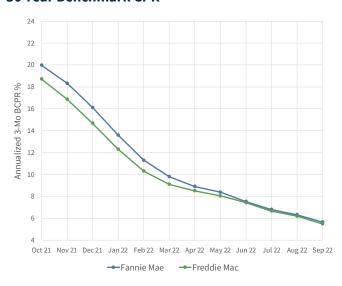


Benchmark CPR® Bulletin - Oct 2022

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 2022	6.3	7.2	5.9	5.9						
Sep 2022	5.7		5.9	5.9	5.1					

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 2022	6.5	7.1	6.2	6.2						
Sep 2022	5.9		6.2	6.2	5.4					

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

Seller Name UPB (\$MM)		Sep BCPR	Aug BCPR	Servicer Name	UPB (\$MM)	Sep BCPR	Aug BCPR
AMERICAN FINANCING CORPORATION	4,400	129%	126%	ROCKET MORTGAGE, LLC	203,011	138%	136%
SOFI BANK, NATIONAL ASSOCIATION	2,934	126%	134%	SOFI BANK, NATIONAL ASSOCIATION	2,934	126%	134%
ARVEST BANK	3,332	125%	126%	FIDELITY BANK, NATIONAL ASSOCIATION	2,162	126%	119%
ROCKET MORTGAGE, LLC	202,511	123%	124%	STOCKTON MORTGAGE CORPORATION	2,162	125%	124%
RENASANT BANK	3,268	118%	118%	CARRINGTON MORTGAGE SERVICES, LLC	2,886	123%	122%

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

Seller Name	UPB (ŞMM)	Sep BCPR	Aug BCPR	Servicer Name	UPB (ŞMM)	Sep BCPR	Aug BCPR
GATEWAY FIRST BANK	3,701	148%	124%	GATEWAY FIRST BANK	3,388	149%	123%
AMERIS BANK	3,037	136%	137%	ROCKET MORTGAGE, LLC	129,391	148%	146%
TEXAS CAPITAL BANK, NA	4,191	136%	134%	PINGORA LOAN SERVICING, LLC	3,226	138%	140%
FREEDOM MORTGAGE CORPORATION	10,967	135%	131%	AMERIS BANK	3,037	136%	137%
RUOFF MORTGAGE COMPANY	2,355	135%	127%	CENTRAL TRUST BANK	1,627	134%	128%

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-2022	Aug-2022	Jul-2022	Sep-2021
Cohort BCPR1	5.0	5.7	5.5	18.6
Cohort BCPR3	5.6	6.3	6.8	19.6
Cohort BCPR6	7.1	8.0	8.7	23.5
WA BCPR3 of Top 25 Sellers*	5.7	6.3	6.8	21.4
WA NR-Adjusted % of Cohort for Top 25 Sellers*	100.9	101.1	101.5	111.7
BCPR3 Range (Max-Min) for Top 100 Sellers*	3.1	3.7	4.7	23.2
Total Current UPB (\$B)	1,694	1,726	1,742	1,510
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	26%	29%	19%	35%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	51%	50%	58%	31%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	21%	19%	21%	21%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	2%	2%	2%	13%

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

Metric	Sep-2022	Aug-2022	Jul-2022	Sep-2021
Cohort BCPR1	5.0	5.5	5.4	17.0
Cohort BCPR3	5.5	6.2	6.6	18.5
Cohort BCPR6	6.9	7.7	8.3	22.3
WA BCPR3 of Top 25 Sellers*	5.5	6.2	6.6	18.8
WA NR-Adjusted % of Cohort for Top 25 Sellers*	100.0	99.8	99.8	104.7
BCPR3 Range (Max-Min) for Top 100 Sellers*	4.9	4.6	5.1	27.1
Total Current UPB (\$B)	1,518	1,544	1,551	1,236
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	20%	21%	22%	42%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	61%	61%	57%	29%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	9%	8%	18%	13%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	10%	10%	3%	16%



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

Metric	Sep-2022	Aug-2022	Jul-2022	Sep-2021
Cohort BCPR1	5.0	5.7	5.5	18.6
Cohort BCPR3	5.6	6.3	6.8	19.6
Cohort BCPR6	7.1	8.0	8.7	23.5
WA BCPR3 of Top 25 Servicers*	5.7	6.4	6.9	21.2
WA NR-Adjusted % of Cohort for Top 25 Servicers*	100.5	101.2	102.0	109.4
BCPR3 Range (Max-Min) for Top 100 Servicers*	4.2	4.2	4.4	34.1
Total Current UPB (\$B)	1,694	1,726	1,742	1,510
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	26%	25%	20%	30%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	58%	55%	60%	33%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	8%	11%	12%	26%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	8%	9%	9%	11%

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

Metric	Sep-2022	Aug-2022	Jul-2022	Sep-2021
Cohort BCPR1	5.0	5.5	5.4	17.0
Cohort BCPR3	5.5	6.2	6.6	18.5
Cohort BCPR6	6.9	7.7	8.3	22.3
WA BCPR3 of Top 25 Servicers*	5.5	6.2	6.6	18.7
WA NR-Adjusted % of Cohort for Top 25 Servicers*	99.8	100.2	100.4	104.1
BCPR3 Range (Max-Min) for Top 100 Servicers*	4.9	5.1	5.6	30.8
Total Current UPB (\$B)	1,518	1,544	1,551	1,236
% of Cohort UPB w/ NR-Adjusted BCPR3 0-90% of Cohort	14%	14%	14%	38%
% of Cohort UPB w/ NR-Adjusted BCPR3 90-110% of Cohort	71%	71%	70%	34%
% of Cohort UPB w/ NR-Adjusted BCPR3 110-130% of Cohort	8%	8%	9%	17%
% of Cohort UPB w/ NR-Adjusted BCPR3 >130% of Cohort	7%	7%	7%	11%



BCPR Component Profiles

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

	Orig amt	Beg bal	Beg loan										%	%	%		
	(\$MM)	(\$MM)	count	WA OLS	WA WAC	WA WALA	WA FICO	WA LTV	WA DTI	% CA	% TPO	% AW	Owner	Investor	Purchase	SMM	CPR
Fannie Mae BCPR																	
a. Jun component	1,835,466	1,776,239	6,288,395	291,881	3.13	14	754	73	35	21%	37%	34%	91%	5%	41%	0.6	7.1
b. Jul component	1,815,551	1,755,822	6,191,803	293,219	3.15	14	754	73	35	21%	37%	33%	91%	5%	42%	0.5	5.9
c. Aug component	1,799,511	1,739,182	6,110,439	294,498	3.20	14	754	73	35	21%	37%	33%	91%	5%	44%	0.5	5.9
d. Sep component	1,766,141	1,705,837	5,973,026	295,686	3.24	15	753	73	35	21%	38%	32%	91%	5%	45%	0.4	5.1
e. MoM profile change	-33,370	-33,345	-137,413	1,188	0.05	1	0	0	0	0%	0%	-1%	0%	0%	1%	-13.9%	-13.6%
f. Sep pay-offs	7,083	6,714	26,262	269,920	3.26	16	747	73	35	16%	34%	32%	90%	6%	38%	100.0	100.0
g. Aug pay-offs	8,464	8,049	31,440	269,381	3.22	16	748	74	35	16%	34%	33%	90%	5%	37%	100.0	100.0
h. Jul-22 issuances	41,523	41,226	132,098	314,331	5.28	2	745	79	38	13%	39%	14%	92%	6%	80%	0.5	5.6
i. Jul-20 issuances	66,906	63,163	239,867	278,930	3.27	25	760	74	34	19%	37%	35%	93%	4%	39%	0.8	8.7
Fannie Mae universe																	
j. Sep universe	10,222,906	2,764,846	12,164,905	331,936	3.60	35	751	74	N/A	N/A	39%	24%	90%	6%	46%	0.6	6.8
k. Diff vs. Sep component	8,456,765	1,059,009	6,191,879	36,249	0.36	20	-2	1	N/A	N/A	1%	-8%	-1%	1%	2%	0.1	1.6

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-i: 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 Amount (\$ MM)	Current UPB (\$ MM)	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
85k	\$10,760	\$9,551	0%	-2%	0%	-18%	-4%	22%	-10%	-3%	-2%	-9%	0%	-3%
110k	\$23,557	\$20,914	-6%	-1%	-6%	-21%	-6%	17%	-6%	-3%	-4%	-13%	12%	-16%
125k	\$23,471	\$20,839	-4%	-6%	-6%	-20%	-8%	19%	-9%	-8%	5%	-17%	5%	-9%
150k	\$54,509	\$48,502	-4%	-9%	-6%	-20%	-10%	20%	-12%	-5%	2%	-12%	2%	-12%
175k	\$70,567	\$62,720	-5%	-9%	-7%	-22%	-8%	17%	-14%	-4%	-2%	-9%	1%	-12%
200k	\$94,259	\$83,666	-7%	-11%	-8%	-22%	-9%	17%	-15%	-7%	3%	-16%	4%	-10%
225k	\$104,224	\$92,292	-8%	-11%	-9%	-22%	-10%	12%	-14%	-6%	-4%	-12%	0%	-12%
NY	\$51,193	\$47,909	17%	-12%	-8%	-21%	-15%	2%	-22%	-7%	24%	-18%	12%	-14%
TX	\$101,333	\$91,261	-8%	-16%	-10%	-16%	-13%	5%	-12%	-3%	-4%	-13%	-3%	-15%
FL	\$93,130	\$83,749	-8%	-12%	2%	-22%	-11%	9%	-16%	-11%	-4%	-19%	3%	-11%
LTV>=95	\$180,002	\$163,174	-15%	-13%	-15%	-26%	-22%	0%	-24%	-8%	-5%	-17%	3%	-14%
Investor***	\$57,996	\$50,763	-2%	-11%	-11%	-26%	-10%	12%	-23%	-3%	-17%	-17%	-3%	-4%
FICO<700	\$130,678	\$113,893	-8%	-8%	-8%	-24%	-14%	5%	-23%	-18%	-2%	-20%	4%	-10%
Non-Spec	\$944,184	\$826,265	-15%	-16%	-12%	-25%	-19%	9%	-15%	-9%	-1%	-20%	3%	-13%
Retail	\$1,210,698	\$1,072,630	-10%	-13%	-10%	-24%	-14%	11%	-15%	-9%	-1%	-17%	3%	-12%
Correspondent	\$409,785	\$362,019	-13%	-14%	-12%	-24%	-17%	7%	-18%	-7%	-3%	-17%	3%	-12%
Broker	\$319,994	\$281,427	-18%	-13%	-10%	-24%	-19%	7%	-18%	-9%	-4%	-21%	3%	-12%
Purchase	\$843,120	\$766,245	-11%	-13%	-9%	-22%	-18%	8%	-20%	-9%	-2%	-15%	5%	-11%
Refi	\$667,336	\$570,316	-14%	-15%	-10%	-25%	-14%	12%	-13%	-7%	-1%	-20%	0%	-13%
Cash-out	\$430,021	\$379,514	-9%	-12%	-12%	-24%	-16%	7%	-16%	-9%	-1%	-16%	4%	-12%
Principal	\$1,769,103	\$1,565,780	-13%	-14%	-11%	-24%	-16%	9%	-16%	-9%	-1%	-18%	3%	-12%
Second Home	\$69,995	\$61,098	0%	-11%	-3%	-19%	-15%	19%	-15%	0%	-8%	-13%	6%	-10%
Investment***	\$101,380	\$89,197	0%	-8%	-7%	-25%	-9%	15%	-19%	-5%	-12%	-16%	-4%	-8%
Standard Appraisal	\$1,304,237	\$1,164,552	-11%	-12%	-10%	-24%	-16%	7%	-18%	-9%	-3%	-18%	3%	-12%
Appraisal Waiver	\$636,240	\$551,523	-14%	-16%	-11%	-24%	-15%	14%	-13%	-8%	-1%	-17%	2%	-13%

^{***} 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 Video Tutorial

MBS Cohort Analyzer Dashboard

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