NOVEMBER 2024

INVESTMENT UPDATE

Sixteen years ago, we were in the middle of what is now known as the "Global Financial Crisis," or GFC, for short. Financial services companies, out of liquidity and with no access to needed capital, were either going out of business or trying to partner up with a former competitor. In response, the Fed rolled out a series of emergency liquidity programs to keep the US and global economies from seizing up and would soon begin (for the first time in US history) to buy government bonds to drive interest rates down, while the US Treasury was providing billions in emergency funding for some of the largest companies in America. By March of 2009, the Fed had spent nearly eight trillion dollars—almost one-half of 2009 US GDP—to buy problematic assets from failing banks and provide critical funds to keep the global financial markets solvent.

There were multiple points of failure that created this crisis, including poor underwriting by lenders, inadequate capital on bank balance sheets, a lack of proper regulatory oversight, overleveraged US households, and a misguided reliance on financial models that underpinned the market for certain securities, particularly those collateralized by US home mortgage loans. The collapse of the mortgage-backed securities (MBS) market was a result of plummeting US home prices, made worse by the lack of protection provided to investors who bought bonds collateralized by these home loans. No securities were hammered harder than those backed by subprime mortgage loans—mortgages that were offered to buyers with poor credit histories. These loans were packaged into pools and sold to investors, who got stuck holding nearly worthless paper when the housing bubble burst, the economy crashed, and these homeowners could no longer afford to make their monthly mortgage payments.

Fast forward to 2024, and the subprime mortgage market is not much more than a distant memory. Regulations that were put in place in the wake of the GFC now require mortgage lenders to have "skin in the game," rules these lenders were not subject to fifteen years ago. The result, unsurprisingly, is that lenders today have less financial incentive to offer loans to homebuyers with poor credit history. Most of the subprime MBS market today consists of the tag-ends of "busted" subprime MBS that were originated pre-GFC. Today these legacy subprime MBS trade between hedge funds and other investor groups willing to take risk in highly illiquid markets. Not for the faint of heart, and not something a high-grade investment portfolio manager would typically be interested in.

There is, however, another type of subprime security that existed pre-GFC and continues to be offered to high-quality investors willing to look past the stigma of the "subprime" moniker—subprime auto loans. Like subprime MBS, subprime auto loans are packaged and securitized pools of loans made to borrowers with shaky credit scores. But that's pretty much where the similarities end.

Unlike subprime MBS, subprime auto loans had a serious down cycle more than ten years prior to the GFC, which sent many of the main underwriters of subprime auto loans into bankruptcy, but also showed the inherent resiliency of this market. And there were important differences between the way subprime MBS and subprime auto loan deals were structured. We will have to get a little into the weeds to describe these differences.

Subprime auto loan securities are members of a class of bonds called asset-backed securities (ABS) that, like mortgage-backed securities, pool together loans and convert them into tradable securities, collateralized by the loans contained in the pools. In both cases, the monthly payments coming from the borrowers paying off their loans are passed through (after the costs of underwriting, marketing and servicing those loans are subtracted) to the holders of these bonds. In their most basic form, both types of securities maintain this simple pass-through structure, with all the holders of the bonds receiving a pro-rata share of the net monthly payments coming from the borrower. But over time, MBS became increasingly complex, and in the 1980s collateralized mortgage obligations (CMOs) grew to become a major subset of the MBS market.

CMOs packaged together pools of mortgage loans, but instead of simply passing the cash flows pro-rata to all bond holders, CMOs sliced and diced the cash flows, directing them to different tranches (from the French word for "trench," indicating that the cash would be directed into one of a number of different subclasses of the same CMO). CMO underwriters used this tranche structure to appeal to buyers looking for bonds with short, intermediate, or longer-term maturities. By contrast, pass-through securities backed with 30-year mortgages had (and still do have) long *stated* maturities, but variable *effective* maturities, depending on whether the homeowner moves or refinances their loan over that 30-year period. By directing this early redemption of principal ("prepayments") to successive tranches (e.g., a three-year bond, a ten-year bond, and a 20-year bond), the underwriter could appeal to a new type of buyer, one not interested in a simple pass-through bond with a highly variable effective maturity.

Unfortunately for investors, over the next couple of decades the CMO market became increasingly complex, with cash flows on some securities directed to one of ten or more tranches,

with myriad formulae to determine who received what under various prepayment and interest rate scenarios. CMO buyers were at the mercy of the underwriters, who were keen to hide the details of what was "under the hood" of these arcane structures and provided little guidance, especially to unsophisticated investors, as to how their bonds might perform under different economic conditions and interest rate scenarios. The results, as we now know, were disastrous, as it turned out that many CMOs couldn't pay back investors on a timely basis (if at all) if home prices fell by more than 10% or so. When home prices fell by over 20% (and more, in some places) the structures completely collapsed, and investors were left holding paper worth a fraction of par value. Subprime CMOs were the worst of the lot, and were completely obliterated, trading for pennies on the dollar.

If the story of subprime CMOs is the financial equivalent of a disaster movie, the same is not true of subprime auto ABS. Subprime auto ABS's period of distress in the 1990s, a result of poor underwriting from long-gone firms like Mercury Financial, cleared out many of the industry's worst players and practices. As a result, the vast majority of subprime auto investors didn't experience the devastating losses that subprime mortgage investors did during the GFC. The underwriting for subprime auto loans had improved from the previous decade, and the issuers themselves were better capitalized than their mortgage brethren. Most of these subprime auto underwriters/originators also retained a financial interest in the bonds after they had been issued, aligning their interests with bondholders in a way that was missing in the CMO market. Importantly, credit support built into the structure of the bonds provided investors a much deeper margin of safety if the collateral (the cars underpinning the deal) lost value.

Initial Rating	Initial Count	Final Rating: Aaa	Aa	A	Baa	Ba	B	Caa-C
Aaa	4,274	96.4%	1.6%	0.4%	1.3%	0.2%	0.0%	0.0%
Aa	620	85.5%	14.4%	0.2%	0.0%	0.0%	0.0%	0.0%
A	591	54.3%	15.7%	27.9%	0.7%	0.0%	0.0%	0.3%
Baa	458	57.4%	13.3%	7.9%	20.5%	0.0%	0.4%	0.2%
Ba	145	38.6%	15.2%	10.3%	6.2%	27.6%	0.7%	0.0%
B	40	0.0%	7.5%	12.5%	17.5%	17.5%	37.5%	0.0%
Caa-C	0							

Looking back, perhaps the most surprising outcome of the subprime CMO versus subprime auto ABS comparison is that during the GFC these cash-strapped borrowers prioritized paying their auto loans over paying their home mortgage loans when forced to choose. In the fullness of time, we've come to understand that, if necessary, one can find alternative housing ("Hello, mom and dad!"), but one cannot lead a normal life in much of America without a car to get to work, or to buy groceries, or take kids to school. If it comes to it, you can even sleep in your car. The table shown here (courtesy of Moody's Investor Service), which covers the time period between 1993 to 2021, shows just how stable subprime ABS credit ratings have been over the life of these bonds. For a typical subprime auto ABS, ratings upgrades have been far more likely than ratings downgrades—a subprime auto ABS bond originally rated single-A has had a 70% chance of being upgraded over this period, and less than a 1% chance of being downgraded. Quite a contrast to the all-but defunct subprime mortgage market.

Subprime auto securitizations achieve strong investment grade ratings (ranging from AAA to BBB) by employing several forms of structural credit enhancement. Subordination is one of the primary forms of hard credit support used in subprime auto securitization. Tranching is used to create a structure of senior and subordinate bond classes, which function much like the capital structure of a company. While principal payments flow from the top down in the capital structure, collateral losses are allocated from the bottom up, meaning that losses must eat entirely through subordinate bonds before senior bonds lose a single dollar.

In addition to subordination, deal structures also frequently employ a combination of two other forms of credit enhancement: overcollateralization and excess spread. Overcollateralization can be most simply described as "more assets than liabilities," which in subprime auto ABS means a higher balance of auto loans relative to the principal balance of the ABS notes, and thus inherently more cushion against losses. In the same vein, excess spread refers to the difference between the interest rate paid on the auto loans and the average coupon paid out on the ABS notes. This spread is often substantial, amounting to as much as 9-10% per year in recent subprime auto securitizations. The excess spread is held captive inside of the trust, serving as the first line of defense against losses. Given that excess spread will progressively build over the life of the deal, this drives a natural deleveraging effect whereby the loss resilience of the structure improves as the collateral pool ages. As mentioned before, this steadily building credit support has driven a dominant trend of auto ABS rating upgrades over time.

In addition to high credit quality and a range of risk/return profiles, subprime auto ABS typically offer yield pick-up versus other high quality fixed income sectors. Critically, the sector also provides an effective diversifier in a high-grade bond portfolio alongside corporates and agency MBS, while simultaneously providing exposure to a major sector of consumer credit.

While the "subprime" label may give some investors pause, the subprime auto ABS sector merits consideration for its potential benefits in a diversified fixed income portfolio. With investor-friendly structural attributes and time-tested performance, the subprime auto ABS sector gives investors the potential to benefit from a combination of high credit quality, relative value, and diversification.