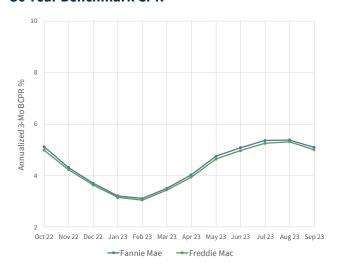


Benchmark CPR® Bulletin - Oct 2023

Monthly Benchmark CPR Results

30 Year Benchmark CPR*



15 Year Benchmark CPR*



Table 1a. Components of Fannie Mae's 30 Year Aug and Sep BCPR Results

30 Yr FNM Cohort		BCPR3 Components								
Reporting Period	BCPR3	Jun	Jul	Aug	Sep					
Aug 2023	5.4	5.6	5.1	5.5						
Sep 2023	5.1		5.1	5.5	4.7					

Table 1b. Components of Fannie Mae's 15 Year Aug and Sep BCPR Results

15 Yr FNM Cohort		BCPR3 Components								
Reporting Period	BCPR3	Jun	Jul	Aug	Sep					
Aug 2023	5.7	5.9	5.3	5.7						
Sep 2023	5.3		5.3	5.7	4.9					

Table 2. Top 5 Fastest Sellers/Servicers: Fannie Mae**

Seller Name	Curr UPB (\$MM)	Sep BCPR	Aug BCPR	Servicer Name	Curr UPB (\$MM)	Sep BCPR	Aug BCPR
REGIONS BANK	2,197	136%	142%	CITIZENS FIRST BANK	876	251%	214%
NORTHPOINTE BANK	3,446	131%	113%	PREMIER MORTGAGE RESOURCES, LLC	786	149%	122%
FIRSTBANK	1,903	131%	123%	ROCKET MORTGAGE, LLC	66,100	147%	142%
ARVEST BANK	1,618	130%	122%	FIRSTBANK	1,425	138%	130%
ROCKET MORTGAGE, LLC	103,248	127%	123%	PRIME LENDING	1,035	136%	119%

Table 3. Top 5 Fastest Sellers/Servicers: Freddie Mac**

Seller Name	Curr UPB (\$MM)	Sep BCPR	Aug BCPR	Servicer Name	Curr UPB (\$MM)	Sep BCPR	Aug BCPR
AMERICAN FINANCING CORPORATION	846	172%	179%	SPECIALIZED LOAN SERVICING, LLC	4,313	156%	146%
RUSHMORE LOAN MANAGEMENT SERVICE	828	151%	140%	ROCKET MORTGAGE, LLC	39,759	144%	146%
REGIONS BANK	1,224	143%	134%	PINGORA LOAN SERVICING, LLC	1,288	140%	129%
CARRINGTON MORTGAGE SERVICES, LLC	983	140%	127%	FIRST FEDERAL BANK	819	139%	124%
FBC MORTGAGE LLC	1,265	140%	140%	FBC MORTGAGE LLC	1,230	137%	134%

Report(s) include entire population for the last 24-months of issuance, all coupons, 30-year or 15-year fixed rate, top 100 Servicers by Current UPB. Rolling 24-month lookback for which a 3-month CPR is available.

 $^{^{\}star\star}\,\text{Population includes top 100 sellers/servicers by UPB and reflects Note Rate Adjusted BCPR3 values.}$



Historical Benchmark CPR Data

Table 4. Summary of Fannie Mae 30 Year Historical BCPR Data - Seller view

Metric	Sep-2023	Aug-2023	Jul-2023	Sep-2022
Cohort BCPR1	4.9	5.6	5.1	5.0
Cohort BCPR3	5.1	5.4	5.4	5.6
Cohort BCPR6	4.9	4.9	4.5	7.1
WA BCPR3 of Top 25 Sellers*	5.1	5.4	5.4	5.7
WA NR-Adjusted % of Cohort for Top 25 Sellers*	101.5	101.1	101.7	100.9
BCPR3 Range (Max-Min) for Top 100 Sellers*	3.5	4.4	4.8	3.1
Total Current UPB (\$B)	988	1,024	1,066	1,694
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	17%	16%	17%	26%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	62%	61%	62%	51%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	18%	20%	18%	21%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	3%	3%	3%	2%

Table 5. Summary of Freddie Mac 30 Year Historical BCPR Data - Seller view

Metric	Sep-2023	Aug-2023	Jul-2023	Sep-2022
Cohort BCPR1	4.8	5.6	5.0	5.0
Cohort BCPR3	5.0	5.3	5.2	5.5
Cohort BCPR6	4.8	4.8	4.4	6.9
WA BCPR3 of Top 25 Sellers*	5.0	5.3	5.2	5.5
WA NR-Adjusted % of Cohort for Top 25 Sellers*	100.3	100.1	99.8	100.0
BCPR3 Range (Max-Min) for Top 100 Sellers*	6.0	6.8	5.3	4.9
Total Current UPB (\$B)	931	968	1,002	1,518
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	20%	22%	18%	20%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	60%	59%	67%	61%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	18%	15%	12%	9%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	2%	3%	3%	10%



Table 6. Summary of Fannie Mae 30 Year Historical BCPR Data - Servicer view

Metric	Sep-2023	Aug-2023	Jul-2023	Sep-2022
Cohort BCPR1	4.9	5.6	5.1	5.0
Cohort BCPR3	5.1	5.4	5.4	5.6
Cohort BCPR6	4.9	4.9	4.5	7.1
WA BCPR3 of Top 25 Servicers*	5.1	5.4	5.4	5.7
WA NR-Adjusted % of Cohort for Top 25 Servicers*	100.6	101.2	101.0	100.5
BCPR3 Range (Max-Min) for Top 100 Servicers*	10.6	9.2	10.9	4.2
Total Current UPB (\$B)	988	1,024	1,066	1,694
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	25%	28%	29%	26%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	62%	58%	57%	58%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	5%	6%	6%	8%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	9%	8%	8%	8%

Table 7. Summary of Freddie Mac 30 Year Historical BCPR Data - Servicer view

Metric	Sep-2023	Aug-2023	Jul-2023	Sep-2022
Cohort BCPR1	4.8	5.6	5.0	5.0
Cohort BCPR3	5.0	5.3	5.2	5.5
Cohort BCPR6	4.8	4.8	4.4	6.9
WA BCPR3 of Top 25 Servicers*	5.0	5.3	5.2	5.5
WA NR-Adjusted % of Cohort for Top 25 Servicers*	99.9	100.0	99.8	99.8
BCPR3 Range (Max-Min) for Top 100 Servicers*	5.7	5.9	5.6	4.9
Total Current UPB (\$B)	931	968	1,002	1,518
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	23%	22%	14%	14%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	62%	65%	74%	71%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	9%	6%	4%	8%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	7%	7%	7%	7%



BCPR Component Profiles

Table 8. Fannie Mae 30-Year BCPR Component Collateral Profiles

ante of Farme Mac of Tear Both Component Cottate at Frontes																	
	Orig amt	Beg bal	Beg loan			WA							%	%	%		
	(\$MM)	(\$MM)	count	WA OLS	WA WAC	WALA	WA FICO	WA LTV	WA DTI	% CA	% TPO	% AW	Owner	Investor	Purchase	SMM	CPR
Fannie Mae BCPR																	I
a. Jun component	1,177,602	1,135,236	3,843,569	306,382	3.97	16	748	75	37	18%	39%	24%	92%	5%	58%	0.5	5.6
b. Jul component	1,114,016	1,074,142	3,622,193	307,553	4.10	16	748	76	37	18%	39%	23%	92%	5%	60%	0.4	5.1
c. Aug component	1,070,459	1,032,269	3,459,752	309,403	4.23	16	748	76	37	17%	39%	23%	92%	5%	62%	0.5	5.5
d. Sep component	1,032,528	995,635	3,316,394	311,340	4.36	16	748	76	37	17%	39%	22%	91%	6%	63%	0.4	4.7
e. MoM profile change	-37,931	-36,634	-143,358	1,937	0.13	0	0	0	0	0%	0%	-1%	0%	0%	1%	-14.1%	-13.8%
f. Sep pay-offs	3,666	3,426	12,891	284,816	4.55	16	740	74	37	12%	37%	22%	88%	7%	57%	100.0	100.0
g. Aug pay-offs	4,497	4,223	15,816	284,505	4.38	16	740	74	37	14%	35%	23%	89%	7%	55%	100.0	100.0
h. Jul-23 issuances	29,337	29,053	85,319	343,853	6.48	2	757	79	38	13%	38%	11%	93%	5%	89%	0.6	7.1
i. Jul-21 issuances	63,045	59,616	213,896	294,748	3.14	25	751	75	35	18%	37%	27%	96%	2%	54%	0.5	5.4
Fannie Mae universe																	1
j. Sep universe	10,414,390	2,848,312	12,371,891	342,073	3.87	42	752	75	N/A	N/A	39%	23%	90%	6%	50%	0.4	5.1
k. Diff vs. Sep component	9,381,863	1,852,676	9,055,497	30,732	-0.49	26	4	-1	N/A	N/A	0%	1%	-1%	0%	-13%	0.0	0.4

Records a-d: Collateral profiles of BCPR components as of the start of each month. Records b-d comprise the most recent BCPR3, while records a-c comprise the prior BCPR3. Records f-g: Profile of loans that paid off in each respective month.

Records $h \to Profile$ of loans issued in the most recent month added to the BCPR3 population and loans issued in the month that rolled off (aged out) of the BCPR3 population. Record i: Overall Fannie Mae 30-year TBA-eligible universe.

BCPR Heatmap

Table 9. MoM Percentage Changes of Various Spec & Loan Cuts on the BCPR1 Heatmap

Population	Orig Amoun (\$ MM)	t Current UPB (\$ MM)	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
85k	\$5,990	\$5,389	-7%	-14%	-4%	-12%	10%	29%	-4%	15%	1%	-4%	4%	-8%
110k	\$11,451	\$10,323	-5%	-16%	-1%	-8%	7%	26%	-3%	16%	5%	-9 %	9%	-8%
125k	\$10,315	\$9,345	-9%	-14%	-9%	-12%	12%	30%	6%	7%	1%	-7%	9%	-11%
150k	\$24,298	\$22,037	-14%	-13%	-4%	-16%	17%	25%	0%	20%	4%	-10%	10%	-10%
175k	\$30,572	\$27,840	-11%	-19%	-8%	-10%	11%	38%	-8%	16%	5%	-11%	15%	-8%
200k	\$40,482	\$36,956	-20%	-14%	-2%	-16%	13%	42%	-12%	27%	3%	-11%	12%	-12%
225k	\$44,335	\$40,612	-17%	-15%	-8%	-16%	20%	42%	-10%	27%	0%	-8%	10%	-14%
NY	\$27,520	\$26,024	-23%	-2%	-1%	-13%	-2%	25%	-19%	33%	12%	-11%	24%	-4%
TX	\$74,677	\$69,203	-21%	-15%	-7%	-11%	35%	24%	-5%	29%	-3%	-5%	4%	-15%
FL	\$63,107	\$57,818	-12%	-16%	0%	-13%	23%	41%	-5%	24%	1%	-11%	10%	-8%
LTV>=95	\$131,533	\$123,794	-21%	-14%	-9%	-15%	26%	39%	2%	16%	4%	-11%	6%	-10%
Investor***	\$32,008	\$29,227	-25%	-14%	-3%	-12%	27%	37%	0%	25%	-3%	-7%	11%	-15%
FICO<700	\$72,765	\$66,308	-19%	-19%	-5%	-15%	27%	34%	-7%	36%	-2%	-5%	10%	-16%
Non-Spec	\$419,954	\$385,964	-16%	-18%	-4%	-17%	16%	46%	-7%	26%	5%	-11%	10%	-12%
Retail	\$606,084	\$555,609	-16%	-15%	-5%	-16%	19%	39%	-5%	22%	2%	-8%	11%	-13%
Correspondent	\$236,383	\$218,894	-18%	-15%	-5%	-15%	21%	38%	-5%	26%	6%	-12%	6%	-10%
Broker	\$146,931	\$136,705	-18%	-22%	1%	-13%	16%	42%	-10%	36%	0%	-11%	10%	-9%
Purchase	\$654,832	\$609,677	-16%	-13%	-5%	-11%	20%	38%	-5%	22%	1%	-9%	8%	-10%
Refi	\$124,642	\$112,580	-18%	-20%	-3%	-22%	12%	45%	-9%	28%	4%	-12%	11%	-16%
Cash-out	\$209,924	\$188,952	-18%	-16%	-5%	-16%	22%	36%	-5%	30%	6%	-10%	12%	-15%
Principal	\$899,243	\$829,722	-17%	-17%	-5%	-15%	19%	39%	-6%	25%	4%	-10%	9%	-12%
Second Home	\$29,709	\$26,284	-16%	-16%	2%	-15%	14%	49%	-17%	32%	-6%	0%	9%	-5%
Investment***	\$60,445	\$55,203	-22%	-11%	-4%	-11%	22%	33%	2%	23%	-5%	-7%	13%	-12%
Standard Appraisal	\$787,834	\$729,080	-17%	-16%	-5%	-15%	19%	39%	-5%	23%	3%	-9%	9%	-11%
Appraisal Waiver	\$201,564	\$182,128	-15%	-18%	-3%	-15%	18%	39%	-8%	32%	1%	-11%	12%	-14%

*** Note that the Investor cut is listed twice. The first instance is the Investor story as part of a specified pooling waterfall. The second instance is a pure isolation of all investor loans in relation to principal residence and second homes. Note the UPB differences between the two, as several investor loans are pooled in other stories.



Additional Resources

For questions, contact the Fannie Mae Investor Help Line at 1-800-232-6643, Option 3 or by e-mail.

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Benchmark CPR Methodology Overview

Benchmark CPR Video Tutorial

MBS Cohort Analyzer Dashboard

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