## INVESTMENT UPDATE

There's a lot of crazy stuff going on in the US mortgage bond market. Mortgage securities (or "MBS," in bond-speak) may not be the sexiest investment alternative out there, but they're one of the largest and most important asset classes, representing more than 1/3 of the Barclays Aggregate Bond Index. And since they're tied directly to the troubled US housing market, and with all the remedies (both current and prospective) that have been put in place to shore up home prices, many of the traditional tools that we use to examine MBS aren't much use right now. Like we said, crazy stuff.

erage, reached in mid-2006. Meanwhile, US new home sales have fallen to their lowest levels recorded since this statistic began to be measured in 1963. As a result, homeowners have seen their wealth fall by approximately three trillion dollars, while an estimated 1/3 of US homeowners now find themselves in a negative equity position in their homes, totaling an estimated \$800 billion. Two million homes have entered, or will soon be entering, into foreclosure proceedings, with tens of millions at least one month behind in their mortgage payments. Consumers, fearful of

Unlike most corporate and Treasury bonds, whose prices simply reflect the general health and perceived ability of the issuer to 175 make all future principal and interest payments, the value of each unique mortgage security is directly tied to a specific pool of 125 home mortgage loans. As a result, the financial health of the owners of these homes, as 00 01 02 the future, have pulled back from their free-spending ways, sending savings rates from near-zero before the financial crisis (when they should have been saving!) to approximately 7% of disposable income today.

well as the fair market value of their properties, has a direct impact on the performance of the mortgage bond tied to those loans. This relationship is even more direct than a so-called "secured bond," as the assets aren't simply collateral that can be "called" when the issuer gets in trouble; in the case of mortgage-backed securities, the homeowners' monthly payments are passed through (after taking out servicing fees) to the bondholder.

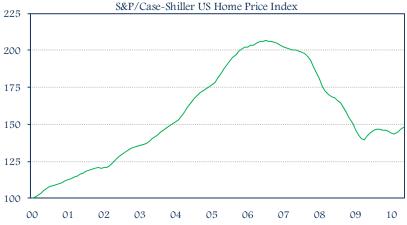
US policymakers are all too aware of the importance of the US housing market, and recognize that the recovery of the US

Holders of mortgage securities, therefore, are particularly interested in the creditworthiness of homeowners in general, and especially in those homeowners whose loans underpin the bonds in their portfolios. In the absence of a financial guarantee (from one of the GSEs—Freddie, Fannie or Ginnie—or the private issuer, as the case may be), when delinquencies rise, the bondholder's income stream and return on investment becomes impaired. But there are other, more subtle (yet no less important) considerations, including the effect of lower home prices on the ability of homeowners to refinance (which can't be done if you're "upside down" on your mortgage) or homeowner "mobility"—the likelihood that homeowners will trade up (or down)—which is curtailed in a big way when home prices are depressed or when a massive supply-demand imbalance makes selling your home a time-consuming and painful ordeal.

economy is joined at the hip to an improving housing market. To this end there have been multiple programs put in place over the past two years to stabilize home prices, lower mortgage rates, incentivize homeowners to stay current on their mortgage payments, and to subsidize home owners and potential home buyers. On the mortgage securities side of the table, there have been programs (including the PPIP) implemented to spur the demand for bonds backed by non-Agency securities. And of course, the Treasury effectively took over ownership of Freddie Mac and Fannie Mae in August of 2008 to keep them from defaulting on the guarantees they had made to investors, promises they could no longer afford to keep due to poor underwriting and lack of adequate capital.

Let's get a little more specific. Right now, home prices are approximately 30% lower than their peak, on a national av-

Of all the programs, keeping mortgage rates low has been the number one policy tool over the past two years for shoring up the US housing market. Low interest rates help to keep monthly payments affordable for those with adjustable rate mortgages, provide the opportunity for existing mortgage holders to refinance at lower rates, and spur home sales by lowering overall borrowing costs. The chart on the back page shows that rates on qualifying mortgages (i.e., those that can be converted to FNMA/FHLMC securities) have fallen below 4%, the lowest home mortgage rates since the 1950s.



While it's impossible to know, in the absence of all these programs, how much lower home prices would be or how many fewer houses would have been sold, we do know one thing: the US housing market hasn't recovered yet, and may not show any real strength for another two, three or five years. Easy money and stunningly bad underwriting standards, along with institutional investors willing to buy crummy mortgage-backed bonds packaged from this dreck, all contributed to creating a massive housing bubble. The bubble took the better part of a decade to inflate, and even though the deflation of home prices may have ended, there is little evidence to support any near-term appreciation of home prices.

All these factors have a complex and multifaceted impact on the bond market, especially the market for MBS. The main effect has been to distort the usual price/yield relationship for MBS in a low-rate environment. To explain: Typically, when interest rates fall, homeowners tend to pay down their mortgages more quickly, by refinancing their

old loans into a new, lower rate loan. When this happens, bondholders who own higher-rate MBS receive "prepayments," or early redemption of their bonds. They get their principal back in full, but sooner than they would have if interest rates had remained stable, and much sooner than if rates had risen. "Prepayment risk" as

it's known in the

30~Year FHLMC Mortgage Rate 9% 8% 7% 6% 5% 4% 3% 99 10 98 00 01 02 03 04 05 06 07 08 09

bond market, is typically the main source of risk for buyers of MBS, especially those which are issued by one of the GSEs. Traditionally, prices of MBS, due to their prepayment risk, tend to have a natural ceiling on their prices, as investors have historically been reluctant to pay much above "par" for a bond that may rapidly pay down at 100 cents on the dollar. In years past, when rates have fallen, we might see Agency MBS backed by higher interest mortgages trade in the \$104-\$105 price range; today, we're seeing some GSE-backed pass-throughs at prices above \$109.

These inflated prices are due to the fact that, in this environment, prepayment risk is suppressed to an extent never seen in the history of the modern bond market. Despite the best attempts by policymakers to increase homeowners' incentive to refinance, homeowners cannot respond to the opportunity to do so for the reasons previously mentioned: They either don't have any equity in their homes, or otherwise are so financially strapped that they no longer meet the new, more stringent underwriting standards that banks have adopted in the wake of the housing meltdown. Refinancing slows to a crawl, MBS are less likely to be called, MBS prices are free to inflate.

Analytical tools used to evaluate the attractiveness of MBS

are therefore not much help in deciding whether these bonds are rich or cheap right now, as there is no historical precedent for these prices. If prepayments remain subdued, a 5% or 6% coupon will provide very good relative returns in this low rate environment, even if you have to pay a sizeable premium. But that income will be wiped out quickly if prepayments move back closer to historic norms. It seems a safe bet that the combination of a weak consumer sector and a shell-shocked banking sector will result in continued weakness in US home prices, with little upward pressure on prepayments, but a miscalculation could prove disastrous.

What we (and many other bond investors) fear right now is the potential for a radical change in rules and regulations concerning the contractual obligation that has always guided the US mortgage market. Namely, new policies put in place by desperate politicians, which could allow upside-down borrowers to refinance their underwater loans at lower rates, or otherwise forgive or renegotiate certain terms of their home mortgage. In both cases the result would be an

acceleration of prepayments, either from the payoff of the old, higher-rate mortgage loan, or (in the case of Federal agency-backed MBS) the paydown of some amount of "forgiven" principal that the homeowner is no longer responsible for. As one commentator wrote, "The politics of pushing these efforts seems good, as homeowners cast more votes than MBS portfolio managers." True, but

there are many obstacles, both market-induced (who will buy a mortgage bond—and at what price—in the future if the rules can be re-written mid-game?) and legal, as even bankruptcy courts cannot force mortgage holders to accept changes to the terms of home loans under current law. Of course, as bond holders, we expect that the original terms of the mortgages that back our bonds will be upheld, as do the servicers who administer (for a fee) the cash flows of these bonds. "Raw" mortgage loans that were never securitized and are still held by the original lender may be renegotiated, but these represent a small percentage of the total number of loans outstanding.

As a result, bond portfolio managers are faced with difficult choices and far from perfect information about what may transpire in this market over the next few months. While we're certainly used to operating with a cloudy outlook, it's the political landscape that makes this environment especially dicey. This uncertainty may not be fully reflected in the prices of Agency-backed MBS, as they continue to trade at inflated prices, despite the non-trivial risk that a more radical "fix" may be attempted to assist impaired homeowners. While we think the prospects for implementation of such remedies are remote, we still believe that this is a good time to back off exposure to the MBS sector.

