

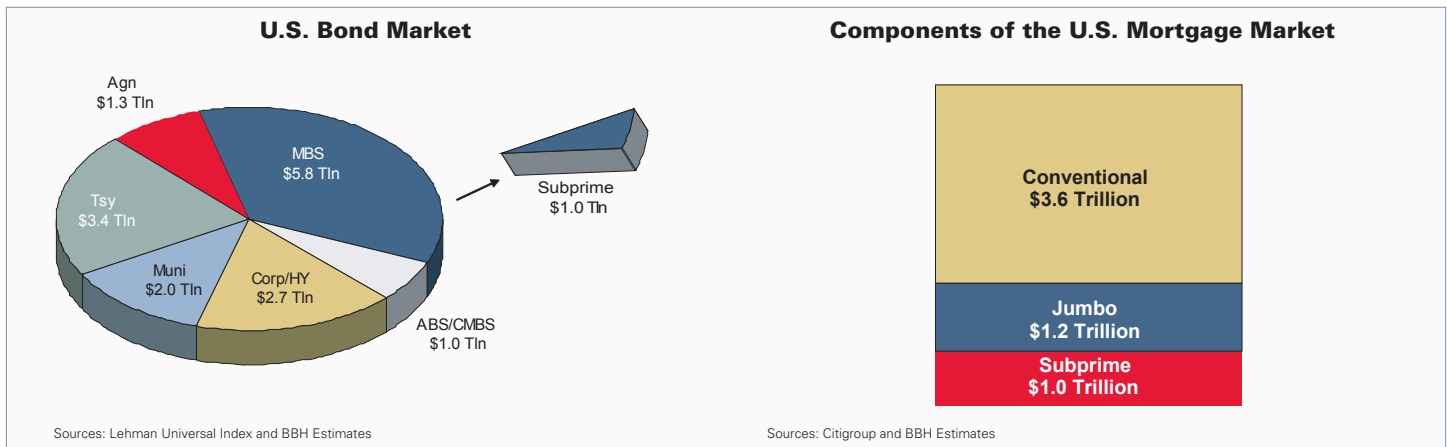
July 23, 2007

FAQ: Untangling the Subprime Market Mess

Every client discussion we're having right now is centered on one topic — the complex and rapidly changing dynamics in the subprime mortgage market. The following commentary will attempt to answer the questions most frequently asked by our clients, while also sharing our views on these important market developments.

Starting at the top, exactly how large is the subprime securitized loan market, and how does its size compare to the total mortgage securities market and other sectors of the U.S. bond market?

Subprime securitized loans (including collateralized debt obligations or CDOs) total an estimated \$1 trillion, which represents 17% of the U.S. mortgage-backed securities (MBS) market, and 6% of the U.S. bond market. The largest share of the mortgage-backed securities outstanding (62%) are conventional mortgage loans to high quality borrowers which get packaged into GNMA, FNMA, and FHLMC securities. The balance of securitized mortgage loans are "jumbo" mortgages (loans > \$417,000) which are made to other high quality consumers who are borrowing amounts in excess of the qualifying guidelines for the government sponsored agency programs.



What have been the historical default rates of these three sub-sectors of the mortgage market?

Conventional and jumbo mortgage loans are made with strict underwriting criteria that focus on high quality borrowers with loan-to-value ratios $\leq 80\%$ under most circumstances. Not surprisingly, default rates have been

very low for loans supporting conventional and jumbo MBS. Subprime loans focus on lower quality borrowers, and prior to the surge in lending in 2005-2006, default rates losses ranged from 2%-4%/year. More than 70% of all subprime loans outstanding today were made at the end of the housing cycle in 2005-2006, and many of these loans were made with less disciplined underwriting standards. Delinquencies (which precede defaults) have recently ramped up to 16% for 2005-2006 subprime originated loans. Delinquencies have also risen for loans made in earlier years, but not by alarming rates.

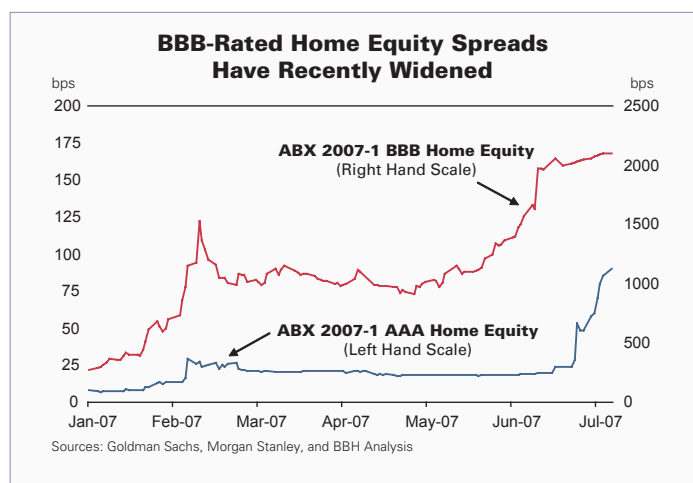
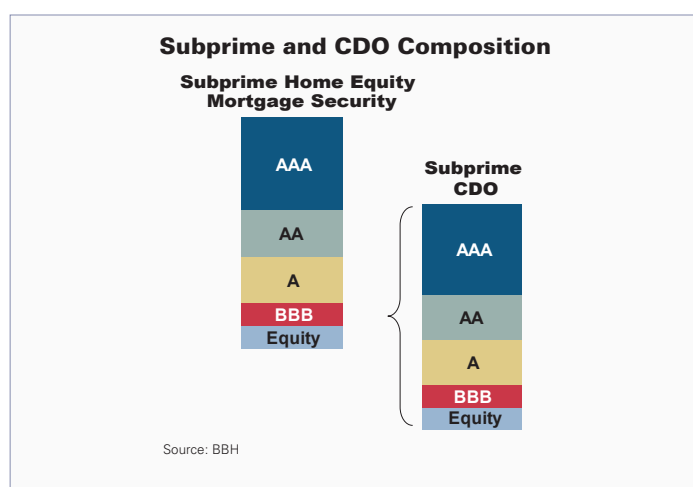
Please explain the typical structure of a subprime MBS?

Typically, subprime loans have been packaged into MBS structures that prioritize cashflows. In the example below, investors in the AAA-rated tranche have the first priority of cashflows before AA-rated investors, who are paid before A-rated investors, and so on. Investors in the "equity" tranche at the bottom get the residual cashflows after all other investor obligations have been satisfied. Naturally, the higher an investor is in the pecking order, the higher the credit rating and lower the probability of default.

Many subprime MBS have subsequently been used to form CDOs, which are themselves created with tiered structures ranging from AAA to equity tranches. As the performance of subprime collateral has deteriorated, the impact has been magnified in CDOs, many of which will experience significant ratings downgrades.

How far have spreads widened on subprime paper?

For a subprime MBS issued in 2006, investors in the AAA-rated tranche typically received LIBOR + 15 basis points, while investors in the BBB-rated tranche received LIBOR + 150 basis points. AAA-rated subprime MBS still remain well protected from default risk, but they have widened sharply to LIBOR + 90 basis points. Meanwhile, BBB-rated subprime MBS spreads have rocketed higher to LIBOR + 2100 basis points, reflecting the high likelihood that investors here will experience principal losses.



Which investor categories are presumed to be the owners of subprime MBS?

That is still the \$64,000 question — and it is really two questions. The first question is: who are the largest dollar-value owners of the subprime MBS? The second question is: who owns most of the exposure to default risk? The answers to both questions are not yet well established. While there have been well publicized hedge fund losses so far, we believe that most of the dollar-value subprime MBS are *not* held by hedge funds, mutual funds, institutional money managers, pension funds, or endowments/foundations. All of these investors mark-to-market their portfolios with great frequency, so the large price declines now under way in subprime MBS would be quite visible if these investors maintained large exposures. Rather, we suspect that the majority of subprime paper, primarily in the high quality tranches, is held by insurance companies and banks around the world. These investors are often more focused on maximizing yield than total return, and they do not mark-to-market less liquid positions like subprime MBS.

Some of the lower rated or equity tranches, where the lion's share of true default risk is concentrated, may be held by hedge funds (some on a hedged basis). We would not be surprised to see further performance difficulties come to light among fixed income oriented hedge funds. When operating on a leveraged basis, there is little margin for error.

What has been the response by the rating agencies to these developments, and what is likely ahead?

In a nutshell, the rating agencies got it very wrong. They did not appropriately model prospective losses for much of the subprime MBS market, and therefore they applied ratings that, for all but the highest quality tranches, have turned out to be far too generous relative to prospective credit losses.

So far the rating agencies have only downgraded about 3% of outstanding subprime MBS, and downgrades have been exclusively in A-rated and BBB-rated tranches. Only a few CDOs have been downgraded, even though credit here is more deeply impaired. Massive further downgrades lie ahead once the rating agencies catch up to the reality of the subprime market's deteriorating fundamentals. There will ultimately be a great deal of securities downgraded from investment grade to non-investment grade ratings. When this occurs, there may very well be large liquidations by investors that are not allowed to hold non-investment grade debt. Based on regulatory and accounting requirements, insurance companies and banks may need to mark-to-market their holdings once downgrades occur and the bonds are deemed to be "impaired". Some of the large price declines already evidenced in subprime MBS are in anticipation of forced liquidations down the road.

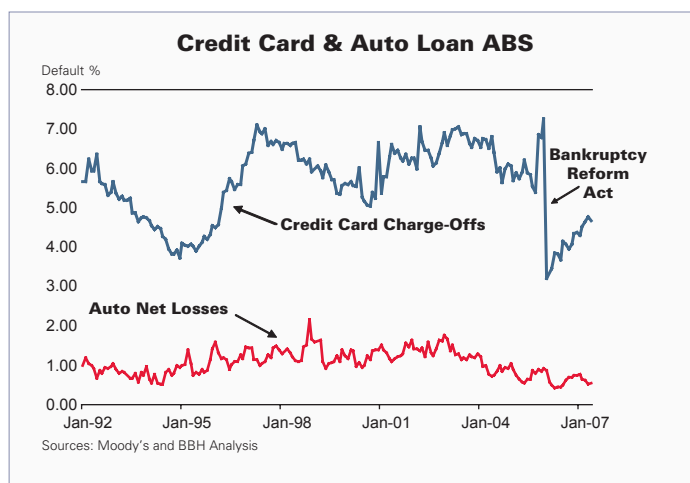
What is the likely magnitude of principal losses? What does this mean for the financial sector?

Based on our internal work, BBH estimates that principal losses in the subprime sector may eventually rise to \$150-\$200 billion, more than twice the amount suggested by Fed Chairman Bernanke in his Humphrey-Hawkins testimony last week. That certainly is a very large number, and it will be plenty painful for the

investors in lower-rated tranches where most of the default risk resides. But in the context of the total MBS/structured-securities market, as well as the overall U.S. bond market, we are not convinced that these losses will be the catalyst for a broader market meltdown. Surely, financial entities that own large positions in subprime paper will see earnings declines. Furthermore, the packaging of subprime MBS and CDOs has been a very profitable undertaking for investment banks over the past few years, and now these profits have come to a grinding halt. There is clearly a higher degree of uncertainty today regarding the credit fundamentals of financial entities, but at this point we do not believe the subprime market woes will turn out to be the storm that severely undermines the credit quality of the broader U.S. financial and corporate sectors.

Are there signs of deterioration in other consumer credit sectors?

Outside of the subprime sector, we do not see signs of a broader deterioration in consumer credit. Delinquencies/default rates for automobile loan receivables and credit card receivables (which total \$500 billion) have remained near the lowest levels that have prevailed for the last 15 years. Consumer income growth remains very strong, and household wealth is at record levels, so we would be surprised to see credit fundamentals seriously deteriorate with consumers so well supported. That said, credit spreads for even highly rated asset-backed securities have not been immune to rising risk premiums. To the extent financing costs are increasing for all types of consumer loans, this is naturally reflected in higher ABS spreads as well.



What is the BBH view from here?

At this juncture, we believe that significant credit losses in the subprime market will largely remain a subprime market problem. There was a tidal wave of lending at the end of the housing cycle to borrowers who perhaps were never going to be able to afford the debt service, and we are seeing the repercussions today. Liquidity in the subprime market has seized up, and selling is occurring in other sectors to raise liquidity since subprime paper cannot (or will not) be traded. This has resulted in a classic flight to quality, temporarily benefiting U.S. Treasuries at the expense of wider spreads throughout the investment grade and high yield sectors. We are in a period right now where credit-oriented total returns (at any quality level) have been significantly below U.S. Treasuries.

From a broad economic perspective, it remains our view that while the housing recession has further to run, fundamentals elsewhere remain solid. We believe there will likely be sufficient strength in other sectors

(consumer spending, business spending, export growth, inventory building) to produce moderate growth in the quarters ahead. Following a period of extraordinarily tight credit spreads and unsustainably low levels of volatility, both measures are now rising sharply across the debt markets. Risk premiums should justifiably be wider today as a result of the uncertainties in the subprime market, but we believe credit spreads are not likely to continue on an upward spiral as long as underlying economic fundamentals remain sound, interest rates remain moderate, and the global economy enjoys a strong period of growth.

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