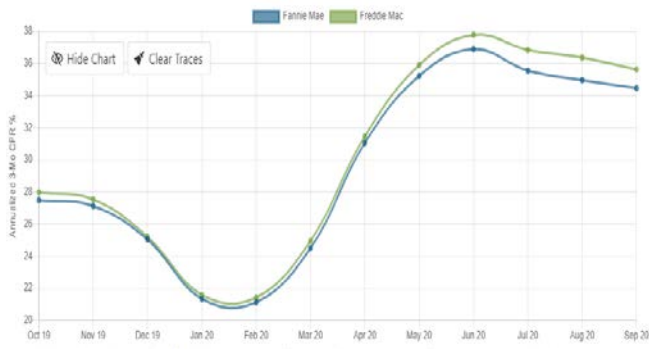


Fannie Mae Benchmark CPR™ Commentary – Oct 2020

30 Year Benchmark CPR



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.

Exhibit 1

The September 30-year Benchmark CPR3 (BCPR3) for the Fannie Mae cohort declined for the third straight month, coming in at 34.5 CPR, a 1.4% decrease from the 35.0 CPR observed in August. While the 3-Month benchmark showed a modest slowdown, its most recent one-month component increased 3.2% (from 33.9 to 35.0) as illustrated in Table 1a. There continues to be significant and persistent rate incentive in the market; using a 2.88% driving 30-year mortgage rate, we estimate that 64% 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 work through this potential supply despite the well-publicized capacity constraints faced by originators.

Table 1a: Components of Fannie Mae’s 30 Year Aug and Sep BCPR Results

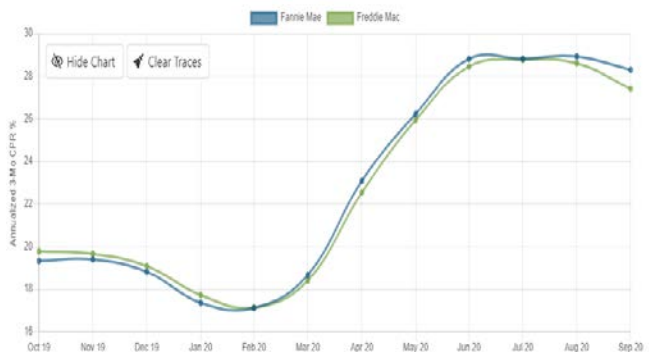
Reporting Period	BCPR3	BCPR3 Components			
		Jun	Jul	Aug	Sep
Aug 2020	35.0	36.7	34.5	33.9	
Sep 2020	34.5		34.5	33.9	35.0

Table 1b: Components of Fannie Mae’s 15 Year Aug and Sep BCPR Results

Reporting Period	BCPR3	BCPR3 Components			
		Jun	Jul	Aug	Sep
Aug 2020	28.9	30.19	29.0	27.8	
Sep 2020	28.3		29.0	27.8	28.1

Table 1

15 Year Benchmark CPR



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.

Exhibit 2

Similar to the 30-year metric, the Fannie Mae Cohort 15-year Benchmark CPR3 (BCPR3) also slowed down marginally in September to 28.3 CPR from the prior month’s 28.9 CPR. However, this follows 3 months of relatively stable prints. Having said that, the September 1-month component speed increased modestly to 28.1 CPR from 27.8 CPR in August. Looking further back, the July component printed at 29.0 CPR. See Table 1b for the one-month components of FNM cohort 15-year BCPR3

Observations in the Coupon Stack and Original Loan Size Buckets

This month, we utilize the heatmap feature in the Benchmark CPR report on Data Dynamics to highlight how the different coupons behaved during the modest slowdown observed at the overall cohort level over the past three months. Exhibit 3 depicts the absolute CPRs for the coupon stack of the Fannie 30yr cohort. Hovering over the relevant cells in the heatmap (on Data Dynamics) will allow a user to observe the changes in speeds over time. We observe that the 2.5 & 3.0 coupons experienced a noticeable pickup in speeds month-over-month and to some degree, so did the 2.0s. This dynamic is consistent with the performance of the entire universe of 30yr UMBS observed by market participants. Conversely, the higher coupons from 3.5 on up were stable or even slower on the BCPR metric. This indicates that the higher coupons included in the BCPR population did not experience the same pace of refinancing as the entire population of higher coupons. In other words, the remaining loans in high coupon pools issued more than 24 months ago are likely prepaying faster than the loans in high coupon pools issued in the last 24 months. For a more detailed explanation on the methodology employed in the BCPR3 calculation, please see the Resources section on Page 5.

Please reference [August commentary](#) for a brief overview on the Benchmark CPR heatmap, a new feature offered as part of the Benchmark CPR report on Data Dynamics.

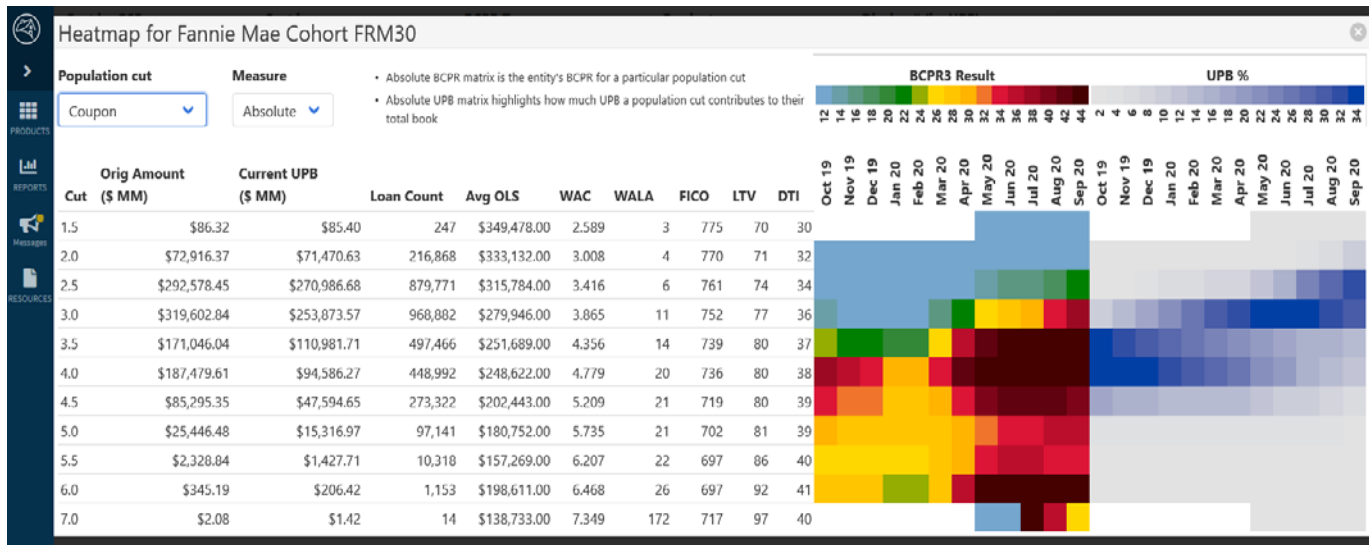


Exhibit 3

Next, we investigate to determine if any loan size buckets buck the trend of the slowing speeds observed in the overall 30-year BCPR cohort. The heatmap in Exhibit 4 indicates all loan size buckets maintained a similar speed or slowed versus last month except for the 484k+ bucket, which increased from 37.5 CPR to 39.2 CPR. This appears to suggest that either the borrowers in this bucket, the lending community at large, or a combination of both remain motivated to engage on these larger loans resulting in more frequent refinances versus other loan size buckets. Note from Exhibit 4 that the WALA on the 484k+ bucket is the lowest of the other loan size buckets and is growing in concentration.

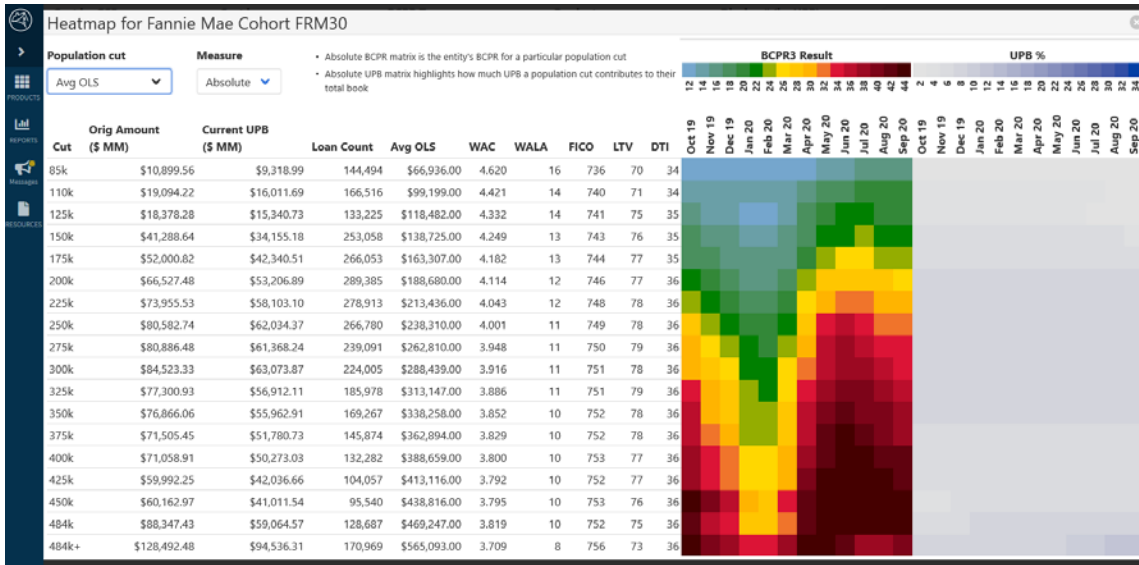


Exhibit 4

Geo Rankings

In recent months, demand for Geo pools - specifically NY, TX and FL - has increased, and in response to stronger pay-ups, we have witnessed an increase in issuance (we wrote about this in our Aug edition and presented the heatmap along the State cut). Here, we revisit this heatmap – Exhibit 5 - to verify the performance in the three Geo cuts mentioned above and note that the pay-ups and issuance continue to appear to be justified. Outside of the NY, TX & FL stories, one item of note from Exhibit 5 is that combined UPB of CA and CO has picked up ~3% additional share over the course of the 12-month period illustrated, with the offsetting deficit spread out across the rest. This is likely a reflection of the home price increases and a larger share of refinances.

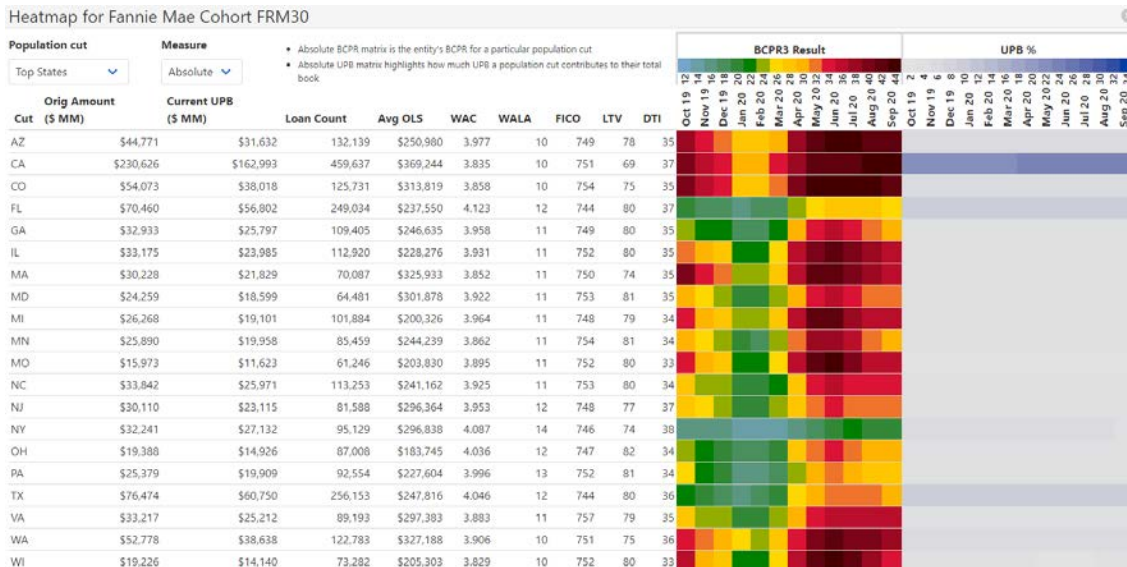


Exhibit 5

In Exhibit 6, we look at the rest of the states in a framework that compares their speeds to the overall Cohort. The BCPR3 data from the heatmap in Exhibit 5 is compared to the relevant month's BCPR3 for the overall Fannie Mae Cohort. Even after excluding the known Geo stories (NY, FL, TX) the range of performance relative to cohort is fairly wide and we see a significant relationship to AOLS per the trendline in Exhibit 7. It is of note that AZ shows up as the biggest outlier in this relationship.

Cut	Orig Amount (\$ MM)	Current UPB (\$ MM)	Loan Count	Avg OLS	WAC	WALA	FICO	LTV	DTI	19-Oct	19-Nov	19-Dec	20-Jan	20-Feb	20-Mar	20-Apr	20-May	20-Jun	20-Jul	20-Aug	20-Sep
AZ	44,771	31,632	132,139	\$250,980	3.977	10	749	78	35	134%	123%	126%	127%	126%	122%	117%	116%	116%	118%	120%	120%
CA	230,626	162,993	459,637	\$369,244	3.835	10	751	69	37	144%	129%	133%	134%	137%	132%	122%	114%	111%	115%	122%	125%
CO	54,073	38,018	125,731	\$313,819	3.858	10	754	75	35	144%	130%	132%	130%	130%	130%	127%	123%	120%	119%	120%	119%
FL	70,460	56,802	249,034	\$237,550	4.123	12	744	80	37	66%	61%	66%	72%	76%	72%	71%	73%	75%	76%	76%	75%
GA	32,933	25,797	109,405	\$246,635	3.958	11	749	80	35	86%	81%	82%	83%	84%	88%	92%	94%	94%	91%	89%	86%
IL	33,175	23,985	112,920	\$228,276	3.931	11	752	80	35	116%	105%	107%	102%	100%	104%	111%	113%	113%	109%	105%	102%
MA	30,228	21,829	70,087	\$325,933	3.852	11	750	74	35	139%	122%	121%	111%	105%	109%	112%	114%	112%	108%	103%	102%
MD	24,259	18,600	64,481	\$301,878	3.922	11	753	81	35	103%	90%	90%	88%	89%	90%	91%	93%	93%	92%	91%	92%
MI	26,268	19,101	101,884	\$200,326	3.964	11	748	79	34	120%	107%	108%	106%	107%	112%	115%	115%	111%	106%	101%	100%
MN	25,890	19,958	85,459	\$244,239	3.862	11	754	81	34	109%	96%	94%	87%	83%	90%	98%	103%	102%	97%	90%	86%
MO	15,973	11,623	61,246	\$203,830	3.895	11	752	80	33	122%	104%	105%	97%	97%	104%	114%	118%	115%	109%	102%	99%
NC	33,842	25,971	113,253	\$241,162	3.925	11	753	80	34	97%	87%	89%	88%	87%	86%	89%	92%	95%	95%	95%	94%
NJ	30,110	23,115	81,588	\$296,364	3.953	12	748	77	37	100%	92%	91%	90%	89%	90%	89%	89%	88%	87%	88%	89%
NY	32,241	27,132	95,129	\$296,838	4.087	14	746	74	38	56%	54%	58%	62%	60%	52%	48%	50%	53%	57%	57%	56%
OH	19,388	14,926	87,008	\$183,745	4.036	12	747	82	34	86%	78%	80%	79%	79%	81%	86%	91%	91%	89%	86%	85%
PA	25,379	19,909	92,554	\$227,604	3.996	13	752	81	34	89%	78%	78%	74%	70%	69%	74%	80%	84%	82%	80%	79%
TX	76,474	60,750	256,153	\$247,816	4.046	12	744	80	36	75%	66%	69%	72%	77%	77%	79%	82%	85%	88%	86%	84%
VA	33,217	25,212	89,193	\$297,383	3.883	11	757	79	35	100%	88%	90%	88%	91%	94%	96%	96%	96%	96%	98%	102%
WA	52,778	38,638	122,783	\$327,188	3.906	10	751	75	36	121%	113%	115%	116%	113%	111%	109%	110%	109%	110%	109%	109%
WI	19,226	14,140	73,282	\$205,303	3.829	10	752	80	33	126%	110%	106%	98%	96%	103%	113%	118%	120%	112%	103%	95%

Exhibit 6

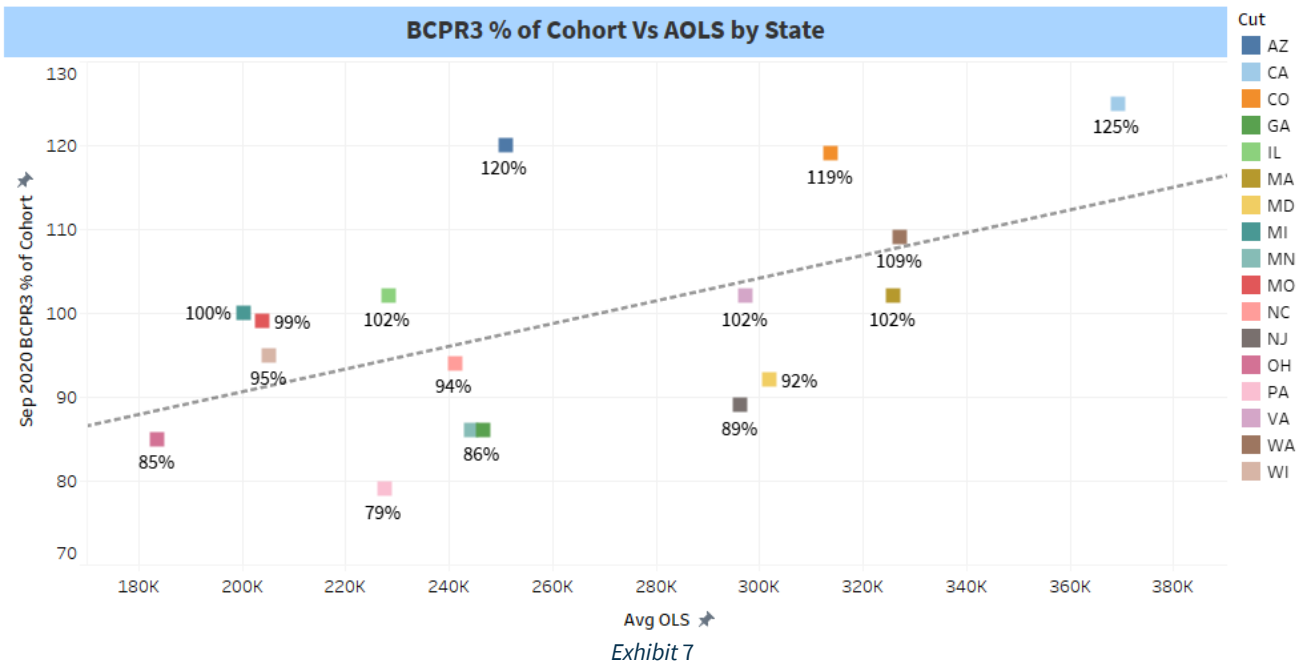


Exhibit 7

Additional Resources

Contact Us

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

Resources

[Benchmark CPR Dashboard](#)

[Benchmark CPR Video Tutorial](#)

[Benchmark CPR Methodology Overview](#)

[Data Dynamics Webpage](#)

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