Investment strategies may not achieve the desired results due to implementation lag, other timing factors, portfolio management decision-making, economic or market conditions or other unanticipated factors. The views and forecasts expressed in this material are as of the date indicated, are subject to change without notice, may not come to pass and do not represent a recommendation or offer of any particular security, strategy, or investments.
Implication of Current Market Prices
The implication of current residential mortgage-backed securities (RMBS) pricing, particularly those issues collateralized by subprime and Alt-A mortgages, is very profound for policy makers in the United States. For starters, Agency mortgage-backed securities (MBS) are priced as wide to US Treasury debt as they ever have been, while subprime and Alt-A RMBS are discounting apocalyptic foreclosure scenarios. The prices as they stand today imply that perhaps over 80% of these subprime and Alt-A mortgages will default. Additionally, in predicting default, the market is further suggesting that home mortgage lenders will realize historically extreme losses, i.e., as high as 75% severities. In effect, the mortgage market is "predicting" that residential real estate would need to decline roughly 60% peak-to-trough to reach these price levels. Such declines would mean that home prices in the affected areas would retrace some 20 years of gains.

This scenario that the RMBS market has priced in would result in a financial setback totaling as much as $2 trillion in overall defaults and $900 billion in losses. The drag on GDP alone would be staggering and, moreover, such losses would devastate bank capital in the U.S., wiping it out from current levels and requiring imponderable levels of new capital to maintain solvency. Shockingly, this scenario would suggest one in five mortgages going into default and ten million homes being foreclosed upon.

However, in our view, it is unlikely that market participants actually believe that 80% of these mortgages will default or that residential real estate will decline in price as much as 60%. What is more likely, we believe, is that the decline in prices of subprime and Alt-A RMBS is a result of the near-disappearance of the buyer base for these securities. In addition to the unprecedented pullback of the buyer base, it is also widely known that banks and brokers have been forced to short-sell these markets to offset large and illiquid holdings on their balance sheets. Some estimates place these “forced” shorts at 50% of the short volume in the sub-prime market.

Looking at the performance prospects of these RMBS, in particular those of subprime and Alt-A collateral, we can make some strong inferences. First, they are presently priced for depression-like conditions. Second, even while experiencing price declines, many of these securities are currently building credit enhancement (due to the majority of borrowers that continue to make loan payments) and are, therefore, fundamentally improving in that respect despite building delinquencies. Finally, these securities have very long average lives of as much as ten to twenty years. Hence the holders of these bonds at their current distressed prices have substantial option value in the sense that any housing stabilization or recovery (even if years away) could greatly enhance the returns to the investor in RMBS.
Market Analysis

To gain perspective on the present market situation, MetWest fitted a loss curve to current pricing on the ABX (a proxy index for subprime RMBS), which included these assumptions:

- Front-loaded defaults, i.e., housing market to get worse before it gets better
- Very high loss severities on default (75% loss)
- Required Swaps + 350 basis points as minimum IRR for worst-case

Results. To rationalize current RMBS pricing levels:

- Projected annual default rates would be more than double current annual default rates
- Projected annual default rates would be initially above 50%
- Annual default rates would need to stay above 30% for four years
- 80% of all loans eventually need to default

Loss severity implies:

- 50% peak-to-trough decline in nominal real estate prices
- 60% peak-to-trough decline in inflation-adjusted real estate prices

Projections are based on various assumptions, which are not fixed and are likely to change. Projections involved the use of sophisticated tools, which could produce varying results under differing conditions.
Market Assumptions: Implications

What does the ABX market imply?

> ABX pricing implies 80% cumulative defaults at 75% loss severity.
> Furthermore, pricing indicates that such defaults will happen quickly (within 1 to 3 years)
> Implied defaults are approximately $2 trillion
> Losses total close to $1 trillion
  • 10 million homes
  • Multiples of US bank capital
  • Potentially up to 20% of mortgage holders

Source: MetWest
Projections are based on various assumptions, which are not fixed and are likely to change.
Projections involved the use of sophisticated tools, which could produce varying results under differing conditions.
MetWest projects harsher future conditions compared to historical experience, but less severe than current prices suggest

> Assumptions:
  - Peak-to-trough housing declines of 40% (versus market-implied 60%)
  - Aggregate defaults reach 60% (versus 80%)
  - Cumulative losses of 36% (versus 60%)

> Rationale behind these Assumptions:
  - Double any previous housing downturn
  - Removes all home price appreciation from this decade
  - 65% severity takes real housing prices back 20+ years

Projections are based on various assumptions, which are not fixed and are likely to change. Projections involved the use of sophisticated tools, which could produce varying results under differing conditions.
Market Assumptions: Implications

Summary:
- Current annual default rate assumptions across all mortgage types are approximately 1-20%
- Current 1st lien severities 25-40%, not 75%
- Market implied total dollar defaults equal approximately $2 trillion

Source: MetWest
Projections are based on various assumptions, which are not fixed and are likely to change.
Projections involved the use of sophisticated tools, which could produce varying results under differing conditions.
Subprime RMBS Market Outlook/Characteristics
As noted above, when determining a performance outlook for these subprime and Alt-A RMBS, we can make some strong inferences. First, the securities are presently priced for depression-like conditions. Second, even while experiencing price declines, most of these securities are currently building credit enhancement (due to the majority of borrowers that continue to make loan payments) and are, therefore, fundamentally improving in that respect. Finally, these securities have very long average lives of as much as ten to twenty years. Hence the holders of these bonds at their current distressed prices have substantial option value in the sense that any housing stabilization or recovery (even if years away) could greatly enhance the returns to the investor in RMBS.

This option value is demonstrated by the fact that only minor improvements from the severe market assumptions results in potentially high-annualized returns being realized for very long time periods. Additionally, any stabilization or even a slight recovery in the housing market would result in potentially higher returns, which are not even contemplated by this presentation. Finally, up to twenty years is a long time in which such an event could occur which implies a very high option value to these bonds.

In summary, while the price action of subprime and Alt-A RMBS has caused a large divergence from the expected return for RMBS in general, the senior nature of these securities has provided cash-flow protection and has left open the strong probability of remediation in value. To achieve this remediation quickly, it will be necessary for a new buyer base to form for the RMBS. This new buyer base will, at least initially, be focused on total return potential. This differs from the old buyer base that was largely concerned with the ability to leverage the bonds. Additionally, while delinquencies, loss severities and actual losses are running far lower then the current market projections, market participants are waiting to see a leveling off in these statistics before embracing the total return potential of these bonds. It is likely and projected that these two elements will form the key to an improvement in market pricing in the near term. In the immediate-term and long-term, the fact that cash-flows are well protected and that losses are well below those anticipated by the market is resulting in high cash-flow IRRs for the bonds over very long periods.

Projections are based on various assumptions, which are not fixed and are likely to change. Projections involved the use of sophisticated tools, which could produce varying results under differing conditions.
Based on what MetWest can currently see:

- **Market delinquencies are consistent with:**
  - 30% default peak
  - More seasoned deals improving

- **RMBS credit enhancement is building**

- **Risk-adjusted return outlook appears favorable**
  - Long average life provides extremely valuable optionality
  - Slight to modest improvement in defaults and/or severities leads to:
    - High IRRs
    - Long average life, meaning high yields persist
  - MetWest Expectations
    - Worst Case: High yields persist over long average life
    - Best Case: Price recovery leads to exceptional intermediate term returns

Projections are based on various assumptions, which are not fixed and are likely to change. Projections involved the use of sophisticated tools, which could produce varying results under differing conditions.
Subprime RMBS Market Pricing - Risk vs. Return

Long average lives provide incredible optionality

Market implying losses = 51% of original balance / 60% of current balance
- 80% loans default with 75% loss severity

Any housing stabilization in the next 2-10 years produces mid-teen returns annually

Pricing has compressed to close to worst case scenario (all loans default)

Source: MetWest

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