



#virus #liquiditysqueeze

## Thinking Macro

# Agency MBS: A tipping point?

- Over the past month, we have seen indiscriminate selling in every major asset class in an increasingly desperate race for cash. Agency MBS have become one of the casualties, because they are highly liquid and have so far outperformed other fixed income spread products; investors simply seem to be selling what they can.
- The significant underperformance of agency MBS to Treasuries is especially notable given that the Fed's recently announced asset purchase program will end up buying all net new supply for 2020. This plan was supposed to stabilize, and should have stabilized, agency mortgages. That has not happened, and MBS spreads have continued to widen to Treasuries.
- This is problematic because of the presence of a large leveraged investor base in agency MBS, namely mortgage REITs. Prudent risk management dictates that as spreads widen, leveraged agency MBS investors pare down their portfolios, even at levels that seem very cheap.
- However, in the current environment, with a virtual buyers' strike, this selling seems to push spreads wider, which in turn forces more selling from these leveraged portfolios, and so on. If this continues for the next few days, there is risk of an accident in the agency MBS market, with forced selling on an ever-larger scale.
- We are not worried so much about the price at which agency MBS clears (and what it means for the level of mortgage rates), but rather the chaos and lack of market liquidity that might ensue for an extended period of time in the event of an accident in the agency MBS space. That is why, while there are arguments on both sides, we now believe the Fed should commit to taking more agency MBS off private sector balance sheets and are calling for the central bank to raise its agency MBS purchases to \$500bn.

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## Agency MBS markets have a problem...

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Over the past month, we have seen indiscriminate selling in every major asset class across the US fixed income spectrum. In the process, extremely high quality, usually liquid financial markets have ended up trading in ways and at levels that have led many (ourselves included) to pronounce them broken (*Broken*, 12 March 2020). This is how muni ETFs have lost over a third of their value, and how 10-year inflation break-evens are now trading below 50bp. We are not convinced that this is primarily a function of economics; investors are simply selling what they can, and often this includes the more liquid, higher credit quality securities they own.

This problem is especially acute in the agency MBS market. First, consider how agency MBS have behaved this quarter. Our rolling, Treasury-hedged mortgage index has widened around 200bp from the start of the year. Assume a spread duration of roughly 3, and that implies a (Treasury-hedged) loss of 6 points on the agency mortgage index. A simpler way is just to look at the dollar price of the index, which as we write is almost unchanged from the start of the year. However, in the same period, the 5y Treasury has rallied 100bp, or gone up around 5 points in price. In other words, the mortgage index after adjusting for duration has lost around \$5. Clearly, agency MBS have underperformed Treasury hedges by 5 to 6 points from the start of the year.

Such a move would be painful in the best of times, but is especially alarming in light of the price action this week. On Sunday night, the Fed made a surprise announcement that it would once again reinvest all pay-downs, in addition to investing \$200bn in agency MBS. This had a substantial effect on the agency mortgage market – far more so than the \$500bn in Treasury purchases that the Fed also committed to. After all, the Fed promised to buy virtually all net new agency mortgage supply for the rest of 2020 (as per Barclays' estimates), leaving nothing for the private sector. In theory, agency MBS should have done extremely well on this news, and for a brief period, they did. But three days after the announcement, mortgages have given up virtually all of their gains and are continuing to leak wider.

## ...especially because of the presence of leveraged holders

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If high quality assets suddenly perform extremely poorly, policy makers (and investors) can often wait for rational thinking to return and for greed eventually to replace fear, as the prices of these assets become progressively cheaper. However, that is not true if a significant percentage of those assets are in leveraged hands, which is true of agency MBS. We refer, of course, to the mortgage REIT community, which buys agency MBS, hedges out the interest rate risk with Treasuries or swaps, and keeps the spread. As of the start of 2020, around \$300bn<sup>1</sup> of agency MBS was held by mortgage REITs, which typically are 7-10x levered. In other words, if mortgage REITs held the equivalent of the agency MBS index and hedged their duration with Treasuries, they could easily be looking at a very significant mark-to-market hit to their capital. In such situations, they become forced sellers of agency MBS. But if there are no buyers (of sufficient size) on the other side, then that very act of selling pushes mortgage spreads wider, which begets further selling, and the cycle just feeds on itself. That is what we believe to be occurring at this point.

Consider a simple, stylized example. Assume that a mortgage REIT holds \$100bn in agency MBS and \$10bn in equity capital. It borrows the \$100bn in the financing markets, at (say) a

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<sup>1</sup> Freddie Mac estimated \$322bn in agency MBS held by REITs in the middle of 2019, and our sense is that the numbers had not changed very much entering 2020.

haircut of 5%. This is a relatively conservative haircut – after all, these are agency MBS, money-good from a credit standpoint. In other words, \$5bn of the \$10bn in equity capital sits with the dealers financing the REIT. Now, say the Treasury hedged price of the agency MBS book falls by 2 points. All of a sudden, the buffer that the dealer holds has fallen by \$2bn. In turn, the dealer asks the REIT to transfer \$2bn. The REIT manager has two choices – dip into his remaining equity capital and transfer \$2bn over while he waits for his assets to recover in prices, or monetize the loss by selling a significant portion of his agency MBS portfolio, thereby reducing the amount he has to finance. Prudent risk management dictates that the REIT manager grit his teeth and sell a big part of his existing book even if prices have fallen to levels that do not seem logical. Yes, there is a big hit to book value, but the REIT manager also manages to reduce his financing needs significantly in a stressed environment.

Unfortunately, in the current situation, that does not seem to be working. The very act of selling is pushing spreads wider, even as other big mortgage investors refuse to step in to buy. The problem is made worse because money managers seemed to have joined REITs as net sellers. Our understanding of their motivation is that they are selling agency MBS because of outflows and because their agency MBS holdings have held up better than other assets in their portfolio. In some cases, portfolios that manage to 60-40 equity-bond splits are forced to sell because the value of their equity holdings has dropped so much that they need to reduce their fixed income holdings to move back to the 60-40 level, and once again, agency MBS seem to be one of the instruments of choice.

## So what happens next?

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There is a very real risk that if this MBS underperformance continues over the next few days, ever larger amounts of agency MBS will end up being put on fire-sale, in which case the chances of a funding accident for one or more leveraged entities will likely go up. This is probably what the equity holders of mortgage REITs were worrying about on Wednesday, when the stock prices of large agency MBS REITs dropped more than 40% during the day before recovering somewhat by day's close.

The question is: If no one else steps in to buy agency MBS, should the Fed prevent a situation in which hundreds of billions of dollars of agency MBS suddenly end up getting sold into a vacuum? The answer is not clear. On the one hand, the Fed could argue that it did its part by announcing its new MBS purchase program, and that its remit is not to help leveraged investors in any single asset class.

On the other, if the goal of the new purchases was (at least in part) to improve market functioning and restore liquidity to the agency MBS market, that has not worked. And a functioning agency MBS market is a pretty important component of a healthy housing market. As just one example, mortgage lenders depend heavily on the agency TBA market to hedge their pipeline. We are not worried so much about the price at which agency MBS clears (and what it means for the level of mortgage rates), but instead the chaos and lack of market liquidity that might ensue for an extended period of time in the event of an accident in the agency MBS space. For this reason, we are now calling for the Fed to increase its agency MBS purchases from \$200bn to \$500bn (see A bigger bazooka: We look for the Fed to increase its LSAPs, 28 February 2020). It is worth noting here that the Fed announced \$1.25 trillion in agency MBS purchases after the 2008 financial crisis. While we hesitate to draw direct parallels with that period, agency MBS markets seem similarly dislocated now.

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