

Appendix E: Econometric Results

Conditional Claim Rates		All Mortgages by Origination Fiscal Year																													
PolicyBook	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
1975	0.04	0.82	1.29	1.01	0.71	0.46	0.33	0.22	0.27	0.21	0.21	0.19	0.20	0.26	0.28	0.27	0.21	0.23	0.20	0.16	0.14	0.07	0.10	0.06	0.04	0.08	0.06	0.04	0.04	0.05	
1976	0.11	0.97	1.04	0.80	0.49	0.35	0.30	0.31	0.27	0.22	0.24	0.26	0.36	0.37	0.37	0.28	0.28	0.27	0.23	0.20	0.13	0.11	0.10	0.07	0.09	0.06	0.06	0.06	0.08	0.11	
1977	0.05	0.54	0.68	0.49	0.38	0.29	0.32	0.25	0.27	0.27	0.31	0.41	0.41	0.41	0.34	0.31	0.26	0.21	0.20	0.17	0.13	0.08	0.05	0.07	0.08	0.05	0.05	0.07	0.09	0.07	
1978	0.03	0.41	0.59	0.55	0.45	0.52	0.45	0.46	0.45	0.50	0.68	0.64	0.57	0.49	0.40	0.36	0.34	0.28	0.21	0.19	0.13	0.10	0.09	0.09	0.07	0.05	0.10	0.10	0.07	0.06	
1979	0.02	0.33	0.76	0.72	0.86	0.80	0.84	0.86	1.01	1.24	1.13	0.97	0.84	0.72	0.61	0.60	0.56	0.41	0.35	0.27	0.19	0.20	0.17	0.13	0.12	0.14	0.11	0.08	0.07	0.07	
1980	0.02	0.66	1.21	1.58	1.51	1.66	1.69	2.11	2.59	2.22	1.78	1.50	1.35	1.30	1.25	1.14	0.74	0.67	0.59	0.43	0.41	0.39	0.27	0.18	0.19	0.11	0.09	0.08	0.08	0.09	
1981	0.08	1.39	3.31	3.36	3.75	3.75	4.90	5.59	4.12	3.22	2.59	2.23	2.06	1.94	1.89	1.33	1.25	1.22	0.90	0.79	0.62	0.48	0.52	0.27	0.15	0.10	0.08	0.08	0.10	0.10	
1982	0.14	2.17	4.56	5.81	6.84	8.96	10.03	7.13	4.77	3.78	3.42	2.81	2.97	2.72	2.00	2.02	2.01	1.34	1.18	0.80	1.30	1.13	0.66	0.21	0.13	0.09	0.09	0.11	0.11	0.12	
1983	0.02	0.53	1.65	2.33	3.56	5.23	4.60	3.30	2.76	2.55	2.30	2.40	2.20	1.55	1.55	1.46	1.42	1.20	1.12	0.70	0.78	0.66	0.28	0.17	0.11	0.09	0.10	0.10	0.11	0.11	
1984	0.04	1.09	2.96	4.93	7.02	6.09	4.34	3.31	2.95	2.54	2.51	2.15	1.73	1.57	1.24	1.08	1.00	0.76	0.53	0.40	0.42	0.33	0.21	0.13	0.10	0.09	0.09	0.10	0.10	0.11	
1985	0.03	0.90	3.26	5.74	5.19	3.96	3.33	2.97	2.86	2.70	2.51	1.81	1.71	1.49	1.06	1.06	0.75	0.58	0.43	0.48	0.45	0.28	0.17	0.13	0.11	0.09	0.09	0.09	0.09	0.09	
1986	0.01	0.47	1.74	2.18	2.03	1.87	1.69	1.56	1.70	1.72	1.40	1.33	1.15	1.00	0.85	0.60	0.51	0.45	0.44	0.32	0.18	0.11	0.08	0.07	0.05	0.03	0.03	0.03	0.03	0.03	
1987	0.01	0.37	1.07	1.30	1.34	1.33	1.24	1.34	1.31	1.11	1.11	0.99	0.89	0.77	0.46	0.42	0.44	0.45	0.31	0.17	0.10	0.07	0.06	0.04	0.03	0.02	0.02	0.02	0.02	0.03	
1988	0.01	0.44	1.23	1.64	1.87	1.84	2.10	2.19	1.80	1.73	1.57	1.44	1.21	0.80	0.68	0.62	0.70	0.47	0.27	0.18	0.12	0.09	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.03	
1989	0.02	0.38	1.20	1.68	1.92	2.38	2.52	2.10	1.98	1.67	1.51	1.35	0.87	0.76	0.70	0.86	0.64	0.37	0.23	0.16	0.12	0.09	0.06	0.05	0.04	0.03	0.03	0.03	0.03	0.03	
1990	0.01	0.33	1.15	1.70	2.25	2.41	1.97	1.97	1.72	1.52	1.33	0.91	0.73	0.74	0.85	0.78	0.46	0.28	0.20	0.15	0.11	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	
1991	0.01	0.34	1.16	1.86	2.23	1.92	2.01	1.79	1.56	1.44	0.92	0.79	0.73	0.96	0.86	0.52	0.34	0.24	0.18	0.13	0.08	0.06	0.05	0.04	0.03	0.03	0.02	0.02	0.03	0.03	
1992	0.01	0.22	0.77	1.19	1.25	1.50	1.45	1.34	1.17	0.82	0.68	0.60	0.83	0.74	0.47	0.31	0.23	0.17	0.12	0.09	0.07	0.05	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	
1993	0.00	0.16	0.57	0.87	1.23	1.21	1.08	0.95	0.61	0.50	0.48	0.68	0.59	0.38	0.24	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	
1994	0.00	0.21	0.68	1.14	1.36	1.25	1.02	0.68	0.58	0.53	0.69	0.60	0.38	0.27	0.21	0.17	0.13	0.10	0.07	0.06	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
1995	0.01	0.30	1.30	2.18	2.49	2.29	1.69	1.45	1.71	1.54	1.10	0.71	0.50	0.37	0.31	0.25	0.18	0.14	0.11	0.09	0.07	0.06	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	
1996	0.00	0.30	1.32	2.13	2.20	1.67	1.49	1.69	1.97	1.63	1.16	0.84	0.62	0.52	0.43	0.34	0.28	0.22	0.17	0.13	0.10	0.08	0.06	0.05	0.04	0.03	0.03	0.03	0.03	0.03	
1997	0.01	0.40	1.50	2.28	2.00	2.03	2.29	2.47	1.90	1.35	1.13	0.80	0.66	0.57	0.45	0.37	0.32	0.25	0.20	0.15	0.12	0.10	0.07	0.06	0.05	0.04	0.03	0.03	0.03	0.03	
1998	0.01	0.33	1.14	1.32	1.44	1.75	2.06	1.58	1.06	0.81	0.69	0.61	0.50	0.41	0.35	0.29	0.23	0.18	0.13	0.10	0.08	0.06	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.02	
1999	0.01	0.32	0.89	1.33	1.93	2.31	1.65	1.08	0.79	0.68	0.62	0.51	0.43	0.36	0.31	0.25	0.19	0.15	0.11	0.08	0.06	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	
2000	0.01	0.51	2.04	4.03	4.77	3.14	2.11	1.54	1.12	1.04	0.89	0.72	0.61	0.52	0.44	0.36	0.29	0.22	0.17	0.13	0.10	0.08	0.06	0.05	0.04	0.03	0.03	0.03	0.03	0.03	
2001	0.01	0.47	1.96	3.42	2.50	1.82	1.21	0.92	0.80	0.70	0.63	0.55	0.47	0.39	0.33	0.27	0.22	0.17	0.13	0.09	0.07	0.05	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	
2002	0.01	0.50	2.01	1.99	1.62	1.37	1.04	0.82	0.68	0.60	0.55	0.47	0.39	0.32	0.27	0.23	0.18	0.14	0.10	0.08	0.06	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	
2003	0.01	0.50	1.16	1.16	1.04	0.87	0.73	0.56	0.46	0.42	0.39	0.32	0.27	0.23	0.20	0.17	0.13	0.10	0.07	0.05	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
2004	0.03	0.80	1.57	1.68	1.47	1.27	0.99	0.75	0.57	0.45	0.37	0.32	0.27	0.23	0.20	0.16	0.13	0.10	0.07	0.05	0.04	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.02	
2005	0.06	0.90	1.69	1.72	1.55	1.26	1.00	0.79	0.58	0.43	0.37	0.32	0.27	0.23	0.19	0.16	0.13	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	
2006	0.05	0.71	1.41	1.55	1.37	1.17	0.94	0.72	0.51	0.41	0.37	0.31	0.27	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	
2007	0.04	0.62	1.30	1.38	1.30	1.13	0.91	0.67	0.49	0.41	0.37	0.31	0.26	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	
2008	0.04	0.59	1.17	1.34	1.28	1.12	0.87	0.66	0.49	0.41	0.37	0.31	0.26	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	
2009	0.04	0.53	1.15	1.32	1.27	1.08	0.86	0.65	0.48	0.41	0.37	0.31	0.26	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	
2010	0.03	0.52	1.12	1.31	1.24	1.08	0.86	0.64	0.48	0.41	0.37	0.31	0.26	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	
2011	0.03	0.52	1.12	1.28	1.24	1.08	0.86	0.64	0.48	0.41	0.37	0.31	0.26	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	

Conditional Prepayment Rates			All Mortgages by Origination Fiscal Year																													
PolicyBook	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
1975	0.17	1.94	7.33	11.12	10.14	5.11	2.74	1.31	3.49	3.56	3.77	6.25	8.28	6.23	5.67	6.08	5.92	8.06	10.88	12.10	10.43	9.94	10.55	13.44	14.91	19.16	13.53	17.41	22.37	18.93		
1976	0.29	3.49	8.62	9.25	4.90	2.51	1.06	3.40	3.49	3.77	6.43	8.31	6.21	5.70	5.89	5.93	7.87	10.95	11.99	8.38	11.62	10.28	12.75	15.03	12.95	18.61	16.09	19.26	18.11	13.29		
1977	0.38	3.35	6.38	3.68	1.90	0.83	2.81	2.89	3.31	6.08	8.07	6.07	5.58	5.86	5.65	7.76	10.36	12.00	8.14	10.21	11.63	12.97	14.83	12.02	13.30	19.44	19.04	18.83	13.66	9.21		
1978	0.34	2.35	2.02	1.33	0.88	2.03	2.13	2.46	5.61	8.30	6.16	5.76	6.05	5.93	8.31	12.43	14.57	8.43	10.91	10.91	14.52	15.87	11.79	12.42	16.60	21.76	18.60	17.53	11.96	11.43		
1979	0.23	0.62	0.64	0.47	1.33	1.55	1.95	5.08	8.57	6.28	5.97	6.37	6.27	11.12	17.74	19.34	9.13	11.87	11.46	15.04	18.12	11.98	12.59	15.61	19.18	22.37	19.48	17.49	14.88	11.77		
1980	0.30	0.78	0.32	1.75	2.03	2.78	11.21	17.17	8.57	7.01	7.95	9.23	17.39	20.76	21.93	10.32	12.85	12.07	15.36	17.58	13.52	11.99	15.17	17.73	18.98	20.62	17.54	15.45	11.74	6.95		
1981	0.20	0.46	9.06	5.70	7.61	23.93	26.38	12.40	9.35	9.18	9.89	14.96	17.62	19.65	10.02	12.71	11.82	14.83	19.77	12.31	14.95	13.02	14.27	17.25	20.73	20.44	18.09	14.19	8.41	7.02		
1982	0.39	19.67	10.47	14.27	33.39	32.49	16.89	13.00	11.19	11.00	14.34	15.77	17.98	10.12	11.79	16.20	15.64	22.78	13.61	12.93	16.78	11.37	15.47	18.17	18.41	18.36	14.91	9.17	7.73	6.50		
1983	0.29	0.94	2.27	18.20	28.02	12.01	9.48	11.34	13.77	23.11	24.52	26.47	12.22	14.94	14.66	29.18	22.65	13.09	12.38	16.21	18.89	17.48	19.42	19.76	20.10	18.62	12.27	10.45	8.88	7.56		
1984	0.21	1.46	19.18	26.27	12.05	9.79	10.72	11.33	17.73	19.24	20.70	9.00	10.53	9.74	11.22	20.45	6.66	6.29	6.83	7.21	15.07	21.30	21.71	22.05	20.74	15.48	13.51	11.49	9.79	8.27		
1985	0.30	11.16	23.23	10.63	8.64	10.56	12.51	21.72	23.11	22.56	8.71	10.34	9.33	10.56	11.48	17.31	6.36	8.35	6.50	13.30	20.55	20.83	21.07	19.63	14.90	14.77	13.00	11.08	9.30	7.66		
1986	0.52	3.83	2.85	3.37	4.74	5.81	14.66	26.12	25.11	7.85	11.80	10.15	15.35	16.84	9.87	19.02	14.43	16.08	15.46	19.12	19.93	19.96	18.70	11.76	11.49	11.57	10.48	9.66	8.05	6.87		
1987	0.27	1.09	1.86	3.03	3.63	8.65	19.49	20.90	6.82	10.47	9.19	15.29	17.74	9.96	13.01	22.11	20.89	17.27	18.01	17.07	17.69	15.85	8.78	8.48	8.59	8.54	8.06	6.86	5.95	5.18		
1988	0.39	1.57	3.21	4.79	14.05	26.01	25.25	7.96	11.90	10.12	15.21	16.81	10.01	11.77	15.35	20.74	15.01	16.50	16.45	16.65	15.30	10.84	10.24	10.01	10.21	10.94	9.37	7.99	6.85	5.89		
1989	0.46	2.07	4.20	14.80	28.18	27.27	8.32	12.23	10.18	15.80	17.52	9.98	11.85	16.01	17.39	20.12	16.75	16.36	17.10	15.85	11.11	10.21	10.05	10.32	11.14	10.83	9.53	8.12	6.94	5.92		
1990	0.39	2.11	9.68	29.13	29.05	8.39	12.68	10.21	16.44	18.46	10.17	12.51	17.52	19.54	17.60	15.94	16.01	16.52	15.41	9.58	8.87	8.70	9.08	10.27	10.24	10.19	8.98	7.66	6.53	5.56		
1991	0.38	5.61	25.11	28.74	7.95	12.83	10.57	17.57	19.76	10.42	13.87	19.20	22.15	18.59	17.26	14.93	15.76	14.20	8.30	8.07	8.21	8.44	9.21	9.08	9.17	9.04	7.92	6.76	5.77	4.93		
1992	0.61	8.79	16.37	6.80	11.54	10.17	18.33	21.23	10.87	15.78	21.83	28.00	21.45	17.24	13.81	13.12	10.78	5.96	5.80	5.86	5.83	6.21	6.07	6.04	6.01	5.89	5.22	4.52	3.92	3.41		
1993	1.34	6.57	4.95	8.64	8.37	14.43	18.22	10.30	15.55	23.00	34.33	24.99	18.18	13.49	13.72	9.16	4.31	3.94	3.71	3.65	4.11	4.12	4.10	4.09	4.08	4.02	3.63	3.20	2.83	2.52		
1994	0.97	3.11	7.17	7.55	12.94	15.60	9.83	14.46	20.27	32.13	24.29	16.78	11.71	12.17	8.91	3.92	3.82	3.70	3.61	3.87	3.78	3.73	3.70	3.67	3.66	3.56	3.19	2.83	2.53	2.27		
1995	1.71	8.99	9.09	19.66	19.64	10.31	16.79	22.65	29.91	24.28	18.14	14.24	14.92	11.42	6.56	5.85	5.76	5.66	6.15	5.92	5.81	5.73	5.67	5.61	5.57	5.43	4.81	4.14	3.58	3.10		
1996	0.62	3.96	16.54	19.06	9.69	16.76	22.96	32.45	30.53	25.85	19.33	20.76	15.65	8.84	7.85	6.74	6.55	7.11	6.84	6.70	6.60	6.54	6.50	6.49	6.48	6.34	5.57	4.78	4.11	3.54		
1997	0.89	12.93	21.79	10.50	19.58	23.35	31.33	28.67	24.80	19.50	21.82	16.72	10.43	9.55	8.90	7.85	8.47	7.93	7.63	7.39	7.21	7.07	6.96	6.87	6.81	6.63	5.87	5.07	4.38	3.79		
1998	1.73	9.44	7.27	14.89	21.93	36.54	32.14	24.96	17.85	19.69	14.52	7.98	6.94	6.35	5.83	5.30	5.02	4.94	4.92	4.92	4.93	4.97	5.01	5.07	5.12	5.09	4.50	3.85	3.30	2.83		
1999	0.94	3.46	11.90	20.35	35.80	31.40	23.60	17.03	19.16	14.30	7.78	6.85	6.22	5.70	5.43	4.63	4.54	4.53	4.53	4.55	4.58	4.63	4.69	4.75	4.81	4.74	4.15	3.57	3.08	2.66		
2000	0.87	25.07	31.60	34.67	31.30	29.46	24.16	27.71	23.50	14.02	12.17	11.35	10.45	10.51	9.54	8.53	8.35	8.24	8.17	8.14	8.13	8.14	8.17	8.22	8.27	8.10	7.09	6.06	5.17	4.42		
2001	4.88	19.77	41.63	34.78	26.96	18.64	21.24	16.73	9.37	8.34	7.79	7.21	6.91	6.35	5.77	5.05	4.85	4.85	4.87	4.89	4.92	4.98	5.04	5.11	5.18	5.17	4.60	3.95	3.41	2.94		
2002	4.02	33.81	29.47	21.59	14.80	16.46	13.06	8.57	8.45	8.08	7.56	7.20	6.52	5.88	5.33	4.56	4.38	4.34	4.32	4.31	4.32	4.35	4.40	4.45	4.50	4.45	3.95	3.42	2.97	2.59		
2003	7.00	14.55	13.47	11.86	12.08	10.62	7.70	8.07	7.79	7.42	7.20	6.64	5.94	5.33	4.78	4.05	3.84	3.75	3.68	3.62	3.59	3.61	3.65	3.68	3.73	3.70	3.37	3.02	2.71	2.45		
2004	4.02	9.57	9.57	10.89	9.43	6.64	6.82	7.09	7.03	7.05	6.65	6.00	5.37	4.82	4.34	3.78	3.64	3.58	3.54	3.52	3.51	3.54	3.59	3.63	3.68	3.66	3.28	2.88	2.53	2.23		
2005	2.76	6.69	9.08	8.81	6.18	5.71	5.83	6.01	6.33	6.07	5.68	5.15	4.65	4.22	3.83	3.42	3.37	3.37	3.38	3.40	3.42	3.47	3.52	3.58	3.63	3.61	3.18	2.73	2.35	2.02		
2006	2.39	7.11	8.01	6.35	5.82	5.65	5.70	6.07	6.10	5.85	5.43	4.94	4.48	4.08	3.72	3.34	3.30	3.31	3.34	3.37	3.40	3.45	3.51	3.56	3.62	3.59	3.16	2.70	2.31	1.98		
2007	2.39	6.00	5.76	5.81	5.74	5.54	5.73	5.82	5.92	5.64	5.24	4.77	4.35	3.97	3.63	3.27	3.25	3.27	3.30	3.34	3.38	3.44	3.49	3.55	3.61	3.58	3.15	2.68	2.28	1.94		
2008	1.86	4.25	5.16	5.78	5.78	5.73	5.62	5.81	5.90	5.62	5.22	4.76	4.34	3.96	3.62	3.27	3.25	3.27	3.30	3.34	3.38	3.44	3.49	3.55	3.61	3.58	3.15	2.68	2.28	1.94		
2009	1.40	3.85	5.08	5.85	6.02	5.62	5.61	5.81	5.90	5.61	5.20	4.75	4.33	3.95	3.62	3.26	3.24	3.27	3.30	3.34	3.39	3.44	3.49	3.55	3.61	3.58	3.15	2.68	2.28	1.94		
2010	1.30	3.81	5.15	6.09	5.89	5.59	5.60	5.80	5.88	5.59	5.19	4.74	4.32	3.95	3.61	3.26	3.24	3.27	3.30	3.34	3.38	3.44	3.49	3.55	3.61	3.58	3.15	2.68	2.28	1.94		
2011	1.29	3.83	5.32	5.94	5.85	5.56	5.57	5.77	5.85	5.57	5.18	4.73	4.31	3.94	3.61	3.26	3.24	3.27	3.30	3.34	3.38	3.44	3.49	3.55	3.61	3.58	3.15	2.68	2.28	1.94		

Cumulative Claim Rates			All Mortgages by Origination Fiscal Year																													
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
1975	0.04	0.86	2.11	3.00	3.55	3.87	4.08	4.23	4.40	4.53	4.65	4.75	4.86	4.98	5.11	5.22	5.30	5.39	5.46	5.50	5.54	5.56	5.58	5.59	5.60	5.61	5.62	5.62	5.62	5.63		
1976	0.11	1.07	2.06	2.74	3.12	3.38	3.59	3.80	3.98	4.13	4.28	4.43	4.62	4.80	4.97	5.09	5.21	5.31	5.38	5.44	5.48	5.50	5.53	5.54	5.55	5.56	5.57	5.57	5.58	5.59		
1977	0.05	0.58	1.24	1.67	1.99	2.24	2.50	2.70	2.91	3.11	3.33	3.59	3.84	4.07	4.24	4.40	4.52	4.60	4.67	4.73	4.77	4.79	4.80	4.81	4.83	4.83	4.84	4.85	4.85	4.86		
1978	0.03	0.44	1.00	1.53	1.94	2.41	2.81	3.21	3.59	3.99	4.48	4.91	5.27	5.56	5.79	5.97	6.11	6.22	6.29	6.35	6.38	6.41	6.42	6.44	6.45	6.46	6.46	6.47	6.48	6.48		
1979	0.02	0.35	1.10	1.80	2.62	3.38	4.15	4.93	5.78	6.72	7.51	8.15	8.66	9.06	9.36	9.60	9.79	9.91	9.99	10.05	10.09	10.12	10.15	10.16	10.17	10.18	10.19	10.20	10.20	10.20		
1980	0.02	0.68	1.87	3.40	4.81	6.31	7.76	9.34	10.91	12.11	12.98	13.64	14.17	14.59	14.90	15.12	15.24	15.34	15.42	15.46	15.50	15.53	15.55	15.56	15.56	15.57	15.57	15.57	15.57	15.58		
1981	0.08	1.47	4.70	7.58	10.51	13.10	15.55	17.47	18.63	19.42	19.97	20.39	20.71	20.95	21.13	21.25	21.34	21.42	21.47	21.50	21.52	21.54	21.55	21.56	21.56	21.56	21.56	21.56	21.57	21.57		
1982	0.14	2.30	5.84	9.67	13.28	16.11	17.97	18.93	19.44	19.79	20.05	20.23	20.38	20.49	20.57	20.63	20.68	20.71	20.72	20.73	20.75	20.76	20.77	20.77	20.77	20.77	20.77	20.77	20.77	20.77		
1983	0.02	0.55	2.17	4.37	7.03	9.72	11.67	12.87	13.73	14.40	14.84	15.18	15.40	15.54	15.65	15.74	15.80	15.83	15.86	15.88	15.90	15.91	15.91	15.91	15.91	15.91	15.91	15.91	15.91	15.91		
1984	0.04	1.13	4.01	7.74	11.40	13.96	15.50	16.49	17.25	17.77	18.17	18.43	18.62	18.77	18.88	18.96	19.02	19.06	19.08	19.10	19.12	19.13	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.15		
1985	0.03	0.92	3.78	7.48	10.27	12.11	13.44	14.43	15.15	15.65	16.00	16.23	16.41	16.56	16.65	16.72	16.77	16.80	16.82	16.85	16.87	16.87	16.88	16.88	16.88	16.88	16.88	16.89	16.89	16.89		
1986	0.01	0.48	2.13	4.11	5.85	7.35	8.59	9.56	10.32	10.88	11.29	11.63	11.89	12.08	12.22	12.30	12.36	12.40	12.43	12.46	12.46	12.47	12.47	12.47	12.48	12.48	12.48	12.48	12.48	12.48		
1987	0.01	0.38	1.43	2.67	3.90	5.05	6.01	6.84	7.47	7.96	8.39	8.74	9.00	9.18	9.28	9.36	9.42	9.47	9.50	9.51	9.52	9.52	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53		
1988	0.01	0.45	1.65	3.18	4.81	6.16	7.27	8.11	8.74	9.25	9.66	9.98	10.20	10.32	10.42	10.49	10.55	10.59	10.61	10.62	10.62	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63		
1989	0.02	0.40	1.56	3.10	4.58	5.85	6.80	7.51	8.08	8.50	8.82	9.04	9.17	9.27	9.35	9.43	9.47	9.49	9.51	9.51	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.52	9.53		
1990	0.01	0.34	1.45	2.93	4.27	5.27	5.99	6.61	7.08	7.42	7.66	7.81	7.91	7.99	8.07	8.12	8.15	8.17	8.18	8.18	8.18	8.19	8.19	8.19	8.19	8.19	8.19	8.19	8.19	8.19		
1991	0.01	0.34	1.44	2.72	3.79	4.62	5.35	5.93	6.33	6.62	6.79	6.91	7.00	7.09	7.15	7.19	7.20	7.22	7.22	7.22	7.23	7.23	7.23	7.23	7.23	7.23	7.24	7.24	7.24	7.24		
1992	0.01	0.22	0.92	1.81	2.67	3.57	4.34	4.91	5.30	5.54	5.70	5.81	5.93	6.00	6.04	6.07	6.08	6.09	6.10	6.10	6.10	6.11	6.11	6.11	6.11	6.11	6.11	6.11	6.11	6.11		
1993	0.00	0.16	0.68	1.44	2.41	3.27	3.91	4.37	4.63	4.81	4.94	5.07	5.14	5.19	5.21	5.22	5.24	5.24	5.25	5.25	5.26	5.26	5.26	5.26	5.26	5.26	5.27	5.27	5.27	5.27		
1994	0.00	0.21	0.85	1.86	2.96	3.82	4.40	4.75	5.00	5.19	5.34	5.45	5.50	5.54	5.56	5.58	5.59	5.60	5.61	5.61	5.61	5.62	5.62	5.62	5.62	5.62	5.62	5.63	5.63	5.63		
1995	0.01	0.31	1.47	3.21	4.76	5.87	6.59	7.09	7.54	7.82	7.97	8.04	8.09	8.12	8.14	8.15	8.17	8.17	8.18	8.18	8.19	8.19	8.19	8.19	8.19	8.19	8.20	8.20	8.20	8.20		
1996	0.00	0.31	1.56	3.23	4.58	5.49	6.15	6.71	7.15	7.39	7.52	7.59	7.63	7.66	7.68	7.70	7.71	7.72	7.72	7.73	7.73	7.73	7.74	7.74	7.74	7.74	7.74	7.74	7.74	7.74		
1997	0.01	0.40	1.68	3.18	4.33	5.25	6.02	6.57	6.86	7.01	7.11	7.17	7.21	7.24	7.26	7.27	7.28	7.29	7.30	7.30	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.32	7.32		
1998	0.01	0.33	1.34	2.41	3.39	4.30	4.96	5.30	5.46	5.56	5.63	5.69	5.72	5.75	5.78	5.80	5.81	5.82	5.83	5.83	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.85	5.85		
1999	0.01	0.33	1.18	2.29	3.55	4.48	4.93	5.14	5.28	5.36	5.43	5.49	5.53	5.56	5.58	5.60	5.62	5.63	5.64	5.64	5.65	5.65	5.65	5.65	5.65	5.65	5.66	5.66	5.66	5.66		
2000	0.01	0.52	2.02	3.99	5.42	6.02	6.30	6.44	6.52	6.57	6.61	6.64	6.66	6.67	6.69	6.69	6.70	6.70	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.72	6.72	6.72		
2001	0.01	0.46	1.94	3.41	4.07	4.41	4.59	4.69	4.77	4.83	4.88	4.92	4.95	4.97	4.99	5.00	5.02	5.02	5.03	5.03	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.05		
2002	0.01	0.49	1.76	2.61	3.15	3.53	3.76	3.92	4.04	4.14	4.22	4.28	4.33	4.37	4.40	4.42	4.44	4.45	4.46	4.47	4.47	4.47	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.49		
2003	0.01	0.47	1.39	2.17	2.78	3.22	3.55	3.78	3.95	4.10	4.23	4.32	4.39	4.45	4.50	4.54	4.57	4.59	4.61	4.62	4.62	4.63	4.63	4.64	4.64	4.64	4.65	4.65	4.65	4.65		
2004	0.03	0.79	2.14	3.43	4.41	5.17	5.71	6.09	6.35	6.55	6.70	6.82	6.91	6.98	7.05	7.09	7.13	7.16	7.18	7.19	7.20	7.21	7.21	7.22	7.22	7.22	7.23	7.23	7.23	7.24		
2005	0.06	0.94	2.46	3.84	4.95	5.78	6.39	6.84	7.16	7.37	7.54	7.68	7.79	7.88	7.95	8.01	8.05	8.09	8.11	8.12	8.14	8.15	8.15	8.16	8.16	8.17	8.17	8.17	8.17	8.18		
2006	0.05	0.75	2.02	3.28	4.31	5.13	5.74	6.18	6.47	6.69	6.87	7.02	7.13	7.23	7.30	7.36	7.41	7.44	7.47	7.49	7.50	7.51	7.52	7.52	7.53	7.53	7.53	7.54	7.54	7.54		
2007	0.04	0.64	1.83	3.00	4.02	4.85	5.47	5.89	6.19	6.42	6.61	6.76	6.89	6.99	7.07	7.13	7.18	7.22	7.24	7.26	7.28	7.29	7.29	7.30	7.30	7.31	7.31	7.31	7.32	7.32		
2008	0.04	0.62	1.71	2.89	3.93	4.77	5.39	5.82	6.12	6.35	6.55	6.71	6.84	6.94	7.02	7.09	7.14	7.18	7.21	7.23	7.24	7.25	7.26	7.26	7.27	7.27	7.28	7.28	7.28	7.29		
2009	0.04	0.56	1.64	2.81	3.85	4.68	5.29	5.72	6.02	6.26	6.46	6.62	6.75	6.85	6.94	7.00	7.05	7.09	7.12	7.14	7.15	7.16	7.17	7.18	7.18	7.19	7.19	7.19	7.20	7.20		
2010	0.03	0.55	1.61	2.77	3.78	4.60	5.21	5.63	5.93	6.17	6.37	6.53	6.66	6.76	6.85	6.91	6.97	7.00	7.03	7.05	7.07	7.08	7.08	7.09	7.09	7.10	7.10	7.10	7.11	7.11		
2011	0.03	0.54	1.60	2.73	3.74	4.56	5.17	5.60	5.90	6.14	6.34	6.50	6.63	6.73	6.82	6.89	6.94	6.97	7.00	7.02	7.04	7.05	7.06	7.06	7.07	7.07	7.07	7.08	7.08	7.08		

Cumulative Prepayment Rates		All Mortgages by Origination Fiscal Year																												
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1975	0.17	2.11	9.22	19.07	26.97	30.53	32.32	33.15	35.34	37.48	39.67	43.15	47.46	50.43	52.96	55.51	57.83	60.80	64.48	68.12	70.87	73.21	75.45	78.00	80.45	83.12	84.65	86.34	88.14	89.32
1976	0.29	3.77	11.97	19.93	23.72	25.56	26.31	28.69	31.05	33.50	37.51	42.35	45.65	48.49	51.24	53.84	57.07	61.20	65.22	67.68	70.80	73.24	75.95	78.74	80.77	83.32	85.11	86.90	88.27	89.08
1977	0.38	3.72	9.83	13.10	14.72	15.41	17.73	20.04	22.59	27.12	32.75	36.62	39.96	43.25	46.23	50.07	54.79	59.67	62.58	65.92	69.34	72.70	76.04	78.34	80.58	83.42	85.65	87.44	88.50	89.11
1978	0.34	2.68	4.63	5.88	6.69	8.55	10.45	12.58	17.30	23.87	28.31	32.19	35.99	39.47	44.04	50.27	56.65	59.79	63.50	66.79	70.69	74.33	76.60	78.71	81.17	83.87	85.67	87.05	87.82	88.47
1979	0.23	0.85	1.48	1.94	3.22	4.68	6.47	11.01	18.21	22.98	27.18	31.34	35.13	41.38	50.17	58.00	60.95	64.43	67.37	70.77	74.25	76.12	77.85	79.73	81.67	83.49	84.72	85.61	86.24	86.66
1980	0.30	1.07	1.39	3.08	4.98	7.49	17.15	30.04	35.23	39.01	42.89	46.97	53.82	60.46	65.93	67.91	70.09	71.86	73.83	75.72	76.91	77.82	78.83	79.83	80.70	81.47	81.99	82.37	82.61	82.74
1981	0.20	0.67	9.53	14.42	20.36	36.90	50.09	54.35	56.99	59.22	61.34	64.13	66.86	69.30	70.28	71.37	72.24	73.19	74.26	74.79	75.34	75.75	76.14	76.53	76.93	77.24	77.46	77.59	77.67	77.72
1982	0.39	19.95	28.10	37.52	55.15	65.41	68.53	70.28	71.49	72.49	73.60	74.60	75.53	75.94	76.36	76.86	77.25	77.72	77.94	78.11	78.30	78.41	78.54	78.67	78.77	78.86	78.91	78.94	78.96	78.98
1983	0.29	1.23	3.46	20.63	41.65	47.81	51.84	55.98	60.26	66.27	71.01	74.76	75.99	77.27	78.33	80.09	81.03	81.45	81.78	82.17	82.53	82.81	83.06	83.26	83.43	83.55	83.62	83.67	83.70	83.73
1984	0.21	1.67	20.31	40.20	46.47	50.60	54.40	57.81	62.36	66.28	69.58	70.69	71.83	72.76	73.71	75.23	75.62	75.95	76.29	76.63	77.27	78.04	78.65	79.14	79.50	79.71	79.86	79.98	80.06	80.13
1985	0.30	11.43	31.79	38.64	43.30	48.20	53.17	60.42	66.23	70.43	71.64	72.92	73.93	74.95	75.93	77.21	77.60	78.07	78.40	79.04	79.88	80.56	81.10	81.50	81.74	81.94	82.10	82.21	82.29	82.36
1986	0.52	4.33	7.05	10.11	14.18	18.82	29.64	45.77	56.99	59.56	63.05	65.65	69.14	72.33	73.87	76.52	78.13	79.66	80.89	82.16	83.24	84.09	84.74	85.07	85.35	85.60	85.80	85.97	86.09	86.19
1987	0.27	1.36	3.19	6.07	9.38	16.89	32.10	45.03	48.31	52.95	56.54	61.90	67.11	69.49	72.27	76.35	79.33	81.27	82.94	84.23	85.34	86.15	86.53	86.87	87.18	87.46	87.70	87.89	88.04	88.17
1988	0.39	1.96	5.09	9.56	21.81	40.90	54.27	57.33	61.44	64.46	68.46	72.14	73.93	75.79	77.92	80.34	81.72	82.99	84.05	84.94	85.62	86.03	86.37	86.67	86.94	87.21	87.41	87.57	87.69	87.79
1989	0.46	2.52	6.60	20.19	41.81	56.43	59.57	63.69	66.62	70.62	74.28	75.96	77.74	79.84	81.73	83.52	84.70	85.66	86.49	87.12	87.50	87.80	88.07	88.32	88.56	88.77	88.93	89.06	89.15	89.23
1990	0.39	2.49	11.90	37.14	54.55	58.01	62.66	65.86	70.39	74.55	76.38	78.38	80.80	83.00	84.59	85.76	86.74	87.58	88.24	88.58	88.87	89.13	89.37	89.62	89.84	90.04	90.20	90.33	90.42	90.50
1991	0.38	5.97	29.49	49.34	53.15	58.68	62.56	68.19	73.31	75.43	77.92	80.85	83.56	85.32	86.63	87.56	88.38	89.01	89.32	89.60	89.86	90.11	90.35	90.57	90.77	90.95	91.10	91.21	91.30	91.37
1992	0.61	9.34	24.14	29.24	37.19	43.31	53.05	62.09	65.68	70.26	75.54	80.79	83.67	85.46	86.64	87.60	88.28	88.62	88.92	89.22	89.49	89.76	90.01	90.25	90.47	90.67	90.84	90.97	91.09	91.18
1993	1.34	7.82	12.37	19.88	26.47	36.73	47.66	52.65	59.33	67.62	77.08	81.58	84.00	85.47	86.75	87.49	87.80	88.08	88.32	88.56	88.81	89.06	89.29	89.51	89.73	89.93	90.10	90.25	90.38	90.49
1994	0.97	4.05	10.91	17.57	28.00	38.77	44.42	51.82	60.63	71.67	77.29	80.20	81.88	83.42	84.40	84.80	85.16	85.51	85.83	86.16	86.47	86.77	87.05	87.32	87.58	87.82	88.03	88.21	88.36	88.50
1995	1.71	10.55	18.65	34.36	46.62	51.63	58.77	66.62	74.48	78.84	81.26	82.80	84.16	85.05	85.50	85.87	86.21	86.53	86.86	87.15	87.42	87.67	87.91	88.13	88.33	88.52	88.68	88.81	88.92	89.00
1996	0.62	4.55	20.29	35.18	41.15	50.25	60.41	71.26	77.99	81.83	83.91	85.69	86.74	87.24	87.64	87.96	88.24	88.53	88.79	89.02	89.23	89.43	89.62	89.79	89.95	90.10	90.22	90.31	90.39	90.46
1997	0.89	13.70	32.42	39.34	50.59	61.12	71.66	78.06	81.87	84.07	86.01	87.16	87.75	88.23	88.64	88.96	89.28	89.55	89.79	90.01	90.20	90.38	90.54	90.69	90.82	90.95	91.05	91.13	91.20	91.26
1998	1.73	11.00	17.45	29.55	44.47	63.53	73.87	79.15	81.93	84.41	85.86	86.54	87.08	87.54	87.93	88.26	88.56	88.84	89.10	89.35	89.59	89.82	90.03	90.24	90.44	90.63	90.79	90.92	91.03	91.12
1999	0.94	4.38	15.71	32.63	55.93	68.65	74.99	78.41	81.56	83.44	84.32	85.02	85.61	86.11	86.57	86.93	87.27	87.59	87.90	88.19	88.47	88.75	89.01	89.26	89.51	89.74	89.93	90.09	90.22	90.33
2000	0.87	25.72	49.03	66.00	75.40	81.05	84.17	86.81	88.40	89.11	89.63	90.06	90.40	90.71	90.96	91.16	91.34	91.50	91.65	91.78	91.91	92.02	92.12	92.22	92.31	92.39	92.45	92.50	92.54	92.57
2001	4.88	23.68	55.26	70.15	77.28	80.75	83.91	85.83	86.72	87.43	88.03	88.54	89.00	89.38	89.71	89.97	90.22	90.45	90.67	90.88	91.08	91.27	91.46	91.64	91.81	91.97	92.11	92.22	92.32	92.39
2002	4.02	36.46	55.04	64.37	69.26	73.80	76.76	78.43	79.92	81.22	82.32	83.29	84.10	84.78	85.36	85.83	86.26	86.66	87.04	87.41	87.76	88.10	88.43	88.74	89.05	89.34	89.58	89.78	89.95	90.10
2003	7.00	20.53	31.17	39.17	46.25	51.66	55.14	58.47	61.41	63.98	66.28	68.24	69.87	71.24	72.40	73.34	74.19	74.98	75.73	76.45	77.12	77.78	78.42	79.05	79.66	80.24	80.75	81.19	81.57	81.91
2004	4.02	13.20	21.43	29.75	36.05	40.01	43.74	47.33	50.60	53.64	56.28	58.51	60.37	61.95	63.30	64.42	65.45	66.44	67.37	68.27	69.13	69.97	70.79	71.59	72.37	73.11	73.76	74.31	74.77	75.17
2005	2.76	9.26	17.41	24.48	28.90	32.68	36.27	39.71	43.10	46.12	48.76	51.01	52.93	54.58	56.02	57.26	58.43	59.55	60.65	61.71	62.74	63.75	64.74	65.71	66.66	67.57	68.34	68.98	69.52	69.97
2006	2.39	9.32	16.53	21.70	26.07	30.01	33.70	37.38	40.82	43.91	46.59	48.89	50.86	52.58	54.07	55.36	56.59	57.78	58.94	60.07	61.18	62.26	63.32	64.36	65.37	66.35	67.17	67.86	68.43	68.90
2007	2.39	8.24	13.49	18.41	22.91	26.96	30.87	34.57	38.09	41.24	43.98	46.34	48.38	50.15	51.71	53.06	54.35	55.61	56.84	58.04	59.21	60.36	61.49	62.60	63.69	64.73	65.61	66.33	66.93	67.43
2008	1.86	6.03	10.85	15.90	20.60	24.92	28.87	32.68	36.31	39.55	42.37	44.80	46.91	48.74	50.34	51.73	53.07	54.37	55.64	56.88	58.10	59.29	60.46	61.61	62.73	63.81	64.72	65.46	66.09	66.60
2009	1.40	5.19	9.98	15.15	20.09	24.36	28.34	32.19	35.85	39.11	41.95	44.40	46.52	48.37	49.99	51.39	52.74	54.06	55.34	56.60	57.82	59.03	60.21	61.37	62.50	63.59	64.51	65.27	65.90	66.42
2010	1.30	5.06	9.92	15.31	20.13	24.39	28.36	32.21	35.87	39.12	41.96	44.41	46.53	48.38	50.00	51.40	52.75	54.07	55.36	56.61	57.84	59.05	60.23	61.39	62.53	63.62	64.54	65.30	65.93	66.45
2011	1.29	5.07	10.10	15.34	20.13	24.37	28.32	32.16	35.80	39.05	41.89	44.34	46.46	48.31	49.93	51.34	52.69	54.01	55.30	56.56	57.79	59.00	60.19	61.35	62.49	63.58	64.50	65.26	65.89	66.42

Conditional Claim Rates		Fixed Rate 30 Year Mortgages by Origination Fiscal Year																												
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1975	0.04	0.82	1.29	1.00	0.70	0.45	0.33	0.22	0.27	0.21	0.20	0.19	0.20	0.26	0.28	0.27	0.21	0.23	0.20	0.16	0.14	0.07	0.10	0.06	0.04	0.08	0.06	0.04	0.04	0.05
1976	0.11	0.97	1.03	0.79	0.49	0.34	0.29	0.30	0.27	0.22	0.24	0.26	0.35	0.37	0.37	0.28	0.28	0.27	0.23	0.20	0.13	0.11	0.10	0.07	0.09	0.06	0.06	0.06	0.08	0.11
1977	0.05	0.54	0.68	0.49	0.38	0.29	0.32	0.25	0.27	0.27	0.31	0.41	0.41	0.41	0.34	0.31	0.26	0.21	0.20	0.17	0.13	0.08	0.05	0.07	0.08	0.05	0.05	0.07	0.09	0.07
1978	0.03	0.41	0.59	0.55	0.45	0.52	0.45	0.46	0.45	0.50	0.68	0.64	0.57	0.50	0.40	0.36	0.34	0.28	0.21	0.19	0.13	0.10	0.09	0.09	0.07	0.05	0.10	0.10	0.07	0.06
1979	0.02	0.33	0.76	0.72	0.85	0.80	0.84	0.86	1.01	1.24	1.13	0.97	0.84	0.72	0.61	0.60	0.56	0.41	0.35	0.27	0.19	0.20	0.17	0.13	0.12	0.14	0.11	0.08	0.07	0.07
1980	0.02	0.66	1.21	1.58	1.51	1.66	1.69	2.11	2.59	2.22	1.78	1.50	1.35	1.30	1.25	1.14	0.74	0.67	0.59	0.43	0.41	0.39	0.27	0.18	0.19	0.11	0.09	0.08	0.08	0.09
1981	0.08	1.39	3.30	3.36	3.75	3.76	4.91	5.61	4.14	3.23	2.60	2.23	2.07	1.94	1.91	1.34	1.25	1.22	0.90	0.79	0.62	0.48	0.52	0.27	0.15	0.10	0.08	0.08	0.10	0.10
1982	0.14	2.18	4.57	5.83	6.88	9.04	10.15	7.23	4.87	3.85	3.50	2.88	3.07	2.82	2.08	2.10	1.99	1.34	1.13	0.80	1.30	1.13	0.66	0.21	0.13	0.09	0.09	0.11	0.11	0.12
1983	0.02	0.56	1.74	2.43	3.76	5.63	4.99	3.62	3.05	2.83	2.58	2.71	2.56	1.81	1.81	1.71	1.42	1.19	1.11	0.70	0.78	0.66	0.28	0.17	0.11	0.09	0.10	0.10	0.11	0.11
1984	0.04	1.14	3.09	5.19	7.41	6.50	4.67	3.59	3.22	2.79	2.77	2.37	1.91	1.77	1.38	1.19	1.00	0.76	0.53	0.40	0.42	0.33	0.21	0.13	0.10	0.09	0.09	0.10	0.10	0.11
1985	0.03	0.97	3.47	6.14	5.60	4.29	3.64	3.26	3.17	2.99	2.81	2.02	1.96	1.72	1.21	1.21	0.76	0.59	0.43	0.48	0.45	0.28	0.17	0.13	0.12	0.09	0.09	0.09	0.10	0.10
1986	0.01	0.51	1.89	2.34	2.18	2.00	1.81	1.69	1.85	1.89	1.55	1.47	1.28	1.12	0.94	0.66	0.52	0.45	0.45	0.33	0.18	0.12	0.09	0.07	0.05	0.03	0.03	0.03	0.03	0.03
1987	0.01	0.38	1.12	1.33	1.37	1.36	1.29	1.42	1.41	1.19	1.20	1.09	0.99	0.87	0.52	0.47	0.47	0.47	0.33	0.18	0.11	0.07	0.06	0.04	0.03	0.02	0.02	0.02	0.02	0.02
1988	0.01	0.42	1.19	1.60	1.84	1.86	2.19	2.32	1.91	1.86	1.68	1.58	1.32	0.88	0.75	0.69	0.73	0.50	0.29	0.18	0.13	0.10	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.03
1989	0.01	0.37	1.18	1.69	1.92	2.44	2.60	2.16	2.06	1.73	1.57	1.41	0.91	0.80	0.75	0.91	0.66	0.38	0.24	0.16	0.12	0.09	0.06	0.05	0.04	0.03	0.03	0.03	0.03	0.03
1990	0.01	0.33	1.15	1.73	2.31	2.47	2.01	2.04	1.78	1.59	1.38	0.96	0.77	0.78	0.91	0.82	0.46	0.29	0.20	0.15	0.11	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03
1991	0.01	0.35	1.22	1.96	2.38	2.03	2.10	1.86	1.63	1.51	0.99	0.87	0.80	1.05	0.95	0.57	0.35	0.25	0.19	0.13	0.08	0.06	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.03
1992	0.01	0.24	0.84	1.33	1.30	1.52	1.48	1.40	1.25	0.93	0.79	0.69	1.03	0.93	0.58	0.34	0.24	0.18	0.12	0.08	0.06	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
1993	0.01	0.17	0.62	0.91	1.22	1.28	1.22	1.12	0.77	0.66	0.66	0.96	0.78	0.50	0.28	0.22	0.17	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01
1994	0.00	0.19	0.69	1.17	1.46	1.44	1.26	0.89	0.80	0.76	0.98	0.77	0.48	0.30	0.24	0.19	0.14	0.10	0.08	0.06	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
1995	0.00	0.29	1.18	1.97	2.27	2.21	1.70	1.44	1.71	1.70	1.33	0.84	0.52	0.40	0.34	0.26	0.18	0.14	0.10	0.08	0.06	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
1996	0.00	0.30	1.26	1.96	2.09	1.67	1.47	1.70	2.16	1.86	1.31	0.77	0.60	0.52	0.40	0.33	0.25	0.19	0.14	0.11	0.08	0.06	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.02
1997	0.01	0.39	1.38	2.04	1.79	1.79	2.10	2.61	2.15	1.52	0.95	0.73	0.64	0.50	0.41	0.34	0.27	0.20	0.15	0.11	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.03
1998	0.01	0.31	1.16	1.36	1.52	1.86	2.23	1.72	1.16	0.79	0.70	0.62	0.50	0.41	0.35	0.29	0.22	0.17	0.13	0.10	0.07	0.06	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02
1999	0.01	0.37	1.04	1.55	2.23	2.64	1.83	1.18	0.80	0.71	0.65	0.52	0.44	0.37	0.31	0.25	0.19	0.15	0.11	0.08	0.06	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02
2000	0.01	0.52	2.12	4.20	5.11	3.40	2.26	1.34	1.03	1.02	0.84	0.69	0.58	0.50	0.41	0.34	0.26	0.20	0.15	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.02	0.03	0.03
2001	0.01	0.55	2.16	3.80	2.87	2.09	1.28	0.97	0.86	0.74	0.68	0.59	0.50	0.41	0.34	0.29	0.23	0.17	0.13	0.10	0.07	0.06	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02
2002	0.01	0.57	2.35	2.40	1.92	1.42	1.10	0.86	0.69	0.63	0.58	0.50	0.41	0.35	0.29	0.24	0.19	0.14	0.11	0.08	0.06	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02
2003	0.01	0.68	1.62	1.55	1.28	1.05	0.76	0.51	0.44	0.41	0.38	0.31	0.26	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
2004	0.03	0.97	1.79	1.65	1.47	1.21	0.83	0.65	0.52	0.43	0.36	0.31	0.26	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
2005	0.07	0.98	1.67	1.65	1.43	1.09	0.89	0.71	0.54	0.41	0.36	0.31	0.26	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
2006	0.06	0.74	1.43	1.45	1.19	1.05	0.85	0.65	0.48	0.39	0.36	0.31	0.26	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
2007	0.05	0.65	1.27	1.23	1.16	1.03	0.82	0.60	0.46	0.39	0.36	0.31	0.26	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
2008	0.04	0.60	1.11	1.21	1.14	1.01	0.78	0.59	0.45	0.39	0.36	0.31	0.26	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
2009	0.04	0.53	1.09	1.19	1.12	0.97	0.78	0.59	0.45	0.39	0.36	0.31	0.26	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
2010	0.04	0.52	1.07	1.17	1.08	0.97	0.77	0.58	0.45	0.39	0.36	0.31	0.26	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
2011	0.04	0.51	1.05	1.13	1.08	0.97	0.78	0.59	0.45	0.39	0.36	0.31	0.26	0.22	0.19	0.16	0.12	0.09	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01

Conditional Prepayment Rates			Fixed Rate 30 Year Mortgages by Origination Fiscal Year																											
PolicyBook	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1975	0.17	1.94	7.34	11.13	10.16	5.11	2.73	1.30	3.48	3.56	3.74	6.24	8.28	6.22	5.63	5.77	5.92	8.06	10.88	12.10	10.43	9.94	10.55	13.44	14.91	19.16	13.53	17.41	22.37	18.93
1976	0.29	3.49	8.63	9.27	4.91	2.50	1.04	3.39	3.49	3.76	6.40	8.31	6.20	5.68	5.85	5.70	7.87	10.95	11.99	8.38	11.62	10.28	12.75	15.03	12.95	18.61	16.09	19.26	18.11	13.29
1977	0.38	3.35	6.39	3.68	1.89	0.83	2.81	2.89	3.30	6.08	8.05	6.06	5.57	5.85	5.62	7.59	10.36	12.00	8.14	10.21	11.63	12.97	14.83	12.02	13.30	19.44	19.04	18.83	13.66	9.21
1978	0.33	2.35	2.01	1.33	0.87	2.02	2.13	2.46	5.61	8.30	6.14	5.76	6.04	5.92	8.30	12.32	14.57	8.43	10.91	10.91	14.52	15.87	11.79	12.42	16.60	21.76	18.60	17.53	11.96	11.43
1979	0.23	0.62	0.64	0.47	1.33	1.54	1.95	5.08	8.57	6.27	5.96	6.37	6.27	11.12	17.74	19.26	9.13	11.87	11.46	15.04	18.12	11.98	12.59	15.61	19.18	22.37	19.48	17.49	14.88	11.77
1980	0.30	0.78	0.32	1.74	2.03	2.77	11.21	17.18	8.57	7.01	7.93	9.24	17.41	20.78	21.93	10.09	12.85	12.07	15.36	17.58	13.52	11.99	15.17	17.73	18.98	20.62	17.54	15.45	11.74	6.95
1981	0.20	0.46	9.08	5.70	7.62	23.97	26.43	12.43	9.35	9.19	9.89	15.02	17.69	19.72	9.99	11.95	11.82	14.83	19.77	12.31	14.95	13.02	14.27	17.25	20.73	20.44	18.09	14.19	8.41	7.02
1982	0.38	19.73	10.50	14.32	33.52	32.70	17.05	13.10	11.29	11.15	14.21	15.99	18.36	10.25	11.95	12.67	15.63	22.76	13.61	12.93	16.78	11.37	15.47	18.17	18.41	18.36	14.91	9.17	7.73	6.50
1983	0.30	0.93	2.27	18.81	28.68	12.24	9.59	11.48	14.04	23.41	24.89	27.41	12.18	14.86	13.84	17.17	22.60	13.09	12.37	16.21	18.89	17.48	19.42	19.76	20.10	18.62	12.27	10.45	8.88	7.56
1984	0.21	1.46	19.64	26.67	12.28	10.01	10.91	11.42	17.57	19.26	21.08	8.96	10.39	9.24	10.25	11.10	6.65	6.02	6.83	7.21	15.07	21.30	21.71	22.05	20.74	15.48	13.51	11.49	9.79	8.27
1985	0.31	11.33	23.48	10.85	8.82	10.80	12.75	21.84	23.43	23.23	8.72	10.46	9.10	10.18	10.88	6.11	5.79	6.66	6.42	13.42	20.94	21.35	21.71	20.40	15.61	15.59	13.83	11.88	10.00	8.28
1986	0.53	3.81	2.72	3.24	4.60	5.64	14.58	26.49	25.52	7.69	11.69	9.93	15.36	16.80	8.91	10.60	14.42	15.85	15.61	19.59	20.59	20.71	19.60	12.41	12.19	12.32	11.19	10.28	8.51	7.22
1987	0.23	0.93	1.71	2.88	3.46	8.63	19.65	20.94	6.63	10.38	8.99	15.22	17.56	9.25	11.93	16.78	20.69	17.34	18.66	17.95	18.72	16.99	9.53	9.21	9.38	9.38	8.74	7.25	6.14	5.19
1988	0.28	1.24	2.90	4.51	14.14	26.81	26.07	7.96	12.07	10.13	15.49	17.15	9.67	11.27	14.97	16.26	15.57	17.78	18.06	18.38	17.35	12.34	11.68	11.47	11.92	12.89	11.10	9.44	8.06	6.87
1989	0.28	1.69	3.94	14.78	28.63	27.67	8.23	12.25	10.18	15.93	17.72	9.91	11.76	15.92	17.20	17.66	17.13	16.81	17.63	16.47	11.57	10.62	10.47	10.80	11.69	11.43	10.07	8.56	7.29	6.19
1990	0.25	1.59	9.19	29.37	29.33	8.31	12.61	10.11	16.49	18.65	10.05	12.40	17.58	19.53	17.48	16.43	16.17	16.70	15.65	9.73	8.99	8.83	9.23	10.47	10.45	10.42	9.17	7.79	6.61	5.60
1991	0.28	4.72	25.67	29.84	7.86	12.83	10.35	17.68	19.94	10.14	13.43	19.08	22.30	18.68	17.44	15.93	16.42	15.00	8.62	8.34	8.54	8.86	9.66	9.61	9.79	9.72	8.51	7.23	6.13	5.19
1992	0.36	7.29	16.71	6.37	10.77	9.53	18.01	21.62	10.33	15.05	21.82	29.10	22.15	17.90	14.00	14.21	12.13	5.98	5.71	5.84	5.95	6.24	6.25	6.36	6.47	6.43	5.63	4.77	4.03	3.40
1993	0.61	4.00	3.96	7.26	7.55	13.24	17.50	9.97	14.71	22.79	35.98	26.13	16.62	10.75	11.09	8.29	3.89	3.52	3.36	3.42	3.86	3.95	4.02	4.09	4.17	4.15	3.64	3.07	2.59	2.18
1994	0.29	1.98	6.07	6.39	11.99	15.19	9.29	13.75	20.62	34.02	24.79	15.66	9.90	10.21	7.43	3.56	3.41	3.41	3.47	3.64	3.65	3.71	3.77	3.83	3.90	3.82	3.29	2.77	2.33	1.96
1995	1.73	8.51	7.00	16.51	18.92	9.50	15.14	22.44	31.28	25.82	20.55	16.03	16.16	12.46	5.78	4.99	4.98	5.09	5.45	5.50	5.59	5.69	5.79	5.89	5.99	5.95	5.22	4.41	3.73	3.15
1996	0.37	2.64	11.32	15.88	8.43	14.64	22.40	33.13	31.65	27.48	19.88	20.91	15.71	7.22	5.85	5.25	5.27	5.74	5.83	5.93	6.04	6.15	6.26	6.37	6.48	6.42	5.58	4.72	3.98	3.36
1997	0.65	9.50	16.53	7.70	14.72	22.72	32.73	30.90	28.73	22.17	23.81	18.38	8.42	6.71	6.00	5.62	5.97	6.06	6.17	6.29	6.41	6.53	6.65	6.77	6.90	6.86	6.01	5.09	4.30	3.64
1998	0.86	5.54	5.64	11.97	19.99	35.42	31.63	24.45	16.89	18.43	13.38	6.63	5.60	5.05	4.66	4.49	4.45	4.51	4.59	4.68	4.77	4.86	4.96	5.05	5.14	5.13	4.51	3.81	3.22	2.72
1999	0.51	2.68	10.68	19.43	34.51	30.69	22.80	16.03	18.05	13.28	6.90	5.92	5.35	4.94	4.67	4.33	4.34	4.42	4.50	4.59	4.67	4.76	4.85	4.94	5.03	4.95	4.29	3.62	3.05	2.58
2000	0.77	24.54	32.04	35.49	32.63	32.15	26.64	29.94	25.62	12.76	10.20	9.33	8.63	8.39	7.79	7.31	7.33	7.46	7.60	7.73	7.87	8.00	8.14	8.29	8.43	8.32	7.26	6.14	5.20	4.39
2001	4.59	17.18	40.13	34.47	27.09	18.05	20.38	15.96	8.58	7.37	6.82	6.33	6.00	5.49	5.04	4.70	4.69	4.78	4.86	4.95	5.03	5.12	5.21	5.31	5.40	5.41	4.76	4.02	3.39	2.86
2002	2.41	31.03	29.68	21.84	14.09	14.89	11.67	7.13	6.88	6.53	6.16	5.72	5.19	4.77	4.41	4.13	4.14	4.22	4.30	4.39	4.47	4.56	4.64	4.73	4.82	4.78	4.17	3.52	2.97	2.51
2003	3.68	11.47	12.19	11.09	10.87	8.95	5.80	5.20	5.19	4.96	4.63	4.19	3.86	3.56	3.29	3.08	3.08	3.14	3.20	3.26	3.32	3.38	3.45	3.51	3.57	3.55	3.09	2.61	2.20	1.85
2004	2.91	7.81	8.68	9.91	8.56	5.17	4.58	4.78	4.92	4.82	4.48	4.16	3.84	3.55	3.27	3.06	3.06	3.12	3.18	3.24	3.30	3.36	3.43	3.49	3.56	3.53	3.09	2.61	2.20	1.85
2005	2.23	5.93	8.23	8.27	5.30	4.41	4.46	4.65	4.86	4.73	4.51	4.18	3.86	3.56	3.29	3.07	3.08	3.14	3.20	3.26	3.32	3.38	3.45	3.51	3.58	3.55	3.10	2.62	2.20	1.86
2006	2.03	6.27	7.38	5.44	4.68	4.46	4.52	4.74	4.86	4.77	4.51	4.18	3.86	3.56	3.29	3.08	3.08	3.14	3.20	3.26	3.32	3.38	3.45	3.51	3.58	3.55	3.10	2.62	2.21	1.86
2007	2.10	5.43	4.83	4.79	4.71	4.50	4.54	4.69	4.91	4.78	4.51	4.18	3.86	3.56	3.29	3.08	3.08	3.14	3.20	3.26	3.32	3.38	3.45	3.51	3.58	3.55	3.10	2.62	2.21	1.86
2008	1.62	3.52	4.21	4.81	4.74	4.48	4.45	4.72	4.92	4.78	4.52	4.19	3.86	3.57	3.29	3.08	3.09	3.14	3.20	3.26	3.33	3.39	3.45	3.52	3.58	3.55	3.10	2.62	2.21	1.86
2009	1.12	3.09	4.24	4.85	4.72	4.38	4.46	4.74	4.93	4.79	4.52	4.19	3.87	3.57	3.29	3.08	3.09	3.15	3.21	3.27	3.33	3.39	3.45	3.52	3.58	3.56	3.10	2.62	2.21	1.86
2010	1.01	3.11	4.29	4.83	4.61	4.38	4.47	4.75	4.94	4.79	4.52	4.19	3.87	3.57	3.29	3.08	3.09	3.15	3.21	3.27	3.33	3.39	3.45	3.52	3.58	3.56	3.10	2.62	2.21	1.86
2011	1.02	3.12	4.24	4.70	4.60	4.38	4.47	4.74	4.93	4.79	4.52	4.19	3.87	3.57	3.29	3.08	3.09	3.15	3.21	3.27	3.33	3.39	3.45	3.52	3.58	3.56	3.10	2.62	2.21	1.86

Cumulative Claim Rates		Fixed Rate 30 Year Mortgages										by Origination Fiscal Year																			
PolicyBook		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1975	0.04	0.86	2.11	3.00	3.54	3.86	4.07	4.21	4.38	4.51	4.63	4.73	4.84	4.96	5.08	5.19	5.28	5.36	5.43	5.48	5.52	5.54	5.56	5.57	5.57	5.59	5.59	5.60	5.60	5.60	
1976	0.11	1.08	2.06	2.74	3.12	3.37	3.58	3.79	3.97	4.11	4.26	4.41	4.60	4.78	4.95	5.08	5.19	5.29	5.37	5.43	5.46	5.49	5.51	5.52	5.54	5.54	5.55	5.56	5.56	5.57	
1977	0.05	0.58	1.23	1.67	1.99	2.23	2.50	2.70	2.91	3.11	3.32	3.58	3.83	4.06	4.24	4.39	4.51	4.60	4.67	4.73	4.76	4.78	4.80	4.81	4.82	4.83	4.84	4.84	4.85	4.85	
1978	0.03	0.44	1.00	1.53	1.94	2.41	2.81	3.21	3.59	3.99	4.48	4.91	5.27	5.56	5.79	5.97	6.12	6.22	6.29	6.35	6.38	6.41	6.42	6.44	6.45	6.46	6.47	6.47	6.48	6.48	
1979	0.02	0.35	1.10	1.80	2.62	3.38	4.15	4.92	5.77	6.72	7.51	8.15	8.66	9.06	9.36	9.61	9.79	9.91	10.00	10.06	10.09	10.12	10.15	10.16	10.18	10.19	10.19	10.20	10.20	10.20	
1980	0.02	0.68	1.87	3.39	4.81	6.30	7.75	9.34	10.91	12.10	12.98	13.64	14.17	14.59	14.90	15.12	15.24	15.34	15.42	15.46	15.50	15.53	15.55	15.56	15.56	15.57	15.57	15.57	15.57	15.58	
1981	0.08	1.47	4.70	7.58	10.50	13.10	15.56	17.48	18.64	19.43	19.98	20.40	20.72	20.96	21.14	21.26	21.35	21.43	21.47	21.51	21.53	21.55	21.56	21.57	21.57	21.57	21.57	21.57	21.57	21.57	
1982	0.14	2.30	5.85	9.70	13.32	16.16	18.02	18.98	19.50	19.84	20.11	20.29	20.44	20.55	20.62	20.69	20.74	20.76	20.78	20.79	20.81	20.82	20.82	20.83	20.83	20.83	20.83	20.83	20.83	20.83	
1983	0.02	0.58	2.28	4.57	7.37	10.19	12.25	13.52	14.44	15.14	15.61	15.97	16.20	16.35	16.46	16.56	16.62	16.66	16.70	16.71	16.73	16.74	16.75	16.75	16.75	16.75	16.75	16.75	16.75	16.75	
1984	0.04	1.18	4.19	8.08	11.87	14.54	16.14	17.18	17.97	18.52	18.94	19.21	19.41	19.57	19.68	19.76	19.82	19.87	19.90	19.91	19.93	19.95	19.95	19.96	19.96	19.96	19.96	19.96	19.96	19.96	
1985	0.03	0.99	4.03	7.95	10.92	12.86	14.26	15.32	16.08	16.61	16.98	17.21	17.41	17.56	17.66	17.74	17.79	17.83	17.85	17.88	17.90	17.91	17.91	17.91	17.91	17.92	17.92	17.92	17.92	17.92	
1986	0.01	0.52	2.32	4.44	6.31	7.91	9.25	10.29	11.11	11.72	12.17	12.54	12.83	13.04	13.18	13.27	13.34	13.38	13.42	13.44	13.46	13.46	13.46	13.46	13.47	13.47	13.47	13.47	13.47	13.47	
1987	0.01	0.40	1.50	2.77	4.02	5.21	6.22	7.10	7.78	8.31	8.78	9.16	9.46	9.66	9.78	9.86	9.94	10.00	10.03	10.04	10.05	10.05	10.06	10.06	10.06	10.06	10.06	10.06	10.06	10.06	
1988	0.01	0.43	1.60	3.10	4.73	6.10	7.26	8.14	8.79	9.34	9.77	10.11	10.34	10.47	10.58	10.66	10.72	10.76	10.78	10.79	10.80	10.80	10.80	10.81	10.81	10.81	10.81	10.81	10.81	10.81	
1989	0.01	0.38	1.53	3.09	4.58	5.89	6.87	7.59	8.18	8.62	8.94	9.18	9.31	9.42	9.50	9.58	9.63	9.65	9.66	9.67	9.67	9.67	9.68	9.68	9.68	9.68	9.68	9.68	9.68	9.68	
1990	0.01	0.34	1.46	2.98	4.37	5.39	6.13	6.77	7.26	7.62	7.87	8.02	8.13	8.22	8.30	8.36	8.39	8.40	8.41	8.42	8.42	8.42	8.42	8.42	8.42	8.43	8.43	8.43	8.43	8.43	
1991	0.01	0.36	1.51	2.87	3.99	4.85	5.61	6.20	6.61	6.91	7.09	7.22	7.31	7.41	7.48	7.52	7.53	7.54	7.55	7.56	7.56	7.56	7.56	7.56	7.56	7.56	7.56	7.56	7.56	7.56	
1992	0.01	0.25	1.02	2.03	2.94	3.88	4.69	5.31	5.74	6.02	6.22	6.35	6.49	6.59	6.64	6.66	6.68	6.69	6.70	6.70	6.70	6.70	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	
1993	0.01	0.18	0.76	1.59	2.61	3.58	4.38	4.97	5.33	5.60	5.80	5.98	6.09	6.15	6.18	6.20	6.21	6.22	6.23	6.23	6.24	6.24	6.24	6.24	6.24	6.25	6.25	6.25	6.25	6.25	
1994	0.00	0.19	0.86	1.93	3.15	4.20	4.97	5.45	5.82	6.10	6.33	6.47	6.54	6.58	6.60	6.63	6.64	6.65	6.66	6.66	6.66	6.67	6.67	6.67	6.67	6.68	6.68	6.68	6.68	6.68	
1995	0.00	0.28	1.34	2.96	4.48	5.65	6.45	7.01	7.51	7.85	8.04	8.13	8.18	8.21	8.23	8.25	8.26	8.27	8.28	8.28	8.28	8.28	8.29	8.29	8.29	8.29	8.29	8.29	8.29	8.29	
1996	0.00	0.30	1.52	3.17	4.62	5.66	6.42	7.09	7.65	7.97	8.13	8.20	8.25	8.28	8.30	8.32	8.33	8.34	8.35	8.35	8.36	8.36	8.36	8.36	8.36	8.36	8.36	8.36	8.36	8.36	
1997	0.01	0.39	1.63	3.12	4.31	5.31	6.18	6.89	7.28	7.47	7.56	7.62	7.66	7.68	7.70	7.72	7.73	7.74	7.74	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.76	7.76	7.76	
1998	0.01	0.32	1.40	2.58	3.72	4.83	5.65	6.08	6.29	6.40	6.49	6.55	6.60	6.64	6.67	6.69	6.71	6.72	6.73	6.74	6.74	6.74	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	
1999	0.01	0.37	1.38	2.69	4.19	5.32	5.84	6.09	6.23	6.33	6.41	6.47	6.52	6.56	6.59	6.61	6.63	6.64	6.65	6.65	6.66	6.66	6.66	6.66	6.67	6.67	6.67	6.67	6.67	6.67	
2000	0.01	0.53	2.10	4.16	5.67	6.29	6.56	6.67	6.73	6.78	6.81	6.83	6.85	6.86	6.87	6.88	6.88	6.89	6.89	6.89	6.89	6.89	6.89	6.89	6.90	6.90	6.90	6.90	6.90	6.90	
2001	0.01	0.54	2.23	3.95	4.75	5.16	5.36	5.48	5.57	5.64	5.70	5.74	5.78	5.81	5.83	5.85	5.86	5.87	5.87	5.88	5.88	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	
2002	0.01	0.57	2.14	3.23	3.88	4.29	4.56	4.74	4.87	4.99	5.08	5.16	5.22	5.27	5.31	5.34	5.36	5.38	5.39	5.40	5.40	5.41	5.41	5.41	5.41	5.42	5.42	5.42	5.42	5.42	
2003	0.01	0.66	2.04	3.17	3.98	4.57	4.95	5.19	5.39	5.56	5.71	5.82	5.92	6.00	6.06	6.11	6.15	6.18	6.20	6.21	6.22	6.23	6.24	6.24	6.24	6.25	6.25	6.25	6.25	6.25	
2004	0.03	0.97	2.56	3.86	4.89	5.65	6.15	6.51	6.79	7.00	7.17	7.31	7.42	7.51	7.58	7.64	7.69	7.72	7.74	7.76	7.77	7.78	7.79	7.79	7.80	7.80	7.81	7.81	7.81	7.81	
2005	0.07	1.03	2.55	3.91	4.96	5.71	6.29	6.72	7.04	7.26	7.45	7.60	7.73	7.83	7.91	7.97	8.02	8.06	8.09	8.11	8.12	8.13	8.14	8.14	8.15	8.15	8.15	8.16	8.16	8.16	
2006	0.06	0.79	2.09	3.29	4.21	4.98	5.56	5.99	6.28	6.51	6.71	6.87	7.00	7.11	7.19	7.26	7.31	7.35	7.38	7.40	7.42	7.43	7.44	7.44	7.45	7.45	7.45	7.46	7.46	7.46	
2007	0.05	0.68	1.85	2.91	3.85	4.63	5.22	5.63	5.93	6.17	6.38	6.55	6.68	6.79	6.88	6.96	7.01	7.05	7.08	7.10	7.12	7.13	7.14	7.15	7.15	7.15	7.16	7.16	7.16	7.17	
2008	0.04	0.63	1.68	2.75	3.71	4.51	5.09	5.51	5.82	6.06	6.28	6.45	6.60	6.71	6.80	6.88	6.94	6.98	7.01	7.03	7.05	7.06	7.07	7.08	7.08	7.08	7.09	7.09	7.09	7.10	
2009	0.04	0.56	1.59	2.66	3.62	4.39	4.98	5.40	5.70	5.95	6.17	6.35	6.49	6.61	6.70	6.78	6.84	6.88	6.91	6.93	6.95	6.96	6.97	6.98	6.98	6.98	6.99	6.99	7.00	7.00	
2010	0.04	0.55	1.56	2.61	3.53	4.31	4.89	5.31	5.61	5.87	6.08	6.26	6.40	6.52	6.62	6.69	6.75	6.79	6.82	6.85	6.86	6.88	6.89	6.89	6.90	6.90	6.90	6.91	6.91	6.91	
2011	0.04	0.54	1.55	2.57	3.49	4.27	4.86	5.28	5.59	5.84	6.06	6.24	6.38	6.50	6.59	6.67	6.73	6.77	6.80	6.82	6.84	6.85	6.86	6.87	6.87	6.88	6.88	6.88	6.89	6.89	

Cumulative Prepayment Rates		Fixed Rate 30 Year Mortgages by Origination Fiscal Year																												
PolicyBook	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1975	0.17	2.10	9.22	19.09	27.00	30.55	32.34	33.17	35.35	37.49	39.66	43.14	47.45	50.42	52.93	55.35	57.69	60.67	64.37	68.02	70.78	73.14	75.39	77.95	80.41	83.09	84.63	86.33	88.14	89.32
1976	0.29	3.77	11.98	19.95	23.75	25.58	26.32	28.69	31.05	33.49	37.49	42.33	45.63	48.46	51.19	53.69	56.94	61.08	65.12	67.59	70.73	73.17	75.90	78.69	80.73	83.29	85.09	86.89	88.26	89.08
1977	0.38	3.71	9.83	13.11	14.72	15.41	17.72	20.02	22.57	27.10	32.72	36.60	39.93	43.22	46.18	49.95	54.67	59.57	62.49	65.84	69.27	72.63	75.98	78.29	80.54	83.39	85.63	87.43	88.48	89.10
1978	0.33	2.67	4.62	5.88	6.69	8.53	10.43	12.57	17.29	23.86	28.29	32.16	35.96	39.44	44.01	50.19	56.58	59.72	63.44	66.74	70.65	74.29	76.57	78.68	81.15	83.85	85.65	87.03	87.81	88.46
1979	0.23	0.84	1.47	1.93	3.21	4.66	6.45	10.99	18.19	22.97	27.15	31.31	35.11	41.36	50.15	57.95	60.91	64.39	67.33	70.74	74.22	76.10	77.83	79.71	81.65	83.48	84.71	85.60	86.23	86.65
1980	0.30	1.07	1.39	3.08	4.97	7.48	17.14	30.05	35.24	39.01	42.89	46.97	53.82	60.47	65.94	67.88	70.06	71.84	73.80	75.70	76.89	77.81	78.82	79.82	80.70	81.47	81.99	82.36	82.61	82.73
1981	0.20	0.67	9.55	14.44	20.38	36.95	50.15	54.41	57.04	59.28	61.38	64.18	66.91	69.35	70.32	71.34	72.22	73.17	74.24	74.77	75.32	75.73	76.12	76.52	76.92	77.23	77.44	77.58	77.65	77.71
1982	0.38	20.01	28.16	37.61	55.27	65.54	68.66	70.41	71.60	72.60	73.67	74.67	75.59	76.00	76.41	76.79	77.18	77.66	77.87	78.05	78.24	78.35	78.48	78.60	78.71	78.79	78.85	78.88	78.90	78.92
1983	0.30	1.22	3.45	21.18	42.47	48.61	52.57	56.61	60.80	66.60	71.14	74.77	75.90	77.08	77.99	78.94	79.96	80.40	80.77	81.18	81.58	81.87	82.14	82.36	82.54	82.67	82.74	82.80	82.84	82.87
1984	0.21	1.66	20.75	40.77	47.05	51.16	54.91	58.21	62.54	66.29	69.49	70.53	71.60	72.43	73.25	74.03	74.45	74.79	75.16	75.51	76.20	77.02	77.68	78.20	78.59	78.81	78.98	79.10	79.19	79.26
1985	0.31	11.59	32.12	39.04	43.72	48.62	53.53	60.56	66.21	70.33	71.47	72.68	73.60	74.51	75.37	75.80	76.17	76.58	76.94	77.63	78.57	79.33	79.93	80.37	80.64	80.86	81.03	81.16	81.25	81.32
1986	0.53	4.32	6.91	9.85	13.79	18.30	29.05	45.40	56.71	59.18	62.58	65.09	68.53	71.66	73.02	74.49	76.25	77.90	79.26	80.70	81.90	82.86	83.58	83.95	84.27	84.54	84.77	84.95	85.08	85.19
1987	0.23	1.15	2.84	5.60	8.77	16.30	31.72	44.72	47.91	52.51	56.04	61.39	66.56	68.78	71.35	74.52	77.75	79.89	81.77	83.24	84.50	85.43	85.86	86.23	86.58	86.90	87.16	87.37	87.52	87.65
1988	0.28	1.52	4.36	8.60	21.09	40.98	54.78	57.80	61.91	64.88	68.87	72.53	74.21	75.95	77.98	79.84	81.32	82.74	83.91	84.89	85.64	86.08	86.44	86.76	87.05	87.32	87.53	87.69	87.81	87.90
1989	0.28	1.97	5.82	19.51	41.67	56.54	59.63	63.74	66.65	70.66	74.33	75.99	77.74	79.80	81.65	83.21	84.45	85.45	86.31	86.97	87.36	87.68	87.95	88.21	88.46	88.67	88.84	88.96	89.06	89.14
1990	0.25	1.84	10.83	36.59	54.32	57.75	62.40	65.58	70.14	74.35	76.17	78.14	80.58	82.78	84.36	85.56	86.54	87.39	88.05	88.39	88.68	88.94	89.18	89.43	89.65	89.85	90.01	90.13	90.23	90.30
1991	0.28	4.99	29.28	49.93	53.64	59.08	62.81	68.39	73.46	75.48	77.84	80.72	83.41	85.14	86.44	87.41	88.24	88.88	89.18	89.46	89.71	89.95	90.19	90.41	90.61	90.79	90.93	91.04	91.12	91.19
1992	0.36	7.62	23.02	27.86	35.41	41.28	51.16	60.71	64.22	68.74	74.25	79.93	82.97	84.86	86.05	87.09	87.85	88.18	88.47	88.75	89.02	89.29	89.54	89.78	90.01	90.22	90.39	90.53	90.64	90.73
1993	0.61	4.58	8.35	14.95	21.25	31.32	42.71	47.99	54.91	63.97	74.92	79.96	82.29	83.54	84.69	85.44	85.77	86.05	86.31	86.57	86.84	87.12	87.38	87.64	87.90	88.14	88.35	88.51	88.65	88.76
1994	0.29	2.26	8.19	14.00	24.08	35.13	40.77	48.23	57.78	70.16	76.05	78.81	80.27	81.61	82.49	82.88	83.24	83.58	83.92	84.26	84.59	84.92	85.24	85.55	85.85	86.13	86.37	86.56	86.72	86.85
1995	1.73	10.09	16.36	29.95	42.64	47.66	54.73	63.44	72.69	77.80	80.75	82.54	84.05	85.02	85.41	85.73	86.03	86.32	86.61	86.89	87.16	87.42	87.67	87.91	88.14	88.35	88.53	88.67	88.78	88.87
1996	0.37	3.00	13.95	27.37	33.23	42.32	53.98	67.10	75.27	79.96	82.36	84.35	85.52	85.97	86.31	86.59	86.86	87.13	87.40	87.65	87.89	88.12	88.34	88.55	88.75	88.94	89.09	89.21	89.31	89.38
1997	0.65	10.08	24.88	30.55	40.31	52.89	66.57	74.99	80.19	82.97	85.25	86.57	87.06	87.41	87.71	87.96	88.22	88.47	88.70	88.92	89.14	89.34	89.53	89.72	89.89	90.05	90.19	90.29	90.37	90.44
1998	0.86	6.35	11.61	22.02	37.09	58.06	69.80	75.80	78.86	81.60	83.20	83.89	84.42	84.88	85.27	85.63	85.98	86.30	86.63	86.94	87.24	87.53	87.82	88.09	88.36	88.61	88.82	88.98	89.12	89.23
1999	0.51	3.18	13.48	30.03	53.24	66.31	72.78	76.21	79.40	81.31	82.16	82.84	83.41	83.91	84.35	84.75	85.12	85.49	85.84	86.19	86.52	86.84	87.16	87.46	87.76	88.03	88.26	88.45	88.59	88.72
2000	0.77	25.12	48.94	66.32	75.95	81.86	85.02	87.54	89.02	89.56	89.93	90.24	90.49	90.72	90.90	91.07	91.22	91.36	91.49	91.62	91.73	91.84	91.95	92.04	92.13	92.21	92.28	92.33	92.37	92.40
2001	4.59	20.98	52.47	68.09	75.66	79.20	82.39	84.34	85.21	85.89	86.47	86.97	87.40	87.78	88.10	88.39	88.66	88.92	89.17	89.42	89.65	89.88	90.10	90.32	90.52	90.72	90.88	91.01	91.11	91.20
2002	2.41	32.69	52.50	62.41	67.25	71.55	74.37	75.87	77.20	78.38	79.40	80.29	81.04	81.70	82.27	82.79	83.28	83.76	84.23	84.68	85.13	85.56	85.98	86.38	86.78	87.15	87.46	87.71	87.92	88.09
2003	3.68	14.73	25.04	33.13	40.05	45.06	47.98	50.42	52.73	54.80	56.64	58.22	59.60	60.83	61.92	62.91	63.86	64.81	65.73	66.65	67.55	68.44	69.31	70.17	71.01	71.82	72.50	73.05	73.51	73.88
2004	2.91	10.50	18.18	26.04	32.04	35.30	38.00	40.67	43.27	45.68	47.80	49.67	51.33	52.79	54.09	55.26	56.40	57.52	58.62	59.71	60.79	61.85	62.89	63.91	64.92	65.88	66.69	67.36	67.90	68.35
2005	2.23	8.03	15.51	22.29	26.20	29.24	32.14	35.00	37.84	40.45	42.80	44.88	46.72	48.34	49.78	51.08	52.34	53.59	54.82	56.03	57.22	58.39	59.54	60.68	61.79	62.86	63.76	64.49	65.10	65.59
2006	2.03	8.17	14.90	19.41	23.03	26.28	29.39	32.47	35.46	38.24	40.73	42.93	44.87	46.58	48.10	49.48	50.81	52.13	53.43	54.70	55.96	57.20	58.42	59.62	60.80	61.93	62.88	63.65	64.29	64.81
2007	2.10	7.42	11.86	15.99	19.81	23.24	26.52	29.72	32.89	35.82	38.44	40.75	42.78	44.58	46.18	47.62	49.02	50.41	51.77	53.11	54.43	55.73	57.01	58.27	59.51	60.69	61.69	62.51	63.17	63.73
2008	1.62	5.08	9.05	13.34	17.32	20.85	24.18	27.51	30.81	33.84	36.56	38.95	41.06	42.92	44.58	46.08	47.53	48.96	50.37	51.76	53.13	54								

Conditional Claim Rates			Fixed Rate 30 Year Streamline Refinance Mortgages										by Origination Fiscal Year																										
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30									
1986	0.00	0.07	0.99	1.93	1.91	1.98	1.80	1.52	1.66	1.96	1.44	1.23	1.07	1.01	0.70	0.57	0.29	0.49	0.15	0.21	0.11	0.08	0.08	0.09	0.08	0.06	0.06	0.06	0.06	0.06									
1987	0.01	0.46	1.28	1.64	1.64	1.63	1.40	1.46	1.34	1.20	1.08	0.90	0.76	0.60	0.30	0.29	0.27	0.31	0.24	0.13	0.07	0.07	0.07	0.06	0.05	0.05	0.05	0.04	0.04	0.04									
1988	0.04	1.04	2.49	2.96	3.09	2.86	2.95	2.93	2.36	1.97	1.83	1.52	1.17	0.61	0.46	0.41	0.46	0.34	0.20	0.11	0.08	0.09	0.09	0.09	0.08	0.08	0.07	0.07	0.07	0.07									
1989	0.04	1.13	2.99	2.60	3.16	3.05	3.31	2.44	2.10	1.77	1.14	0.90	0.71	0.53	0.62	0.94	0.50	0.29	0.16	0.12	0.11	0.10	0.10	0.10	0.09	0.08	0.08	0.08	0.08	0.08									
1990	0.02	0.69	1.83	2.22	2.46	2.79	1.98	1.75	1.38	1.46	0.85	0.72	0.41	0.24	0.37	0.64	0.38	0.21	0.16	0.13	0.09	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07									
1991	0.01	0.44	1.48	2.00	2.03	1.57	1.59	1.23	1.10	0.96	0.60	0.42	0.35	0.55	0.78	0.55	0.33	0.24	0.18	0.12	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06									
1992	0.00	0.24	0.71	0.95	0.99	0.95	0.84	0.94	0.68	0.42	0.31	0.27	0.69	0.80	0.54	0.35	0.25	0.18	0.10	0.06	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03									
1993	0.00	0.18	0.61	0.90	1.24	1.15	0.98	0.76	0.43	0.34	0.28	0.59	0.65	0.42	0.24	0.19	0.14	0.09	0.06	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02									
1994	0.01	0.28	0.68	0.97	1.06	0.91	0.72	0.47	0.37	0.31	0.53	0.56	0.36	0.22	0.18	0.15	0.10	0.06	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02									
1995	0.02	0.43	1.26	1.83	1.60	1.61	1.15	0.78	0.93	0.74	1.00	0.70	0.46	0.39	0.37	0.28	0.18	0.12	0.09	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03									
1996	0.01	0.41	1.26	1.55	1.52	0.93	0.77	0.76	1.17	1.39	1.04	0.64	0.53	0.51	0.41	0.33	0.24	0.17	0.10	0.07	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05									
1997	0.02	0.56	1.42	1.75	1.29	1.02	1.03	1.63	1.59	1.15	0.77	0.64	0.64	0.51	0.42	0.37	0.27	0.16	0.11	0.08	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05									
1998	0.00	0.20	0.74	0.79	0.74	0.85	1.50	1.32	0.75	0.53	0.51	0.50	0.41	0.36	0.32	0.28	0.18	0.12	0.08	0.06	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04									
1999	0.01	0.24	0.51	0.66	0.90	1.31	1.24	0.73	0.48	0.45	0.47	0.41	0.36	0.32	0.28	0.20	0.14	0.10	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03									
2000	0.02	0.39	1.21	2.17	3.02	2.41	1.75	1.01	0.72	0.81	0.71	0.61	0.55	0.49	0.37	0.32	0.23	0.16	0.11	0.08	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06									
2001	0.00	0.21	1.30	2.22	1.32	0.89	0.67	0.54	0.45	0.40	0.40	0.37	0.32	0.25	0.22	0.19	0.14	0.10	0.07	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03									
2002	0.01	0.41	1.54	1.07	0.80	0.62	0.54	0.44	0.34	0.33	0.33	0.29	0.22	0.19	0.17	0.15	0.11	0.07	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02									
2003	0.01	0.37	0.70	0.71	0.57	0.55	0.68	0.59	0.46	0.44	0.42	0.33	0.29	0.26	0.23	0.20	0.15	0.10	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03									
2004	0.02	0.63	1.21	1.04	1.08	1.27	1.19	0.87	0.59	0.45	0.36	0.33	0.29	0.26	0.24	0.20	0.15	0.10	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03									
2005	0.05	0.75	1.17	1.31	1.65	1.51	1.24	0.90	0.56	0.37	0.36	0.33	0.29	0.26	0.23	0.20	0.15	0.10	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03									
2006	0.04	0.55	1.16	1.67	1.69	1.35	1.11	0.78	0.43	0.36	0.36	0.36	0.33	0.29	0.26	0.23	0.20	0.15	0.10	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03									
2007	0.03	0.59	1.54	1.81	1.58	1.26	1.01	0.62	0.41	0.36	0.36	0.36	0.33	0.29	0.26	0.23	0.20	0.15	0.10	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03									
2008	0.04	0.80	1.74	1.76	1.52	1.18	0.84	0.61	0.40	0.36	0.35	0.33	0.29	0.26	0.23	0.20	0.15	0.10	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03									
2009	0.05	0.90	1.69	1.70	1.43	0.98	0.83	0.60	0.40	0.35	0.35	0.33	0.29	0.26	0.23	0.20	0.15	0.10	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03									
2010	0.05	0.88	1.64	1.61	1.19	0.98	0.82	0.60	0.40	0.35	0.35	0.33	0.29	0.26	0.23	0.20	0.15	0.10	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03									
2011	0.05	0.86	1.58	1.37	1.21	0.98	0.83	0.60	0.40	0.35	0.35	0.33	0.29	0.26	0.23	0.20	0.15	0.10	0.07	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03									

Conditional Prepayment Rates				Fixed Rate 30 Year Streamline Refinance Mortgages																by Origination Fiscal Year															
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
1986	0.04	1.61	2.19	2.53	3.20	3.57	11.90	26.71	26.51	6.81	11.14	10.03	16.22	18.44	9.86	12.96	15.49	18.93	15.88	16.00	14.37	14.39	12.42	6.34	6.15	6.21	6.32	7.07	7.38	7.37					
1987	0.46	1.78	2.13	2.89	3.34	7.99	20.37	22.42	6.19	10.01	8.89	15.68	19.12	10.37	12.70	18.64	22.81	17.16	15.40	13.20	13.07	11.10	5.33	5.19	5.24	5.22	5.54	5.82	5.81	5.81					
1988	2.10	6.73	7.03	7.67	19.46	30.65	30.58	9.09	13.50	11.38	15.17	18.01	10.32	10.87	14.82	15.95	16.19	17.32	16.18	15.40	12.89	7.69	7.50	7.40	7.44	7.89	8.27	8.26	8.25	8.25					
1989	6.19	14.46	13.19	25.03	31.84	33.14	12.35	16.06	11.12	16.36	16.51	11.00	10.28	13.58	13.96	15.60	16.32	15.37	14.53	12.11	7.15	7.02	6.97	6.96	7.29	7.73	7.77	7.77	7.77	7.76					
1990	4.37	16.47	29.09	37.99	35.43	11.04	15.40	12.45	17.96	18.37	9.94	11.26	15.58	18.30	17.66	17.51	16.12	15.36	12.75	6.91	6.41	6.34	6.41	6.91	7.27	7.20	7.17	7.16	7.16	7.15					
1991	2.63	31.24	44.34	39.18	11.00	17.48	13.59	19.44	22.52	10.50	13.97	19.10	20.23	19.98	19.98	17.45	16.53	13.56	6.99	6.42	6.12	6.18	6.71	7.02	7.02	6.99	6.98	6.98	6.98	6.98					
1992	2.61	25.90	30.27	8.03	13.29	10.63	19.90	23.73	11.01	14.75	24.26	31.39	23.22	20.81	16.60	15.69	12.38	5.30	4.87	4.64	4.42	4.69	4.96	4.96	4.96	4.96	4.96	4.96	4.96	4.96					
1993	2.87	11.64	5.75	8.97	8.22	15.26	19.95	9.92	15.46	25.36	39.38	27.94	20.85	14.84	14.81	10.65	4.08	3.29	2.80	2.63	2.98	3.22	3.22	3.22	3.21	3.21	3.21	3.21	3.21	3.21					
1994	1.93	4.31	7.18	7.27	11.56	15.47	9.42	13.12	20.49	36.43	27.91	19.92	13.14	13.23	8.99	3.31	2.74	2.36	2.21	2.44	2.54	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.52	2.52					
1995	2.18	14.24	9.38	20.31	22.73	10.61	17.48	25.45	33.84	30.25	27.52	22.13	21.42	16.19	6.66	5.38	4.89	4.64	4.82	4.80	4.54	4.41	4.40	4.39	4.39	4.35	4.35	4.35	4.34	4.34					
1996	2.00	6.00	16.40	21.28	10.07	17.16	27.21	41.81	40.77	38.92	30.71	31.47	22.71	8.97	6.89	5.76	5.37	5.77	5.87	5.51	5.21	5.17	5.17	5.16	5.16	5.13	5.11	5.10	5.10	5.08					
1997	2.66	24.42	25.27	9.63	18.28	28.84	40.60	42.25	40.60	33.79	36.64	28.21	11.60	8.97	7.56	6.74	7.07	7.17	6.74	6.33	6.00	5.93	5.92	5.92	5.92	5.89	5.91	5.91	5.91	5.89					
1998	3.72	15.89	8.08	16.78	29.64	49.43	45.33	38.63	26.84	29.81	21.91	8.89	6.86	5.83	5.15	4.96	4.97	4.63	4.35	4.08	3.85	3.80	3.80	3.80	3.80	3.79	3.79	3.79	3.78	3.78					
1999	2.54	5.95	13.11	23.83	45.25	40.82	31.91	22.27	23.78	17.15	7.60	6.21	5.42	4.79	4.37	4.17	3.87	3.63	3.41	3.19	3.06	3.05	3.05	3.05	3.05	3.04	3.04	3.04	3.04	3.03					
2000	3.16	29.12	34.07	41.23	42.74	42.47	37.34	40.94	33.29	15.46	13.06	11.41	10.13	9.80	9.33	8.36	7.81	7.34	6.90	6.48	6.18	6.13	6.13	6.13	6.13	6.16	6.20	6.20	6.20	6.19					
2001	6.44	30.58	51.74	42.41	32.55	24.19	28.18	21.47	9.10	7.92	7.63	6.92	6.38	6.06	5.28	4.69	4.35	4.08	3.83	3.59	3.40	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36					
2002	9.34	47.03	36.94	25.46	17.57	20.81	16.04	7.84	6.80	6.62	6.43	5.89	5.53	4.84	4.28	3.82	3.55	3.34	3.13	2.94	2.80	2.78	2.78	2.78	2.78	2.79	2.79	2.79	2.79	2.79					
2003	11.72	19.26	14.18	11.69	11.75	11.50	8.95	10.75	10.06	9.75	9.71	9.23	8.17	7.22	6.38	5.67	5.26	4.93	4.63	4.34	4.12	4.08	4.07	4.07	4.07	4.08	4.08	4.08	4.08	4.07					
2004	6.86	12.21	10.00	10.29	9.74	7.64	9.54	10.06	9.68	9.90	10.27	9.31	8.24	7.29	6.45	5.74	5.33	5.00	4.69	4.41	4.18	4.15	4.14	4.14	4.14	4.15	4.16	4.16	4.16	4.16					
2005	5.56	9.30	9.55	9.21	6.91	8.66	9.32	9.84	9.76	10.33	10.19	9.21	8.15	7.21	6.38	5.68	5.28	4.95	4.65	4.36	4.15	4.11	4.11	4.11	4.11	4.12	4.13	4.12	4.12	4.12					
2006	5.00	9.80	9.17	6.85	8.19	8.86	9.52	10.24	10.42	10.38	10.16	9.18	8.13	7.19	6.36	5.66	5.26	4.94	4.64	4.35	4.14	4.10	4.10	4.10	4.10	4.11	4.12	4.12	4.12	4.11					
2007	5.09	9.08	6.77	8.08	8.30	8.98	9.82	10.86	10.48	10.38	10.15	9.17	8.12	7.18	6.35	5.66	5.26	4.93	4.63	4.34	4.13	4.10	4.10	4.09	4.09	4.11	4.11	4.11	4.11	4.11					
2008	3.92	6.63	7.93	8.13	8.34	9.19	10.33	10.89	10.49	10.37	10.14	9.15	8.10	7.17	6.34	5.65	5.25	4.93	4.62	4.34	4.13	4.09	4.09	4.09	4.09	4.10	4.11	4.11	4.11	4.11					
2009	3.20	7.79	8.02	8.17	8.52	9.66	10.35	10.92	10.50	10.37	10.13	9.15	8.10	7.16	6.33	5.65	5.25	4.92	4.62	4.34	4.12	4.09	4.09	4.09	4.09	4.10	4.10	4.10	4.10	4.10					
2010	3.68	7.88	8.10	8.35	8.97	9.68	10.37	10.94	10.51	10.37	10.13	9.15	8.10	7.17	6.34	5.65	5.25	4.93	4.62	4.34	4.12	4.09	4.09	4.09	4.09	4.10	4.11	4.11	4.11	4.10					
2011	3.69	7.92	8.24	8.76	8.95	9.66	10.35	10.91	10.50	10.37	10.13	9.15	8.10	7.17	6.34	5.65	5.25	4.93	4.62	4.34	4.13	4.09	4.09	4.09	4.09	4.10	4.11	4.11	4.11	4.10					

Cumulative Claim Rates			Fixed Rate 30 Year Streamline Refinance Mortgages															by Origination Fiscal Year												
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1986	0.00	0.07	1.04	2.88	4.61	6.32	7.79	8.86	9.69	10.41	10.88	11.24	11.51	11.72	11.85	11.93	11.97	12.03	12.04	12.05	12.06	12.07	12.07	12.07	12.08	12.08	12.08	12.08	12.08	12.09
1987	0.01	0.47	1.72	3.25	4.72	6.11	7.19	8.07	8.68	9.19	9.60	9.90	10.12	10.26	10.32	10.37	10.41	10.44	10.46	10.47	10.48	10.48	10.48	10.49	10.49	10.49	10.49	10.49	10.50	10.50
1988	0.04	1.05	3.30	5.71	7.97	9.58	10.70	11.43	11.94	12.31	12.60	12.80	12.93	12.99	13.03	13.06	13.08	13.10	13.11	13.11	13.11	13.12	13.12	13.12	13.12	13.12	13.12	13.13	13.13	13.13
1989	0.04	1.10	3.46	5.18	6.70	7.65	8.31	8.72	9.01	9.22	9.33	9.40	9.45	9.49	9.52	9.56	9.58	9.59	9.60	9.60	9.60	9.60	9.61	9.61	9.61	9.61	9.61	9.61	9.61	9.61
1990	0.02	0.67	2.13	3.34	4.15	4.71	5.06	5.32	5.49	5.63	5.70	5.75	5.78	5.79	5.81	5.83	5.84	5.85	5.85	5.85	5.85	5.85	5.85	5.86	5.86	5.86	5.86	5.86	5.86	5.86
1991	0.01	0.44	1.42	2.14	2.57	2.86	3.10	3.25	3.36	3.44	3.48	3.50	3.52	3.54	3.56	3.57	3.58	3.58	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59
1992	0.00	0.23	0.75	1.22	1.67	2.03	2.32	2.58	2.72	2.79	2.84	2.87	2.92	2.97	3.00	3.01	3.02	3.02	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.04
1993	0.00	0.18	0.70	1.43	2.32	3.08	3.61	3.94	4.11	4.22	4.28	4.37	4.44	4.47	4.49	4.50	4.51	4.51	4.51	4.51	4.52	4.52	4.52	4.52	4.52	4.52	4.52	4.52	4.53	4.53
1994	0.01	0.29	0.92	1.76	2.60	3.23	3.65	3.90	4.06	4.17	4.29	4.38	4.43	4.45	4.47	4.48	4.49	4.50	4.50	4.50	4.50	4.50	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.52
1995	0.02	0.45	1.50	2.86	3.79	4.49	4.93	5.18	5.39	5.51	5.61	5.66	5.69	5.71	5.72	5.73	5.73	5.74	5.74	5.74	5.74	5.74	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75
1996	0.01	0.41	1.56	2.74	3.62	4.10	4.43	4.66	4.86	5.00	5.07	5.09	5.11	5.12	5.13	5.13	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.14	5.15	5.15	5.15	5.15	5.15
1997	0.02	0.56	1.60	2.54	3.15	3.54	3.81	4.07	4.21	4.26	4.29	4.30	4.31	4.32	4.32	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.34	4.34	4.34	4.34	4.34
1998	0.00	0.19	0.79	1.36	1.82	2.17	2.49	2.64	2.69	2.71	2.73	2.74	2.75	2.76	2.77	2.77	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.79	2.79	2.79	2.79
1999	0.01	0.25	0.71	1.23	1.76	2.19	2.42	2.51	2.55	2.59	2.61	2.64	2.65	2.67	2.68	2.69	2.70	2.70	2.70	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.72
2000	0.02	0.40	1.22	2.18	2.94	3.27	3.40	3.44	3.46	3.48	3.49	3.49	3.50	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52
2001	0.00	0.20	1.04	1.72	1.94	2.04	2.09	2.13	2.15	2.16	2.18	2.19	2.20	2.21	2.22	2.22	2.22	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.24
2002	0.01	0.38	1.12	1.43	1.60	1.71	1.79	1.84	1.87	1.90	1.93	1.96	1.98	1.99	2.00	2.01	2.02	2.03	2.03	2.03	2.03	2.03	2.03	2.04	2.04	2.04	2.04	2.04	2.04	2.04
2003	0.01	0.33	0.83	1.25	1.56	1.81	2.09	2.31	2.46	2.59	2.70	2.77	2.84	2.89	2.93	2.96	2.99	3.00	3.01	3.02	3.03	3.03	3.03	3.04	3.04	3.04	3.05	3.05	3.05	3.06
2004	0.02	0.61	1.59	2.34	3.04	3.76	4.38	4.78	5.02	5.19	5.31	5.41	5.48	5.55	5.60	5.65	5.68	5.70	5.71	5.72	5.72	5.73	5.73	5.74	5.74	5.75	5.75	5.75	5.76	5.76
2005	0.05	0.76	1.75	2.75	3.87	4.80	5.49	5.94	6.19	6.34	6.47	6.57	6.66	6.73	6.78	6.83	6.86	6.88	6.90	6.90	6.91	6.92	6.92	6.93	6.93	6.94	6.94	6.95	6.95	6.95
2006	0.04	0.56	1.55	2.83	4.01	4.86	5.49	5.88	6.08	6.22	6.35	6.45	6.54	6.60	6.66	6.71	6.74	6.76	6.77	6.78	6.79	6.80	6.80	6.81	6.81	6.82	6.82	6.82	6.83	6.83
2007	0.03	0.59	1.91	3.33	4.45	5.26	5.84	6.15	6.34	6.48	6.61	6.71	6.80	6.87	6.93	6.97	7.00	7.03	7.04	7.05	7.05	7.06	7.07	7.07	7.08	7.08	7.09	7.09	7.09	7.10
2008	0.04	0.80	2.35	3.76	4.87	5.64	6.13	6.44	6.63	6.77	6.90	7.01	7.10	7.17	7.23	7.27	7.31	7.33	7.34	7.35	7.36	7.36	7.37	7.37	7.38	7.38	7.39	7.39	7.40	7.40
2009	0.05	0.92	2.42	3.77	4.80	5.44	5.92	6.23	6.41	6.55	6.68	6.78	6.87	6.94	7.00	7.04	7.08	7.10	7.11	7.12	7.13	7.13	7.14	7.14	7.15	7.15	7.16	7.16	7.17	7.17
2010	0.05	0.89	2.34	3.61	4.46	5.09	5.56	5.86	6.04	6.19	6.31	6.42	6.50	6.57	6.63	6.67	6.71	6.73	6.74	6.75	6.76	6.76	6.77	6.77	6.78	6.78	6.79	6.79	6.80	6.80
2011	0.05	0.88	2.26	3.35	4.21	4.83	5.31	5.61	5.79	5.94	6.06	6.17	6.25	6.32	6.38	6.42	6.45	6.48	6.49	6.50	6.50	6.51	6.52	6.52	6.53	6.53	6.54	6.54	6.54	6.55

Cumulative Prepayment Rates			Fixed Rate 30 Year Streamline Refinance Mortgages										by Origination Fiscal Year																										
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30									
1986	0.04	1.65	3.80	6.21	9.12	12.20	21.89	40.68	54.05	56.52	60.21	63.11	67.27	71.18	72.87	74.85	76.90	79.00	80.43	81.63	82.54	83.32	83.89	84.15	84.38	84.60	84.81	85.03	85.24	85.44									
1987	0.46	2.23	4.30	7.02	10.02	16.84	32.53	46.04	48.88	53.13	56.48	61.80	67.21	69.56	72.12	75.40	78.64	80.52	81.91	82.92	83.78	84.42	84.69	84.94	85.18	85.41	85.64	85.86	86.07	86.27									
1988	2.10	8.68	15.03	21.29	35.50	52.82	64.32	66.59	69.56	71.66	74.10	76.49	77.59	78.63	79.87	81.00	81.96	82.82	83.48	84.01	84.38	84.57	84.74	84.90	85.05	85.19	85.33	85.46	85.58	85.68									
1989	6.19	19.75	30.19	46.80	62.09	72.43	74.89	77.59	79.11	81.06	82.66	83.54	84.27	85.12	85.87	86.59	87.22	87.71	88.10	88.38	88.53	88.66	88.78	88.89	89.00	89.11	89.21	89.30	89.39	89.46									
1990	4.37	20.12	43.16	63.95	75.54	77.78	80.48	82.28	84.50	86.34	87.14	87.95	88.93	89.90	90.66	91.28	91.74	92.11	92.37	92.50	92.60	92.70	92.79	92.89	92.98	93.06	93.14	93.21	93.28	93.34									
1991	2.63	33.05	62.54	76.66	78.99	82.22	84.24	86.71	88.97	89.77	90.72	91.83	92.77	93.52	94.10	94.51	94.83	95.04	95.14	95.22	95.29	95.36	95.43	95.50	95.57	95.63	95.68	95.73	95.78	95.82									
1992	2.61	27.83	49.60	53.59	59.60	63.71	70.53	76.97	79.23	81.89	85.61	89.23	91.07	92.32	93.10	93.71	94.12	94.27	94.40	94.52	94.63	94.74	94.85	94.96	95.06	95.15	95.24	95.33	95.41	95.48									
1993	2.87	14.17	19.10	26.29	32.23	42.22	53.14	57.43	63.40	71.64	81.15	85.22	87.39	88.60	89.63	90.25	90.47	90.63	90.77	90.89	91.03	91.17	91.31	91.45	91.58	91.70	91.82	91.94	92.05	92.16									
1994	1.93	6.15	12.87	19.14	28.28	38.97	44.41	51.23	60.42	73.36	79.63	82.83	84.51	85.98	86.84	87.13	87.36	87.55	87.72	87.91	88.11	88.29	88.48	88.65	88.83	88.99	89.16	89.32	89.47	89.63									
1995	2.18	16.11	23.93	39.08	52.27	56.94	63.68	71.67	79.50	84.07	86.94	88.59	89.82	90.55	90.80	90.98	91.15	91.29	91.43	91.57	91.69	91.80	91.91	92.02	92.11	92.21	92.30	92.38	92.46	92.54									
1996	2.00	7.89	22.92	38.99	44.86	53.70	65.18	77.89	85.00	88.95	90.81	92.10	92.74	92.93	93.07	93.17	93.26	93.36	93.44	93.52	93.59	93.66	93.72	93.78	93.83	93.89	93.94	93.98	94.03	94.07									
1997	2.66	26.43	44.88	50.03	58.70	69.70	80.57	87.17	90.73	92.44	93.65	94.23	94.40	94.52	94.60	94.68	94.75	94.81	94.87	94.92	94.97	95.01	95.05	95.08	95.12	95.15	95.18	95.21	95.24	95.26									
1998	3.72	19.02	25.55	37.91	55.91	76.80	86.33	90.65	92.45	93.90	94.64	94.88	95.04	95.17	95.27	95.37	95.46	95.55	95.62	95.68	95.74	95.80	95.85	95.90	95.95	96.00	96.05	96.09	96.13	96.18									
1999	2.54	8.34	20.33	39.15	66.13	79.23	85.16	87.93	90.20	91.45	91.90	92.24	92.52	92.75	92.95	93.13	93.29	93.44	93.57	93.69	93.80	93.91	94.01	94.11	94.21	94.30	94.39	94.48	94.56	94.65									
2000	3.16	31.35	54.60	72.81	83.50	89.26	92.05	93.91	94.79	95.06	95.25	95.40	95.51	95.61	95.69	95.76	95.81	95.86	95.91	95.94	95.98	96.01	96.04	96.07	96.09	96.12	96.14	96.16	96.18	96.20									
2001	6.44	35.05	68.56	81.45	86.93	89.62	91.97	93.25	93.67	94.00	94.29	94.54	94.74	94.93	95.08	95.21	95.32	95.42	95.51	95.59	95.66	95.74	95.80	95.87	95.93	95.99	96.05	96.11	96.17	96.22									
2002	9.34	51.98	69.58	77.04	80.82	84.48	86.69	87.60	88.32	88.97	89.55	90.05	90.50	90.86	91.17	91.43	91.66	91.87	92.06	92.24	92.40	92.55	92.70	92.85	92.99	93.13	93.26	93.40	93.52	93.65									
2003	11.72	28.72	38.79	45.84	52.06	57.39	61.04	65.01	68.30	71.15	73.70	75.88	77.62	79.03	80.19	81.14	81.98	82.72	83.38	83.97	84.51	85.02	85.50	85.97	86.42	86.85	87.26	87.65	88.03	88.40									
2004	6.86	18.24	26.35	33.77	39.99	44.34	49.29	53.95	57.95	61.62	65.03	67.79	70.00	71.78	73.24	74.46	75.52	76.46	77.30	78.05	78.72	79.37	79.99	80.58	81.15	81.69	82.21	82.71	83.19	83.65									
2005	5.56	14.35	22.45	29.43	34.12	39.49	44.68	49.59	53.93	58.05	61.67	64.61	66.96	68.86	70.42	71.71	72.84	73.85	74.75	75.55	76.27	76.97	77.63	78.26	78.87	79.46	80.02	80.56	81.07	81.57									
2006	5.00	14.31	22.11	27.34	33.06	38.63	44.02	49.19	53.87	58.03	61.66	64.60	66.95	68.86	70.42	71.71	72.85	73.86	74.76	75.56	76.29	76.99	77.65	78.29	78.90	79.49	80.05	80.59	81.11	81.60									
2007	5.09	13.70	19.51	25.86	31.73	37.47	43.09	48.64	53.38	57.56	61.21	64.16	66.52	68.44	70.01	71.31	72.45	73.47	74.37	75.18	75.91	76.61	77.28	77.92	78.53	79.12	79.69	80.23	80.76	81.25									
2008	3.92	10.29	17.34	23.87	29.91	35.90	41.94	47.59	52.41	56.66	60.37	63.36	65.77	67.71	69.30	70.63	71.79	72.82	73.74	74.56	75.30	76.01	76.69	77.35	77.97	78.57	79.15	79.70	80.23	80.74									
2009	3.20	10.74	17.82	24.34	30.47	36.72	42.71	48.32	53.09	57.29	60.95	63.92	66.29	68.21	69.79	71.10	72.24	73.26	74.17	74.98	75.72	76.42	77.09	77.74	78.36	78.95	79.52	80.07	80.59	81.09									
2010	3.68	11.27	18.38	25.00	31.40	37.61	43.55	49.12	53.85	58.01	61.64	64.57	66.92	68.83	70.39	71.68	72.82	73.83	74.73	75.53	76.26	76.96	77.62	78.26	78.87	79.46	80.03	80.57	81.09	81.58									
2011	3.69	11.31	18.55	25.48	31.85	38.03	43.94	49.48	54.20	58.35	61.97	64.89	67.24	69.14	70.69	71.99	73.12	74.13	75.03	75.83	76.56	77.25	77.91	78.55	79.16	79.75	80.31	80.85	81.37	81.86									

Conditional Claim Rates			Fixed Rate 15 Year Mortgages					by Origination Fiscal Year							
Policy/Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1975	0.00	0.28	0.88	2.50	1.76	2.30	0.62	1.51	0.91	0.48	0.75	0.28	0.93	0.68	1.94
1976	0.00	0.35	1.34	1.44	0.98	1.47	0.94	1.31	0.70	0.94	1.01	1.44	1.60	0.30	0.00
1977	0.00	0.71	1.34	0.78	0.49	0.51	1.07	0.38	0.40	0.84	0.23	0.27	0.58	0.64	0.00
1978	0.38	0.78	0.20	0.42	0.66	0.67	0.00	0.72	0.52	0.28	0.60	1.05	0.00	0.00	0.00
1979	0.00	0.56	1.14	1.37	1.86	1.09	0.23	1.45	0.54	0.91	0.33	0.00	1.28	0.48	0.00
1980	0.00	0.43	3.37	2.14	1.61	1.55	2.55	2.25	2.08	0.77	1.13	0.69	0.74	0.41	0.48
1981	0.00	1.57	5.61	3.01	3.44	1.27	1.46	1.98	1.25	1.39	1.53	2.60	0.94	1.03	0.00
1982	0.21	1.06	2.66	2.96	2.42	2.12	3.02	2.59	0.58	0.94	0.67	0.41	0.00	0.00	0.00
1983	0.02	0.17	0.59	1.02	1.22	1.32	1.08	0.56	0.40	0.38	0.35	0.33	0.14	0.08	0.09
1984	0.02	0.39	1.11	1.72	2.67	1.84	1.27	0.79	0.68	0.50	0.40	0.47	0.41	0.12	0.18
1985	0.00	0.22	1.11	2.03	1.61	1.27	0.95	0.87	0.72	0.82	0.73	0.58	0.30	0.25	0.20
1986	0.00	0.15	0.55	0.72	0.67	0.54	0.50	0.38	0.38	0.36	0.25	0.16	0.16	0.12	0.17
1987	0.00	0.11	0.35	0.43	0.50	0.43	0.37	0.36	0.38	0.26	0.22	0.19	0.09	0.09	0.09
1988	0.01	0.17	0.51	0.79	0.99	0.94	0.94	1.05	0.79	0.55	0.57	0.25	0.22	0.24	0.10
1989	0.01	0.17	0.55	0.90	1.21	1.29	1.38	1.28	0.97	0.76	0.70	0.54	0.20	0.15	0.13
1990	0.00	0.16	0.63	0.92	1.05	1.41	1.17	0.82	0.74	0.49	0.50	0.20	0.11	0.23	0.13
1991	0.00	0.16	0.52	0.81	1.17	1.04	0.82	0.73	0.63	0.48	0.15	0.11	0.09	0.09	0.13
1992	0.00	0.09	0.44	0.53	0.66	0.51	0.50	0.45	0.29	0.20	0.15	0.06	0.11	0.12	0.09
1993	0.00	0.05	0.31	0.40	0.37	0.35	0.30	0.24	0.15	0.10	0.16	0.13	0.12	0.09	0.07
1994	0.00	0.07	0.19	0.32	0.36	0.27	0.35	0.24	0.14	0.15	0.15	0.13	0.10	0.08	0.06
1995	0.01	0.12	0.44	0.77	0.74	0.68	0.45	0.48	0.49	0.49	0.25	0.19	0.14	0.11	0.10
1996	0.00	0.10	0.37	0.48	0.56	0.54	0.46	0.50	0.33	0.28	0.22	0.16	0.13	0.12	0.09
1997	0.00	0.07	0.34	0.65	0.61	0.54	0.40	0.40	0.38	0.29	0.21	0.17	0.16	0.12	0.10
1998	0.00	0.11	0.37	0.40	0.55	0.55	0.46	0.35	0.27	0.22	0.18	0.16	0.12	0.10	0.08
1999	0.00	0.10	0.32	0.45	0.72	0.64	0.41	0.31	0.25	0.20	0.18	0.13	0.11	0.09	0.07
2000	0.00	0.12	0.67	1.31	1.48	0.78	0.60	0.43	0.34	0.31	0.24	0.19	0.15	0.12	0.09
2001	0.00	0.18	0.70	1.10	0.67	0.50	0.41	0.33	0.30	0.22	0.18	0.14	0.11	0.08	0.07
2002	0.02	0.23	0.62	0.59	0.50	0.42	0.34	0.30	0.22	0.18	0.15	0.11	0.08	0.07	0.05
2003	0.01	0.13	0.29	0.41	0.38	0.34	0.35	0.30	0.25	0.20	0.16	0.11	0.09	0.07	0.06
2004	0.01	0.14	0.35	0.48	0.43	0.42	0.36	0.29	0.24	0.19	0.13	0.11	0.09	0.07	0.06
2005	0.01	0.17	0.41	0.56	0.54	0.44	0.36	0.29	0.23	0.16	0.13	0.11	0.09	0.07	0.06
2006	0.01	0.17	0.42	0.66	0.56	0.44	0.36	0.28	0.20	0.16	0.13	0.11	0.09	0.07	0.06
2007	0.01	0.19	0.51	0.67	0.55	0.44	0.35	0.25	0.20	0.16	0.13	0.11	0.09	0.07	0.06
2008	0.01	0.22	0.53	0.67	0.55	0.43	0.30	0.25	0.20	0.16	0.13	0.11	0.09	0.07	0.06
2009	0.02	0.23	0.52	0.65	0.53	0.37	0.30	0.25	0.20	0.16	0.13	0.11	0.09	0.07	0.06
2010	0.02	0.23	0.51	0.63	0.46	0.37	0.30	0.25	0.20	0.16	0.13	0.11	0.09	0.07	0.06
2011	0.02	0.23	0.49	0.55	0.46	0.37	0.30	0.25	0.20	0.16	0.13	0.11	0.09	0.07	0.06

Conditional Prepayment Rates				Fixed Rate 15 Year Mortgages								by Origination Fiscal Year						
PolicyBook	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
1975	0.70	2.55	5.69	8.75	6.51	4.80	3.72	3.46	3.86	3.58	10.95	9.30	8.10	10.96	14.73			
1976	0.82	2.83	5.72	5.37	3.79	3.98	3.90	5.57	5.28	6.37	14.95	8.17	9.04	12.50	21.16			
1977	1.40	3.97	3.87	3.92	3.46	3.09	5.16	4.36	5.18	5.91	14.93	8.00	9.01	9.97	19.06			
1978	1.72	2.54	4.24	2.75	1.53	4.02	3.04	5.80	5.68	7.16	14.58	4.91	11.57	8.86	17.59			
1979	0.93	1.12	1.71	3.53	3.71	4.80	3.71	8.45	10.72	8.16	15.28	7.48	10.64	12.56	16.11			
1980	0.43	1.72	0.73	2.91	4.83	3.79	8.55	9.20	7.85	8.21	17.18	6.55	8.92	13.99	22.60			
1981	0.47	0.63	3.85	4.42	6.12	11.84	12.41	7.63	9.06	7.67	9.96	5.19	7.51	10.77	12.79			
1982	0.63	11.24	7.62	7.82	19.03	15.00	7.42	8.03	6.67	5.31	19.00	7.88	5.88	6.73	7.73			
1983	0.22	1.09	2.33	10.47	20.68	9.71	8.48	10.16	11.56	20.83	21.89	20.26	12.48	15.37	19.23			
1984	0.28	1.47	12.67	21.25	9.44	7.59	8.92	10.49	19.07	19.05	17.63	9.28	11.62	13.42	18.57			
1985	0.29	9.54	21.06	8.76	7.18	8.76	10.76	21.10	21.13	18.40	8.77	9.77	10.84	12.80	14.90			
1986	0.58	4.70	4.22	4.80	6.32	7.84	16.39	23.51	22.35	9.54	13.15	12.28	15.39	17.28	17.95			
1987	0.45	1.71	2.87	4.46	5.28	9.82	17.44	19.75	9.35	12.37	11.70	15.37	17.94	16.32	24.90			
1988	0.50	1.78	3.59	5.21	11.00	19.37	20.84	8.79	12.07	10.91	13.84	14.75	13.95	15.40	21.86			
1989	0.40	2.12	4.02	11.40	20.52	21.86	9.32	12.24	10.50	13.94	15.44	11.34	13.59	18.04	23.53			
1990	0.52	2.34	8.22	21.59	23.57	9.00	12.98	11.23	14.86	15.31	11.87	13.73	16.41	20.24	21.28			
1991	0.61	3.95	17.35	23.49	9.00	12.49	11.69	15.22	17.23	11.94	13.07	17.49	19.40	19.82	21.91			
1992	0.62	6.15	13.73	8.08	12.35	11.60	16.43	17.77	12.25	13.82	17.01	21.06	21.28	21.55	19.10			
1993	0.66	4.63	5.62	8.66	9.22	12.85	16.38	10.70	12.56	16.57	20.87	24.50	18.84	13.95	16.11			
1994	0.69	2.82	6.38	7.08	10.68	12.43	9.54	11.47	14.41	18.47	18.52	16.31	12.27	14.26	11.31			
1995	1.20	6.23	7.76	13.62	14.46	9.61	13.06	15.75	16.86	18.34	20.53	18.22	19.87	17.85	11.16			
1996	0.79	3.71	8.91	13.28	9.70	12.36	16.38	20.94	24.28	24.68	19.48	22.19	18.40	11.09	10.16			
1997	0.95	6.48	12.10	8.94	12.55	17.55	21.94	24.08	25.72	21.06	23.98	20.61	12.49	11.26	10.62			
1998	1.03	5.76	6.65	10.87	16.58	25.09	24.02	21.77	16.04	18.59	14.87	8.99	8.32	8.21	8.30			
1999	0.70	3.59	8.96	15.51	25.35	23.48	19.86	14.80	16.68	13.37	8.22	7.44	7.39	7.46	7.55			
2000	0.83	14.78	24.97	32.27	25.09	25.00	21.84	24.97	22.39	13.65	12.33	11.69	11.78	12.98	12.82			
2001	2.08	12.83	32.78	26.76	20.12	15.37	17.21	14.07	8.65	7.74	7.71	7.77	7.85	7.53	7.57			
2002	1.81	22.58	21.86	15.92	12.26	13.42	10.85	6.91	6.09	6.15	6.21	6.16	5.89	5.94	6.01			
2003	2.88	8.21	8.86	7.92	7.99	7.08	5.20	5.10	5.16	5.21	5.17	4.94	5.00	5.05	5.10			
2004	1.58	5.55	7.00	7.45	6.81	5.10	5.04	5.10	5.15	5.11	4.89	4.94	4.99	5.05	5.10			
2005	1.25	4.59	6.78	6.47	5.00	4.99	5.04	5.10	5.06	4.83	4.89	4.94	5.00	5.05	5.10			
2006	1.16	4.66	6.02	4.83	4.91	4.99	5.04	5.01	4.78	4.83	4.89	4.94	5.00	5.05	5.10			
2007	1.17	3.99	4.47	4.75	4.92	4.99	4.95	4.73	4.78	4.83	4.89	4.94	5.00	5.05	5.10			
2008	0.91	2.98	4.38	4.77	4.92	4.90	4.68	4.73	4.78	4.83	4.89	4.94	5.00	5.05	5.10			
2009	0.72	2.92	4.39	4.79	4.84	4.63	4.68	4.73	4.78	4.83	4.89	4.94	5.00	5.05	5.10			
2010	0.70	2.93	4.42	4.70	4.57	4.63	4.68	4.73	4.78	4.83	4.89	4.94	5.00	5.05	5.10			
2011	0.70	2.94	4.33	4.44	4.57	4.63	4.68	4.73	4.78	4.83	4.89	4.94	5.00	5.05	5.10			

Cumulative Claim Rates			Fixed Rate 15 Year Mortgages							by Origination Fiscal Year						
Policy/Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1975	0.00	0.28	1.13	3.38	4.79	6.48	6.90	7.89	8.45	8.73	9.15	9.30	9.72	10.00	10.70	
1976	0.00	0.35	1.64	2.92	3.74	4.91	5.61	6.54	7.01	7.59	8.18	8.88	9.58	9.70	9.70	
1977	0.00	0.70	1.96	2.66	3.08	3.50	4.34	4.62	4.90	5.45	5.59	5.73	6.01	6.29	6.29	
1978	0.38	1.15	1.34	1.72	2.29	2.87	2.87	3.44	3.82	4.02	4.40	4.97	4.97	4.97	4.97	
1979	0.00	0.56	1.67	2.97	4.64	5.57	5.75	6.86	7.24	7.79	7.98	7.98	8.53	8.72	8.72	
1980	0.00	0.43	3.71	5.71	7.14	8.43	10.43	12.00	13.29	13.71	14.29	14.57	14.86	15.00	15.14	
1981	0.00	1.56	7.02	9.67	12.48	13.42	14.35	15.44	16.07	16.69	17.32	18.25	18.56	18.88	18.88	
1982	0.21	1.26	3.58	5.89	7.57	8.73	10.09	11.15	11.36	11.67	11.88	11.99	11.99	11.99	11.99	
1983	0.02	0.18	0.77	1.74	2.77	3.64	4.27	4.57	4.76	4.92	5.04	5.12	5.15	5.17	5.18	
1984	0.02	0.40	1.49	2.94	4.68	5.73	6.38	6.75	7.03	7.19	7.30	7.40	7.48	7.51	7.53	
1985	0.00	0.22	1.21	2.63	3.64	4.37	4.85	5.25	5.50	5.73	5.89	6.01	6.06	6.10	6.13	
1986	0.00	0.15	0.67	1.32	1.89	2.31	2.68	2.91	3.08	3.21	3.29	3.34	3.37	3.40	3.43	
1987	0.00	0.11	0.46	0.87	1.31	1.67	1.95	2.18	2.37	2.48	2.57	2.64	2.66	2.69	2.70	
1988	0.01	0.18	0.68	1.42	2.29	3.02	3.60	4.11	4.45	4.66	4.85	4.93	4.98	5.03	5.05	
1989	0.01	0.18	0.71	1.55	2.53	3.35	4.03	4.59	4.96	5.21	5.41	5.54	5.59	5.61	5.63	
1990	0.00	0.16	0.77	1.59	2.30	3.03	3.57	3.90	4.16	4.30	4.43	4.47	4.49	4.53	4.54	
1991	0.00	0.16	0.66	1.29	1.99	2.54	2.92	3.22	3.43	3.56	3.60	3.62	3.64	3.65	3.66	
1992	0.00	0.09	0.50	0.92	1.40	1.73	2.01	2.22	2.33	2.40	2.44	2.45	2.47	2.49	2.50	
1993	0.00	0.06	0.35	0.71	1.01	1.27	1.46	1.58	1.66	1.70	1.75	1.79	1.81	1.83	1.84	
1994	0.00	0.06	0.25	0.54	0.84	1.04	1.24	1.41	1.48	1.54	1.60	1.64	1.66	1.68	1.69	
1995	0.01	0.12	0.53	1.19	1.73	2.14	2.39	2.62	2.82	2.98	3.05	3.09	3.12	3.13	3.14	
1996	0.00	0.10	0.45	0.86	1.28	1.64	1.91	2.15	2.28	2.36	2.41	2.43	2.45	2.47	2.47	
1997	0.00	0.07	0.39	0.91	1.35	1.70	1.91	2.07	2.19	2.25	2.29	2.32	2.33	2.34	2.35	
1998	0.00	0.11	0.45	0.80	1.22	1.57	1.79	1.92	1.99	2.04	2.08	2.10	2.12	2.13	2.14	
1999	0.00	0.10	0.40	0.79	1.32	1.67	1.84	1.94	2.01	2.05	2.09	2.11	2.13	2.15	2.16	
2000	0.00	0.12	0.68	1.50	2.12	2.36	2.50	2.57	2.62	2.65	2.67	2.69	2.70	2.70	2.71	
2001	0.00	0.18	0.77	1.40	1.67	1.83	1.94	2.02	2.07	2.11	2.14	2.16	2.18	2.19	2.20	
2002	0.02	0.24	0.71	1.05	1.30	1.48	1.61	1.70	1.77	1.82	1.86	1.89	1.91	1.92	1.93	
2003	0.01	0.14	0.40	0.74	1.02	1.25	1.47	1.65	1.79	1.90	1.97	2.03	2.07	2.10	2.13	
2004	0.01	0.14	0.47	0.88	1.22	1.53	1.78	1.97	2.12	2.23	2.31	2.36	2.41	2.44	2.47	
2005	0.01	0.18	0.57	1.05	1.49	1.83	2.09	2.30	2.45	2.55	2.63	2.69	2.73	2.77	2.80	
2006	0.01	0.18	0.57	1.15	1.62	1.96	2.23	2.43	2.57	2.67	2.75	2.81	2.86	2.90	2.93	
2007	0.01	0.19	0.67	1.28	1.75	2.11	2.37	2.55	2.69	2.79	2.88	2.94	2.99	3.03	3.06	
2008	0.01	0.23	0.74	1.35	1.83	2.17	2.41	2.59	2.73	2.84	2.92	2.99	3.04	3.08	3.11	
2009	0.02	0.25	0.75	1.35	1.81	2.11	2.35	2.53	2.67	2.78	2.87	2.93	2.98	3.02	3.05	
2010	0.02	0.24	0.74	1.31	1.71	2.01	2.25	2.43	2.58	2.69	2.77	2.84	2.89	2.93	2.96	
2011	0.02	0.24	0.71	1.22	1.62	1.93	2.17	2.35	2.49	2.61	2.69	2.76	2.81	2.85	2.88	

Cumulative Prepayment Rates				Fixed Rate 15 Year Mortgages								by Origination Fiscal Year						
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
1975	0.70	3.24	8.73	16.62	21.83	25.35	27.89	30.14	32.54	34.65	40.85	45.49	49.15	53.66	59.01			
1976	0.82	3.62	9.11	13.90	17.06	20.21	23.13	27.10	30.61	34.58	43.22	47.20	51.17	56.07	63.32			
1977	1.40	5.31	8.95	12.45	15.38	17.90	21.96	25.17	28.81	32.73	41.96	46.15	50.49	54.83	62.24			
1978	1.72	4.21	8.22	10.71	12.05	15.49	17.97	22.56	26.77	31.74	41.11	43.79	49.71	53.73	60.99			
1979	0.93	2.04	3.71	7.05	10.39	14.47	17.44	23.93	31.35	36.36	44.90	48.42	53.06	57.88	63.27			
1980	0.43	2.14	2.86	5.57	9.86	13.00	19.71	26.14	31.00	35.57	44.29	47.00	50.43	55.29	62.00			
1981	0.47	1.09	4.84	8.74	13.73	22.46	30.42	34.63	39.16	42.59	46.65	48.52	51.01	54.29	57.72			
1982	0.63	11.78	18.40	24.50	37.75	45.95	49.32	52.58	54.99	56.78	62.78	64.77	66.14	67.61	69.19			
1983	0.22	1.31	3.60	13.61	31.11	37.53	42.52	47.92	53.42	62.13	69.34	74.53	77.07	79.80	82.69			
1984	0.28	1.74	14.15	32.07	38.21	42.54	47.15	52.03	59.89	66.19	70.88	72.91	75.20	77.52	80.30			
1985	0.29	9.81	28.76	34.89	39.38	44.37	49.89	59.44	66.90	71.98	73.93	75.90	77.86	79.92	82.00			
1986	0.58	5.26	9.25	13.58	18.96	25.17	37.05	51.23	61.47	64.86	69.05	72.45	76.18	79.71	82.74			
1987	0.45	2.15	4.96	9.18	13.93	22.25	35.52	47.87	52.54	58.12	62.73	68.06	73.32	77.24	82.24			
1988	0.50	2.26	5.77	10.65	20.32	35.31	48.16	52.40	57.65	61.78	66.43	70.66	74.07	77.29	81.16			
1989	0.40	2.51	6.42	17.01	33.72	47.65	52.22	57.58	61.55	66.22	70.63	73.35	76.21	79.50	83.00			
1990	0.52	2.85	10.82	29.91	46.05	50.70	56.70	61.17	66.36	70.87	73.82	76.80	79.88	83.04	85.69			
1991	0.61	4.53	21.07	39.45	44.79	51.44	56.82	62.95	68.78	72.10	75.28	78.97	82.35	85.13	87.59			
1992	0.62	6.73	19.53	25.99	35.02	42.39	51.57	59.82	64.47	69.06	73.91	78.90	82.86	86.02	88.22			
1993	0.66	5.26	10.58	18.30	25.77	35.18	45.59	51.25	57.18	64.00	71.16	77.79	81.64	83.95	86.24			
1994	0.69	3.50	9.65	16.03	24.94	34.17	40.35	47.05	54.48	62.61	69.25	74.00	76.99	80.04	82.10			
1995	1.20	7.35	14.53	26.10	36.61	42.54	49.76	57.30	64.05	70.13	75.65	79.53	82.98	85.46	86.74			
1996	0.79	4.48	12.98	24.48	31.72	40.00	49.56	59.72	68.98	76.07	80.27	84.12	86.59	87.81	88.79			
1997	0.95	7.37	18.57	25.82	35.02	46.18	57.61	67.36	75.22	79.98	84.24	87.02	88.35	89.40	90.28			
1998	1.03	6.74	12.93	22.34	35.09	51.06	62.44	70.23	74.70	79.03	81.84	83.29	84.51	85.60	86.62			
1999	0.70	4.26	12.83	26.29	44.77	57.43	65.55	70.38	74.99	78.07	79.70	81.06	82.30	83.46	84.55			
2000	0.83	15.48	36.56	56.81	67.27	74.92	79.88	84.28	87.23	88.61	89.69	90.58	91.38	92.15	92.81			
2001	2.08	14.64	42.56	57.72	65.95	70.93	75.61	78.77	80.43	81.79	83.03	84.18	85.25	86.20	87.08			
2002	1.81	23.98	40.54	49.89	55.91	61.65	65.65	67.92	69.77	71.52	73.17	74.71	76.09	77.40	78.64			
2003	2.88	10.86	18.75	25.15	31.07	35.88	39.15	42.18	45.08	47.84	50.45	52.80	55.06	57.22	59.30			
2004	1.58	7.04	13.54	19.95	25.34	29.08	32.58	35.93	39.12	42.13	44.85	47.46	49.96	52.37	54.67			
2005	1.25	5.79	12.16	17.81	21.87	25.69	29.34	32.84	36.12	39.09	41.94	44.68	47.31	49.84	52.25			
2006	1.16	5.77	11.43	15.68	19.77	23.69	27.44	30.96	34.14	37.20	40.14	42.96	45.67	48.27	50.76			
2007	1.17	5.12	9.35	13.63	17.82	21.83	25.60	29.00	32.27	35.42	38.44	41.34	44.12	46.79	49.35			
2008	0.91	3.86	8.06	12.41	16.65	20.64	24.25	27.72	31.05	34.25	37.33	40.28	43.11	45.83	48.44			
2009	0.72	3.61	7.84	12.21	16.39	20.18	23.81	27.30	30.66	33.88	36.97	39.95	42.80	45.54	48.16			
2010	0.70	3.61	7.86	12.16	16.11	19.91	23.57	27.07	30.44	33.68	36.79	39.78	42.64	45.39	48.03			
2011	0.70	3.62	7.78	11.84	15.81	19.63	23.30	26.83	30.21	33.46	36.59	39.59	42.47	45.23	47.88			

Conditional Claim Rates			Fixed Rate 15 Year Streamline Refinance Mortgages										by Origination Fiscal Year		
Policy/Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1986	0.00	0.00	0.29	0.39	0.37	0.33	0.39	0.29	0.37	0.21	0.16	0.28	0.00	0.00	0.00
1987	0.00	0.10	0.27	0.33	0.43	0.36	0.28	0.33	0.21	0.15	0.05	0.07	0.06	0.02	0.02
1988	0.00	0.09	0.41	0.90	0.86	0.63	0.53	0.56	0.38	0.17	0.20	0.12	0.00	0.32	0.00
1989	0.00	0.31	0.80	0.64	0.41	0.31	0.68	0.60	0.17	0.00	0.00	0.24	0.00	0.00	0.00
1990	0.00	0.31	0.62	0.34	0.70	0.74	0.35	0.53	0.60	0.18	0.00	0.25	0.00	0.00	0.01
1991	0.00	0.06	0.19	0.48	0.32	0.05	0.35	0.06	0.16	0.10	0.23	0.00	0.00	0.01	0.02
1992	0.00	0.05	0.10	0.22	0.20	0.15	0.26	0.16	0.11	0.14	0.02	0.02	0.02	0.03	0.02
1993	0.00	0.04	0.11	0.15	0.16	0.16	0.12	0.13	0.08	0.07	0.03	0.03	0.03	0.02	0.01
1994	0.00	0.07	0.19	0.24	0.26	0.23	0.20	0.10	0.11	0.07	0.04	0.04	0.02	0.01	0.01
1995	0.01	0.18	0.39	0.61	0.48	0.44	0.40	0.32	0.22	0.19	0.10	0.07	0.04	0.03	0.03
1996	0.00	0.04	0.15	0.30	0.37	0.30	0.21	0.15	0.20	0.09	0.06	0.03	0.02	0.02	0.01
1997	0.00	0.11	0.21	0.32	0.35	0.21	0.14	0.20	0.10	0.07	0.04	0.02	0.02	0.01	0.01
1998	0.00	0.01	0.13	0.13	0.24	0.13	0.14	0.11	0.08	0.05	0.03	0.03	0.02	0.02	0.01
1999	0.00	0.03	0.08	0.10	0.16	0.16	0.13	0.09	0.06	0.04	0.04	0.03	0.02	0.01	0.01
2000	0.00	0.09	0.21	0.32	0.34	0.31	0.23	0.12	0.07	0.07	0.05	0.03	0.02	0.01	0.01
2001	0.00	0.04	0.13	0.26	0.22	0.20	0.15	0.11	0.11	0.07	0.05	0.04	0.02	0.01	0.01
2002	0.00	0.04	0.17	0.22	0.23	0.21	0.17	0.17	0.12	0.08	0.06	0.04	0.02	0.01	0.01
2003	0.00	0.04	0.16	0.21	0.21	0.22	0.22	0.16	0.11	0.08	0.05	0.02	0.01	0.01	0.01
2004	0.00	0.07	0.19	0.24	0.24	0.30	0.23	0.16	0.11	0.07	0.03	0.02	0.01	0.01	0.01
2005	0.00	0.08	0.21	0.26	0.33	0.30	0.23	0.16	0.10	0.04	0.03	0.02	0.01	0.01	0.01
2006	0.00	0.08	0.22	0.34	0.32	0.30	0.23	0.15	0.06	0.04	0.03	0.02	0.01	0.01	0.01
2007	0.00	0.08	0.28	0.34	0.32	0.30	0.21	0.09	0.06	0.04	0.03	0.02	0.01	0.01	0.01
2008	0.01	0.11	0.28	0.33	0.32	0.27	0.13	0.09	0.06	0.04	0.03	0.02	0.01	0.01	0.01
2009	0.01	0.11	0.27	0.33	0.29	0.17	0.13	0.09	0.06	0.04	0.03	0.02	0.01	0.01	0.01
2010	0.01	0.10	0.27	0.30	0.18	0.17	0.13	0.09	0.06	0.04	0.03	0.02	0.01	0.01	0.01
2011	0.01	0.10	0.24	0.18	0.18	0.17	0.13	0.09	0.06	0.04	0.03	0.02	0.01	0.01	0.01

Conditional Prepayment Rates				Fixed Rate 15 Year Streamline Refinance Mortgages										by Origination Fiscal Year		
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1986	0.08	1.56	3.13	4.02	5.29	6.04	14.34	22.22	23.51	10.57	14.76	11.44	15.99	17.91	16.97	
1987	0.43	1.87	2.91	4.25	5.13	9.34	17.82	20.15	9.93	12.39	11.66	16.83	18.83	17.23	24.94	
1988	1.07	2.80	4.34	6.05	13.59	20.94	23.60	7.94	10.44	11.70	16.02	14.80	14.38	17.12	24.61	
1989	1.72	5.81	5.73	12.54	19.85	23.77	8.40	9.39	11.59	12.57	12.23	11.98	9.19	11.66	20.14	
1990	1.04	7.48	15.16	26.44	25.91	7.90	13.15	10.27	16.14	15.26	13.38	12.01	18.16	20.14	20.58	
1991	0.66	9.03	25.20	29.25	9.69	13.08	10.61	18.01	20.55	13.86	15.41	20.19	23.24	24.24	31.33	
1992	0.68	9.79	17.46	7.50	11.51	10.26	15.09	16.97	10.64	13.59	20.71	22.96	24.68	30.75	32.59	
1993	1.11	6.69	5.88	9.03	9.30	13.19	15.90	10.41	13.50	18.41	24.56	21.90	26.63	28.31	29.32	
1994	1.43	4.12	7.19	7.73	11.13	13.55	9.78	12.10	15.97	21.88	20.99	25.11	26.73	27.99	26.63	
1995	1.81	9.25	8.69	13.08	16.31	10.32	11.98	16.39	20.16	19.75	25.59	27.20	28.03	26.30	17.62	
1996	0.91	4.58	9.70	13.88	9.12	12.64	17.59	24.32	26.52	33.95	35.95	36.80	34.86	23.98	25.46	
1997	1.20	8.59	14.03	8.05	10.85	18.10	24.06	22.76	28.30	30.05	30.59	28.65	19.30	20.50	21.84	
1998	1.11	7.02	6.47	10.28	16.06	27.60	23.35	27.01	28.70	30.09	28.68	19.38	20.70	22.09	23.56	
1999	1.29	4.10	8.36	13.43	24.74	21.21	24.50	26.09	27.68	26.37	17.69	18.92	20.21	21.58	23.63	
2000	2.06	11.34	17.37	25.78	23.36	23.34	24.87	25.24	23.62	15.70	16.75	17.92	19.16	21.03	24.17	
2001	1.24	11.57	33.73	22.88	21.06	22.43	23.79	22.63	15.00	16.06	17.20	18.41	20.22	23.27	24.79	
2002	2.26	21.54	17.80	19.31	20.62	22.00	20.94	13.82	14.81	15.86	16.98	18.68	21.55	22.98	24.49	
2003	3.40	10.03	17.71	19.24	20.55	19.54	12.84	13.77	14.76	15.81	17.42	20.14	21.51	22.94	24.45	
2004	2.31	12.56	16.80	18.75	18.12	11.91	12.78	13.71	14.69	16.18	18.75	20.05	21.41	22.84	24.34	
2005	3.37	12.05	16.48	16.58	11.06	11.91	12.78	13.71	15.12	17.52	18.75	20.05	21.41	22.84	24.34	
2006	3.36	12.18	14.77	10.18	11.09	11.91	12.78	14.11	16.37	17.52	18.75	20.06	21.41	22.84	24.35	
2007	3.38	10.56	9.05	10.22	11.09	11.92	13.16	15.29	16.37	17.52	18.76	20.06	21.41	22.84	24.35	
2008	2.59	6.52	9.07	10.23	11.10	12.27	14.28	15.30	16.38	17.52	18.76	20.06	21.42	22.85	24.35	
2009	1.75	6.54	9.10	10.25	11.44	13.32	14.28	15.30	16.38	17.53	18.76	20.06	21.42	22.85	24.36	
2010	1.75	6.56	9.13	10.57	12.42	13.32	14.28	15.30	16.38	17.53	18.76	20.06	21.42	22.85	24.36	
2011	1.75	6.57	9.41	11.48	12.42	13.32	14.28	15.30	16.38	17.53	18.76	20.06	21.42	22.85	24.36	

Cumulative Claim Rates			Fixed Rate 15 Year Streamline Refinance Mortgages										by Origination Fiscal Year		
Policy/Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1986	0.00	0.00	0.28	0.65	0.99	1.27	1.58	1.78	1.98	2.06	2.12	2.20	2.20	2.20	2.20
1987	0.00	0.10	0.36	0.67	1.06	1.37	1.58	1.79	1.89	1.96	1.98	2.01	2.03	2.03	2.03
1988	0.00	0.09	0.49	1.31	2.04	2.50	2.80	3.04	3.20	3.26	3.32	3.35	3.35	3.41	3.41
1989	0.00	0.31	1.04	1.60	1.90	2.09	2.40	2.64	2.70	2.70	2.70	2.76	2.76	2.76	2.76
1990	0.00	0.30	0.87	1.13	1.52	1.83	1.96	2.13	2.31	2.35	2.35	2.39	2.39	2.39	2.39
1991	0.00	0.06	0.23	0.56	0.70	0.73	0.85	0.88	0.92	0.94	0.98	0.98	0.98	0.98	0.98
1992	0.00	0.05	0.14	0.30	0.44	0.53	0.67	0.75	0.79	0.83	0.84	0.84	0.85	0.85	0.85
1993	0.00	0.04	0.14	0.26	0.39	0.50	0.58	0.64	0.68	0.71	0.72	0.72	0.73	0.73	0.73
1994	0.00	0.07	0.25	0.46	0.67	0.83	0.95	1.01	1.06	1.09	1.11	1.11	1.12	1.12	1.12
1995	0.01	0.19	0.54	1.04	1.38	1.63	1.84	1.98	2.07	2.12	2.15	2.16	2.17	2.17	2.17
1996	0.00	0.04	0.18	0.44	0.71	0.91	1.03	1.10	1.17	1.19	1.20	1.21	1.21	1.21	1.21
1997	0.00	0.10	0.29	0.54	0.79	0.93	1.00	1.08	1.11	1.12	1.13	1.13	1.13	1.13	1.13
1998	0.00	0.01	0.14	0.24	0.42	0.51	0.58	0.62	0.64	0.65	0.65	0.65	0.65	0.66	0.66
1999	0.00	0.03	0.11	0.20	0.32	0.41	0.47	0.50	0.51	0.52	0.53	0.53	0.53	0.53	0.53
2000	0.00	0.09	0.27	0.50	0.68	0.81	0.88	0.90	0.92	0.93	0.93	0.93	0.93	0.94	0.94
2001	0.00	0.04	0.15	0.30	0.40	0.47	0.51	0.53	0.55	0.56	0.56	0.56	0.57	0.57	0.57
2002	0.00	0.04	0.17	0.31	0.42	0.51	0.56	0.60	0.63	0.64	0.65	0.66	0.66	0.66	0.66
2003	0.00	0.04	0.17	0.32	0.44	0.54	0.62	0.67	0.70	0.72	0.73	0.73	0.73	0.73	0.74
2004	0.00	0.07	0.23	0.40	0.54	0.68	0.77	0.83	0.86	0.88	0.89	0.89	0.89	0.89	0.89
2005	0.00	0.08	0.26	0.45	0.64	0.80	0.90	0.96	1.00	1.01	1.02	1.02	1.02	1.03	1.03
2006	0.00	0.08	0.26	0.51	0.72	0.89	1.00	1.07	1.09	1.10	1.11	1.11	1.12	1.12	1.12
2007	0.00	0.09	0.33	0.59	0.82	1.00	1.12	1.16	1.18	1.20	1.21	1.21	1.21	1.21	1.21
2008	0.01	0.11	0.36	0.64	0.88	1.06	1.13	1.17	1.20	1.21	1.22	1.22	1.23	1.23	1.23
2009	0.01	0.11	0.36	0.64	0.85	0.96	1.04	1.08	1.10	1.12	1.13	1.13	1.13	1.14	1.14
2010	0.01	0.11	0.36	0.61	0.74	0.85	0.92	0.96	0.98	1.00	1.01	1.01	1.01	1.01	1.02
2011	0.01	0.11	0.33	0.48	0.61	0.72	0.79	0.83	0.86	0.87	0.88	0.88	0.89	0.89	0.89

Cumulative Prepayment Rates				Fixed Rate 15 Year Streamline Refinance Mortgages										by Origination Fiscal Year		
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1986	0.08	1.64	4.72	8.53	13.34	18.51	30.01	45.21	57.67	61.94	67.25	70.75	75.08	79.15	82.31	
1987	0.43	2.29	5.13	9.14	13.77	21.73	35.43	48.13	53.10	58.67	63.26	69.11	74.55	78.59	83.42	
1988	1.07	3.84	8.01	13.55	25.11	40.37	53.85	57.29	61.43	65.57	70.56	74.43	77.63	80.88	84.75	
1989	1.72	7.43	12.71	23.53	38.39	52.58	56.39	60.26	64.56	68.67	72.17	75.18	77.21	79.55	83.11	
1990	1.04	8.44	22.28	42.60	57.18	60.44	65.40	68.76	73.46	77.15	79.90	82.03	84.86	87.42	89.52	
1991	0.66	9.63	32.39	52.09	56.68	62.25	66.18	72.12	77.67	80.64	83.48	86.61	89.50	91.80	94.06	
1992	0.68	10.41	26.04	31.58	39.42	45.59	53.72	61.46	65.48	70.07	76.09	81.39	85.77	89.89	92.91	
1993	1.11	7.73	13.16	20.99	28.31	37.72	47.54	52.94	59.21	66.59	74.62	80.02	85.15	89.15	92.11	
1994	1.43	5.49	12.28	19.04	27.99	37.66	43.67	50.37	58.14	67.07	73.75	80.07	85.10	88.95	91.60	
1995	1.81	10.90	18.63	29.19	40.57	46.56	52.77	60.21	67.83	73.78	79.95	84.82	88.47	90.93	92.15	
1996	0.91	5.44	14.61	26.44	33.11	41.47	51.61	63.12	72.61	81.51	87.73	91.80	94.24	95.33	96.21	
1997	1.20	9.68	22.33	28.56	36.25	47.65	60.02	68.89	77.39	83.85	88.45	91.44	92.87	94.10	95.14	
1998	1.11	8.05	13.99	22.82	35.18	52.95	63.82	73.44	80.88	86.45	90.15	91.93	93.47	94.77	95.84	
1999	1.29	5.33	13.24	24.88	43.41	55.35	66.19	74.89	81.70	86.39	88.70	90.74	92.51	94.01	95.30	
2000	2.06	13.16	28.23	46.66	59.01	68.42	76.07	81.89	85.95	88.01	89.87	91.52	92.96	94.25	95.41	
2001	1.24	12.67	42.11	55.32	64.67	72.50	78.93	83.59	85.97	88.13	90.08	91.80	93.35	94.76	95.92	
2002	2.26	23.31	36.95	49.09	59.53	68.34	74.86	78.26	81.39	84.24	86.81	89.15	91.35	93.18	94.69	
2003	3.40	13.09	28.47	42.20	54.01	62.91	67.60	71.98	76.02	79.70	83.11	86.37	89.14	91.46	93.37	
2004	2.31	14.58	28.92	42.20	52.60	58.19	63.44	68.35	72.88	77.13	81.25	84.83	87.89	90.45	92.56	
2005	3.37	15.01	29.00	40.73	47.24	53.45	59.30	64.75	69.94	75.03	79.52	83.42	86.75	89.55	91.84	
2006	3.36	15.14	27.66	35.00	42.15	48.96	55.37	61.52	67.65	73.12	77.96	82.16	85.74	88.74	91.21	
2007	3.38	13.59	21.40	29.39	37.16	44.55	51.72	58.93	65.47	71.31	76.47	80.94	84.77	87.97	90.60	
2008	2.59	8.94	17.19	25.62	33.81	41.82	49.98	57.46	64.23	70.29	75.64	80.28	84.24	87.56	90.29	
2009	1.75	8.17	16.51	25.03	33.53	42.27	50.38	57.81	64.55	70.57	75.88	80.49	84.43	87.73	90.44	
2010	1.75	8.19	16.56	25.34	34.54	43.16	51.16	58.49	65.13	71.07	76.31	80.86	84.75	88.00	90.68	
2011	1.75	8.20	16.83	26.34	35.43	43.95	51.85	59.10	65.66	71.53	76.71	81.20	85.04	88.26	90.90	

Conditional Claim Rates			Adjustable Rate Mortgages										by Origination Fiscal Year																										
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30									
1985	0.00	1.19	3.30	3.84	3.72	3.57	4.69	2.08	1.32	1.16	0.43	0.46	0.49	0.00	0.58	0.00	0.71	1.61	0.00	0.11	0.17	0.11	0.12	0.07	0.05	0.05	0.03	0.03	0.03	0.02									
1986	0.01	0.58	1.79	2.30	2.59	3.14	2.23	1.37	1.38	0.74	0.48	0.94	0.54	0.62	0.49	0.36	0.13	0.23	0.28	0.12	0.08	0.10	0.06	0.05	0.04	0.03	0.02	0.02	0.02	0.02									
1987	0.01	0.18	0.92	1.70	2.29	2.10	1.58	1.42	1.04	0.78	1.07	0.93	0.57	0.66	0.38	0.33	0.28	0.15	0.13	0.09	0.12	0.07	0.05	0.05	0.04	0.03	0.03	0.02	0.02	0.02									
1988	0.01	0.40	1.56	2.06	2.25	1.66	1.42	1.30	1.02	1.07	1.13	0.93	0.86	0.54	0.40	0.43	0.49	0.17	0.12	0.16	0.09	0.07	0.06	0.05	0.04	0.03	0.03	0.02	0.02	0.02									
1989	0.05	0.43	1.51	1.93	2.06	1.45	0.99	1.20	1.11	1.09	0.98	1.13	0.99	0.84	0.26	0.33	0.21	0.15	0.20	0.11	0.09	0.08	0.06	0.05	0.04	0.04	0.03	0.02	0.02	0.02									
1990	0.00	0.17	0.82	1.06	1.62	1.16	1.69	1.75	1.69	1.12	1.15	0.62	0.29	0.24	0.50	0.25	0.19	0.23	0.13	0.10	0.09	0.07	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02									
1991	0.01	0.12	0.63	1.00	1.29	1.49	1.98	2.06	1.62	1.47	0.78	0.46	0.50	0.59	0.28	0.20	0.25	0.15	0.11	0.11	0.09	0.07	0.06	0.06	0.05	0.04	0.03	0.03	0.02	0.02									
1992	0.00	0.18	0.68	1.07	1.48	2.12	2.09	1.70	1.52	0.83	0.63	0.63	0.45	0.31	0.22	0.30	0.18	0.14	0.13	0.10	0.08	0.08	0.07	0.06	0.05	0.04	0.03	0.03	0.02	0.02									
1993	0.01	0.16	0.70	1.30	2.39	2.24	1.88	1.74	1.06	0.75	0.82	0.61	0.38	0.27	0.36	0.22	0.17	0.16	0.12	0.10	0.09	0.08	0.07	0.06	0.05	0.04	0.03	0.03	0.02	0.02									
1994	0.00	0.17	0.90	2.03	2.58	2.39	1.90	1.13	1.01	1.04	0.75	0.46	0.33	0.44	0.27	0.20	0.19	0.15	0.12	0.11	0.10	0.08	0.07	0.06	0.05	0.04	0.03	0.03	0.02	0.02									
1995	0.01	0.35	1.77	3.08	3.83	3.05	2.06	1.91	2.28	1.44	0.59	0.43	0.55	0.33	0.25	0.24	0.19	0.15	0.14	0.12	0.10	0.08	0.07	0.06	0.05	0.04	0.03	0.03	0.02	0.02									
1996	0.00	0.33	1.71	3.55	3.84	2.73	2.82	3.36	2.40	1.40	1.04	1.37	0.85	0.64	0.61	0.48	0.39	0.35	0.32	0.26	0.22	0.18	0.15	0.12	0.10	0.08	0.07	0.06	0.05	0.04									
1997	0.01	0.42	1.86	3.17	2.93	3.57	3.94	2.69	1.69	1.25	1.65	1.03	0.78	0.75	0.58	0.48	0.43	0.38	0.32	0.26	0.22	0.18	0.15	0.12	0.10	0.08	0.07	0.06	0.05	0.04									
1998	0.01	0.73	2.10	2.51	3.10	3.71	2.87	1.95	1.32	1.82	1.13	0.91	0.86	0.66	0.55	0.49	0.44	0.36	0.30	0.25	0.20	0.17	0.14	0.11	0.09	0.08	0.06	0.05	0.04	0.04									
1999	0.00	0.22	0.86	2.05	3.25	2.84	1.99	1.69	2.23	1.41	1.05	1.05	0.80	0.67	0.59	0.53	0.44	0.37	0.30	0.25	0.21	0.17	0.14	0.12	0.10	0.08	0.06	0.05	0.04	0.04									
2000	0.01	0.53	1.73	3.49	3.19	2.21	1.78	2.56	1.61	1.24	1.19	0.94	0.78	0.69	0.62	0.52	0.43	0.35	0.29	0.24	0.20	0.16	0.14	0.11	0.09	0.08	0.06	0.05	0.04	0.03									
2001	0.00	0.35	1.37	2.12	2.23	1.90	2.78	1.96	1.49	1.47	1.15	0.96	0.85	0.77	0.64	0.53	0.44	0.36	0.30	0.25	0.20	0.17	0.14	0.11	0.09	0.08	0.06	0.05	0.04	0.04									
2002	0.00	0.24	1.33	1.98	2.06	3.16	2.15	1.76	1.71	1.34	1.13	1.00	0.91	0.75	0.63	0.52	0.43	0.35	0.29	0.24	0.20	0.17	0.14	0.11	0.09	0.08	0.06	0.05	0.04	0.03									
2003	0.01	0.31	1.23	1.91	3.50	2.53	1.97	2.03	1.57	1.31	1.18	1.07	0.89	0.74	0.61	0.51	0.42	0.35	0.29	0.24	0.20	0.16	0.13	0.11	0.09	0.07	0.06	0.05	0.04	0.03									
2004	0.02	0.50	1.78	4.34	3.51	2.86	2.82	2.28	1.80	1.47	1.28	1.07	0.89	0.74	0.61	0.51	0.42	0.35	0.29	0.24	0.20	0.16	0.13	0.11	0.09	0.07	0.06	0.05	0.04	0.03									
2005	0.02	0.67	3.04	3.50	3.34	3.48	2.82	2.43	1.97	1.59	1.27	1.06	0.88	0.73	0.61	0.50	0.42	0.35	0.29	0.24	0.19	0.16	0.13	0.11	0.09	0.07	0.06	0.05	0.04	0.03									
2006	0.02	0.80	1.91	2.99	3.65	3.16	2.73	2.51	2.05	1.54	1.27	1.06	0.88	0.73	0.61	0.50	0.42	0.35	0.29	0.24	0.19	0.16	0.13	0.11	0.09	0.07	0.06	0.05	0.04	0.03									
2007	0.02	0.49	1.77	3.04	3.40	3.09	2.88	2.69	2.01	1.53	1.27	1.07	0.89	0.74	0.61	0.51	0.42	0.35	0.29	0.24	0.20	0.16	0.13	0.11	0.09	0.07	0.06	0.05	0.04	0.03									
2008	0.01	0.46	1.67	2.86	3.32	3.29	3.12	2.67	2.00	1.53	1.27	1.07	0.89	0.74	0.61	0.51	0.42	0.35	0.29	0.24	0.20	0.16	0.13	0.11	0.09	0.07	0.06	0.05	0.04	0.03									
2009	0.01	0.42	1.57	2.81	3.53	3.56	3.10	2.65	1.99	1.53	1.27	1.07	0.89	0.74	0.61	0.51	0.42	0.35	0.29	0.24	0.20	0.16	0.13	0.11	0.09	0.07	0.06	0.05	0.04	0.03									
2010	0.01	0.40	1.54	3.00	3.81	3.56	3.09	2.64	1.98	1.52	1.27	1.07	0.89	0.74	0.61	0.51	0.42	0.35	0.29	0.24	0.20	0.16	0.13	0.11	0.09	0.07	0.06	0.05	0.04	0.03									
2011	0.01	0.39	1.69	3.25	3.84	3.57	3.10	2.65	1.99	1.53	1.27	1.07	0.89	0.74	0.61	0.51	0.42	0.35	0.29	0.24	0.20	0.16	0.13	0.11	0.09	0.07	0.06	0.05	0.04	0.03									

Conditional Prepayment Rates				Adjustable Rate Mortgages										by Origination Fiscal Year																										
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30										
1985	0.51	5.80	5.87	3.84	4.38	5.00	7.55	7.72	13.49	9.65	5.63	5.99	5.42	10.47	14.04	4.11	10.71	8.87	10.81	10.95	5.22	3.55	4.01	2.90	2.48	2.31	2.12	1.94	2.17	1.91										
1986	0.43	2.28	2.91	4.10	5.95	6.80	10.89	13.21	11.61	5.98	7.86	7.86	12.18	12.39	8.95	9.58	12.64	13.11	7.21	2.99	2.36	3.50	2.53	2.85	2.83	3.10	2.95	3.29	2.89	2.64										
1987	0.05	0.75	2.19	4.75	6.29	9.24	13.64	11.89	6.52	8.86	8.87	13.82	15.08	10.02	14.15	15.28	17.37	8.92	3.80	3.26	4.86	3.68	3.67	3.93	3.83	3.54	3.95	3.48	3.18	2.91										
1988	0.33	1.81	4.76	6.87	10.04	13.99	12.63	6.49	8.87	8.54	12.94	14.16	10.04	14.44	13.92	14.63	8.33	3.70	3.15	4.75	3.49	3.69	3.98	4.15	3.85	4.31	3.78	3.46	3.16	2.88										
1989	0.40	2.70	6.37	9.57	14.78	12.99	7.21	9.47	8.69	14.61	15.12	9.09	13.06	17.60	14.19	9.71	3.91	3.32	4.87	3.56	3.83	4.11	4.40	4.09	4.56	4.01	3.66	3.35	3.06	2.79										
1990	0.06	1.84	5.42	10.79	12.44	8.82	13.38	11.06	16.61	16.26	11.97	18.29	19.00	18.79	11.12	4.48	4.03	6.17	4.86	4.75	5.38	5.28	4.84	5.40	4.76	4.35	3.98	3.63	3.32	3.03										
1991	0.21	2.11	6.61	9.03	7.38	11.87	11.96	17.31	18.53	12.54	20.49	22.47	22.96	13.29	5.59	4.82	7.14	5.28	5.32	5.66	5.53	5.09	5.69	5.02	4.59	4.19	3.83	3.50	3.20	2.92										
1992	0.23	3.18	7.05	7.37	13.47	12.26	19.93	20.00	12.85	20.55	22.38	24.29	15.69	6.31	5.40	7.57	5.50	5.69	5.90	5.79	5.36	5.98	5.28	4.83	4.41	4.04	3.69	3.37	3.08	2.81										
1993	0.46	3.60	5.62	13.10	11.37	19.61	20.32	12.73	23.66	25.19	27.60	17.43	6.97	5.88	8.36	6.05	6.29	6.50	6.40	5.92	6.60	5.83	5.33	4.88	4.46	4.07	3.72	3.40	3.11	2.84										
1994	0.31	2.60	9.96	11.46	20.97	20.29	13.04	24.50	25.63	28.88	18.78	7.69	6.56	9.25	6.73	6.97	7.23	7.10	6.57	7.33	6.47	5.92	5.42	4.96	4.53	4.14	3.79	3.46	3.16	2.89										
1995	1.61	9.63	14.77	30.05	22.79	13.51	24.56	25.07	26.46	19.08	7.84	6.74	9.77	7.14	7.39	7.67	7.54	6.97	7.77	6.87	6.29	5.75	5.26	4.81	4.40	4.02	3.68	3.36	3.07	2.80										
1996	0.49	5.62	32.19	31.17	15.55	29.35	26.05	25.55	22.18	12.94	11.31	15.60	11.55	11.81	12.37	12.13	11.22	12.47	11.07	10.16	9.32	8.54	7.83	7.17	6.57	6.01	5.50	5.03	4.60	4.20										
1997	0.86	17.10	32.66	18.07	35.41	25.88	25.32	20.84	13.39	12.12	16.67	12.38	12.69	13.26	13.01	12.06	13.40	11.90	10.92	10.03	9.20	8.43	7.73	7.08	6.48	5.93	5.42	4.96	4.54	4.15										
1998	2.57	19.36	16.55	35.47	27.44	25.73	22.19	13.13	12.23	17.85	12.93	14.32	13.96	14.01	13.11	14.55	12.93	11.88	10.91	10.02	9.19	8.42	7.72	7.07	6.47	5.92	5.42	4.96	4.53	4.14										
1999	0.39	3.75	30.55	29.60	28.34	18.96	12.79	12.99	20.55	16.43	16.12	17.48	17.00	15.71	17.40	15.50	14.27	13.12	12.06	11.07	10.16	9.32	8.54	7.83	7.17	6.56	6.01	5.50	5.03	4.60										
2000	1.00	30.85	28.99	27.17	19.85	12.72	12.06	18.95	16.28	17.65	18.02	17.81	16.60	18.36	16.38	15.09	13.88	12.77	11.73	10.77	9.88	9.06	8.31	7.61	6.97	6.38	5.84	5.34	4.89	4.47										
2001	4.59	18.17	27.23	19.72	14.21	11.60	17.63	15.31	18.27	20.06	19.65	18.23	20.14	17.99	16.58	15.28	14.06	12.93	11.88	10.90	10.01	9.18	8.41	7.71	7.06	6.46	5.91	5.41	4.95	4.52										
2002	1.99	25.05	17.89	15.97	12.60	17.30	14.50	17.24	20.83	21.25	19.84	21.89	19.59	18.09	16.68	15.37	14.15	13.01	11.96	10.98	10.08	9.24	8.47	7.76	7.11	6.51	5.96	5.45	4.98	4.56										
2003	4.74	12.33	16.22	13.65	18.11	13.95	16.57	19.50	22.39	21.61	23.79	21.33	19.72	18.20	16.79	15.47	14.24	13.09	12.03	11.05	10.14	9.30	8.53	7.81	7.16	6.55	6.00	5.48	5.02	4.59										
2004	2.45	10.03	11.52	16.92	12.50	13.82	16.15	18.95	21.26	25.30	23.19	21.50	19.88	18.36	16.93	15.60	14.36	13.21	12.14	11.15	10.23	9.39	8.61	7.89	7.22	6.61	6.05	5.54	5.06	4.63										
2005	2.24	7.81	14.58	12.75	13.70	14.64	16.49	18.31	24.99	24.48	23.19	21.48	19.86	18.34	16.91	15.59	14.35	13.20	12.13	11.14	10.22	9.38	8.60	7.88	7.22	6.61	6.05	5.53	5.06	4.63										
2006	1.98	10.16	12.02	15.23	15.54	16.07	17.02	22.43	24.76	24.80	23.21	21.48	19.86	18.34	16.92	15.59	14.35	13.20	12.13	11.14	10.23	9.38	8.60	7.88	7.22	6.61	6.05	5.53	5.06	4.63										
2007	2.27	8.18	14.20	15.16	15.92	16.46	20.62	21.89	24.98	24.89	23.23	21.50	19.88	18.36	16.93	15.60	14.36	13.21	12.14	11.15	10.23	9.39	8.61	7.89	7.22	6.61	6.05	5.54	5.06	4.63										
2008	2.00	8.77	12.27	14.63	16.26	19.81	19.95	21.98	25.05	24.92	23.23	21.50	19.88	18.36	16.93	15.60	14.36	13.21	12.14	11.15	10.23	9.39	8.61	7.89	7.22	6.61	6.05	5.54	5.07	4.63										
2009	2.15	7.34	11.02	14.83	19.60	19.23	20.02	22.08	25.14	24.94	23.23	21.50	19.88	18.36	16.93	15.60	14.36	13.21	12.14	11.15	10.23	9.39	8.61	7.89	7.22	6.61	6.05	5.54	5.06	4.63										
2010	1.69	6.70	11.19	17.99	19.05	19.20	20.06	22.14	25.18	24.95	23.23	21.50	19.88	18.36	16.93	15.60	14.36	13.21	12.14	11.15	10.23	9.39	8.61	7.89	7.22	6.61	6.05	5.54	5.06	4.63										
2011	1.62	6.78	13.60	17.33	18.88	19.16	20.01	22.07	25.11	24.93	23.23	21.50	19.88	18.36	16.93	15.60	14.36	13.21	12.14	11.15	10.24	9.39	8.61	7.89	7.22	6.61	6.05	5.54	5.07	4.63										

Cumulative Claim Rates		Adjustable Rate Mortgages										by Origination Fiscal Year																			
Policy\Book		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1985		0.00	1.19	4.24	7.47	10.36	12.90	15.96	17.15	17.83	18.34	18.51	18.68	18.85	18.85	19.02	19.02	19.19	19.52	19.52	19.54	19.57	19.58	19.60	19.61	19.62	19.62	19.63	19.63	19.63	19.63
1986		0.01	0.59	2.33	4.45	6.68	9.16	10.75	11.59	12.32	12.66	12.86	13.24	13.43	13.62	13.75	13.84	13.87	13.92	13.96	13.98	13.99	14.01	14.02	14.02	14.03	14.03	14.03	14.04	14.04	14.04
1987		0.01	0.18	1.09	2.72	4.77	6.49	7.64	8.52	9.08	9.46	9.94	10.31	10.51	10.70	10.80	10.87	10.92	10.94	10.96	10.97	10.99	11.00	11.00	11.01	11.01	11.01	11.02	11.02	11.02	11.02
1988		0.01	0.41	1.93	3.81	5.68	6.89	7.77	8.45	8.95	9.42	9.87	10.18	10.43	10.57	10.66	10.74	10.82	10.85	10.86	10.89	10.90	10.91	10.91	10.92	10.92	10.93	10.93	10.93	10.93	10.94
1989		0.05	0.47	1.93	3.64	5.26	6.21	6.77	7.38	7.89	8.34	8.68	9.01	9.27	9.46	9.51	9.56	9.59	9.61	9.64	9.65	9.66	9.67	9.68	9.68	9.69	9.69	9.69	9.70	9.70	9.70
1990		0.00	0.17	0.97	1.95	3.26	4.06	5.12	6.05	6.83	7.26	7.62	7.79	7.85	7.89	7.96	8.00	8.02	8.05	8.06	8.07	8.08	8.09	8.09	8.10	8.10	8.10	8.11	8.11	8.11	8.11
1991		0.01	0.14	0.76	1.66	2.71	3.82	5.10	6.24	6.96	7.49	7.73	7.84	7.93	8.02	8.05	8.07	8.10	8.12	8.13	8.14	8.14	8.15	8.15	8.16	8.16	8.16	8.17	8.17	8.17	8.17
1992		0.00	0.18	0.83	1.78	2.99	4.46	5.70	6.48	7.03	7.29	7.44	7.56	7.63	7.66	7.69	7.72	7.74	7.75	7.76	7.77	7.77	7.77	7.78	7.78	7.79	7.79	7.79	7.80	7.80	7.80
1993		0.01	0.17	0.84	2.01	3.84	5.33	6.30	7.00	7.36	7.55	7.71	7.80	7.84	7.87	7.90	7.92	7.94	7.95	7.96	7.96	7.97	7.98	7.98	7.98	7.98	7.99	7.99	7.99	7.99	7.99
1994		0.00	0.17	1.05	2.80	4.73	6.10	6.94	7.36	7.65	7.86	7.97	8.02	8.05	8.10	8.12	8.14	8.15	8.16	8.17	8.18	8.18	8.19	8.19	8.20	8.20	8.20	8.20	8.20	8.20	8.20
1995		0.01	0.36	1.92	4.20	6.09	7.20	7.82	8.25	8.62	8.78	8.84	8.87	8.92	8.94	8.96	8.97	8.98	8.99	9.00	9.00	9.01	9.01	9.01	9.01	9.01	9.01	9.02	9.02	9.02	9.02
1996		0.00	0.33	1.93	4.13	5.68	6.57	7.19	7.72	7.99	8.11	8.18	8.27	8.31	8.34	8.37	8.38	8.40	8.41	8.41	8.42	8.42	8.43	8.43	8.43	8.43	8.43	8.43	8.43	8.43	8.43
1997		0.01	0.42	1.94	3.63	4.87	5.80	6.52	6.87	7.04	7.14	7.26	7.33	7.37	7.40	7.42	7.44	7.45	7.46	7.47	7.47	7.47	7.48	7.48	7.48	7.48	7.48	7.48	7.49	7.49	7.49
1998		0.01	0.73	2.36	3.95	5.17	6.18	6.73	7.02	7.18	7.37	7.47	7.53	7.59	7.62	7.65	7.66	7.68	7.69	7.70	7.70	7.71	7.71	7.71	7.71	7.71	7.72	7.72	7.72	7.72	7.72
1999		0.00	0.21	1.04	2.38	3.84	4.71	5.19	5.53	5.92	6.11	6.23	6.32	6.38	6.42	6.45	6.48	6.49	6.50	6.51	6.52	6.52	6.52	6.53	6.53	6.53	6.53	6.53	6.53	6.53	6.53
2000		0.01	0.53	1.71	3.35	4.39	4.95	5.33	5.80	6.03	6.18	6.29	6.37	6.42	6.45	6.48	6.50	6.51	6.52	6.52	6.53	6.53	6.54	6.54	6.54	6.54	6.54	6.54	6.54	6.54	6.54
2001		0.00	0.33	1.39	2.57	3.54	4.22	5.10	5.58	5.89	6.13	6.28	6.38	6.45	6.50	6.54	6.56	6.58	6.59	6.60	6.60	6.61	6.61	6.61	6.61	6.62	6.62	6.62	6.62	6.62	6.62
2002		0.00	0.24	1.22	2.38	3.38	4.69	5.40	5.89	6.27	6.50	6.65	6.75	6.83	6.88	6.91	6.93	6.95	6.96	6.97	6.97	6.98	6.98	6.98	6.98	6.98	6.99	6.99	6.99	6.99	6.99
2003		0.01	0.30	1.33	2.64	4.67	5.82	6.57	7.20	7.58	7.82	7.99	8.10	8.18	8.22	8.26	8.28	8.29	8.31	8.31	8.32	8.32	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.34	8.34
2004		0.02	0.50	2.05	5.34	7.43	8.86	10.03	10.80	11.28	11.58	11.77	11.89	11.97	12.02	12.06	12.08	12.10	12.11	12.12	12.12	12.13	12.13	12.13	12.14	12.14	12.14	12.14	12.14	12.14	12.14
2005		0.02	0.67	3.39	5.97	8.03	9.81	10.99	11.82	12.34	12.66	12.84	12.96	13.03	13.08	13.11	13.14	13.15	13.16	13.17	13.18	13.18	13.18	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19
2006		0.02	0.80	2.47	4.71	6.95	8.52	9.61	10.42	10.92	11.19	11.35	11.46	11.53	11.57	11.60	11.62	11.63	11.64	11.65	11.66	11.66	11.66	11.66	11.67	11.67	11.67	11.67	11.67	11.67	11.67
2007		0.02	0.50	2.07	4.35	6.44	7.97	9.12	9.94	10.40	10.66	10.81	10.91	10.98	11.02	11.05	11.07	11.08	11.09	11.09	11.10	11.10	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11
2008		0.01	0.46	1.94	4.13	6.23	7.90	9.12	9.92	10.38	10.63	10.78	10.88	10.94	10.99	11.01	11.03	11.05	11.05	11.06	11.07	11.07	11.07	11.07	11.08	11.08	11.08	11.08	11.08	11.08	11.08
2009		0.01	0.42	1.84	4.05	6.35	8.12	9.32	10.11	10.55	10.80	10.95	11.05	11.11	11.15	11.18	11.20	11.21	11.22	11.22	11.23	11.23	11.23	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24
2010		0.01	0.40	1.81	4.20	6.60	8.33	9.49	10.25	10.68	10.92	11.07	11.16	11.22	11.26	11.29	11.31	11.32	11.33	11.33	11.34	11.34	11.34	11.34	11.35	11.35	11.35	11.35	11.35	11.35	11.35
2011		0.01	0.39	1.93	4.45	6.81	8.50	9.64	10.39	10.81	11.05	11.19	11.29	11.35	11.38	11.41	11.43	11.44	11.45	11.46	11.46	11.46	11.47	11.47	11.47	11.47	11.47	11.47	11.47	11.47	11.47

Cumulative Prepayment Rates				Adjustable Rate Mortgages										by Origination Fiscal Year																										
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30										
1985	0.51	6.28	11.71	14.94	18.34	21.90	26.83	31.24	38.20	42.44	44.65	46.86	48.73	52.12	56.20	57.22	59.76	61.63	63.67	65.51	66.29	66.79	67.34	67.72	68.03	68.31	68.57	68.80	69.05	69.27										
1986	0.43	2.70	5.51	9.29	14.42	19.79	27.52	35.68	41.80	44.54	47.90	50.99	55.34	59.21	61.64	64.00	66.80	69.33	70.54	71.01	71.36	71.87	72.23	72.62	73.00	73.40	73.77	74.17	74.51	74.82										
1987	0.05	0.80	2.97	7.53	13.17	20.75	30.68	38.01	41.50	45.88	49.84	55.40	60.57	63.47	67.12	70.50	73.73	75.10	75.63	76.07	76.70	77.15	77.59	78.04	78.46	78.83	79.23	79.57	79.87	80.14										
1988	0.33	2.14	6.78	13.05	21.40	31.60	39.37	42.80	47.12	50.87	56.01	60.84	63.75	67.48	70.53	73.28	74.62	75.15	75.59	76.24	76.69	77.15	77.62	78.10	78.52	78.98	79.36	79.69	79.99	80.25										
1989	0.40	3.09	9.23	17.73	29.35	37.84	41.88	46.74	50.73	56.77	62.05	64.71	68.14	72.12	74.73	76.26	76.82	77.27	77.91	78.35	78.81	79.28	79.77	80.20	80.66	81.05	81.39	81.69	81.95	82.18										
1990	0.06	1.90	7.22	17.12	27.19	33.33	41.71	47.59	55.29	61.45	65.19	70.17	74.35	77.70	79.30	79.87	80.36	81.08	81.60	82.10	82.62	83.12	83.54	83.99	84.37	84.70	84.98	85.23	85.46	85.65										
1991	0.21	2.31	8.76	16.94	22.94	31.77	39.47	49.07	57.35	61.82	68.11	73.54	77.82	79.71	80.40	80.95	81.74	82.27	82.79	83.30	83.77	84.19	84.62	84.98	85.30	85.57	85.81	86.02	86.21	86.37										
1992	0.23	3.41	10.21	16.76	27.73	36.23	48.05	57.30	61.95	68.32	73.78	78.34	80.55	81.30	81.89	82.68	83.21	83.73	84.23	84.69	85.10	85.52	85.88	86.18	86.45	86.68	86.89	87.06	87.22	87.36										
1993	0.46	4.05	9.43	21.19	29.92	42.91	53.43	58.56	66.71	73.24	78.54	80.94	81.72	82.34	83.16	83.70	84.22	84.73	85.20	85.61	86.03	86.38	86.68	86.94	87.17	87.37	87.54	87.69	87.83	87.94										
1994	0.31	2.90	12.55	22.45	38.13	49.72	55.48	64.69	71.85	77.77	80.47	81.36	82.06	82.97	83.57	84.15	84.71	85.22	85.65	86.10	86.47	86.79	87.06	87.30	87.50	87.68	87.84	87.97	88.09	88.20										
1995	1.61	11.08	24.17	46.38	57.64	62.54	69.97	75.54	79.83	82.03	82.75	83.32	84.08	84.58	85.06	85.52	85.94	86.29	86.66	86.96	87.21	87.43	87.61	87.78	87.92	88.04	88.15	88.25	88.33	88.40										
1996	0.49	6.08	36.20	55.48	61.76	71.32	77.08	81.10	83.58	84.67	85.49	86.47	87.08	87.63	88.12	88.55	88.89	89.23	89.49	89.71	89.88	90.03	90.15	90.25	90.34	90.41	90.47	90.53	90.58	90.62										
1997	0.86	17.81	44.52	54.19	69.12	75.85	80.50	83.21	84.53	85.56	86.77	87.51	88.17	88.76	89.26	89.66	90.05	90.35	90.59	90.78	90.94	91.08	91.19	91.28	91.36	91.43	91.49	91.54	91.58	91.62										
1998	2.57	21.43	34.31	56.78	67.55	74.57	78.84	80.74	82.23	84.13	85.22	86.27	87.14	87.88	88.47	89.03	89.46	89.80	90.07	90.30	90.48	90.63	90.76	90.87	90.96	91.04	91.11	91.17	91.22	91.26										
1999	0.39	4.13	33.35	52.77	65.48	71.30	74.37	77.02	80.61	82.82	84.61	86.21	87.48	88.44	89.34	89.99	90.49	90.89	91.20	91.46	91.66	91.83	91.97	92.09	92.19	92.27	92.35	92.41	92.46	92.51										
2000	1.00	31.54	51.23	64.02	70.50	73.69	76.27	79.76	82.11	84.20	85.93	87.32	88.37	89.32	90.02	90.55	90.96	91.28	91.54	91.75	91.92	92.06	92.17	92.27	92.36	92.43	92.49	92.54	92.58	92.62										
2001	4.59	21.93	43.10	54.05	60.21	64.42	69.94	73.76	77.54	80.86	83.42	85.29	86.97	88.15	89.04	89.71	90.24	90.65	90.98	91.24	91.46	91.64	91.78	91.91	92.01	92.10	92.18	92.24	92.30	92.35										
2002	1.99	26.54	39.64	49.08	55.20	62.36	67.14	71.87	76.50	80.17	82.81	85.12	86.71	87.88	88.75	89.42	89.94	90.34	90.66	90.93	91.14	91.31	91.46	91.58	91.68	91.77	91.84	91.91	91.96	92.01										
2003	4.74	16.48	29.98	39.35	49.86	56.20	62.49	68.52	73.96	77.95	81.34	83.61	85.25	86.44	87.34	88.02	88.55	88.96	89.29	89.55	89.77	89.95	90.09	90.22	90.32	90.41	90.49	90.55	90.61	90.65										
2004	2.45	12.24	22.29	35.09	42.54	49.45	56.18	62.59	68.24	73.42	76.90	79.34	81.08	82.35	83.31	84.03	84.59	85.03	85.37	85.65	85.88	86.07	86.22	86.35	86.46	86.55	86.63	86.70	86.76	86.81										
2005	2.24	9.87	22.92	32.31	40.77	48.26	55.18	61.37	68.07	72.86	76.22	78.57	80.25	81.49	82.40	83.10	83.64	84.07	84.40	84.67	84.89	85.07	85.22	85.35	85.45	85.54	85.62	85.69	85.74	85.79										
2006	1.98	11.93	22.42	33.86	43.40	51.38	58.21	65.43	71.41	75.79	78.81	80.93	82.44	83.55	84.37	85.00	85.49	85.87	86.17	86.41	86.61	86.77	86.91	87.02	87.11	87.19	87.26	87.32	87.37	87.42										
2007	2.27	10.26	22.93	34.30	44.06	52.21	60.42	67.09	72.83	77.00	79.87	81.87	83.31	84.36	85.14	85.73	86.19	86.55	86.84	87.07	87.26	87.41	87.54	87.65	87.74	87.81	87.88	87.93	87.98	88.02										
2008	2.00	10.59	21.50	32.71	42.98	53.04	60.83	67.44	73.11	77.22	80.05	82.02	83.43	84.46	85.23	85.82	86.27	86.63	86.91	87.13	87.32	87.47	87.59	87.70	87.79	87.86	87.93	87.98	88.03	88.07										
2009	2.15	9.33	19.28	30.98	43.72	53.32	61.04	67.58	73.19	77.25	80.02	81.96	83.35	84.37	85.13	85.70	86.15	86.50	86.78	87.00	87.18	87.33	87.45	87.56	87.64	87.72	87.78	87.83	87.88	87.92										
2010	1.69	8.28	18.50	32.83	44.83	54.16	61.68	68.07	73.53	77.47	80.16	82.05	83.40	84.39	85.12	85.68	86.12	86.45	86.72	86.94	87.12	87.26	87.38	87.48	87.57	87.64	87.70	87.75	87.80	87.84										
2011	1.62	8.29	20.71	34.11	45.71	54.81	62.15	68.38	73.71	77.57	80.21	82.06	83.38	84.35	85.07	85.62	86.05	86.38	86.64	86.85	87.03	87.17	87.29	87.38	87.47	87.54	87.60	87.65	87.69	87.73										

Conditional Claim Rates		Adjustable Rate Streamline Refinance Mortgages										by Origination Fiscal Year																			
Policy\Book		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1987	0.00	0.34	0.70	1.64	2.90	1.07	1.44	1.70	0.97	0.35	0.39	0.42	0.50	0.59	1.29	0.00	0.00	0.11	0.15	0.12	0.16	0.09	0.06	0.07	0.06	0.06	0.05	0.05	0.05	0.04	
1988	0.00	0.97	1.49	3.19	1.73	0.65	0.75	0.78	3.31	0.93	0.00	0.00	2.70	1.59	1.79	0.00	0.17	0.19	0.14	0.19	0.11	0.08	0.06	0.04	0.03	0.03	0.03	0.02	0.02	0.01	
1989	0.00	7.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1990	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1991	0.00	0.00	1.00	1.11	0.00	2.19	1.71	1.02	0.00	0.00	0.00	0.00	0.00	0.22	0.23	0.20	0.30	0.19	0.11	0.13	0.13	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.04	0.03
1992	0.00	0.14	0.36	0.49	0.88	1.11	1.04	1.03	0.68	0.28	0.35	0.15	0.17	0.23	0.19	0.27	0.17	0.11	0.13	0.12	0.11	0.10	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.05	
1993	0.01	0.22	0.81	1.51	2.40	2.05	1.59	1.31	0.57	0.50	0.28	0.28	0.25	0.21	0.32	0.20	0.13	0.15	0.14	0.13	0.11	0.12	0.10	0.09	0.08	0.07	0.07	0.06	0.05	0.05	
1994	0.01	0.46	1.86	3.08	2.90	2.53	1.64	0.85	0.60	0.32	0.37	0.28	0.21	0.33	0.20	0.15	0.15	0.15	0.13	0.12	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	
1995	0.00	0.57	1.95	2.19	3.14	3.46	1.19	1.16	1.91	0.63	0.50	0.42	0.46	0.28	0.18	0.20	0.20	0.17	0.16	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.06	0.05	
1996	0.01	0.38	1.91	3.47	2.83	1.29	1.64	0.92	1.44	0.94	0.78	1.07	0.69	0.46	0.51	0.49	0.44	0.38	0.39	0.35	0.31	0.28	0.25	0.22	0.20	0.18	0.16	0.14	0.13	0.11	
1997	0.01	0.39	1.83	3.57	2.63	2.52	2.33	1.25	1.05	0.87	1.25	0.81	0.53	0.59	0.57	0.51	0.44	0.45	0.41	0.36	0.32	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.13	0.11	
1998	0.01	0.31	1.23	1.36	1.62	1.76	1.78	1.15	0.87	1.33	0.85	0.62	0.64	0.62	0.56	0.49	0.50	0.44	0.40	0.35	0.32	0.28	0.25	0.22	0.20	0.18	0.16	0.14	0.13	0.11	
1999	0.00	0.15	0.49	1.03	2.59	1.91	1.20	1.05	1.53	0.99	0.63	0.71	0.69	0.62	0.54	0.55	0.49	0.44	0.39	0.35	0.31	0.28	0.25	0.22	0.20	0.18	0.16	0.14	0.12	0.11	
2000	0.00	0.33	1.72	4.01	2.04	1.18	0.92	1.45	0.91	0.67	0.68	0.67	0.60	0.52	0.53	0.48	0.43	0.38	0.34	0.30	0.27	0.24	0.21	0.19	0.17	0.15	0.14	0.12	0.11	0.10	
2001	0.01	0.28	2.09	2.29	1.45	1.19	1.79	1.19	0.77	0.86	0.84	0.75	0.66	0.67	0.60	0.53	0.48	0.42	0.38	0.34	0.30	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.12	0.11	
2002	0.01	0.37	1.06	1.20	1.13	1.71	1.10	0.73	0.79	0.77	0.69	0.60	0.62	0.55	0.49	0.44	0.39	0.35	0.31	0.28	0.25	0.22	0.20	0.17	0.16	0.14	0.12	0.11	0.10	0.09	
2003	0.01	0.29	0.71	1.17	2.01	1.26	0.81	0.85	0.83	0.74	0.65	0.66	0.59	0.53	0.47	0.42	0.38	0.33	0.30	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.12	0.11	0.09	0.08	
2004	0.01	0.52	1.62	4.17	2.82	1.43	1.30	1.08	0.89	0.74	0.74	0.66	0.59	0.52	0.47	0.42	0.37	0.33	0.30	0.26	0.23	0.21	0.19	0.17	0.15	0.13	0.12	0.11	0.09	0.08	
2005	0.03	0.91	3.19	3.59	2.22	1.93	1.48	1.11	0.89	0.85	0.74	0.66	0.59	0.52	0.47	0.42	0.37	0.33	0.29	0.26	0.23	0.21	0.19	0.17	0.15	0.13	0.12	0.11	0.09	0.08	
2006	0.03	1.04	1.89	2.31	2.43	1.86	1.35	1.05	0.99	0.84	0.74	0.66	0.59	0.52	0.47	0.42	0.37	0.33	0.29	0.26	0.23	0.21	0.19	0.17	0.15	0.13	0.12	0.11	0.09	0.08	
2007	0.03	0.58	1.39	2.47	2.44	1.76	1.29	1.19	0.98	0.83	0.74	0.66	0.59	0.52	0.47	0.42	0.37	0.33	0.29	0.26	0.23	0.21	0.19	0.17	0.15	0.13	0.12	0.11	0.09	0.08	
2008	0.02	0.46	1.40	2.53	2.35	1.69	1.47	1.18	0.98	0.83	0.74	0.66	0.59	0.52	0.47	0.42	0.37	0.33	0.29	0.26	0.23	0.21	0.19	0.17	0.15	0.13	0.12	0.11	0.09	0.08	
2009	0.02	0.46	1.41	2.42	2.25	1.93	1.46	1.18	0.98	0.83	0.74	0.66	0.59	0.52	0.47	0.42	0.37	0.33	0.29	0.26	0.23	0.21	0.19	0.17	0.15	0.13	0.12	0.11	0.09	0.08	
2010	0.02	0.46	1.35	2.35	2.58	1.91	1.45	1.17	0.97	0.83	0.74	0.66	0.59	0.52	0.47	0.42	0.37	0.33	0.29	0.26	0.23	0.21	0.19	0.17	0.15	0.13	0.12	0.11	0.09	0.08	
2011	0.02	0.45	1.36	2.75	2.61	1.94	1.46	1.18	0.98	0.83	0.74	0.66	0.59	0.52	0.47	0.42	0.37	0.33	0.29	0.26	0.23	0.21	0.19	0.17	0.15	0.13	0.12	0.11	0.09	0.08	

Conditional Prepayment Rates				Adjustable Rate Streamline Refinance Mortgages																	by Origination Fiscal Year														
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
1987	0.17	1.55	3.15	4.01	6.56	10.23	13.94	10.51	7.12	8.45	7.72	14.71	15.35	8.24	14.84	14.62	18.92	11.62	10.86	9.17	13.75	10.54	11.16	12.48	13.48	13.71	16.86	16.94	16.98	17.01					
1988	1.43	1.93	4.98	4.79	8.67	13.55	3.01	4.69	8.26	10.28	11.58	11.90	12.16	9.52	19.64	11.36	7.96	5.74	4.73	7.18	4.94	5.24	5.74	6.26	5.95	6.87	6.32	5.77	5.23	4.71					
1989	0.00	7.14	0.00	8.33	0.00	9.09	10.00	11.11	12.50	14.29	16.67	0.00	20.00	0.00	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
1990	0.00	36.36	14.29	16.67	0.00	0.00	0.00	20.00	33.33	50.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
1991	0.00	4.76	9.00	12.78	11.61	12.41	14.53	20.41	19.48	17.74	17.65	23.81	31.25	16.68	10.51	9.12	13.37	10.07	9.92	12.02	12.20	11.97	14.35	13.93	13.39	12.79	12.12	11.39	10.61	9.80					
1992	0.73	7.39	11.99	10.57	16.48	12.88	20.32	18.88	13.47	18.58	20.43	24.18	15.76	10.52	9.07	13.28	10.06	10.66	11.91	12.85	13.04	16.06	16.14	16.18	16.22	16.25	16.29	16.33	16.37	16.41					
1993	1.69	8.50	8.67	12.71	10.75	17.26	17.79	13.22	23.00	24.32	27.08	16.31	10.26	8.80	13.09	9.83	10.37	11.80	12.64	12.75	15.71	15.81	15.85	15.88	15.92	15.96	16.00	16.03	16.07	16.11					
1994	2.79	6.76	11.21	10.21	16.09	16.36	12.13	19.28	21.08	25.22	17.71	9.80	8.04	12.29	9.11	9.84	10.87	11.87	12.08	14.90	14.99	15.03	15.07	15.11	15.14	15.17	15.21	15.25	15.28	15.32					
1995	2.41	17.38	19.20	26.49	17.40	13.25	22.23	24.65	21.04	18.36	9.33	8.03	12.61	9.52	9.91	11.54	12.24	12.30	15.17	15.25	15.29	15.33	15.37	15.41	15.45	15.48	15.52	15.56	15.60	15.64					
1996	2.90	19.51	39.23	33.07	15.82	28.05	27.06	29.02	24.01	17.31	15.03	21.68	16.64	17.72	19.57	21.08	21.35	25.90	26.04	26.10	26.16	26.23	26.29	26.35	26.41	26.47	26.53	26.59	26.65	26.71					
1997	4.38	36.11	40.19	19.29	34.34	27.94	31.08	28.43	17.62	15.28	22.07	16.99	17.84	20.12	21.48	21.71	26.32	26.45	26.51	26.57	26.63	26.69	26.75	26.80	26.86	26.98	27.04	27.10	27.15	27.21					
1998	9.59	38.93	22.04	40.06	33.50	34.79	27.24	18.24	15.18	22.36	17.00	18.34	20.01	21.77	22.18	26.92	27.07	27.13	27.20	27.26	27.32	27.38	27.45	27.51	27.57	27.63	27.69	27.74	27.80	27.86					
1999	3.13	10.62	32.80	30.18	31.36	24.38	17.92	15.90	22.64	17.49	18.27	20.76	22.02	22.16	26.85	26.99	27.05	27.12	27.18	27.24	27.30	27.36	27.42	27.47	27.53	27.59	27.64	27.69	27.75	27.81					
2000	2.76	23.42	21.38	19.74	20.65	17.22	14.45	21.69	16.37	17.62	19.52	21.11	21.40	25.96	26.09	26.15	26.22	26.28	26.34	26.40	26.48	26.55	26.61	26.66	26.72	26.78	26.84	26.91	26.97	27.02					
2001	3.37	29.42	29.01	21.91	17.21	14.75	21.50	16.87	17.48	20.16	21.30	21.49	26.07	26.21	26.28	26.35	26.43	26.50	26.57	26.64	26.70	26.76	26.83	26.89	26.96	27.02	27.09	27.15	27.21	27.28					
2002	5.61	33.05	22.66	16.78	13.98	20.63	16.18	17.15	19.43	20.75	21.03	25.53	25.66	25.73	25.80	25.87	25.94	26.00	26.07	26.13	26.20	26.26	26.32	26.39	26.45	26.51	26.57	26.64	26.70	26.76					
2003	9.76	21.16	18.63	13.65	19.84	15.64	16.94	19.45	20.82	21.08	25.59	25.73	25.80	25.87	25.94	26.02	26.09	26.15	26.22	26.29	26.35	26.42	26.48	26.55	26.61	26.68	26.74	26.81	26.87	26.93					
2004	6.47	18.07	13.43	17.72	13.65	15.15	17.67	19.55	20.33	25.37	25.79	25.91	25.98	26.05	26.12	26.19	26.26	26.33	26.39	26.46	26.53	26.59	26.66	26.72	26.78	26.85	26.91	26.98	27.04	27.10					
2005	7.76	14.04	17.61	12.94	14.04	16.40	18.32	19.30	24.46	25.39	25.80	25.90	25.97	26.04	26.11	26.18	26.25	26.32	26.39	26.45	26.52	26.59	26.65	26.71	26.78	26.84	26.91	26.97	27.03	27.09					
2006	6.57	18.37	13.88	13.96	15.84	17.84	18.85	23.83	24.83	25.57	25.82	25.90	25.97	26.05	26.11	26.19	26.25	26.32	26.39	26.45	26.52	26.59	26.65	26.71	26.78	26.84	26.91	26.97	27.03	27.09					
2007	7.73	14.13	14.35	14.14	16.30	18.21	23.11	24.00	24.95	25.61	25.83	25.91	25.98	26.05	26.12	26.19	26.26	26.32	26.39	26.46	26.52	26.59	26.65	26.72	26.78	26.85	26.91	26.98	27.04	27.10					
2008	5.92	13.91	12.74	13.55	16.56	22.26	23.17	24.06	24.99	25.62	25.83	25.90	25.98	26.05	26.12	26.19	26.26	26.32	26.39	26.46	26.52	26.59	26.65	26.72	26.78	26.84	26.91	26.97	27.04	27.09					
2009	6.05	11.91	11.21	13.67	20.32	22.36	23.22	24.11	25.04	25.64	25.83	25.90	25.98	26.05	26.12	26.19	26.26	26.32	26.39	26.46	26.52	26.59	26.65	26.72	26.78	26.84	26.91	26.97	27.04	27.09					
2010	4.83	10.54	11.31	16.91	20.45	22.36	23.26	24.15	25.06	25.65	25.83	25.90	25.98	26.05	26.12	26.19	26.26	26.32	26.39	26.45	26.52	26.59	26.65	26.72	26.78	26.84	26.91	26.97	27.04	27.09					
2011	4.53	10.59	13.96	16.92	20.28	22.30	23.22	24.11	25.02	25.63	25.83	25.90	25.98	26.05	26.12	26.19	26.26	26.32	26.39	26.45	26.52	26.59	26.65	26.72	26.78	26.84	26.91	26.97	27.04	27.09					

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Cumulative Prepayment Rates				Adjustable Rate Streamline Refinance Mortgages											by Origination Fiscal Year																										
Policy\Book	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30											
1987	0.17	1.72	4.80	8.58	14.41	22.64	32.59	38.94	42.71	46.83	50.26	56.26	61.58	63.98	67.92	71.18	74.79	76.58	78.06	79.17	80.68	81.68	82.63	83.56	84.45	85.23	86.05	86.74	87.32	87.79											
1988	1.43	3.33	8.10	12.38	19.52	29.52	31.43	34.29	39.05	44.29	49.52	54.29	58.57	61.43	66.67	69.05	70.53	71.51	72.26	73.36	74.06	74.76	75.49	76.24	76.91	77.63	78.26	78.79	79.24	79.63											
1989	0.00	7.14	7.14	14.29	14.29	21.43	28.57	35.71	42.86	50.00	57.14	57.14	64.29	64.29	71.43	71.43	71.43	71.43	71.43	71.43	71.43	71.43	71.43	71.43	71.43	71.43	71.43	71.43	71.43	71.43											
1990	0.00	36.36	45.45	54.55	54.55	54.55	54.55	63.64	72.73	81.82	81.82	90.91	90.91	90.91	90.91	90.91	90.91	90.91	90.91	90.91	90.91	90.91	90.91	90.91	90.91	90.91	90.91	90.91	90.91	90.91											
1991	0.00	4.76	13.33	24.29	32.86	40.95	49.05	58.57	65.71	70.95	75.24	80.00	84.76	86.51	87.42	88.13	89.07	89.69	90.23	90.82	91.35	91.80	92.28	92.67	93.00	93.27	93.49	93.68	93.83	93.96											
1992	0.73	8.06	19.07	27.57	39.36	46.98	57.31	64.86	69.18	74.29	78.85	83.13	85.24	86.42	87.33	88.54	89.33	90.08	90.84	91.55	92.18	92.85	93.42	93.90	94.30	94.63	94.91	95.15	95.35	95.51											
1993	1.69	10.05	17.83	28.15	35.64	46.08	54.77	59.97	67.71	73.96	79.20	81.49	82.69	83.61	84.86	85.67	86.44	87.22	87.97	88.62	89.32	89.91	90.41	90.83	91.18	91.48	91.73	91.94	92.12	92.27											
1994	2.79	9.36	19.47	27.47	38.41	47.42	52.84	60.27	66.75	72.83	76.01	77.45	78.51	80.00	80.97	81.91	82.85	83.77	84.59	85.47	86.23	86.87	87.42	87.89	88.29	88.62	88.91	89.15	89.36	89.53											
1995	2.41	19.38	34.75	51.47	59.31	64.05	70.67	76.30	79.86	82.25	83.24	84.00	85.10	85.83	86.50	87.21	87.88	88.46	89.09	89.63	90.09	90.47	90.80	91.08	91.31	91.51	91.68	91.82	91.94	92.05											
1996	2.90	21.85	52.36	67.50	72.10	78.73	83.24	86.70	88.70	89.78	90.54	91.47	92.02	92.51	92.94	93.32	93.62	93.90	94.12	94.27	94.38	94.47	94.53	94.58	94.61	94.64	94.65	94.67	94.68	94.68											
1997	4.38	38.90	63.30	70.09	79.42	84.20	87.90	90.16	91.14	91.83	92.67	93.17	93.59	93.99	94.32	94.58	94.83	95.01	95.15	95.25	95.32	95.37	95.41	95.44	95.46	95.47	95.48	95.49	95.50	95.50											
1998	9.59	44.78	56.88	73.77	82.04	87.61	90.38	91.70	92.58	93.67	94.30	94.87	95.36	95.79	96.13	96.45	96.68	96.85	96.97	97.06	97.12	97.17	97.20	97.23	97.24	97.26	97.27	97.27	97.28	97.28											
1999	3.13	13.42	41.77	59.17	71.61	77.99	81.45	83.94	86.87	88.59	90.06	91.41	92.53	93.41	94.23	94.82	95.26	95.57	95.80	95.97	96.09	96.17	96.24	96.28	96.32	96.34	96.36	96.37	96.38	96.39											
2000	2.76	25.53	41.38	52.64	61.61	67.40	71.37	76.40	79.32	81.92	84.28	86.31	87.92	89.44	90.57	91.40	92.01	92.46	92.79	93.03	93.21	93.34	93.43	93.50	93.55	93.59	93.62	93.64	93.66	93.67											
2001	3.37	31.80	51.50	61.75	67.86	72.11	77.32	80.46	83.13	85.64	87.74	89.38	90.94	92.08	92.92	93.53	93.99	94.32	94.56	94.74	94.87	94.96	95.03	95.08	95.12	95.14	95.16	95.18	95.19	95.20											
2002	5.61	36.80	51.04	59.08	64.58	71.46	75.66	79.34	82.76	85.67	87.99	90.20	91.83	93.04	93.94	94.60	95.09	95.45	95.71	95.91	96.05	96.16	96.24	96.30	96.34	96.37	96.39	96.41	96.42	96.43											
2003	9.76	28.85	42.05	49.85	59.52	65.47	70.83	75.89	80.21	83.63	86.88	89.29	91.07	92.38	93.35	94.07	94.60	94.98	95.27	95.48	95.64	95.75	95.84	95.90	95.94	95.98	96.00	96.02	96.03	96.04											
2004	6.47	23.37	33.59	45.06	51.95	58.35	64.57	70.14	74.75	79.27	82.67	85.18	87.03	88.39	89.39	90.13	90.67	91.07	91.37	91.58	91.74	91.86	91.94	92.00	92.05	92.08	92.11	92.13	92.14	92.15											
2005	7.76	20.71	34.52	42.56	49.84	56.96	63.46	68.95	74.48	78.77	81.99	84.36	86.10	87.39	88.34	89.03	89.55	89.92	90.20	90.41	90.55	90.66	90.75	90.80	90.85	90.88	90.90	90.92	90.93	90.94											
2006	6.57	23.72	34.17	43.03	51.43	59.17	65.74	72.37	77.55	81.51	84.46	86.63	88.23	89.40	90.27	90.91	91.37	91.72	91.97	92.16	92.30	92.40	92.47	92.53	92.57	92.60	92.62	92.63	92.64	92.65											
2007	7.73	20.76	32.05	41.42	50.44	58.62	66.93	73.45	78.52	82.38	85.24	87.35	88.90	90.04	90.88	91.50	91.96	92.29	92.54	92.72	92.85	92.95	93.02	93.08	93.11	93.14	93.16	93.18	93.19	93.20											
2008	5.92	19.01	29.27	38.64	48.25	58.73	67.02	73.51	78.55	82.37	85.21	87.30	88.83	89.96	90.80	91.41	91.86	92.20	92.44	92.62	92.75	92.85	92.92	92.97	93.01	93.04	93.06	93.07	93.08	93.09											
2009	6.05	17.24	26.47	36.30	48.57	59.02	67.23	73.66	78.64	82.42	85.22	87.28	88.79	89.91	90.73	91.34	91.79	92.11	92.36	92.53	92.66	92.76	92.83	92.88	92.92	92.94	92.97	92.98	92.99	93.00											
2010	4.83	14.86	24.45	36.96	49.17	59.44	67.54	73.87	78.77	82.48	85.23	87.26	88.75	89.84	90.65	91.25	91.69	92.01	92.25	92.42	92.55	92.64	92.71	92.76	92.80	92.82	92.84	92.86	92.87	92.88											
2011	4.53	14.64	26.49	38.66	50.38	60.31	68.15	74.27	79.03	82.63	85.30	87.26	88.71	89.77	90.56	91.14	91.56	91.88	92.11	92.27	92.40	92.49	92.56	92.61	92.64	92.67	92.69	92.70	92.71	92.72											