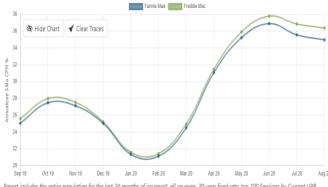


Fannie Mae Benchmark CPR™ Commentary – September 2020

30-Year Benchmark CPR

Exhibit 1



Report includes the entire population for the last 24-months of issuance*, all coupons, 30-year fixed rate, top 100 Servicers by Current UPB.

*Rolling 24 month lookback for which a 3 month CPR is available.

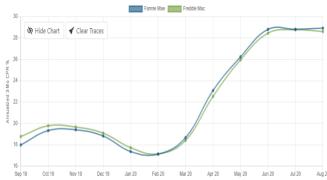
Following four months of steady increases, the Benchmark CPR3 (BCPR3) metric declined for the second straight month as August speeds dipped modestly. The Fannie Mae cohort BCPR3 came in at 35.0 CPR for August, a 1.4% decrease from the 35.6 CPR observed in July. The slowdown continues despite the significant and persistent rate incentive; using a 2.93% driving 30-year mortgage rate, we estimate that 64% of all mortgages are at least 50 bps in the money, and this rises above 77% when looking at conventional mortgages only. We believe that this dynamic may reflect current capacity constraints faced by originators. Table 1 shows the individual components of the BCPR3 and highlights the slowing trend and how they have contributed to the downward movement of the BCPR3.

Table 1: Components of Fannie Mae's 30 Year July and August BCPR Results

Reporting Period	BCPR3	May Component CPR	June Component CPR	July Component CPR	August Component CPR	
July 2020	35.6	35.6	36.7	34.5		
August 2020	35.0		36.7	34.5	33.9	

15-Year Benchmark CPR

Exhibit 2



Report includes the entire population for the last 24-months of issuance*, all coupons, 15-year fixed rate, top 100 Servicers by Current UPB.

*Rolling 24 month lookback for which a 3 month CPR is available.

Unlike the 30-year sector, the Fannie Mae Cohort 15-year Benchmark CPR3 (BCPR3) shows a marginal uptick in August to 28.9 from the prior month's 28.8 CPR. Having said that, the August 1-month component speed continued the slowdown observed in July, dropping to 27.8 CPR from 29.0 CPR. Looking further back, the June component printed at 30.2%.



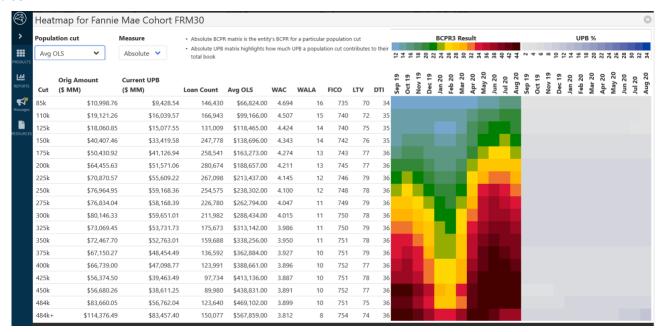
Original Loan Size and Spec Stories

This month, the heatmaps help highlight how different original loan size buckets have behaved in light of the modest slowdown observed at the overall cohort level over the past two months. Exhibit 3 depicts the absolute CPRs for the different loan size buckets in the Fannie cohort. We observe that every loan size bucket has experienced a slowdown from two months prior with two exceptions: speeds on the 85k and 110k buckets increased modestly during this period. (Hovering over the relevant cells in the heatmap will allow a user to observe a slight increase in speeds.)

It is worth noting that the seasonings of these two stories are further down the WALA ramp than the remaining loan size buckets. This could be contributing to the modest speed pickup.

Please reference <u>last month's commentary</u> for a brief overview on the Benchmark CPR heatmap, a new feature offered as part of the Benchmark CPR report on Data Dynamics.

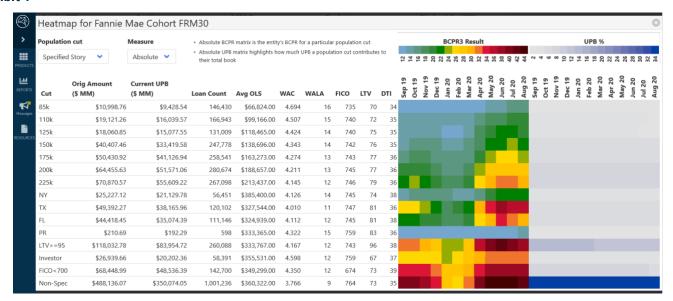
Exhibit 3



Next, we investigated whether the same slowdown observed in most of the loan size buckets is also observed in various specified pool stories, or if any stories instead followed the 85k and 110k buckets with higher speeds. Excluding the PR Geo story given the limited volume, as well as the aforementioned 85k and 110k buckets, all other spec stories in the heatmap waterfall followed the macro theme of slower speeds. This is illustrated in Exhibit 4.



Exhibit 4



Specified Story Rankings

The specified pool market has a fairly well-established waterfall based on call protection, which drives both pooling decisions made by originators as well as the pay-up to TBA paid by investors. Here we look at the prepayment performance and payups for the stories in this waterfall. For prepay performance, we leverage the Specified Story cut in the 30-year Fannie Mae Cohort heatmap feature and translate the BCPR3 speeds into rankings (Exhibit 5). For pay-ups, we rank the levels observed on Fannie Mae's Whole Loan Conduit monthly auctions for the same set of specified stories (Exhibit 6). In the BCPR3 heatmap rankings (Exhibit 5), rank 1 represents the slowest story while rank 13 represents the fastest story, and in the pay-up rankings (Exhibit 6), rank 1 represents the highest pay-up while rank 13 represents the lowest pay-up. It should also be noted that the pay-up rankings are those of 3.0 coupon prior to Q2 2020 and 2.5 coupon Q2 2020 onward, as we attempt to adjust for the drift lower in origination coupon into the continued rate rally.

The data indicates the pricing efficiency present in the market, as observed in the consistency of rankings across the two metrics. Having said that, it also suggests some interesting observations:

- I. The investor story has enjoyed strong pay-ups recently, as market participants may have anticipated tightening in credit availability in this sector during the crisis, which appears to be supported by the improvement in BCPR3 rankings in recent months. However, the latest print suggests the story reverting to higher speeds while pay-ups continue to stay elevated.
- II. In 2020, the NY story has consistently outperformed the 150K story from a prepay perspective, while lagging the 150K story from a pay-up perspective. This may be driven by market concerns around involuntary speeds, as the NY region was one of the hardest hit by the COVID-19 pandemic.
- III. The other two geo stories, TX and FL, have shown a resurgence in issuance. Based on the data, both appear to outperform in the BCPR3 rankings versus the pay-up rankings.



Exhibit 5

	BCPR3 Ranking											
Cut	Sep-2019	Oct-2019	Nov-2019	Dec-2019	Jan-2020	Feb-2020	Mar-2020	Apr-2020	May-2020	Jun-2020	Jul-2020	Aug-2020
85k	1	1	1	1	1	1	1	1	1	1	1	1
110k	2	2	2	2	3	3	3	2	2	2	2	2
125k	4	3	3	3	2	2	2	4	3	3	3	3
150k	5	5	4	4	4	4	5	5	5	5	5	5
175k	6	6	6	6	6	6	6	6	6	6	6	6
200k	7	7	7	7	7	7	7	7	7	7	7	7
225k	9	9	9	9	9	8	8	8	9	9	9	8
NY	3	4	5	5	5	5	4	3	4	4	4	4
TX	11	10	10	10	10	10	10	10	11	11	11	11
FL	8	8	8	8	8	9	9	9	8	10	10	9
LTV>=95	12	12	12	12	11	11	11	13	13	13	13	13
Investor	10	11	11	11	12	12	12	11	10	8	8	10
FICO<700	13	13	13	13	13	13	13	12	12	12	12	12

Exhibit 6

	Fannie Mae Whole Loan Conduit Monthly Auction Payup Ranking											
Cut	Sep-2019	Oct-2019	Nov-2019	Dec-2019	Jan-2020	Feb-2020	Mar-2020	Apr-2020	May-2020	Jun-2020	Jul-2020	Aug-2020
85k	1	1	1	1	1	1	1	1	1	1	1	1
110k	2	2	2	2	2	2	2	2	2	2	2	2
125k	3	3	3	3	3	3	3	3	3	3	3	3
150k	4	4	4	4	4	4	4	4	4	4	4	4
175k	6	6	5	5	6	6	5	6	6	6	6	6
200k	7	7	7	7	7	7	7	7	7	7	8	8
225k	8	8	8	8	9	9	9	8	8	10	9	9
NY	5	5	6	6	5	5	6	5	5	5	5	5
TX	11	11	12	13	13	12	10	13	11	11	12	12
FL	11	11	12	9	8	8	8	9	10	9	10	9
LTV>=95	9	9	9	10	11	11	11	11	12	13	13	13
Investor	11	11	10	11	10	10	12	10	9	8	7	7
FICO<700	10	10	11	12	12	13	12	11	13	12	11	11



Additional Resources

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Benchmark CPR Dashboard

Benchmark CPR Video Tutorial

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