclined to “trade up” to a new or more expensive house. Homeowners will simply stick with their existing mortgages, paying them down more -or-less according to schedule. Meanwhile, homebuilders are likely to curtail the construction of new houses. Less supply of new mortgage loans, combined with strong demand for high quality US bonds from around the globe, leads to reasonable expectations that the MBS market could be the star performer among high-grade bonds in 2006.

