INCOME RESEARCH + MANAGEMENT

IR+M UPDATE
Hidden Risks in Subordinated Securitized Tranches

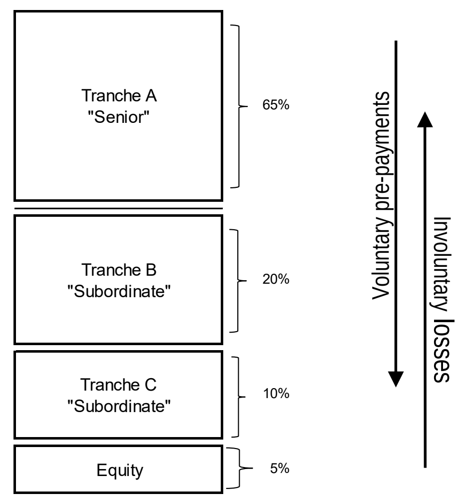
October 21, 2019

Securitized assets provide yield and diversification benefits, though understanding the deal structure helps to avoid unwanted surprises. This is particularly evident when comparing the risk of limited principal loss in a senior tranche relative to the greater risk in a subordinated tranche. While subordinated tranches may carry investment grade ratings, they leverage the risk of principal loss to the performance of the underlying collateral pool. We believe this structural leverage is not always fully reflected in the rating agency models. Historical data shows a significant difference in the average recovery rates on defaulted securitized subordinate tranches relative to similarly rated unsecured corporate bonds. Understanding this subtlety is key to ensuring that subordinate tranches are fully compensating investors for the additional risk.

Securitized Credit Risk 101

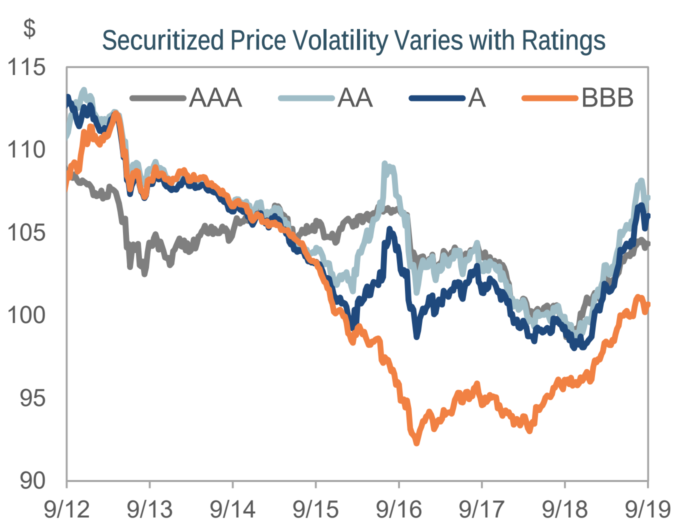
- Private label (non-Agency-guaranteed) securitized deals are most often structured to have two or more tranches, each with contractual principal payment waterfalls.
- Voluntary pre-payments from the underlying collateral pool typically flow first to the most senior tranche(s), while the realized losses flow first to the junior tranche(s).
- Each tranche normally receives a distinct rating from at least one rating agency based on the type of collateral, the tranche's position in the capital structure, and any other credit enhancements.
- The rating agencies typically rate each tranche to the first penny of principal loss; hence, ratings do not reflect the potential to lose more principal after that first penny.
- Credit enhancement can be achieved through a senior/subordinated tranche structure, overcollateralization, excess spread, and/or reserve funds. This provides investors a margin of safety given that the underlying collateral will virtually always experience some defaults.
- Principal impairment occurs once all forms of credit enhancement are fully exhausted, including the complete write-down of tranches beneath the one being impaired.

Standard Securitized Structure[1]



[1]For illustrative purposes only

Through Thick and Thin



- Beyond the level of credit enhancement, subordinated principal risk is also a function of the tranche's size or "thickness" relative to the size of the overall collateral pool.
- A thick tranche represents a larger portion of the collateral pool and, as a result, has lower principal sensitivity to losses beyond initial impairment.
- A thin tranche is backed by a smaller percentage of the collateral pool so small losses to the collateral may be allocated to a larger percentage of the subordinated principal balance.
- In an environment where the collateral pool is experiencing higher than anticipated losses, a subordinated tranche will trade at a price reflecting both the remaining credit enhancement and the thickness of the tranche; therefore, thinner tranches usually exhibit more price volatility than thicker tranches.
- A senior tranche does not suffer this leveraged principal risk. If it realizes losses, by definition its principal is backed by 100% of the remaining collateral pool since all other tranches have been written down. Any loss would then be absorbed on a 1-for-1 basis with the remaining collateral pool.

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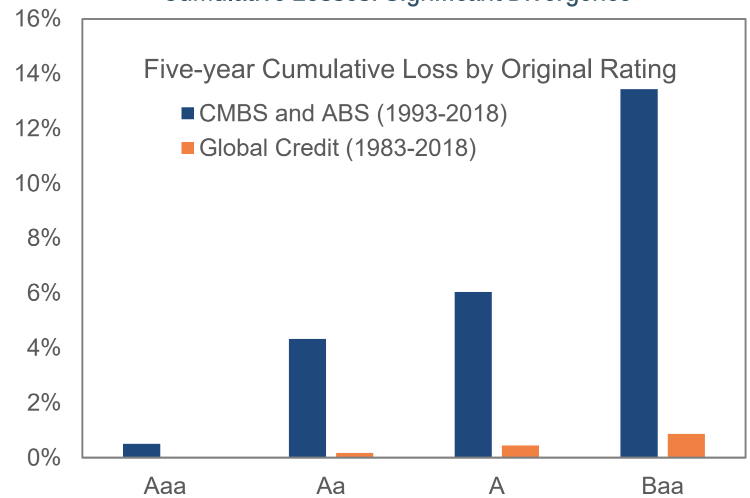
Looking Back

- When looking at longer term historical data, we can observe the effect of principal leverage in impairments and recovery rates.
- Securitized tranches have collectively performed well over the past ten years, but if we look further back, we see a marked divergence between senior and subordinated tranche performance.
  - From 1993-2018, 5-year cumulative losses for securitized tranches rated Aaa at issue are 0.5% versus 13.4% for tranches rated Baa at issue.
- When compared to corporate bonds with similar ratings, we see further deviation; 5-year cumulative losses for corporate bonds rated Baa at issue are less than 1%.
- The more recent market environment has provided a benign default experience across a wide spectrum of securitized assets.
- But if the longer historical experience holds true, investors may be more susceptible to downside risks than they realize.

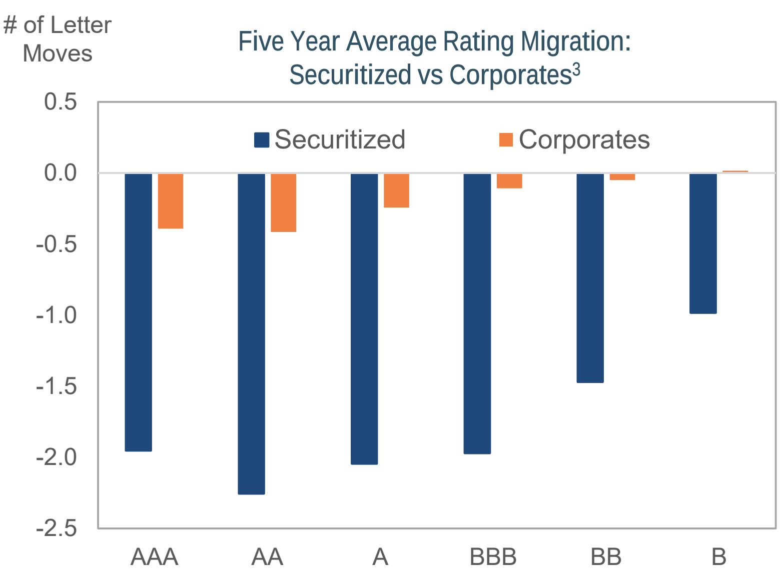
Cumulative Losses: Significant Divergence[2]



[2]Moody's Annual Default Study; ABS data excludes Home Equity Loans (HEL)

Moving Forward

Five Year Average Rating Migration: Securitized vs Corporates[3]



[3]Fitch 2018 Transition and Default Studies (1990-2018)
[3]Excludes rating withdrawals and full principal repayments

- Five-year average rating migration shows the ratings volatility for securitized tranches far outpaces that of corporates; price volatility naturally coincides with these ratings changes.
- Ratings applied to various securitized collateral types often use simplistic assumptions that may not necessarily hold up through longer economic cycles.
- Small estimation errors can drastically change the level of principal risk for each rated tranche.
- New types of collateral are continuously introduced into the securitized markets, so they carry ratings that are especially assumption-laden given the new collateral does not have a long performance history across economic cycles.
- The hidden risks in subordinated securitized tranches make us especially cautious given that we don't believe the current spread levels compensate for heightened principal sensitivity in an economic downturn.

At IR+M, careful security selection drives our investment philosophy. Our preference for senior tranches within the securitized market goes beyond ratings and incorporates our views on each tranche's potential price volatility and protection against principal losses. We believe this approach is appropriate for an investment grade fixed income portfolio but can also create opportunities when investors are compensated for this additional risk.