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Fischer's Fulcrum

Agency CMBS and Quitting the Race to the Bottom

Negative convexity is the cruelest principle in bond math. Once explained to me as, "You'll likely never make as much as you expect, and you'll likely lose more than you expect." Simplistic, but an overall fair description. The most infamous source of negative convexity comes from the embedded option to prepay a standard residential mortgage, at no cost. Every residential mortgage backed security (RMBS) investor is familiar with the race to the bottom that ensues when mortgage rates fall: consumers recognize a financial incentive to refinance, refi applications surge, and two months later a wave principal is returned to RMBS investors. Typically fixed income investors would see an appreciation in the fair value of their bonds in proportion to the duration, but it's this voluntary prepayment cash flow ebb and flow that prevents the bond from fully realizing a gain just based on duration.

Careers and fortunes have been created trying to quantify the behavior of the mortgage borrower in different rate environments and mortgage markets. Decades since their appearance, these complex prepayment models are still a dark-art, and despite the efforts of an army of quants, armed with incomprehensible computing power, the error levels can still be quite disappointing. According to Black Knight, Inc. the 2018 is the fastest prepaying vintage in a decade and the 2017, 2018 and 2019 vintages account for 50% of all prepayments. This is not typical, and is likely the source of model variance we have noticed in recent vintages.

If negative convexity is a result of untimely cash flows, then positive convexity is typically found in instruments that have well defined cash flows, not correlated with lower interest rates. Treasuries, bullet agency debentures, corporate bonds and municipal debt immediately come to mind as sources of positive convexity, however **a less traditional source of positive convexity for the portfolio is the commercial mortgage backed security.** Broadly these are securitized loans backing offices, warehouses, retail and multifamily assets that have well defined prepayment restrictions and economics. These are structured and sold as private-label and US agency backed bond markets. Specifically herein we'll be discussing the agency commercial mortgage backed security (ACMBS) that are focused almost exclusively on multifamily housing, and its place in the investment portfolio as a mitigant to the negative convexity of RMBS investing.

According to Bloomberg LP, ACMBS issuance hit a pre financial crisis high of $10bn in 2006, decreasing to about $6bn per year during the years of 2007 and 2008. In the wake, Freddie Mac, Fannie Mae and Ginnie Mae recognized the need to promote affordable housing and in the following years a variety of multifamily programs developed. Issuance steadily grew to $230bn in 2019.

ACMBS issuance is predominately accomplished through the Fannie Mae Delegated Underwriting and Servicing (DUS), GeMS and ACES; Freddie Mac K, SB and Q; and Ginnie Mae Project Loan programs. Each product has unique characteristics, but these are mostly fixed rate assets with over 90% of the total issuance coming in the form of either fixed rate or a hybrid structure. Each underlying loan has prepayment restrictions such as hard lock-outs, yield maintenance or defeasance, resulting in predictable cashflows. From a credit standpoint, these bonds carry a similar agency backing that their RMBS cousins benefit from.

In looking at commercial banks between $1bn and $600bn in assets, **ACMBS holdings have steadily grown the past decade.** At the beginning of 2011 less than 1% of bank portfolios were allocated to ACMBS and only about 15% banks had invested in the asset class. **As of Q2 2020, this same asset range of banks had about 10% of the portfolio allocated to ACMBS and could be found in 64% of the banks.**

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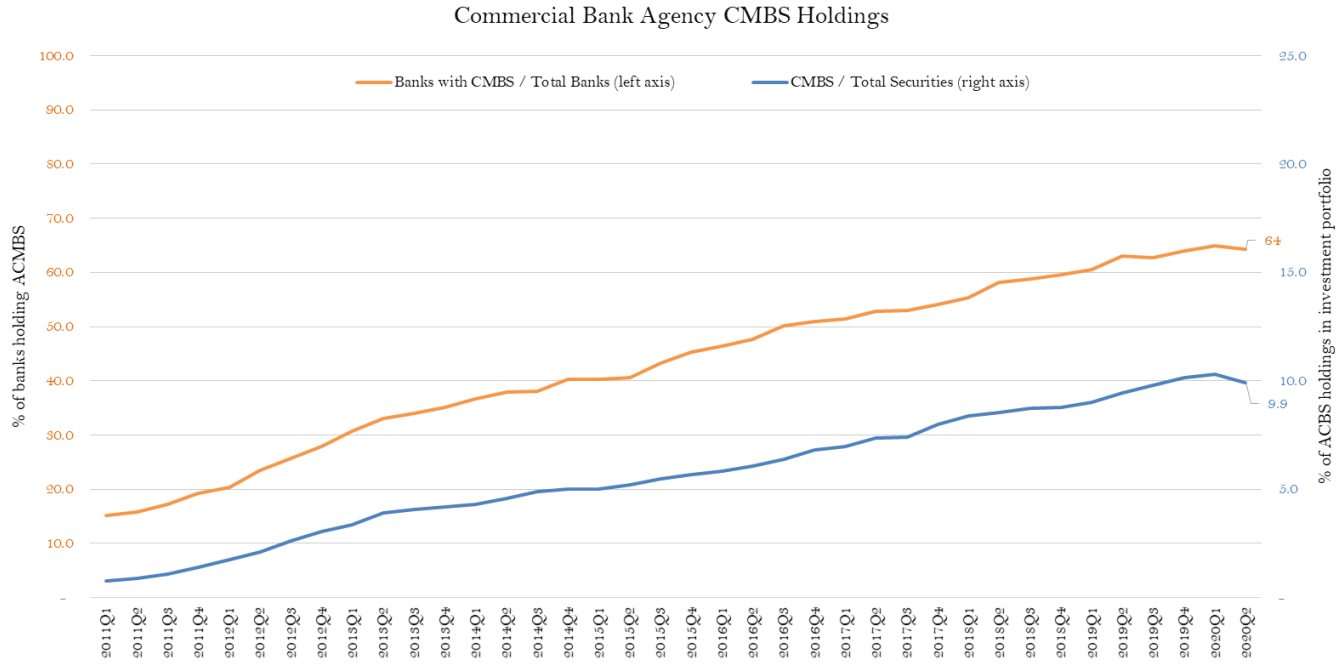
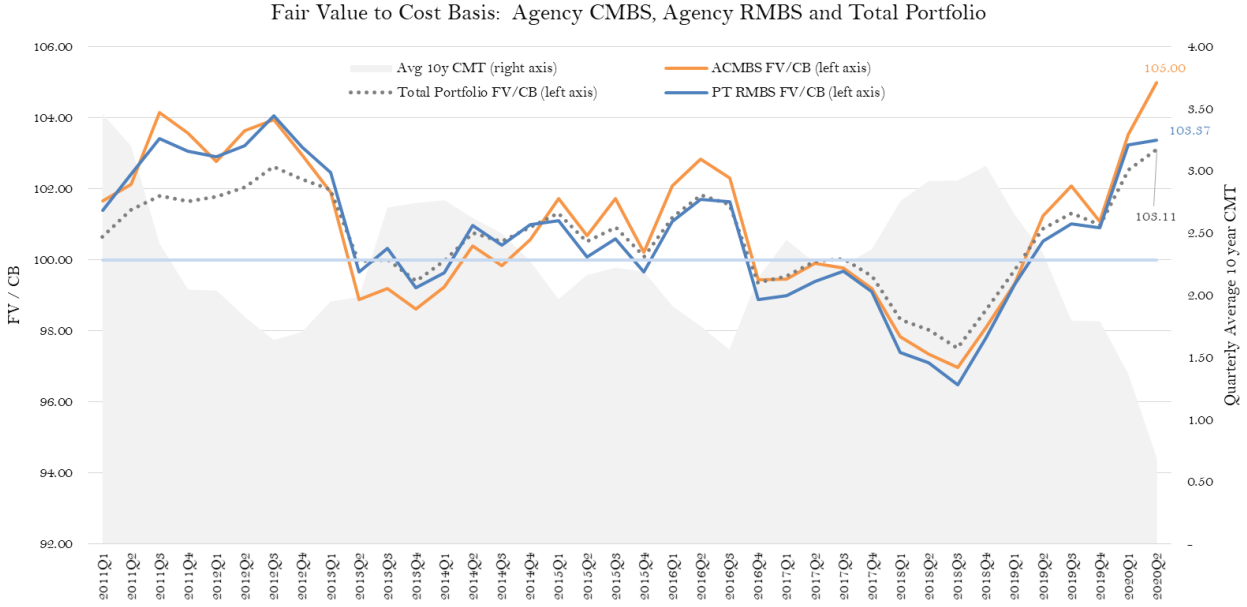


Source: S&P Global Intelligence

The fixed rate nature and the prepayment provisions in the underlying loans has resulted in strong price performance as compared to RMBS. **The Call Report requires banks to report both estimated fair value as well as cost basis for a number of investment portfolio asset classes including ACMBS and RMBS.** By dividing fair value by cost basis (FV/CB) we arrive at an 'implied price' that, while not perfect, offers an estimate relative of price performance.



Source: FRED, S&P Global Intelligence

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Since 2015 ACMBS has outperformed RMBS in this measure. In the past two quarters mortgage prepayment speeds have surged, and negative convexity is likely providing resistance to more price appreciation for RMBS. From Q4 2019 to Q1 2020 average 10 year CMT declined 43 basis points. In that period from Q4 to Q1, ACMBS and RMBS experienced comparable price increases at 2.45 and 2.34 points. However, from Q1 2020 to Q2 2020 average 10 year CMT decreased 68 basis points and while ACMBS appreciated 1.47 points and RMBS only appreciated 0.12 points. Clearly there are a few factors that can skew these measures, such as new purchases, but it's difficult to deny that **negative convexity of RMBS is holding back further price appreciation.**

Change from prior quarter			
Quarter	Avg 10y CMT	ACMBS FV/CB	RMBS FV/CB
2020Q1	-0.43	2.45	2.34
2020Q2	-0.68	1.47	0.12

It is also worth noting that ACMBS is eligible for open market purchases by the Federal Reserve Bank of New York as part of its authority under Section 14 of the Federal Reserve Act. On March 27, 2020 the Federal Reserve conducted its first purchase of ACMBS in open market operations to support the asset class in the face of COVID market disruptions that saw benchmark K, 10 year, A2 spreads widen from about 55 basis points to 110 basis points on March 23, when the purchase plans were announced. These operations were effective and, since that day, spreads have completely retraced and are now inside pre-crisis levels.[1]

Not often thought of as having credit exposure, ACMBS credit risk is an emerging topic of discussion. Multifamily in general has displayed excellent credit performance in the past decade, but there are lingering concerns about the effect of COVID related renter stress, eviction moratoriums and a potential shift away from urban living on landlord finances. As with other agency backed products, the agencies guarantee the timely delivery of interest and principal. However, while par amount of the principal is covered, any market premium is not. It's not uncommon to see a 115+ dollar price on a high coupon ACMBS bond. Should the agency step in for a defaulted loan, the premium allocated to that loan principal would be written down. This is clearly not the magnitude of credit risk associated with private-label CMBS, and more akin to a RMBS prepayment risk where a portion of the premium is at risk to an 'involuntary' prepayment. **Multi-asset structures such as Ks, SBs and Qs provide granularity to mitigate this risk,** however single asset DUS bonds pose more risk.

Investors holding a number of high premium DUS bonds, and interested in taking gains, should consider a DUS REMIC through the Fannie Mae ACES program to create a security backed by a diverse underlying pool of loans and classes that price closer to par. The diversity and lower premium classes created by the ACES structure have more appeal to investors than individual DUS securities who are willing to pay tighter spreads vs. the premium bonds. There are also other execution paths where the investor sells the tightest part of the cash flows and retains the cheapest for their investment needs.

Source: Liberty Street Economics – Federal Reserve Agency CMBS Purchases