Small Balance Loan Prepayments

As of June 2023

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- This report presents a summary of Freddie Mac Multifamily Small Balance Loan (SBL or SB) voluntary prepayment activity over the past 12 months ending June 2023 (July 2022 through June 2023).
- We summarize prepayment speeds in aggregate and by product type, vintage, prepayment type, prepayment phase and FRESB deal.
- The 12-month average constant prepayment rate (CPR) is 9.9% as of June 2023 — down 650 bps from the December 2022 CPR of 16.4%.
- Based on historical performance to date, we find that prepayment speeds increase with loan seasoning and declining prepayment premiums all else equal. As loans season and a growing population of loans move into periods with lower prepayment premiums, we expect prepayment activity to pick up. However, higher interest rates are slowing prepayment activity and may continue to do so going forward.
- The focus of this report is on voluntary prepayments. There have been very few defaults in the SBL program — only \$43.3 million (11 basis points) losses in aggregate on a total securitized balance of \$40.1 billion in the program's history from October 2014 through June 2023.
- See our SB-Deal® Investor Presentation for background information on the program's history, mortgage products, the Freddie Mac Optigo® network and FRESB bond structure.

Freddie Mac MULTIFAMILY

Freddie Mac Multifamily formally added the SBL line of business to its lending platform in October 2014. This program targets loans between $1 million and $7.5 million and offers prepayment flexibility to borrowers.

Through June 2023[1], Freddie Mac has funded and securitized nearly 15,000 SB loans totaling over $40 billion of original unpaid principal balance (UPB), of which approximately $13.7 billion have prepaid.

Prepayment Options Background

SB loan products include both hybrid ARMs and fixed-rate products across multiple loan terms, all with an array of prepayment options. SB loans generally offer more prepayment flexibility than our conventional loans, where the standard K-Deal® fixed-rate loan has a lockout period followed by defeasance or yield maintenance.

Exhibit 1 shows the mix of SBL products and available prepayment types, along with the percentage of total origination volume across product types and prepayment options since the inception of the SBL program in 2014. The 5-year hybrid and 10-year fixed-rate products make up 65% of our business. The most popular prepayment option is yield maintenance, particularly for 10-year fixed-rate loans. These loans make up 47% of total business. The second most popular prepayment option starts with a 5% prepayment premium and then steps down, or declines, over the term of the loan — Option 1.

The Freddie Mac SBL program offers borrowers prepayment options along with a number of different products.

Exhibit 1: Loan Products & Available Prepayment Options

	Hybrids			Fixed-Rate			Total % Business
Option	**5H**	**7H**	**10H**	**5F**	**7F**	**10F**	
1	54321, 1%	5544321, 1%	5544332211, 1%	54321	5544321	5544332211	**41%**
2	321(3), 1%	3(2)2(2)1(3), 1%	3(3)2(3)1(4), 1%	321(3)	3(2)2(2)1(3)	3(3)2(3)1(4)	**7%**
3	(YM or 1%) + 1%, 1%	(YM or 1%) + 1%, 1%	(YM or 1%) + 1%, 1%	YM or 1%	YM or 1%	YM or 1%	**47%**
4	310(3), 0%	N/A	N/A	310(3)	N/A	N/A	**5%**
Total % Business	**33%**	**8%**	**14%**	**6%**	**8%**	**32%**	**100%**

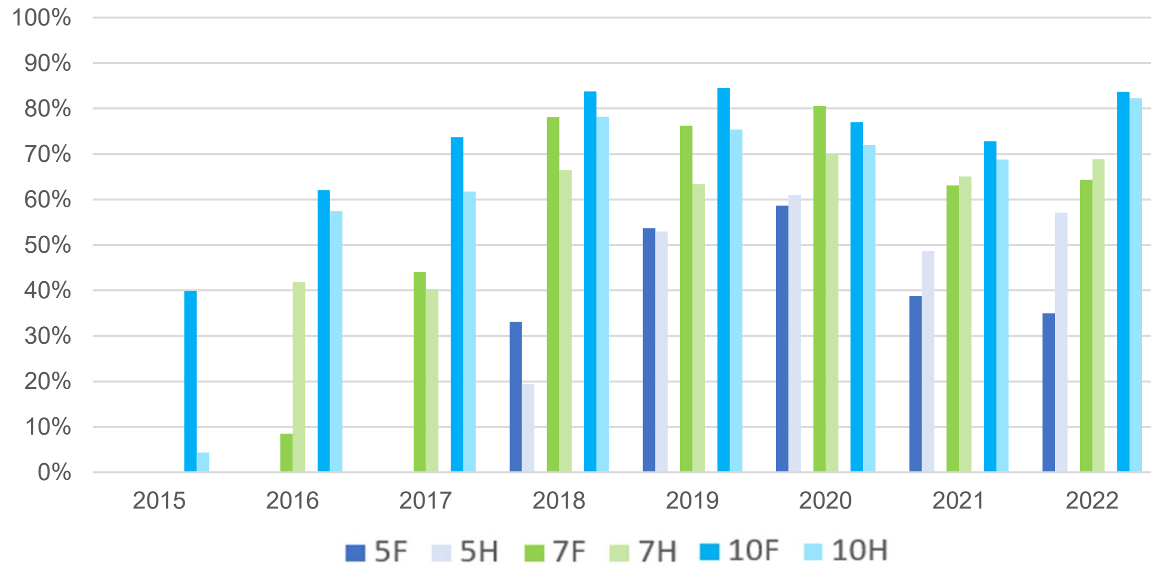
Source: Freddie Mac. We frequently use shorthand above to define the products; for example, we refer to the 5-year Hybrid as “5H” and the 10-year Fixed Balloon as “10F.” Option 3 refers to Yield Maintenance (YM) but includes legacy YM or 1%, +1%, 1% loans. See the SBL Product page for more details. May not sum to 100% due to rounding.

[1] All data points in this report are as of June 2023 unless otherwise stated. This analysis excludes third-party seasoned loans not typical of the program.

The share of borrowers choosing yield maintenance remains high, especially in our 7- and 10-year products, as shown below in Exhibit 2. We see a dip in the share electing yield maintenance in 2020 and 2021, but a rebound in 2022 especially among the long-term vintages.

Yield maintenance Is more prevalent with newly originated loans and those with longer terms.

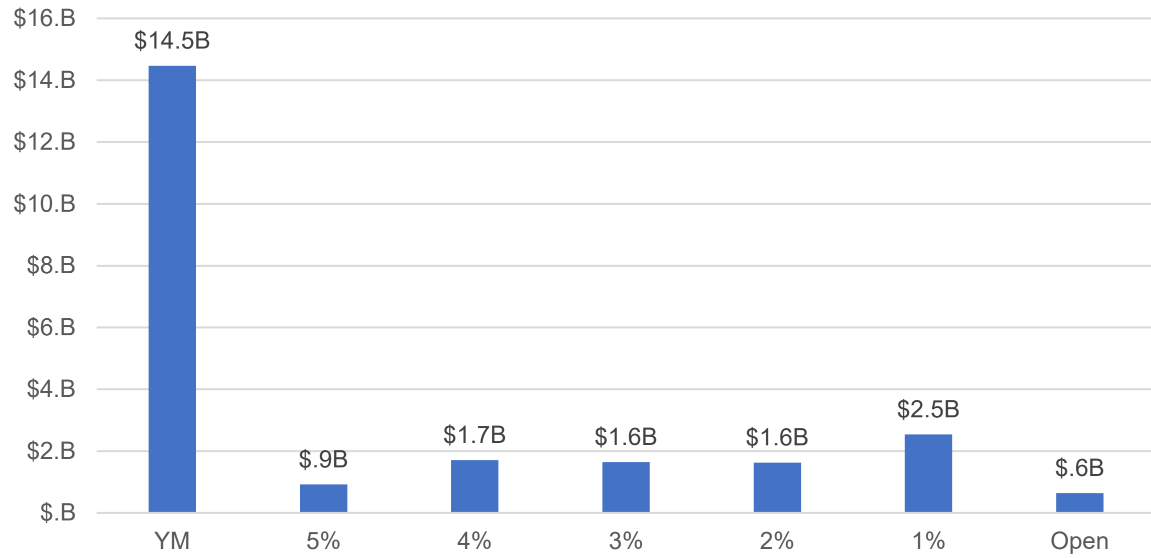
Exhibit 2: Percentage of Active Loans with Yield Maintenance by Vintage and Product Type



Source: Freddie Mac

Several factors drive prepayment behavior, including an incentive to prepay when interest rates fall or when property values rise. However, the existence of a prepayment premium can mitigate both of those factors. Currently, most of our outstanding loans are still subject to prepayment premiums, primarily in the form of either yield maintenance or a fixed percentage prepayment premium, as shown in Exhibit 3.

Exhibit 3: Outstanding Loan Balance by Prepayment Phase



Source: Freddie Mac

Prepayment Speeds by Loan Characteristics

For the 12 months ending in June 2023, 1,030 loans prepaid which decreased 41% in comparison with the prior report, representing the 12 months ending December 2022.[2] The total number of loans that have prepaid since the program's inception is about 5,200. Exhibit 4 is a summary of the payoffs across different prepayment options (shown in Exhibit 1), prepayment phase, vintage and product type during the 12-month period ending in June 2023.[3] While the number of paid off loans with the most flexible prepayment terms (1% or open) decreased 33% from December 2022 through June 2023.

Loan prepayments decreased in first half of 2023.

Exhibit 4: Payoff Summary by Loan Count in the Past 12 Months

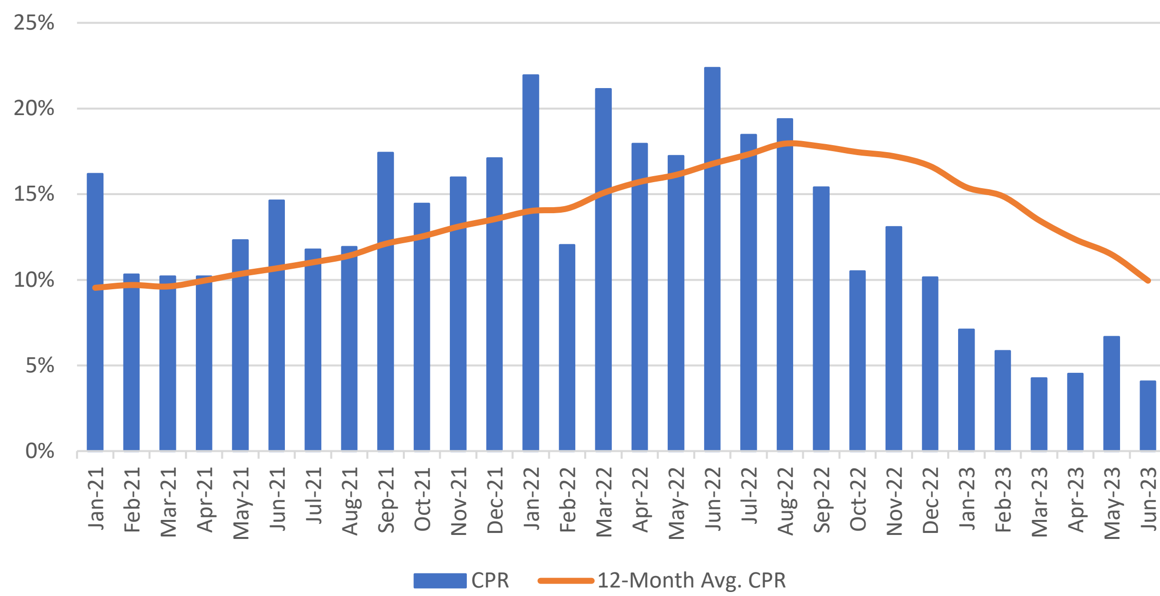
Prepayment Option	1	2	3	4				Total
	469	44	471	46				1,030
Prepayment Phase	YM	5%	4%	3%	2%	1%	Open	
	351	23	71	73	91	359	62	1,030
Vintage	2014	2015	2016	2017	2018	2019	2020	
	3	37	109	283	281	156	101	1,030
Product	5H	7H	10H	5F	7F	10F		
	475	53	94	54	68	286		1,030

[2] The report with data for the 12 months ending in December 2022 was released in June 2023.
[3] For additional details on prepays since inception of the SBL line of business, please see the May 2019, the November 2019, November 2020, October 2021, May 2022, November 2022, and June 2023 SBL Prepay Reports. For additional details around FRESB loan payoffs, please reference our SB-Deal Performance Presentation.

Source: Freddie Mac

The 12-month average CPR is 9.9% as of June 2023, down sharply from 16.4% in the December 2022 report. Interest rates were relatively low to start 2022 but increased quickly, while property values grew for part of year before flattening and then declining toward the end of year. Both trends have continued into the first half of 2023, which has continued to slow prepayment speeds. In Exhibit 5, we see a significant slowdown in CPRs starting in October of 2022 and through June of 2023 given higher interest rates and lower property prices.

Exhibit 5: Annualized and 12-Month Average CPR

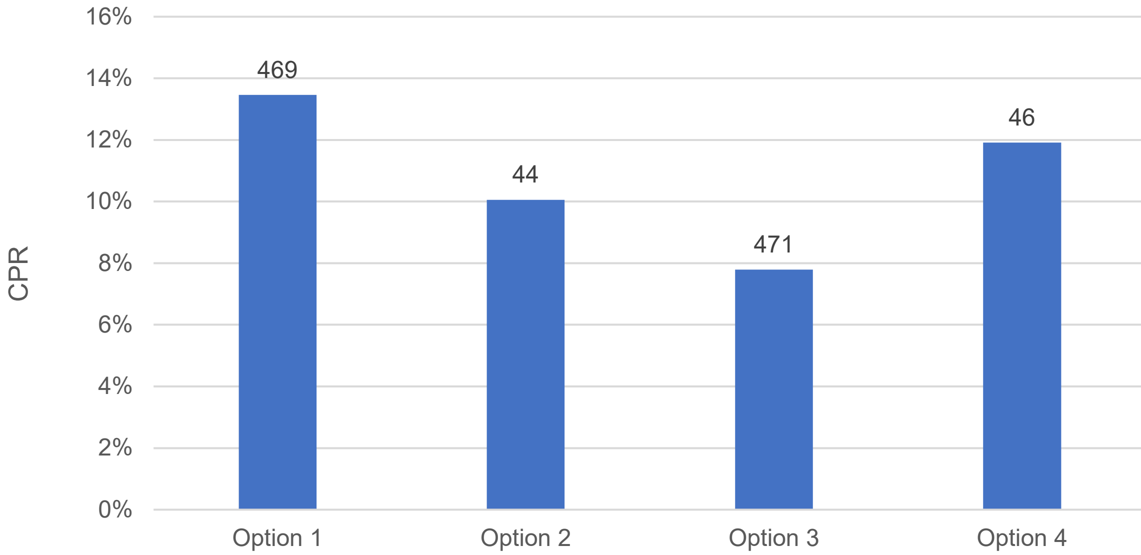


Source: Freddie Mac

In the following exhibits, we present prepayment speed across various characteristics over the 12 months ending June 2023. We have continued to observe the vast majority of prepayments utilizing Options 3 and 1, at 471 and 469 loans respectively of the 1,030 loans that have prepaid. As shown in Exhibit 6, Options 2, 4 and 1 have experienced the highest prepayment rates of 10%, 12% and almost 14% respectively, while Option 3 is lower at about 8%. This is a similar pattern to what we saw in the last report, with elevated prepayment rates for Options 1, 2 and 4 and a lower rate for Option 3. However, in the December 2022 report Options 1, 2, and 4 were all at similar 12-month CPR levels. The reason Option 3 has the lowest prepayment rate is due to the greater prepayment flexibility Options 1, 2 and 4 provide compared with yield maintenance in Option 3, although prepayment rates are down across all option types.

Loans with option 1 had the highest CPR, while loans with option 3 saw the most prepays over the past 12 months.

Exhibit 6: CPR by Prepayment Option in the Past 12 Months

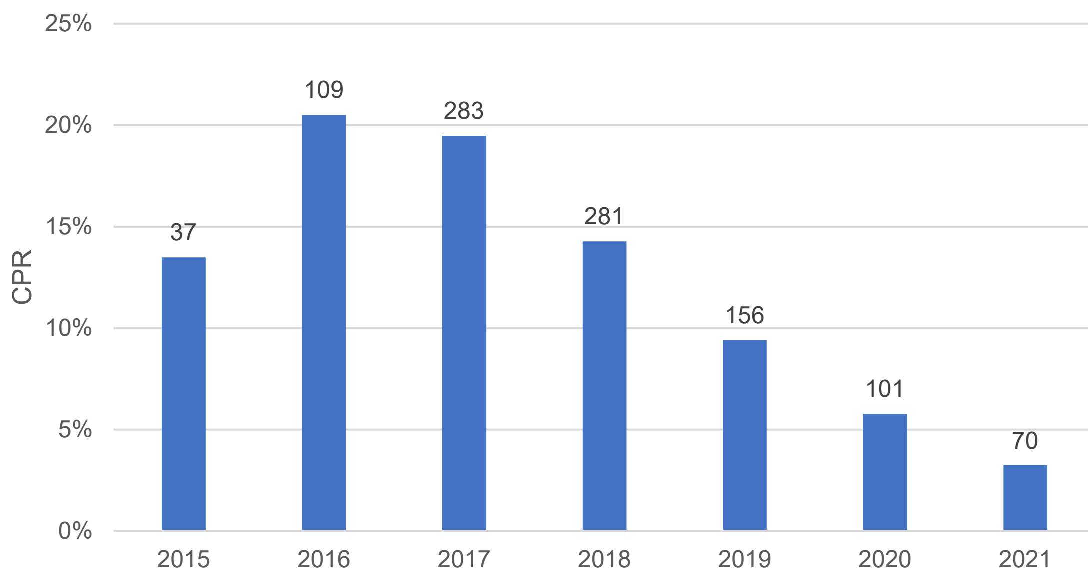


Source: Freddie Mac

The largest number of loans that have prepaid come from the 2017 and 2018 vintages, as loans in those years have had time to season, shown in Exhibit 7. The highest 12-month average CPRs come from 2016 and 2017 vintages, which have already experienced many loans pay off and have a lower remaining origination volumes. Therefore, we do not experience high payoff activity by loan count but see elevated CPR rates in those years. Generally, the less seasoned a loan, the slower the CPR, with originations from 2021 down to 3%.

As loans season, the CPR generally increases.

Exhibit 7: CPR by Origination Vintage and Payoff Loan Counts in the Past 12 Months

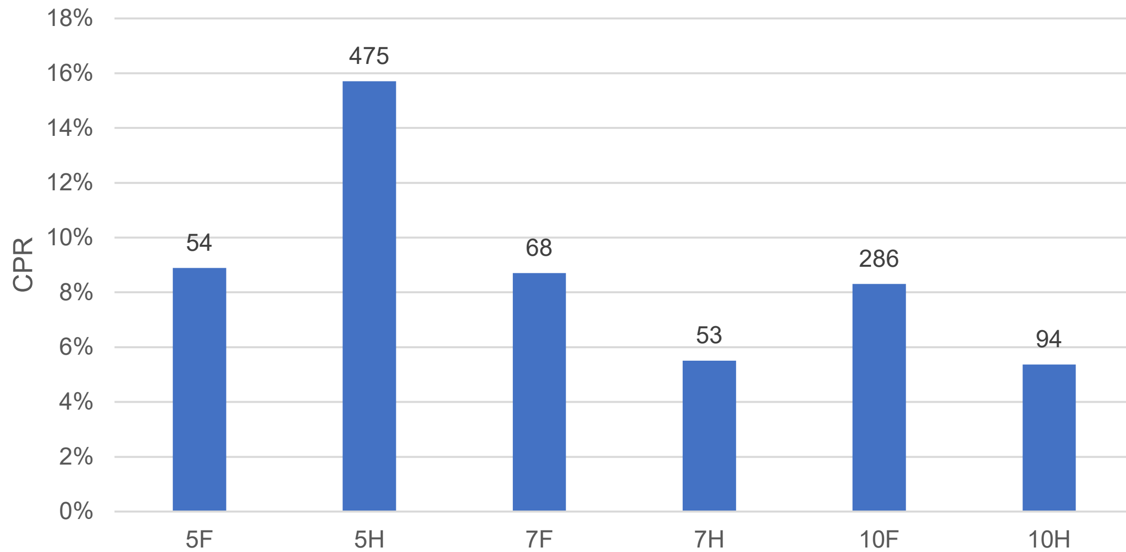


Source: Freddie Mac

Exhibit 8 below shows that CPRs are fastest for the 5-year hybrid loans with speeds of 16%. By loan count, the greatest number of prepaid loans are among the 5-year hybrid and 10-year fixed-rate products, with 475 and 286 prepays, respectively, as they are the most common loan types chosen by borrowers.

Loans with longer terms typically have more punitive prepayment structures and lower CPRs.

Exhibit 8: CPR by Product Type and Payoff Loan Counts in the Past 12 Months



Source: Freddie Mac

Among the 5-year hybrid loans that were originated prior to May 2018, a total of 2,381 loans converted to floating-rate by the June 2023 data cut-off of this report, as shown in Exhibit 8. Once converted, the standard prepayment premium is 1% (unless refinanced with Freddie Mac, in which case the prepayment is contractually not due[4]). Of those 2,381 loans, 1,224 either paid off or were refinanced prior to converting, while the remaining 1,157 converted, for an overall conversion rate of 49%. Of those loans that converted, 38%, or 439 loans paid off after they flipped.

Exhibit 9: Analysis of 5-Year Hybrid Loan Conversion Rates

Origination Month	Originated 5H Loans	Loans Paid Off/ Refinanced	Loans Converted	First Interest Adjustment Date	Conversion Rate	Floating Loans as of June 2023
Oct 2014	1	1	0	--	--	--
Nov 2014	1	1	0	--	--	--
Dec 2014	6	1	5	Jan 2020	63%	3
Jan 2015	5	5	0	Feb 2020	38%	--
Feb 2015	9	6	3	Mar 2020	36%	0
Mar 2015	14	10	4	Apr 2020	33%	3

[4] See the SB-Deal® X1 Bond Handout for the full list of scenarios where the 1% may not be due.

Origination Month	Originated 5H Loans	Loans Paid Off/ Refinanced	Loans Converted	First Interest Adjustment Date	Conversion Rate	Floating Loans as of June 2023
Apr 2015	9	5	4	May 2020	36%	1
May 2015	9	6	3	Jun 2020	35%	1
Jun 2015	28	14	14	Jul 2020	40%	5
Jul 2015	31	14	17	Aug 2020	44%	6
Aug 2015	50	18	32	Sep 2020	50%	16
Sep 2015	68	32	36	Oct 2020	51%	20
Oct 2015	50	26	24	Nov 2020	51%	8
Nov 2015	42	18	24	Dec 2020	51%	9
Dec 2015	71	34	37	Jan 2021	52%	16
Jan 2016	53	26	27	Feb 2021	51%	9
Feb 2016	56	27	29	Mar 2021	51%	10
Mar 2016	70	42	28	Apr 2021	50%	6
Apr 2016	56	31	25	May 2021	50%	12
May 2016	53	18	35	Jun 2021	51%	22
Jun 2016	67	40	27	Jul 2021	50%	16
Jul 2016	26	12	14	Aug 2021	50%	5
Aug 2016	28	15	13	Sep 2021	50%	10
Sep 2016	30	18	12	Oct 2021	50%	7
Oct 2016	46	23	23	Nov 2021	50%	11
Nov 2016	42	22	20	Dec 2021	50%	9
Dec 2016	99	34	65	Jan 2022	51%	37
Jan 2017	80	43	37	Feb 2022	51%	13
Feb 2017	60	28	32	Mar 2022	51%	18
Mar 2017	86	42	44	Apr 2022	51%	30
Apr 2017	45	20	25	May 2022	51%	13
May 2017	88	34	54	Jun 2022	52%	36
Jun 2017	96	63	33	Jul 2022	51%	23
Jul 2017	69	38	31	Aug 2022	50%	13
Aug 2017	148	99	49	Sep 2022	49%	25
Sep 2017	103	43	60	Oct 2022	49%	55
Oct 2017	57	28	29	Nov 2022	49%	25
Nov 2017	78	38	40	Dec 2022	49%	37
Dec 2017	80	33	47	Jan 2023	50%	44
Jan 2018	50	24	26	Feb 2023	50%	24
Feb 2018	72	34	38	Mar 2023	50%	36
Mar 2018	92	58	34	Apr 2023	49%	30
Apr 2018	103	68	35	May 2023	49%	32
May 2018	54	32	22	Jun 2023	49%	22
Total	**2,381**	**1,224**	**1,157**		**49%**	**718**

Source: Freddie Mac

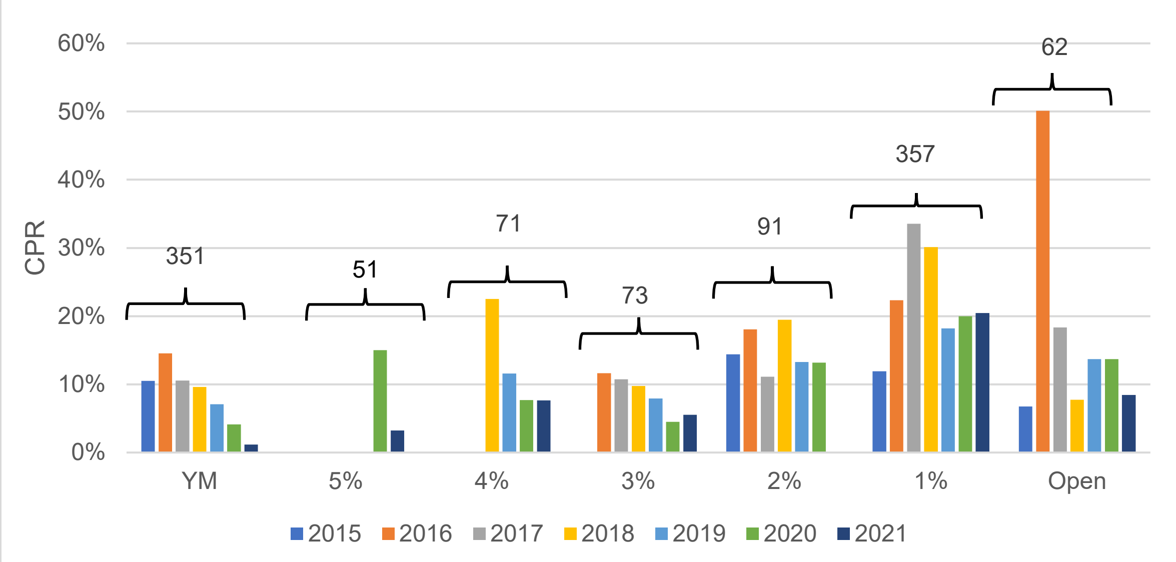
Among the 7-year hybrid loans that were originated prior to May 2016, a total of 93 loans converted to floating-rate by the June 2023 data cut-off of this report, as shown in Exhibit 9. Once converted, the standard prepayment penalty is 1% (unless refinanced with Freddie Mac, in which case the prepayment is contractually not due). Of those 93 loans, 76 either paid off or were refinanced prior to converting, while the remaining 17 converted, for an overall conversion rate of 18%. Of those loans that converted, 24%, or 4 loans paid off after they extended.

Exhibit 10: Analysis of 7-Year Hybrid Loan Conversion Rates

Origination Month	Originated 7H Loans	Loans Paid Off/ Refinanced	Loans Converted	First Interest Adjustment Date	Conversion Rate	Floating Loans as of December 2022
Nov 2014	1	1	0	Dec 2021	0%	--
Dec 2014	0	0	0	Jan 2022	0%	--
Jan 2015	0	0	0	Feb 2022	0%	--
Feb 2015	1	1	0	Mar 2022	0%	
Mar 2015	0	0	0	Apr 2022	0%	
Apr 2015	4	3	1	May 2022	17%	1
May 2015	2	2	0	Jun 2022	13%	
Jun 2015	6	5	1	Jul 2022	14%	1
Jul 2015	13	10	3	Aug 2022	19%	2
Aug 2015	6	3	3	Sep 2022	24%	3
Sep 2015	4	4	0	Oct 2022	22%	
Oct 2015	6	5	1	Nov 2022	21%	1
Nov 2015	3	2	1	Dec 2022	22%	0
Dec 2015	7	4	3	Jan 2023	25%	1
Jan 2016	1	1	0	Feb 2023	24%	0
Feb 2016	7	7	0	Mar 2023	21%	0
Mar 2016	12	10	2	Apr 2023	21%	2
Apr 2016	8	7	1	May 2023	20%	1
May 2016	12	11	1	Jun 2023	18%	1
Total	**93**	**76**	**17**		**18%**	**13**

Historically, as loans season and enter lower prepayment premium periods, we expect loans to prepay more quickly and for CPRs to increase. This is illustrated below in Exhibit 11, where the prepayment speed increases as the seasoning increases and prepayment premium decreases.

Exhibit 11: CPR by Loan Prepayment Phase, Year and Payoff Counts in the Past 12 Months



Source: Freddie Mac

Exhibit 12 shows CPRs and prepayment count by Freddie Mac SB-Deal (see Appendix for additional chart). Because the history is short and SB-Deals are more heterogenous compared with K-Deals, we observe an uneven, albeit generally downward trending prepayment history over time, but the most seasoned deals are slowing. Some of the unevenness can be attributed to large pools of loans in deals paying off, inflating an individual deal's CPR. However, in general, the longer the deal has been outstanding, the higher the prepayment rate.

Exhibit 12: CPR, Initial UPB and Loan Count of Payoffs by FRESB Deal

Deal	Initial UPB, $M	CPR	Paid off Loan count in the past 12 months	Deal	Initial UPB, $M	CPR	Paid off Loan count in the past 12 months
SB001	121	7%	2	SB053	568	24%	46
SB002	122	8%	3	SB054	539	12%	14
SB004	192	11%	5	SB055	608	16%	29
SB005	145	5%	1	SB056	565	10%	18
SB006	202	10%	3	SB057	578	14%	26
SB007	101	0%	0	SB058	624	11%	16
SB009	445	11%	9	SB059	626	10%	17
SB010	148	16%	5	SB060	625	9%	19
SB011	110	9%	2	SB061	616	12%	16
SB012	167	6%	2	SB062	625	13%	24
SB013	401	17%	8	SB063	531	12%	21
SB014	310	21%	8	SB064	443	5%	10
SB015	302	18%	9	SB065	615	7%	12

Deal	Initial UPB, M $	CPR	Paid off Loan count in the past 12 months	Deal	Initial UPB, M $	CPR	Paid off Loan count in the past 12 months
SB016	350	24%	11	SB066	575	6%	12
SB017	387	19%	9	SB067	605	10%	16
SB018	118	14%	2	SB068	537	5%	9
SB020	293	8%	9	SB069	460	8%	13
SB021	94	11%	2	SB070	414	10%	15
SB022	255	17%	9	SB071	423	10%	12
SB023	342	23%	8	SB072	381	6%	10
SB024	259	10%	6	SB073	333	11%	11
SB025	233	21%	10	SB074	419	8%	13
SB026	221	14%	5	SB075	494	2%	6
SB027	246	18%	7	SB076	432	4%	8
SB028	323	8%	9	SB077	426	5%	5
SB029	217	9%	5	SB078	411	5%	7
SB030	307	3%	2	SB079	410	3%	4
SB031	264	13%	9	SB080	405	5%	10
SB032	322	10%	9	SB081	323	8%	9
SB033	221	16%	6	SB082	450	10%	18
SB034	328	14%	7	SB083	401	2%	3
SB035	317	17%	9	SB084	403	7%	9
SB036	351	20%	16	SB085	428	5%	7
SB037	317	18%	21	SB086	414	5%	6
SB038	259	18%	16	SB087	430	5%	8
SB039	264	12%	4	SB088	426	5%	7
SB040	294	24%	23	SB089	426	5%	6
SB041	312	11%	7	SB090	450	1%	1
SB042	288	24%	23	SB092	425	2%	4
SB043	326	24%	19	SB093	390	4%	6
SB044	321	10%	7	SB099	422	1%	3
SB045	403	22%	24	SB100	446	1%	4
SB046	495	16%	22	SB101	417	2%	5
SB047	553	23%	34	SB102	476	0%	1
SB048	561	15%	20	SB103	440	0%	1
SB049	569	12%	12	SB104	381	0%	0
SB050	506	20%	32	SB105	417	0%	0
SB051	509	8%	13	SB106	455	0%	0
SB052	564	15%	28				

Source: Freddie Mac

Summary

There are many factors that drive prepayment behavior, some of which are idiosyncratic. Typically, as loans season and property values increase, the prepayment rates increase. Additionally, 5- and 7-year hybrid loans started to convert in 2020 and 2022, respectively, which could lead to a higher level of prepayment activity. This is because most prepayments were made on seasoned loans, while recently originated loans are still unable to prepay. However, the higher interest rates and lower property values slowed down prepayment activity, which was observed in the last few months of 2022 and has slowed prepayments markedly into 2023.

Appendix: CPR by FRESB Deal in the Past 12 Months