

Model Performance

The Seasonality of the Witch

by Dan Szakallas

Prepayments slowed in September, as expected. Speeds for FNMA 15-year 4.5's to 7.0's fell between 9% and 13%, which is right in line with the 10-12% drop we predicted last month. Drops for FNMA 30-yr 5.0's to 6.5's also fell between 10-12% from August. We saw similar drops for the FHLMC coupon stack, with 4.5's leading the way with a decrease of 15.0% from August. GNMA's also experienced significant drops in September, most notably in the 4.5's, where speeds dropped 23%. The GNMA premium sector showed sizeable drops as well, as 6.5's to 8.0's fell anywhere between 12% and 22%. Below, we show actual pool CPR speeds of selected coupon buckets along with corresponding model forecasts.

v4.3.4a

	FNMA 15			FNMA 30			FHLMC 15		
Coupon	Actual	Model	Current Balance	Actual	Model	Current Balance	Actual	Model	Current Balance
4.0	6.55	10.19	\$26,013,381,084	6.83	5.36	\$547,219,688	6.56	10.12	\$39,886,087,190
4.5	7.64	10.31	\$103,119,799,675	6.03	4.95	\$39,900,904,451	7.31	10.21	\$127,629,205,000
5.0	9.49	10.52	\$107,314,570,034	7.8	4.63	\$331,716,572,406	8.82	10.78	\$126,682,394,163
5.5	10.78	10.53	\$43,555,232,517	10.05	6.21	\$437,166,609,547	9.97	12.25	\$55,006,666,786
6.0	12.9	12.4	\$23,536,113,781	11.76	9.93	\$231,676,850,077	12.66	14.97	\$25,988,147,036
6.5	15.9	17.15	\$6,919,510,319	15.69	13.49	\$90,106,587,739	15.86	18.94	\$7,470,100,686
7.0	16.2	20.21	\$2,232,587,838	22.61	21.08	\$25,923,650,908	18.44	22.64	\$2,535,033,006
7.5	18.6	22.02	\$824,686,764	19.73	25.19	\$7,429,406,612	17.73	25.15	\$1,042,279,191
8.0	19.72	24.16	\$287,906,562	21.09	29.74	\$3,405,674,351	18.94	27.62	\$333,255,172

	FHLMC 30			GNMA 15			GNMA 30		
Coupon	Actual	Model	Current Balance	Actual	Model	Current Balance	Actual	Model	Current Balance
4.0	7.58	5.34	\$539,000,132	11.12	7.46	\$1,050,562,493	17.81	5.49	\$2,366,320,619
4.5	5.35	4.03	\$44,462,669,756	11.2	7.42	\$3,772,317,154	12.25	5.81	\$9,144,634,303
5.0	7	4	\$361,463,614,932	11.92	8.18	\$6,253,314,387	11.62	6.15	\$65,886,594,425
5.5	8.98	5.1	\$396,453,289,481	12.52	8.68	\$2,721,543,223	13.17	10.82	\$109,978,540,494
6.0	9.88	7.3	\$211,381,372,599	14.57	11.42	\$1,805,581,956	13.58	12.8	\$69,183,791,361
6.5	14.81	12.01	\$81,027,671,849	18.24	13.19	\$773,395,516	16.33	16.48	\$27,592,106,077
7.0	19.17	16.39	\$19,255,786,067	17.49	14.18	\$467,721,059	19.16	18.5	\$11,812,095,600
7.5	18.11	22.14	\$6,576,937,461	16.28	17.46	\$178,783,883	18.55	20.91	\$4,800,569,826
8.0	18.31	27.16	\$3,103,482,860	19.93	20.91	\$92,228,871	19.2	28.34	\$2,911,364,353

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4.5	5.35	7.21	\$44,462,669,756	11.2	10.66	\$3,772,317,154	12.25	8.46	\$9,144,634,303
5.0	7	8.47	\$361,463,614,932	11.92	11.87	\$6,253,314,387	11.62	11.23	\$65,886,594,425
5.5	8.98	10.02	\$396,453,289,481	12.52	12.27	\$2,721,543,223	13.17	13.13	\$109,978,540,494
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In accordance with the seasonality effect, we expected to see a slowdown in prepayments in September and that is indeed what happened. The start of the school year tends to have a large effect on home sales, causing prepayments to dip from mid-summer levels. Looking at mortgage rates, we saw a 6-month low on 30-year rates in the first week of October, which we anticipate will create some refinancing activity to offset the continued drop in home sales due to seasonality. Most of these effects won't be seen until November, so for October we can expect prepayments to remain somewhat flat, with an estimated 5% increase or decrease, depending on the coupon class. We should see increases across the board in November.

I will devote next month's article to covering model performance on our new suite of ARM models released in version 5.2a of the Prepayment Model. In the piece, I intend to focus on FHLMC hybrid ARMs and take a look at model performance on both treasury and LIBOR-based products. Fixed-rate and hybrid products will be covered in upcoming issues as well.



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