Prepayments in the Time of Coronavirus

The Fed has purchased approximately $290bn of agency MBS since it announced the program just two weeks ago. The scale of the Fed purchases is potentially unlimited and unprecedented in its magnitude over such a short period of time. This missive addresses a question we have been asked frequently since the original March 15th announcement: ***how will prepayments likely perform during this period of crisis and Fed response?***

No previous period in history compares to the current one, but the closest proxy we identified was the most obvious: the financial crisis of 2008/2009. Both that previous and the current periods have been marked by great forward-looking economic uncertainty, risk-market upheaval, a widening of MBS spreads and a massive Fed response. After that, the similarities end, including the root cause of the distress. But it is still the most appropriate point of comparison.

For the sake of brevity and clarity, we compare prepayment speeds and market structure leading up to the most recent QE4 with similar data from the QE1 era. Importantly, the data from the QE1 period are presented for the following two years as the Fed continued to purchase what would amount to $1.35 trillion in MBS. Interestingly, in both the QE1 and QE4 eras (not to mention QE3), the Fed eventually bought much more in MBS than it had originally planned, and the QE4 experience is still unfolding.

There are three graphs below that are constructed the same way. The red line represents the current era beginning in July 2018 and ending in March 2020. The most recently-available remit report is as of February 2020, so the red line ends one month before Time 0. The blue line represents the time before, during, and after QE1, from January 2007 to December 2010. Time 0 on the graphs represent the month of the greatest market dislocations: in September 2008 and (hopefully) March 2020, respectively.

Figure 1 compares the speeds for loans in 30yr conventional cohorts that are 12 to 36 months seasoned with -25bps to 25bps of rate incentive, basically, at-the-money. Prepayment speeds were low and range bound between 5-10 CPR before and during QE1 with the exception of a one small spike four months after operations began. Current speeds are slightly elevated compared to the 2008 experience for this cohort.

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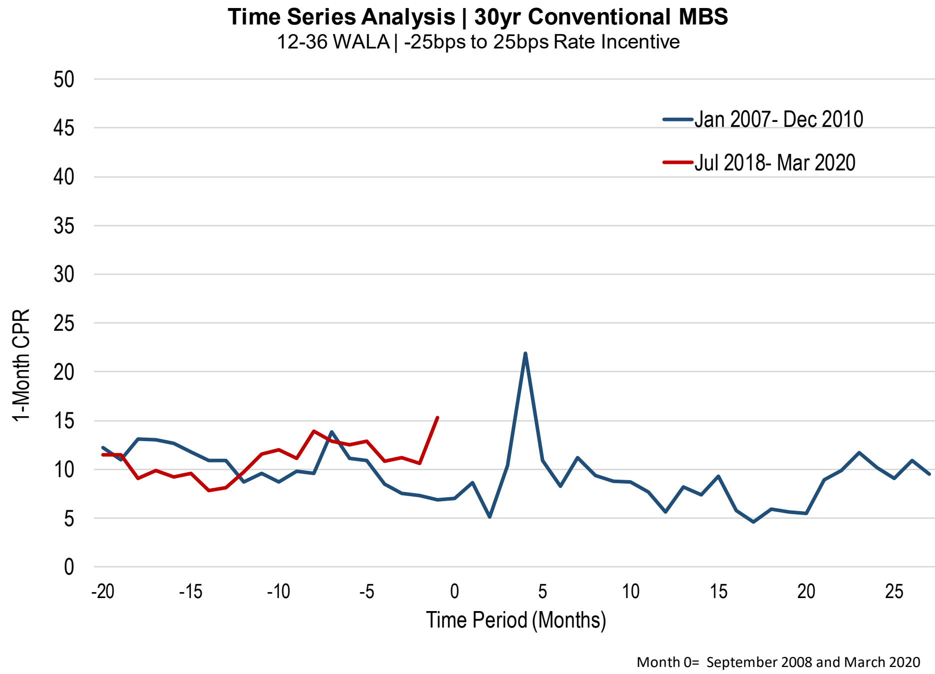
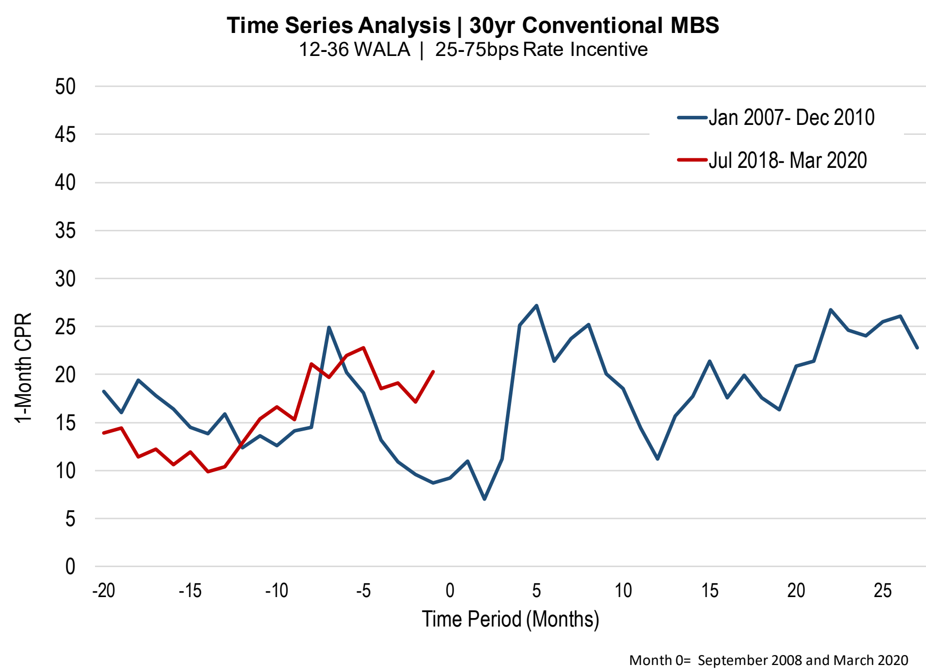
Figure 1: At-the-Money Prepayments for 30yr Conventional MBS



Source: FHN Financial and CPRCDR

Prepayment speeds for marginally refinanceable loans with 25-75bps of rate incentive follow a similar pattern. The difference between speeds before and after the start of QE1 is relatively small. Speeds are slow for the initial four months after Fed involvement and then spike before returning to a more typical range, between 15-25 CPR. Again, we see that current speeds are elevated compared to 2008 speeds just before the start of QE1. After all, prepayments were beginning to ramp higher on supportive seasonals and still-low interest rates when the Covid-19 economic response began to take effect.

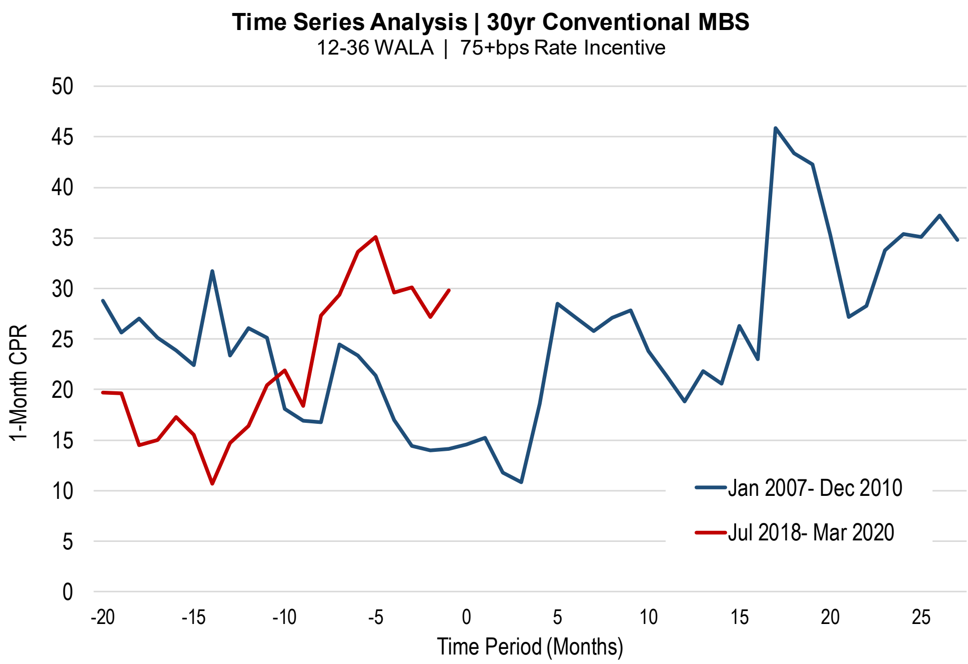
Figure 2: Marginally In-the-Money Prepayments for 30yr Conventional MBS



Source: FHN Financial and CPRCDR

Prepayment speeds for loans with 75bps or more of rate incentive before and during QE1 show the most variance. Prepayments before the start of QE1 ranged between 15-30 CPR. After the start of QE1, prepayments spiked during month four, leveled out, spiked again during month 17, and leveled out once more. After QE1 started, prepayments ranged between 25-35 CPR. The fastest print during this period was 45 CPR, a year-and-a-half after QE1 started.

Figure 3: Deep In-the-Money Prepayments for 30yr Conventional MBS



Month 0= September 2008 and March 2020

Source: FHN Financial and CPRCDR

In general, prepayments before and during QE1 were well contained. It took at least three months for the rate effects of Fed purchases to transmit to the borrower and then show up as prepayments. In fact, the Fed did not announce QE1 until November, 2008 and began purchasing MBS in January, 2009. Once that occurred, prepayments spiked briefly as a certain percentage of borrowers took advantage of lower rates and a better lending environment. But after the spike, prepayments settled lower for a considerable amount of time for all inventive profiles. In fact, the second spike in the >75 incentive bucket was due to the buyout of previously-delinquent loans that Fannie and Freddie executed beginning in February, 2010.

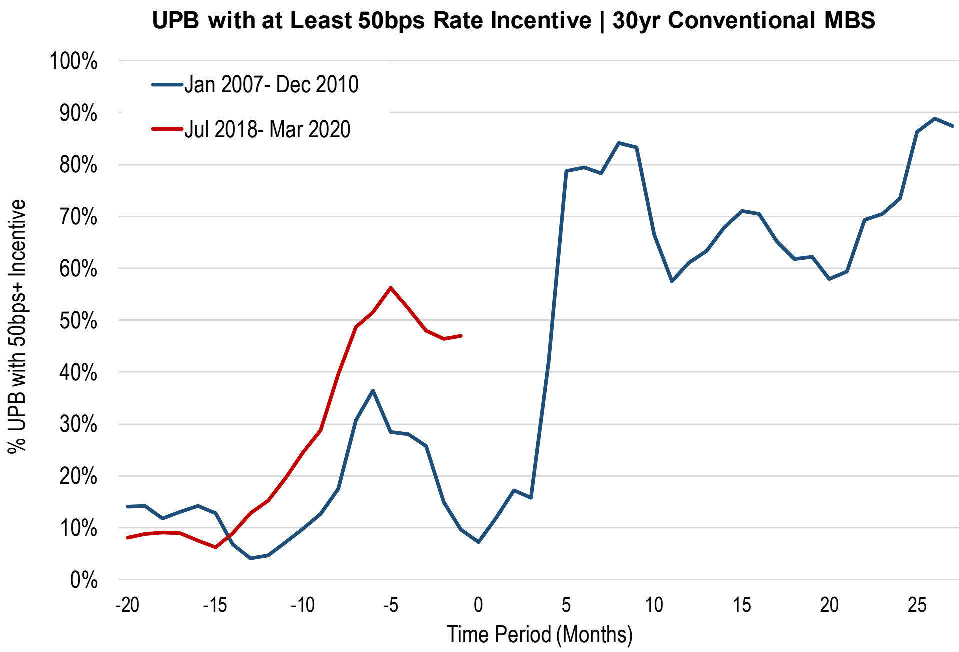
Will this time be different? Yes. First, the Fed wasted no time in the current environment to institute QE4 and buy MBS. We have stated in the past that once that the Fed had "crossed the Rubicon" into QE in 2009, QE would become a favored policy tool in the next crisis. The Fed was true to that, as it enacted QE at the first hint of trouble. That hint was the fact that the 50 bps rate cut on March 3 would not be enough to provide adequate financing in this crisis. Therefore, the Fed dusted off the QE playbook on March 15. During the 2008/2009 crisis, the Fed acted quickly with broker/dealer financing as Lehman Brothers went bankrupt, but it did not begin to buy MBS for almost another three months.

Second, the initial prepayment speeds between the two eras are different. Recent speeds are faster than the speeds immediately preceding the start of QE1 mostly because the incentive profile of the universe is different. Last month 47% of the 30yr universe had 50bps+ rate incentive compared to just 10% of the 30yr universe in August 2008. If the Fed had left MBS spreads to go unchecked for two months this time around, primary mortgage rates would likely have risen significantly and borrower incentives would have diminished with it. But the Fed did not hesitate this time around.

Figure 4 tracks the percent of the outstanding 30yr MBS universe that has at least 50bps of rate incentive or more. The primary 30yr rate in August 2008 was 6.25%. By the end of January 2009, primary rates had fallen 100bps and 80% of the outstanding balance had more than 50bps of incentive. Even with the massive swing in the percent of the balance with significant incentive, the fastest one-month speed was under 50 CPR.

The current 30yr rate is 3.84%. Rates would have to drop 60bps from here to 3.2% for 80% of the current balance to have at least 50bps of incentive. However, there are other factors at play this time around to keep rates higher and speeds slower.

Figure 4- Percent of UPB with Incentive



Month 0= September 2008 and March 2020

Source: FHN Financial and CPRCDR

The main driving factor that could keep prepayments in check for the next 2-4 factor reports is social distancing. At last Thursday's meeting of the Financial Stability and Oversight Council (FSOC), FHFA Chairman Mark Calabria said in prepared remarks that, "the coronavirus is disrupting the primary and secondary mortgage markets" and that, "bottlenecks are emerging in mortgage origination process".[1]

In response to these "bottlenecks", the FHFA has directed Fannie Mae and Freddie Mac just yesterday to provide "Processing Flexibilities to (Enterprise) Customers".[2] This comes after the FHFA on March 23 directed the Enterprises to, "Grant Flexibilities for Appraisal and Employment Verifications".[3]

These steps will help to facilitate both purchase and refi transactions. But the very swift and comprehensive nature with which these directives were instituted suggests that the problems in the origination pipeline are quite severe and required immediate relief.

In addition, the CARES Act that was signed by the President on March 27 allows for borrowers who face financial difficulty due to the Covid-19 virus to request a forbearance period of 180 days with an optional 180-day extension via written notice. No other documentation or correspondence is necessary. The servicer must grant that forbearance with no penalties, fees or reporting to credit bureaus, but the forborne payments will be added on to the end of the loan term. This has three potential implications for MBS investors.

1 Prepared Remarks of Dr. Mark A. Calabria, Director of FHFA, at Financial Stability Oversight Council Principals Meeting: https://www.fhfa.gov/Media/PublicAffairs/Pages/Prepared-Remarks-of-Dr-Mark-A-Calabria-Director-of-FHFA-at-FSOC-Principals-Meeting.aspx
2 https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Authorizes-Loan-Processing-Flexibilities-for-Fannie-and-Freddie.aspx
3 https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Directs-Enterprises-to-Grant-Flexibilities-for-Appraisal-and-Employment-Verifications.aspx

1. The credit performance of the MBS and CMOs is not affected. The GSEs (Fannie, Freddie and Ginnie, respectively) guarantee the timely payment of principal and interest to the bondholder.

2. The ability of the servicers to perform their duties as the first line of defense to make up the cash flow shortfall could have significant implications for the prepayment profile of the MBS population for a number of months. If servicers/originators are spending valuable resources dealing with multiple forbearance requests, that leaves fewer resources (time, personnel, risk management, hedging, etc.) to solicit and close new business. And any loan that receives a forbearance is obviously not going to prepay during the period of forbearance.

3. The current policy is that any loan receiving a significant modification will be bought out of the pool at par. Also, a loan that is considered delinquent for more than four consecutive months is bought out of the pool at par. We have not seen direct guidance on either of these two facets of buyouts as it relates to the current forbearance policy, but we assume that the current forbearance periods of six months followed by a potential additional six months will not count toward the "delinquent" status of the loan. Furthermore, any loan that is forborne and subsequently extends in maturity by a few months will likely NOT be considered a significant modification. Therefore, loans that are forborne according to the current CARES Act policy and then become immediately current will likely NOT be bought out of the pool at par. Even in the unlikely event that forbearance leads to an eventual modification and buyout from the pool, that process would take months to complete with available detail about which loans would be subject to such potential modifications.

The bottom line is that this time really IS different. The economy is likely going to see a contraction in output and an increase in unemployment not seen on a percent basis in many decades. The purpose of using the 2008/2009 experience is mostly a "reality check" for the last time the Fed became so involved in the MBS market in such a dramatic way. We take comfort in the fact that prepayment spikes during that era were: 1. delayed, 2. short-lived, 3. quite small in magnitude.

The current experience will likely play out a little differently. There will likely be an increase in speeds for the March report given activity that has already closed followed by perhaps many months of slower-than-expected prepayments speeds. At some point, pent-up demand for mortgages – both refi's and particularly purchases – will pick back up, perhaps in the third quarter.

For now, our recommendations have changed a bit. Money managers with shorter investment horizons cannot afford to "fight the Fed" and should continue to participate in the coupons that the Fed is buying in size. Others may continue to concentrate on seasoned, secondary cash flows in the passthru and CMO markets as they are available, because that will still provide the best form of convexity and allow investors to weather any prepayment whipsaw risk that may occur.

– Alexis Vilimas and Walt Schmidt