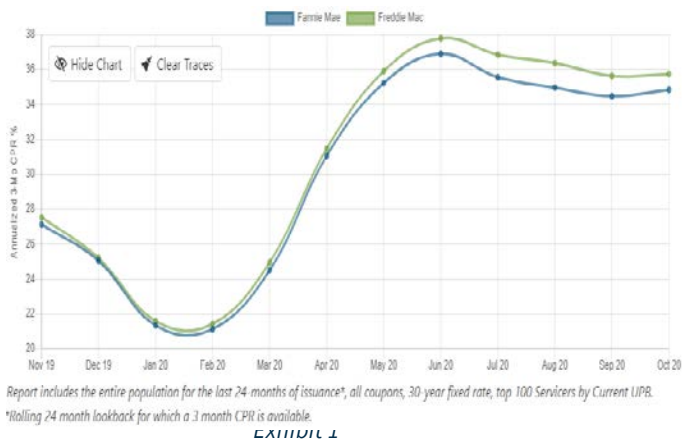


Fannie Mae Benchmark CPR™ Commentary – Nov 2020

30 Year Benchmark CPR



The October 30-year Benchmark CPR3 (BCPR3) for the Fannie Mae cohort increased slightly coming in at 34.8 CPR, a 0.9% increase from the 34.5 CPR observed in September. This reverses three straight months of modest declines. The most recent one-month component increased 1.4% (from 35.0 to 35.5) as illustrated in Table 1. There continues to be significant and persistent rate incentive in the market; using a 2.78% driving 30-year mortgage rate, we estimate that 65% of all mortgages are at least 50 bps in the money, and this rises above 78% when looking at conventional mortgages only. Prepayment speeds should remain elevated as the industry continues to hire more staff to manage the elevated demand.

Table 1a: Components of Fannie Mae's 30 Year Sep and Oct BCPR Results

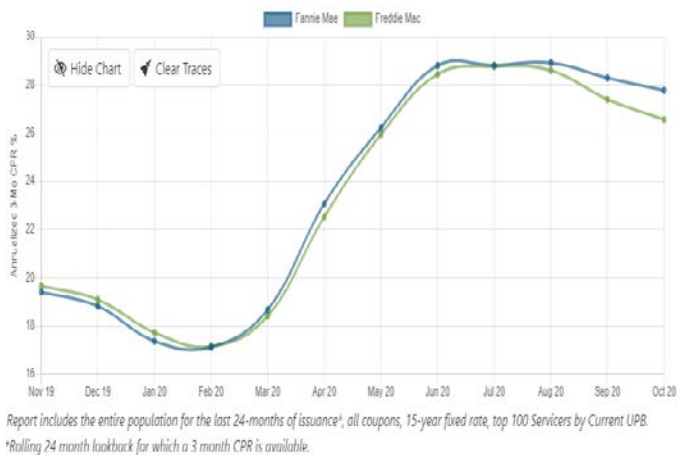
30 Yr FNM Cohort		BCPR3 Components			
Reporting Period	BCPR3	Jul	Aug	Sep	Oct
Sep 2020	34.5	34.5	33.9	35.0	
Oct 2020	34.8		33.9	35.0	35.5

Table 1b: Components of Fannie Mae's 15 Year Sep and Oct BCPR Results

15 Yr FNM Cohort		BCPR3 Components			
Reporting Period	BCPR3	Jul	Aug	Sep	Oct
Sep 2020	28.3	29.0	27.8	28.1	
Oct 2020	27.8		27.8	28.1	27.4

Table 1: Components of Fannie Mae's Sep and Oct BCPR Results

15 Year Benchmark CPR



Unlike the 30-year metric, the Fannie Mae Cohort 15-year Benchmark CPR3 (BCPR3) slowed down marginally in October to 27.7 CPR from the prior month's 28.3 CPR. This marks two months in a row of slightly slower speeds after 3 months of relatively stable prints. The October 1-month component speed decreased modestly to 27.4 CPR from 28.1 CPR in September. See Table 1 for the one-month components of FNM cohort 15-year BCPR3.

Composition of the Benchmark CPR Metric

Given the elevated prepay environment, interest in specified pools is extremely high. Readers should be reminded that the overall [Benchmark CPR metric](#) evaluates speeds on loans earmarked for specified pools and for TBA pools alike. There are a couple of reasons why we include loans intended for both specified and TBA pools into the overall Benchmark CPR figure:

- **Completeness:** The Benchmark CPR measure consolidates the various results generated from vintage/coupon cohorting to produce a singular measure of an entity's prepayment performance. For this consolidated metric to provide as complete of a picture as possible, all TBA-eligible* loans need to be included in the measurement population.
- **Stability:** The level of payups on various specified pool stories change with the market. Loans earmarked for pooling into specified today may revert to TBA product once overall speeds recover. This is most prevalent on fringe specified stories or the lowest coupon production. Establishing what constitutes as specified in today's market may not be accurate in the future. Thus, including everything in one metric creates a more consistent result over time, all things being equal.

*Non-TBA eligible loans are also included if they were securitized de minimis into TBA eligible pools

While the consolidated view of the Benchmark CPR is our primary metric, we also offer in-depth analysis of cohorts within the top line number via our Heatmap tool, which we've [previously highlighted](#) in our commentary. For those unfamiliar, the link to the Heatmaps is imbedded in the BCPR tool under the speed results once an entity is clicked on. With this added functionality, users can evaluate the prepayment speeds of different specified stories as well as non-specified volume (See Exhibit 3 below). The added granularity of the Heatmap allows for greater insight of both specified loans, and non-specified loans alike. In addition to the specified vs non-specified analysis, the Heatmaps are also available for a large variety of population cuts including, but not limited to, Coupons, Geo-States, Loan Purpose (Exhibits 4,5 below).

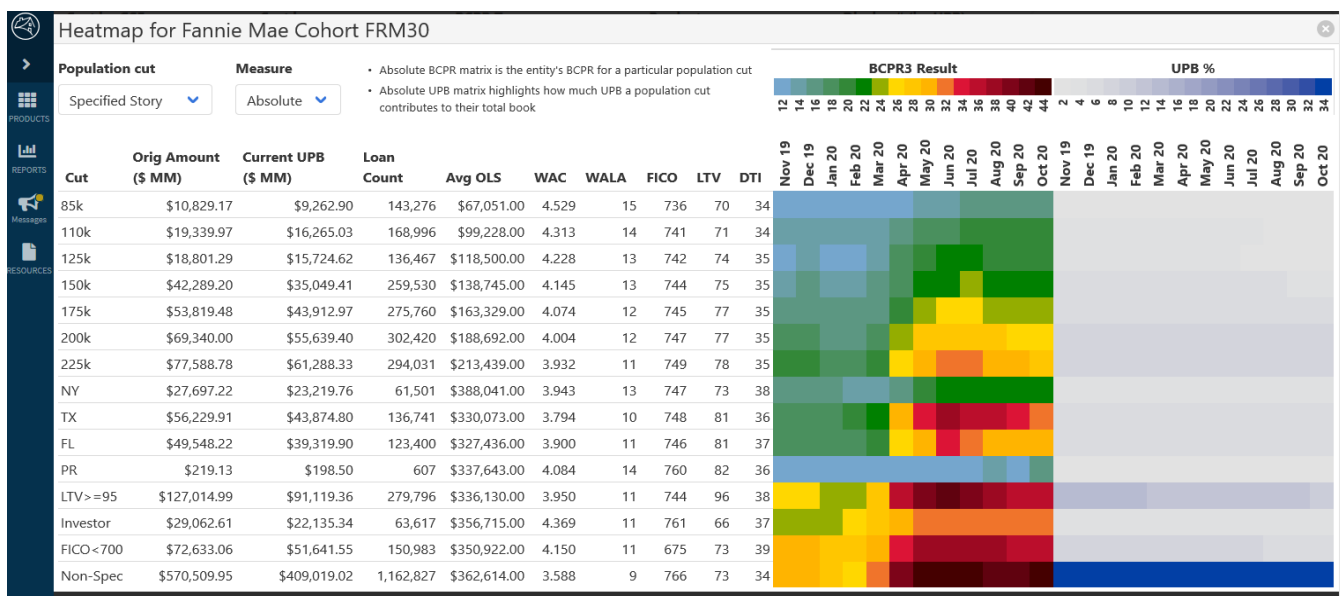


Exhibit 3

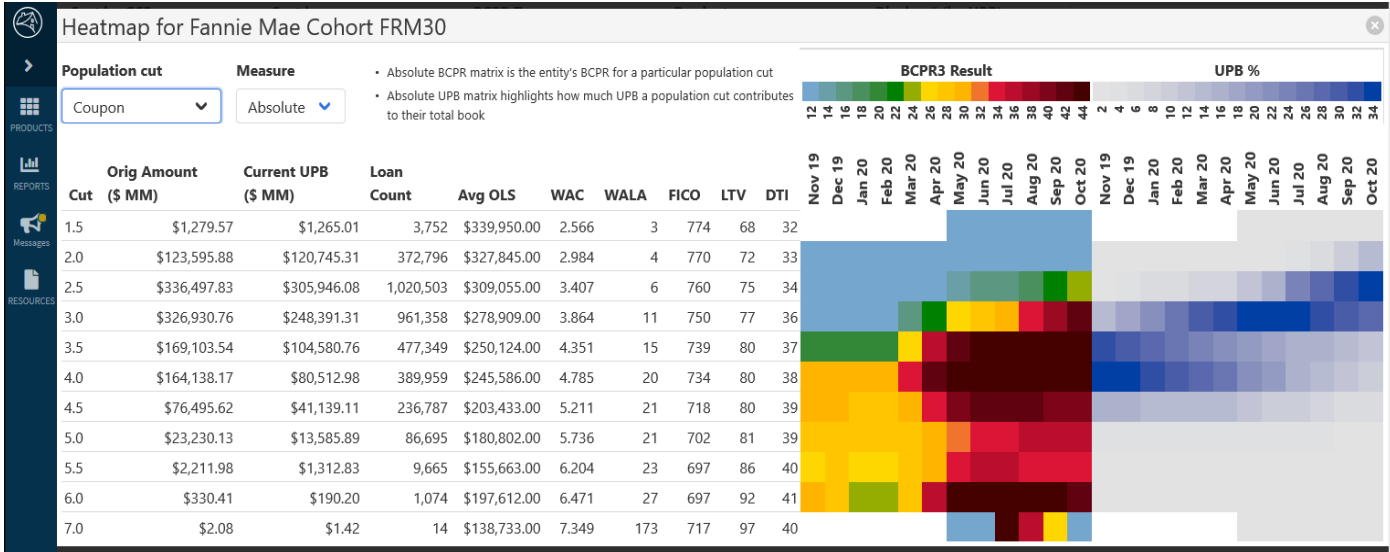


Exhibit 4

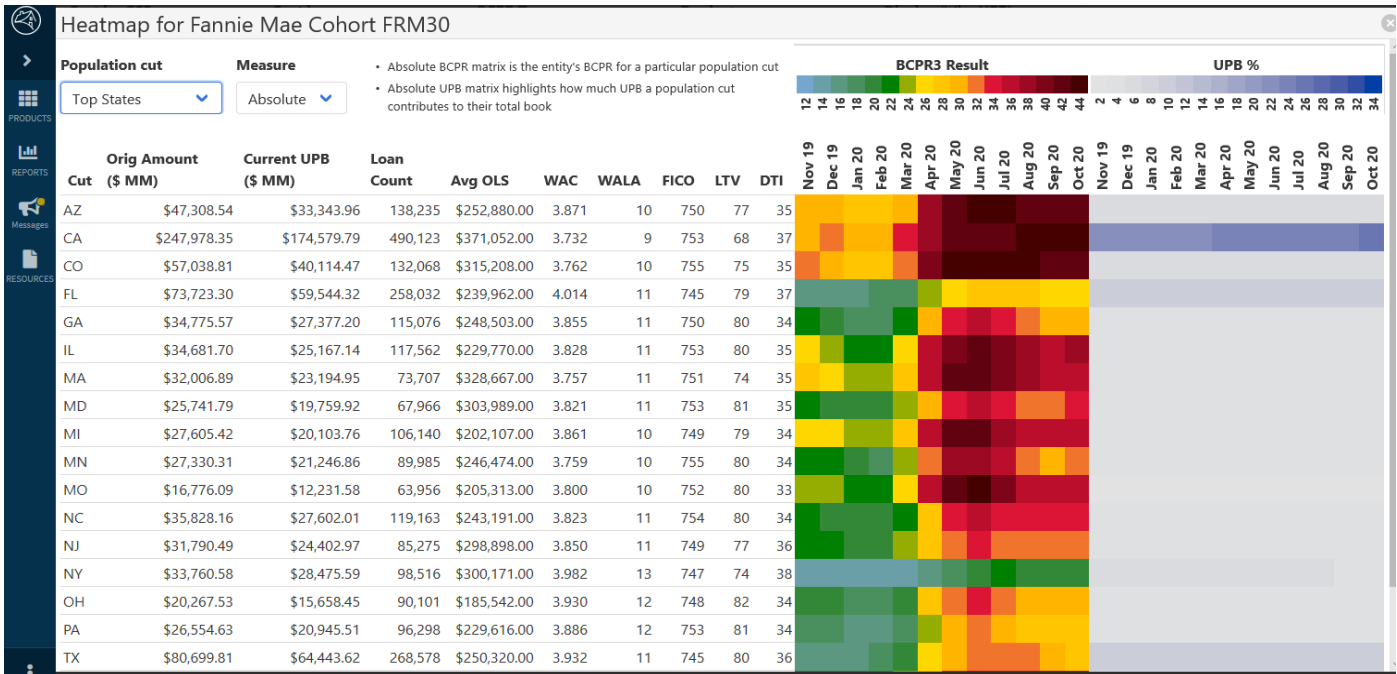


Exhibit 5

Adding Historical Data to the Benchmark CPR Metric

Currently users of the Benchmark CPR tool only have access to the current month’s results in a downloadable format. However, a new landing page within the MBS section of Data Dynamics will be introduced in the near future enabling users to download historical BCPR data going back to 2017. This expanded data set will allow for greater analysis using the BCPR tool, so we’d like to highlight a handful of charts sourced from this data.

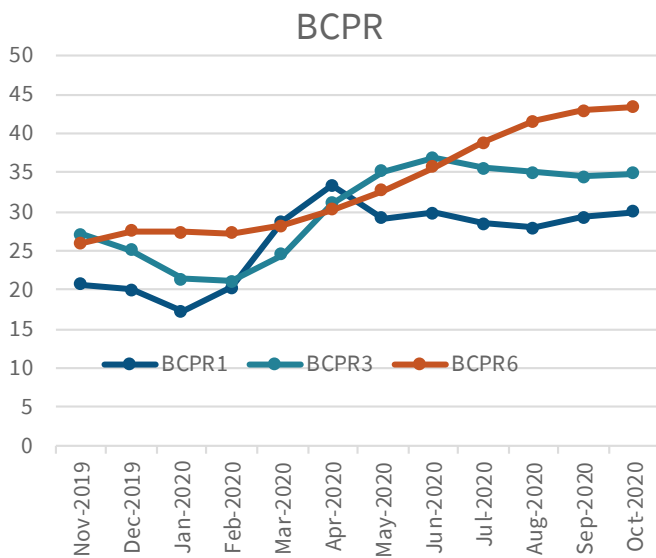


Exhibit 6

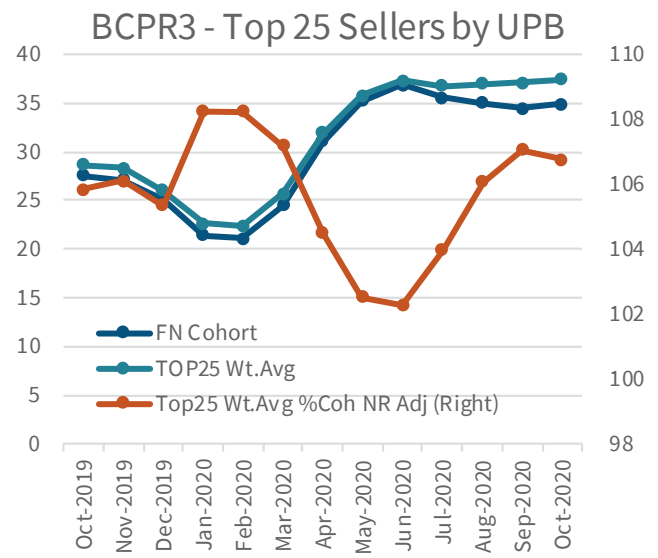


Exhibit 7

Comparison of the BCPR1, BCPR3 & BCPR6 Metrics

In Exhibit 6 we can see the sensitivity differences between evaluating speeds on a 1-month, 3-month and 6-month perspective. Fannie Mae primarily focuses on the BCPR3 measure as it smooths out the variability of a BCPR1 view but is still influenced by new trends in the data.

Divergence of the Top 25 Sellers from Cohort

In Exhibit 7, the relative CPR and percentage of Fannie cohort among the Top 25 sellers (25 largest sellers in UPB terms, within the BCPR 24-month window) can be viewed over time. Although CPRs for the Top 25 sellers consistently trend faster than the Fannie cohort, we observe the recent widening beginning in July. Prepay speeds as a percentage of cohort after applying note rate adjustment for the Top 25 sellers also begin to trend higher in July before falling slightly in October.

Seller UPB Distribution by % of Cohort

Exhibit 8 shows the distribution of Seller UPB by note rate adjusted percentage of cohort. The results for the current period are presented along with the distributions 3M ago, 6M ago and 12M ago. Of note is the increased concentration of UPB in the 90% or lower section in the current month (31% of UPB) versus prior periods (low of 22% 6M ago). Also interesting is the number of Sellers that make up this portion of the distribution - In the current month the lender count lands at 784 out of a total universe of 1118 lenders. This leads us to believe that there could be a bias toward slower prepayment behavior from smaller lenders in comparison to the larger entities.

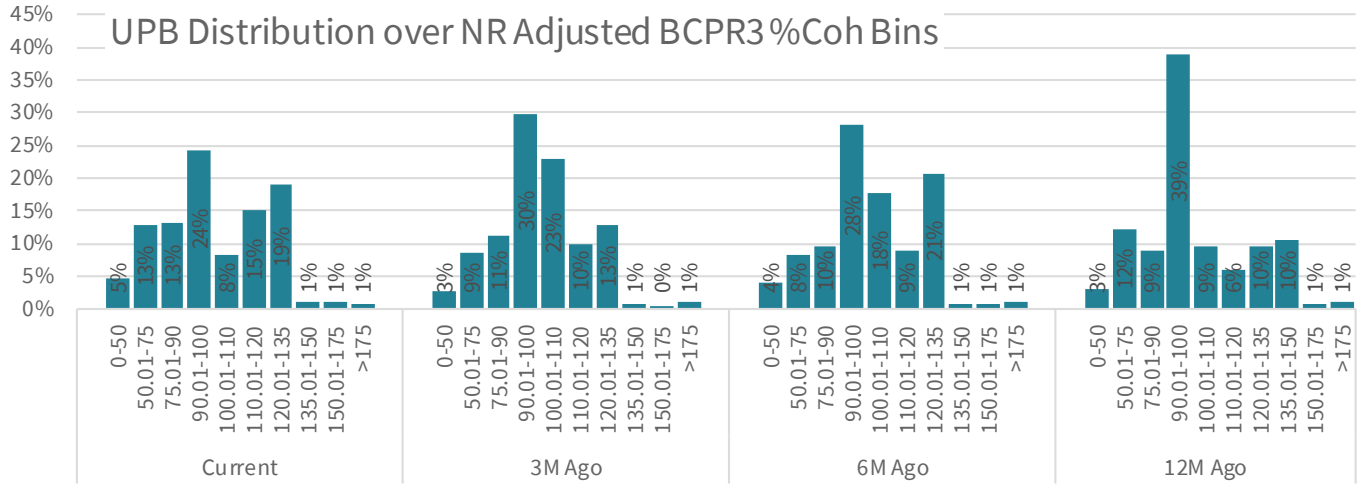


Exhibit 8

Distribution of Monthly Change in Prepay Speeds

Exhibit 9 shows the month over month change in BCPR3 across sellers distributed over a range of percentage changes. Similar to the percentage of cohort exhibit above, the distributions are shown for the current month and historical periods of 3M ago, 6M ago and 12M ago. The current month distribution appears to be more clustered around the center than 3M ago and appears closer to the homogeneity observed in earlier time periods.

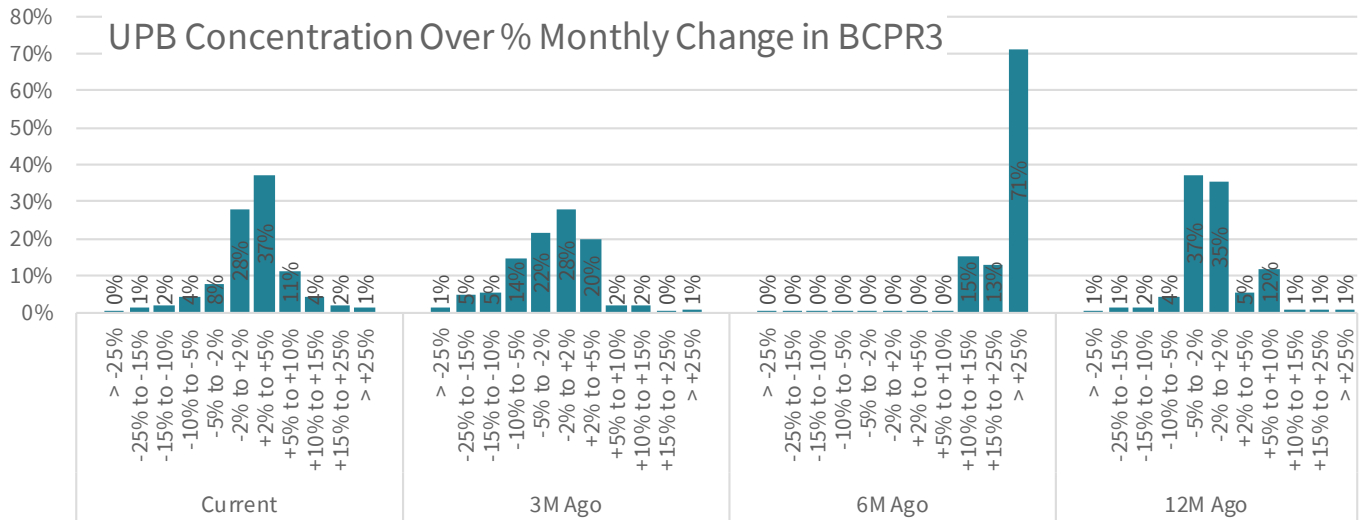


Exhibit 9

Additional Resources

For questions, contact the Fannie Mae Investor Help Line at 1-800-232-6643, Option 3 or by [e-mail](#)

[Benchmark CPR Dashboard](#)

[Benchmark CPR Video Tutorial](#)

[Benchmark CPR Methodology Overview](#)

[Data Dynamics Overview](#)

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