STOUT

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STRUCTURED FINANCE COMMENTARY

Summer 2023

IN THIS ISSUE

ARE WE THERE YET? ARE WE THERE YET?

There where? Regardless – no, we're not. It will take time for the rate hikes to diffuse into all the nooks and crannies of our financial system and to expose cracks along the way that we may not even be thinking about yet. Any company, product, or strategy that relied on low rates, assumed asset prices always increase, and operated on thin margins has seen profitability compress, especially those that failed to adapt to the tectonic shifts we are experiencing in the way we live and work since the beginning of this decade. There will be no soft landing nor a repeat of a recognizable pattern of any other economic downturn or recovery we have seen before. The GFC was a credit crisis that was accompanied by high unemployment and a backdrop of relative geopolitical stability. Our current situation was triggered by rate hikes coupled with tumultuous geopolitical events during a period of nearly full employment. So, there's no playbook you can dust off the shelf for this one. Rates were too low for too long, and the only remedy the Fed has at its disposal is higher rates. The increase is bitter medicine that has induced, amongst other things, a purging of assets and has exposed strategies that didn't consider the volatility we have seen. As unpleasant as it may be, once this blows over, surviving platforms and products will enjoy an abundance of demand and growth in the second half of this decade. Until then, expect mostly cloudy markets, decreased liquidity, and increasingly more stress for the unprepared.

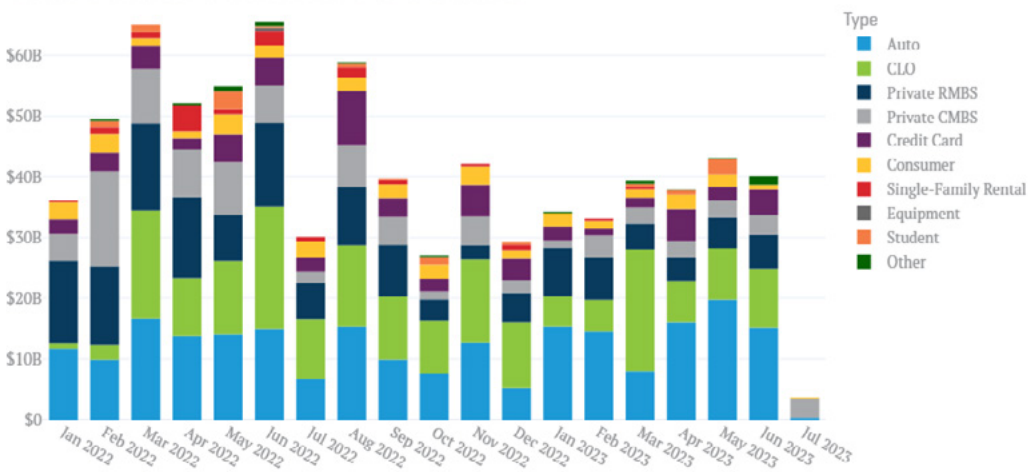
| See Disclaimer

STRUCTURED PRODUCTS: SUFFERING

Since our last commentary, some of the United States' more innovative (take our usage of that term as you will) banks failed, the debt ceiling standoff was successfully kicked down the road with a maximum gnashing of teeth, and rate hike expectations have fluctuated wildly. It's been a volatile year, as nobody seems to know where the economy is going, and this creates uncertainty for structured products. The big three — issuance volume, spreads, and collateral performance — have all suffered. Issuance volume is down for all subsectors. Spreads are still quite wide (especially for lower-rated tranches given flight to quality), although there has been some tightening since mid-March. This tightening applies to spreads only, as for the most part base rate increases have continued to outstrip spread tightening. Collateral performance has continued to be subpar: A good example is subprime auto securitizations will suffer losses on their bonds, which is certainly unsettling with the backdrop of full employment. The pivot in underwriting toward more prime unsecured consumer borrowers over the past year has helped new issue performance, but this leads to the lack of refiability for legacy loans that has hurt overall performance.

On issuance, our most bearish forecast published in Asset-Backed Alert at the beginning of the year has proved prescient, with issuance down -35.2% in the first half of the year vs. our forecast of -27.0% for the full year. The first half of 2023 did see more issuance than the second half of 2022, but the collapse of issuance started in the second half of 2022. If rate volatility dies down in the second half and we reach a "paleo-normal" of higher long-term interest rates more in line with pre-Global Financial Crisis interest rates (contrasted to the low-rate "new normal" of the 2010s), issuance may pick up some, but any growth will be slow.

STRUCTURED PRODUCTS ISSUANCE



Source: Intex, Stout Analysis

PRIMARY ISSUANCE RELATIVE VALUE

Source: Finsight, Stout Analysis

CMBS: DEATH SPIRAL

There is $14 trillion of U.S. commercial real estate. We all own a piece of it directly or indirectly. Pension funds invest your retirement plans in the sector, insurance companies like the long-dated nature of the product, banks make loans on it, not to mention REITs that make a business of it … and it’s in (various degrees of) a death spiral. Just about every measure of risk is going up: Interest rates are up, inflation is up (perhaps cooling but still up), meaning costs are up, and rents are mixed (depending on subsector). This leads to NOIs being down, thus lower DSCRs, thus lower appraisals, thus higher LTVs, which all lead to higher borrowing rates, thus lower NOIs, and the cycle continues … Not surprisingly, some sponsors who do the math on what they owe on a loan vs. the income they expect to generate from that asset are coming up with the logical conclusion: Turn the property over to the special servicer and walk away. At least that’s the theory. Of all the unknowns in CRE, one thing we know for sure is things move very, very slowly. The experience of Peter Cooper Village / Stuyvesant Town in the Global Financial Crisis may be instructive, with special servicing taking so long that the asset recovered and led to a court fight. But this time, there’s no lower interest rates on the horizon available to heal DSCRs. Looking at CRE data is akin to seeing the light of a dead star in the sky. Retail’s troubles, for example, started over a decade ago with the rise of online shopping (only exacerbated by the changes wrought by the pandemic), so the resolutions we are seeing now for the retail properties are the result of ongoing special servicing efforts that started many years ago. Depending on the path chosen by the special servicer, a resolution can take anywhere from a “quick” sale in a year or two or 5+ years if it involves an extension, a failed modification, litigation, and a long foreclosure sale process depending on quality and location, location, and location of the asset.

The long resolution timelines mean there aren't many distressed sales we can refer to when gauging reduction in value, so we turn to appraisals that are required for distressed loans in CMBS deals. While the reason could range from delinquency to an upcoming maturity, an appraisal is an appraisal and is worth considering. We analyzed appraisals that were conducted on distressed loans in 2023, and office properties are, as expected, taking huge hits. Retail is a close second, and multi-family is interesting. In any case, note that the DSCRs are abysmal, and all loans are underwater when using updated appraisals. Also note these loans first entered special servicing on average over three years ago and still have a way to go before a resolution.

PROPERTY TYPE	AVERAGE APPRAISAL REDUCTION AMOUNT	AVERAGE DSCR	NUMBER OF LOANS	AVERAGE APPRAISAL LTV (%)	AVERAGE SPECIAL SERVICED DATE
Office	-30.7%	0.34x	24	175.4	Dec-19
Retail	-27.8%	0.81x	39	155.9	Aug-19
Multifamily	-26.8%	0.81x	4	121.8	Jan-20
Hotel	-18.8%	0.62x	17	103.1	Aug-20
Industrial	-16.3%	1.84x	4	106.2	Feb-20
Mixed Use	-14.9%	1.00x	6	103.0	Jan-20
Other	-25.3%	0.89x	3	109.3	Mar-21
Overall	-25.5%	0.71x	97	143.3	Dec-19

Sample is all loans with an appraisal reduction in CMBX universe

We expected to see more looming distress than we can currently observe in the data set that we analyzed, especially in light of all the press and discussions about household name sponsors turning in the keys to marquee office buildings. It makes you think about how big the problem could be if the investors who know this asset class the best are throwing in the towel in the early rounds … Attempts to infer the distress from the data and news available require a good amount of judgment. We first have to come to terms with the fact that there will be a lot of extend-and-pretend, which obfuscates what would otherwise be imminent distress. Borrowers may burn through cash to make payments on loans taken on by failing companies in hopes of an improved economy (corporate bankruptcies show no sign of slowing), servicers may (and very often do) extend loan maturities over a year or make other modifications to loan terms. Given the interests of lender, sponsor, and bond owner may diverge, especially during times of distress, and sharp elbows, a close reading of documents, and active management are necessary to protect investments in junior bonds and salvage returns.

In order to wrap our head around the distress, we analyzed the 12 most recent CMBX indices covering much of the market since 2013. Troubled loans tend to have DSCRs below the average of 2.2x for performing loans and LTVs worse than mid-50s. Note that DSCRs are usually more up to date than LTVs, as NOIs are more frequently updated than appraisals.

CMBS PROPERTY DELINQUENCY STATUS

Source: Intex, Stout Analysis

NON-AGENCY RMBS: PRETTY SLUGGISH

Non-Agency market is pretty sluggish overall. People are staying put in their homes instead of giving up that sweet rate they refied to back in 2021, and you can't blame them. Loan originations are down, thus so is primary issuance, and secondary trading is faring just as poorly. Liquidity is poor with weekly trading volume hovering around $1.5 - $2.0 billion since May, so it would take a seller at least a month to sell a $10 billion book. But this market has never been all that liquid, and it's not likely to change any time soon. Prepayments are very low. Spreads are tighter on the year, though still much wider than in previous years. There just isn't much to get really excited about in Non-Agency first lien land. Things are a lot more interesting in the second lien and overall home equity lending space. Higher rates and inflation have already been weighing in on household finances, and additional stress from the resumption of student loan payments will make things worse, especially for lower FICO borrowers. There is a good chance this will lead home-equity rich / cash-poor borrowers to tap into their home equity via more conventional second liens, HELOCs, or newer products like HEA, leading to more issuance in these areas.

WEEKLY NON-AGENCY RMBS TRADING VOLUME

Source: FINRA, Stout Analysis

AGENCY MBS: CHALLENGING

MBS continues to be a challenging asset class in this rate environment. The basis remains wide, durations can still extend (although not as much), hedging is still challenging, and supply continues to outweigh demand as the Fed and other central banks offload their holdings that were built up over the past 14 years. The Fed and banks (taken as a unit) have never been net sellers of MBS, and as holders of 2/3 of the MBS market, the supply coming from them will weigh on the market, and thus spreads, at least throughout 2023. Rate volatility doesn't help the asset class either. We continue to be negative on the basis.

Prepays will continue to remain low (just like non-agency, with non-existent refi and low turnover as so many borrowers are "locked in" by their low rates), making agency MBS an even longer duration asset. In contrast, banks' deposit durations will continue to grind shorter, further widening the duration mismatch in the asset for banks and limiting their appetite.

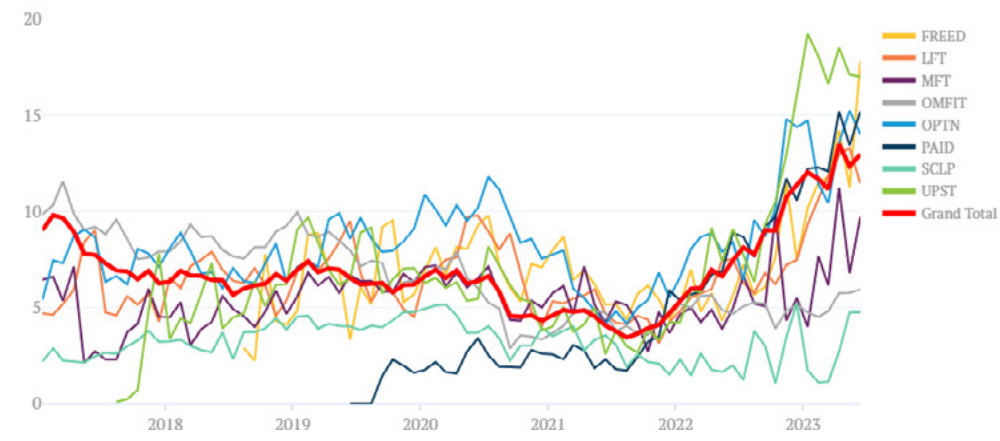
Specified pool pay-ups have also been under pressure, and the certainty of the duration stickiness is no longer in demand given the large universe of far out-of-the-money low-prepay pools; however, we continue to see value in PR-only pools for duration predictability, loan size, and ESG-ness of the collateral.

CONSUMER ABS: CREDIT DETERIORATION

Credit deterioration is still rolling through the collateral (unsecured consumer, autos, FFELP). Lower FICO borrowers' performance is deteriorating more noticeably, as it all boils down to ability to pay and lack of ability to refi / self-extend. Debt-to-income ratios have been increasing as the numerator goes up as higher rates make monthly payments higher, while wage gains mean the denominator also grew but not as much.

Take unsecured consumer loans, for example. Based on $61 billion of deals issued since 2017, annualized net loss rates for non-prime lenders continue their steady increase, while prime lenders' credit performance is more in line with historical averages.

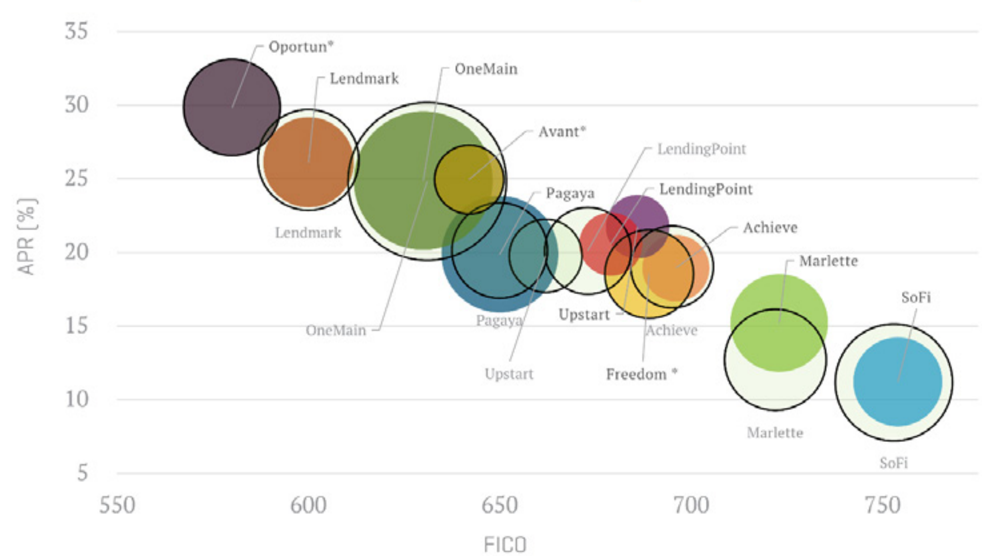
ANNUALIZED NET LOSS RATE



While issuance has been weak, as payments resume on student loans, we expect down-river impacts on unsecured consumer loans, student loan refi products, and home equity products (as previously mentioned). Comparing the most recent two issuances from each lender to determine if the lenders require higher APR for the same FICO, or higher FICO for the same APR, we note that while some issuers like Marlette were able to increase their APR for a given FICO (i.e. ~720 FICO), most issuers' current deals feature APRs that are similar to their prior issue (although LendingPoint and Upstart have moved somewhat upmarket). This will certainly eat into issuers' margins and investors' returns, especially if the credit deterioration is worse than priced in.

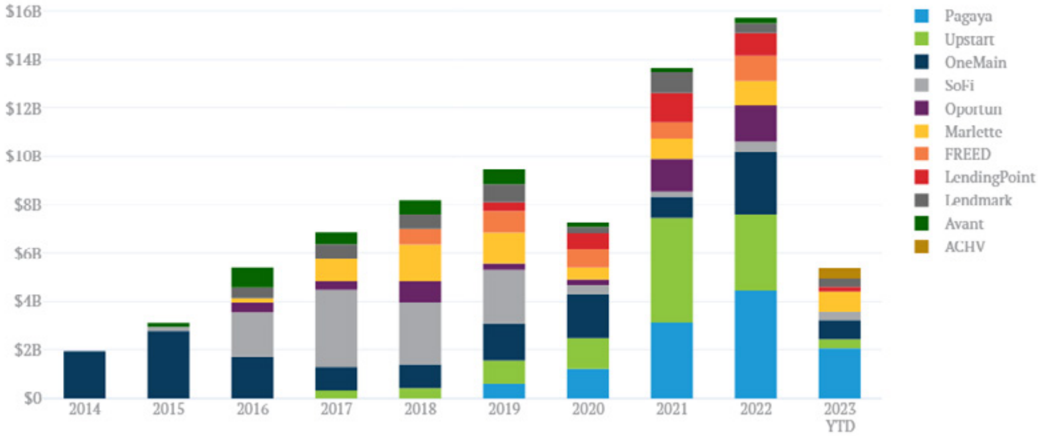
Filled circles are most recent issuance, unfilled is prior issuance. Issuers with asterisks have not issued in 2023, so no comparison is made.

MARKETPLACE LENDING SHELVES APR/FICO COMPARISON



Source: Intex, Stout Analysis

MPL ISSUANCE BY PLATFORM



Source: Intex, Stout Analysis

FUNDING: COMPETITIVE

Funding continues to remain competitive because of light new issuance and portfolio repositioning. Dealer funding books continue to be dominated by bonds rated AA or lower, haircuts remain unchanged from the previous quarter, and spreads have compressed slightly as credit assets trade tighter. The lack of new issue bonds continues to restrain the size of a business that most dealers expected to grow 5-10% this year.

OUR STRUCTURED FINANCE COVERAGE

Residential Mortgages

- Agency MBS (spec pools, IOs, CRT)
- Non-agency RMBS (reps and warranties, monoline wrapped)
- NPL/RPL whole loans and RMBS
- Jumbo, non-QM
- Manufactured housing
- Reverse mortgages
- Manufactured housing
- EBOs
- HELOCs
- MSRs

Unsecured Consumer

- Marketplace lending
- Private student loans
- Income sharing agreements
- Credit card
- POS
- Elective medical
- Travel
- Other installment loans
- Payday
- Autos
- Solar
- Microfinance
- BNPL
- Unsecured consumer loan servicing rights

Commercial

- CRE (office, retail, multifamily)
- CMBS (including B-pieces and specially serviced deals)
- Single-family rental
- Fix and flip
- Equipment ABS
- Whole business securitizations
- Merchant cash advances
- Aviation
- Containers
- Inventory financing
- Timeshares
- Tax credits
- Music Royalties

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