

Relo CMO/prepay analysis (1/2)

- * As you are aware, I am a big fan of discount Relo CMOs, for their high and predictable turnover rates and wide spreads in the marketplace.
- * The following pages have prepay histories for some agency and Pru Home CMOs. I have only listed CMOs originated from 93-95, as that was the period from which the loans are discounts and cusps today.
- * What is noteworthy is the fast current speeds, even on the discounts. This is due to a) the strong economy leading to corporate relocation activity b) seasoning - 40-50% of relo borrowers get re-relocated within 2-5 years c) seasonality - most borrowers move in summer months when schools are out.

Relo CMO/prepay analysis (2/2)

- * Another point is that, even on the seasoned loans, 12mo speeds are around 12-15 cpr. As I mentioned, these do display strong seasonality.
- * A good long term speed for longer CMOs would be 200-250 psa. Shorter CMOs should be evaluated for structural exposure to seasonality. With the strong economy, I think short term prepays will remain fast, and 275-300 psa is not unreasonable. We should have 2 more fast months in the pipeline, in any case. All these comments apply to both agencies and jumbos.
- * I have tons of data, and have opinions about how these loans pay in a rally. Please call me if you have more questions.

Here are some discount relo cmos I like. In case this is not obvious, I'm doing all this work to try and sell some bonds :-).

- * 50mm PHMS 93-58 A3, 5.8% x 6.955%, 308 wam, support structure, 3yr wal, +85/c/250 = 97-12. Current pay structure with very good potential TRRs due to the short duration, discount, and ability to benefit from seasonal prepays. My favorite CMO.
- * 10mm FHR 1764-B E, 6% x 6.643, 304 wam, 2yr wal, offered at +65/c/325 = 99-03+. Quite a stable seq: 250 psa==>2.6yr (+53/c), 200 psa==>3.23yr (+45/c). No more lockout left.
- * 5mm FHR 1810 B, 6% x 7.246%, 333 wam, 3.6yr seq, offered at +75/c/350 = 97-31. This is a full offer, but its a nice bond due to the high wac, and the 333 wam suggesting it will start prepaying fast soon. Worth throwing a bid at.

586-6575, 203-750-1107; 203-750-1111 Fax.

Relo CMO speed histories - FHLMC 30-yr 3-6yr old deals (1/2)

CMO	WAC	WAM	1mo	3mo	6mo	12mo	Life
FHR 1355	8.293	281	16.7	15.9	15.7	13.9	19.7
FHR 1396	7.776	281	13.8	15.2	12.8	11.5	12.9
FHR 1448	7.431	283	14.4	17.5	13.8	13.1	10.8
FHR 1474	7.757	287	13.2	16.5	13.8	12.3	12.0
FHR 1525	7.686	291	24.5	15.8	14.9	14.2	11.5
FHR 1558	7.064	295	16.1	15.5	14.4	14.2	10.1
FHR 1589	6.980	299	12.4	15.1	12.3	11.6	9.4
FHR 1632	6.728	300	21.4	19.5	15.8	13.7	9.7
FHR 1685	6.643	306	21.0	18.7	15.4	13.6	9.8
FHR 1731	6.869	309	15.9	18.8	16.9	16.0	10.8
FHR 1745	8.014	309	23.5	18.2	14.8	14.2	10.9

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Relo CMO speed histories - FHLMC 30-yr 3-6yr old deals (2/2)

CMO	WAC	WAM	1mo	3mo	6mo	12mo	Life
FHR 1756	7.619	288	22.0	19.6	17.5	14.9	10.8
FHR 1777	8.697	316	22.9	20.2	17.7	17.4	18.6
FHR 1787	8.230	316	15.0	16.3	16.0	15.0	14.2
FHR 1791	8.284	325	27.1	19.9	16.9	14.3	14.1
FHR 1800	7.644	329	23.8	21.0	15.5	10.7	7.9
FHR 1806	7.423	328	22.7	18.8	15.7	10.5	7.6
FHR 1810	7.246	333	10.4	16.5	14.0	10.8	8.5
FHR 1811	7.411	334	7.6	12.2	11.5	9.8	6.9
FHR 1814	7.363	329	20.8	17.7	14.9	11.2	9.0
FHR 1839	7.050	338	11.4	15.3	11.0	8.4	7.0
FHR 1840	6.990	337	6.1	7.7	8.4	6.1	4.7

Relo CMO speed histories - PHMS 30-yr 3-6yr old deals

CMO	WAC	WAM	1mo	3mo	6mo	12mo	Life
PHMS 92-38	7.661	290	16.1	14.4	14.0	13.5	13.4
PHMS 93-4	7.697	295	19.3	16.7	15.1	11.6	13.1
PHMS 93-18	7.744	295	24.4	21.6	18.8	14.7	15.3
PHMS 93-32	7.213	300	9.4	18.7	15.1	13.3	10.7
PHMS 93-40	7.178	305	22.1	18.3	14.5	12.4	9.5
PHMS 93-58	6.955	308	23.6	20.0	14.1	13.1	9.2
PHMS 94-12	6.817	311	26.0	18.9	16.1	13.5	10.4
PHMS 94-29	7.265	313	13.7	23.9	19.7	15.5	10.7
PHMS 94-32	8.475	317	27.1	25.9	21.4	16.8	16.4
PHMS 95-3	8.677	320	41.6	31.9	22.6	23.1	24.1
PHMS 95-7	7.528	331	25.2	21.2	15.4	12.4	9.3

Relo MBS Backed CMOs offer Extension Protection and Cheap Convexity I

- Although rates have backed up, relos should continue to prepay fast, as a significant component of their prepayments are likely to remain insensitive to interest rate backups.
- Prepayments on relo loans are primarily a function of corporate relocation activity. *Pru Home Mortgage* has reported that their relo program's volume increased 10% in 1994, even though they have not added significantly more companies to their program. This increase correlates with the pickup in the economy, and we expect relo prepaes to increase in a rising rate environment, with increased economic activity. We observed such an increase in prepayments (for conventionals) in *Spring 1984* (not a typo), when the 5-yr. UST rose 300 bps to 14% in tandem with a rise in GDP, and prepayments on current coupons and discounts doubled (from about 5 CPR to about 10 CPR).
- We have previously concluded¹ that (i) relo loans have high turnover rates; (ii) relos turnover slowly in the first two years, after which they experience faster prepayment rates; (iii) relo loans have a greater propensity to refinance than non-relo loans; and (iv) it usually takes a greater than 150 bps incentive to induce relo refinancings.
- Our monthly prepayment analysis also indicates consistently that relo turnover is greater than non-relo turnover, once the loans season two years.
- The 1993 Atlas Van Lines survey² indicates that 52% of respondents typically relocate employees between 3 and 5 years. Prepayment experience to date³ has correlated with this fact. We therefore expect high relo turnover to occur after year 3, with relatively low turnover in the first two years.
- High relo turnover after loans age 3 years should mitigate extension risk concerns for relo MBSs. This in turn gives relos extremely attractive convexity characteristics, as they can essentially be considered sinking fund bonds when they are out-of-the money, irrespective of the WAC. This conclusion is supported by our prepayment model (Tables 2, 4 & 5).
- With the market backup, most bonds are at deep discounts, at wider spreads, as well. This gives them both positive convexity, as well as better relative value. The following table shows the OAS, Durations, and Convexities of selected Relo backed CMOs.

Table 1: Selected Relo backed CMOs

Bond	Type	Coups/Collet.	WAL	Price	Spread	Pricing Speed	OAS	Dur.	Conv.
FH 1632 PE	PAC	5.50 x 6.0	5.52	91-10+	+96/5	325 PSA	86	4.52	0.09
FH 1632 PG	PAC	5.75 x 6.0	7.52	89-04	+110/5-10	325 PSA	95	5.76	0.24
FH 1632 PH	PAC	6.0 x 6.0	9.58	87-28	+96/10	325 PSA	95	6.90	0.57
FH 1558 C	TAC	6.5 x 6.5	9.45	89-08+	+130/10	145/4-mth, 325 Life	116	6.32	-0.72
FH 1474 E	TAC	7.0 x 7.0	10.61	92-01	+130/10	300 PSA	101	5.85	-0.75
FH 1632 B	Comp	6.0 x 6.0	7.75	85-11+	+200/5-10	325 PSA	136	6.62	0.42
FH 1589 Z	Comp	6.25 x 6.25	9.85	81-15	+200/10	325 PSA	139	8.61	0.06

¹ Understanding Relocation Mortgage Prepayments I & II, 10/20/93 and 10/26/93, *MBS Strategies Group*.

² 26th Annual Survey of Corporate Relocation Policies, *Atlas Van Lines*. Copies available.

³ We extract the relo turnover component from relo CPRs in our monthly relo prepayment summary (attached); the average turnover CPR from loans aged more than 24 months is about 20%.

Samir Shah, 212-667-2060

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST.

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- Table 4 shows prepayment projections to life for each of these deals, under different interest rate environments. Our model suggests that, when out of the money, refo MBSs prepay at average lifetime speeds close to 19 CPR or about 316 PSA.

Table 4: Refo CMO Scenario Prepayment Projections in CPRs

CMO	WAC	-200	-100	-50	0	+50	+100	+200
FH 1685	6.70	16	15	15	15	15	15	15
FH 1632	6.70	17	16	16	16	16	16	16
FH 1589	7.00	21	16	16	16	16	16	16
FH 1558	7.10	25	17	17	17	17	17	17
FH 1448	7.50	44	18	18	18	18	18	18
FH 1525	7.70	47	18	18	17	17	17	17
FH 1474	7.80	48	19	18	18	18	18	18
FH 1396	7.80	48	19	18	18	18	18	18
FH 1355	8.30	41	32	19	19	18	18	18
FN 92-101	8.40	39	33	20	19	19	19	19
FN 91-171	8.80	35	32	26	19	19	19	19
FH 1158	9.20	30	28	28	23	20	20	19
FH 1123	9.50	28	27	26	25	21	20	20

Table 5: Refo CMO Scenario Prepayment Projections in PSAs

CMO	WAC	-200	-100	-50	0	+50	+100	+200
FH 1685	6.70	320	302	302	302	302	302	302
FH 1632	6.70	328	303	303	303	303	303	303
FH 1589	7.00	400	304	304	304	304	304	304
FH 1558	7.10	471	308	308	308	308	308	308
FH 1448	7.50	801	316	313	312	312	312	312
FH 1525	7.70	948	332	314	311	311	311	311
FH 1474	7.80	904	334	317	313	313	313	313
FH 1396	7.80	904	334	317	313	313	313	313
FH 1355	8.30	703	552	330	313	310	310	310
FN 92-101	8.40	659	556	340	313	310	310	310
FN 91-171	8.80	577	531	433	323	315	314	314
FH 1158	9.20	508	475	462	389	330	325	324
FH 1123	9.50	465	445	436	416	343	331	331

- Nomura's Relo model captures the refinancing and age components of relo MBSs quite well, including burnout, but appears to underestimate prepayments for relo MBSs with small WALAs. The results can be seen in Table 2. It should be noted that some of the relo cohorts are quite small, and are subject to idiosyncratic behavior.

Table 2: The Nomura Relo Prepayment Model

Actual versus Estimated Prepayments for FHLMC 30-yr. Relo MBSs

Coupon		WAC	WALA	March 94 Actual CPR	March 94 Model CPR	March 94 Actual PSA	March 94 Model PSA
Gold							
6.0	New	6.69	5	2.4	0.3	221	71
6.5	New	7.11	11	4.8	0.8	218	78
7.0	New	7.77	16	12.9	3.9	396	148
7.5	New	8.33	22	30.2	27.7	683	730
8.0	New	8.58	28	37.7	46.1	669	1212
8.0	Seasoned	8.77	42	48.5	49.3	808	822
8.5	Seasoned	9.11	35	72.5	42.5	1209	787
9.0	Seasoned	9.56	41	33.8	38.7	563	668
Non-Gold							
9.5	Seasoned	10.35	64	30.8	30.6	513	511
10.0	Seasoned	11.08	64	18.0	24.6	299	410
10.5	Seasoned	11.42	60	21.9	20.0	365	333

- Table 3 shows the actual prepayment experience of numerous relo CMOs, sorted by WAC.

Table 3: Actual Prepayments for Relo CMO Issues

CMO	WAC	WALA	CPR - Mar	CPR - Life	PSA - Mar	PSA - Life
FH 1685	6.70	4	0.2	0.1	29	16
FH 1632	6.70	7	3.0	1.2	217	124
FH 1589	7.00	8	4.0	1.6	251	162
FH 1558	7.10	11	5.2	2.5	237	176
FH 1448	7.50	18	7.3	5.6	202	263
FH 1525	7.70	13	10.0	5.9	386	365
FH 1474	7.80	16	12.6	8.9	394	463
FH 1396	7.80	20	16.3	11.8	412	515
FH 1355	8.30	22	30.6	25.5	694	987
FN 92-101	8.40	25	47.6	25.8	952	863
FN 91-171	8.80	30	59.5	35.1	1006	1009
FH 1158	9.20	36	47.6	44.9	793	1063
FH 1123	9.50	36	51.4	39.6	856	966

Relocation Mortgage Loan Prepayment Characteristics

Unlike conventional mortgages, whose prepayment behavior is related to interest rates, and which are negatively convex as a result, relo mortgages tend to have more predictable prepayment behavior and average lives.

Relocation loans have a distinct two-tiered prepayment pattern: they prepay slightly slower than non-relo pools in the initial years, but prepay substantially faster in subsequent years, as relocated employees get transferred. According to a nation-wide survey, more than 50% of corporate transferees are relocated once every three to five years, on average, and 10% are relocated at least once every two years. This behavior can be seen in the graphs comparing CPRs for relo and non-relo loans.

As relocation loans season (> 5 yrs), relo loans are likely to behave more like conventional loans, as some of the relocated employees may not get relocated again. This could also occur if they get promoted, or change jobs within the same geographic region. However, relos are likely to still prepay faster than comparable conventionals, as the remainder of the relocated employees are likely to get relocated again. This can be seen in the graph showing the 1 Month CPRs of 1986 Q2 production, as well as in the 6-month and 12-months CPRs of the more seasoned pools, shown in the tables.

We would not expect relo prepayments to slow down substantially and extend in a rising rate environment. This is because employees will keep on being relocated over time. To the extent that rising rates are associated with a strengthening economy, rising rates may suggest a pickup in the pace of corporate employee relocation, and thus relo loan prepayments.

In a declining rate environment, relo prepayments should be relatively insensitive to a small decline in rates but are likely to pick up significantly if rates drop further. A decline in rates on the order of 50 basis points should not have a significant impact on prepayments, since relo loans typically have below market mortgage rates, reflecting subsidies provided by corporate relocation programs. Relocated employees, however, continue to have incentives to reduce interest costs by refinancing, even though they can be relocated again, if they can limit their transactions costs. At current market rates, it would thus require a decline in rates greater than 100 basis points for relo loans to become refinancible into a no-point conventional mortgages, at which point we would expect relo mortgages to prepay like conventionals.

Our prepayment projections for relo collateral (6.999% gross WAC) under different interest rate scenarios are shown below. While our projections suggest a slowing down of speeds in a rising rate environment, it is possible that relo loans might actually speed up if this occurs, since rising rates tend to be correlated with increasing economic activity.

Scenario	-100	-50	0	50	100	150	200
Prepay Speed (PSA) - relo 6.25	450/Life	175/12 325/12 375/Life	150/12 275/12 325/Life	150/12 250/12 325/Life	125/12 225/12 300/Life	100/12 225/12 275/Life	100/12 200/12 250/Life

For more details, please refer to the following Nomura MBS Research articles:

FHLMC Relo Remic Series 1558, Joseph Hu & Tim Mamin, June 1993,

Agency-Guaranteed Relocation Mortgage Backed REMICs, Joseph Hu & Tim Mamin, Jan 1993.

Amir Shah, Tim Mamin, 212-667-2060

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FHLMC 30-Year Relo March Prepayment Summary

Coupon	Relo				Non-Relo				CPR Difference	
	WAC	Age	Ref Incentive (bp)	1-Month CPR	Turnover* (CPR)	Refinancing (CPR)	WAC	Age		1-Month CPR
Gold										
6 New	6.69	5	0	2.4	2.4	0.0	6.66	4	0.8	1.6
6.5 New	7.11	11	0	1.9	1.9	0.0	7.04	5	1.5	0.4
7 New	7.77	16	66	12.9	12.9	0.0	7.49	8	4.4	8.5
7.5 New	8.33	22	122	30.2	24.3	5.9	8.00	14	15.9	14.3
8 New	8.58	28	147	37.7	16.4	21.3	8.53	21	31.3	6.4
8.0 Seasoned	8.77	42	166	48.5	22.7	25.8	8.91	93	35.8	12.7
8.5 Seasoned	9.11	35	200	72.5	38.7	33.8	9.28	70	43.8	28.7
9 Seasoned	9.56	41	245	33.8	0.0	33.8	9.70	56	44.1	-10.3
Non-Gold										
9.5 Seasoned	10.35	64	324	30.8	0.3	30.5	10.12	73	40.5	-9.7
10 Seasoned	11.08	64	397	18.0	0.0	18.0	10.62	75	38.6	-20.6
10.5 Seasoned	11.42	60	431	21.9	0.0	21.9	11.12	80	34.8	-12.9

* Relo turnover data are estimates. See Understanding Relocation Mortgage Prepayments II (10/26/93).

- Prepayments of Gold relos increased for most coupons despite rising mortgage rates, with relo speeds exceeding non-relo speeds for 8.5% and below of relos, even at an early age.
- The CPR difference for Gold premiums tightened in March and is now between 10 and 20 CPR. However, seasoned non-Golds continue to prepay substantially slower than non-relo, non-Gold mortgages.
- With investors scrambling to minimize extension risk in their portfolio, Nomura feels that prepayment figures on relocation-backed collateral will draw renewed interest in the coming months.

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Issue Quarter	Original Balance	Remaining Balance	Loans Originated	Loans Remaining	Original Average Loan Size	Current Average Loan Size	WAC	Low Rate	Hi Rate	WART	1 Month	3 Month	6 Month	12 Month	To Date
86Q2	39,291,420	5,382,734	428	69	91,802	78,011	9.792	9.125	10.750	273	60.77%	66.35%	63.43%	57.26%	23.59%
86Q3	66,995,130	7,774,769	729	87	81,900	80,152	10.047	9.500	11.250	278	68.11%	68.15%	64.24%	59.81%	28.18%
86Q4	63,987,170	11,046,357	710	142	90,123	77,791	9.631	8.375	10.500	279	52.40%	61.63%	59.76%	55.39%	22.53%
87Q1	50,314,870	11,905,706	525	140	85,838	85,041	8.951	7.875	9.625	282	60.08%	60.55%	57.17%	44.67%	19.36%
87Q2	101,412,515	25,372,201	1,026	281	98,650	90,293	9.163	7.750	11.000	285	57.06%	53.32%	47.33%	39.64%	19.21%
87Q3	75,515,900	10,038,412	781	116	85,469	86,547	10.200	9.125	11.125	288	71.04%	70.28%	66.59%	64.28%	28.39%
87Q4	41,578,830	5,481,866	414	59	100,427	92,913	10.675	9.500	11.625	291	61.83%	58.75%	62.41%	55.47%	29.61%
88Q1	49,706,300	8,785,342	479	94	103,771	93,248	9.993	8.500	10.875	294	48.95%	56.66%	62.42%	55.11%	26.89%
88Q2	86,290,250	18,027,583	806	160	107,060	100,153	10.027	8.500	10.875	297	53.70%	60.05%	59.62%	53.82%	25.62%
88Q3	103,906,395	16,222,610	963	175	105,705	97,701	10.219	8.355	11.250	300	77.23%	66.94%	63.80%	60.35%	31.00%
88Q4	98,100,020	18,041,012	924	164	107,251	98,049	10.113	8.500	11.375	303	49.53%	57.46%	61.08%	59.39%	30.12%
89Q1	83,384,655	13,367,793	755	138	110,444	97,085	10.499	8.500	11.375	307	57.04%	54.87%	57.68%	55.69%	33.62%
89Q2	113,505,775	20,095,528	1,017	193	111,608	104,122	10.614	9.375	11.875	308	55.72%	57.51%	61.13%	59.65%	34.02%
89Q3	174,187,525	43,437,091	1,523	418	114,378	103,916	9.968	8.605	11.625	312	65.30%	58.36%	60.17%	56.63%	29.39%
89Q4	128,489,120	36,232,201	1,063	342	117,558	105,842	8.925	8.255	11.375	315	70.96%	61.96%	61.04%	57.80%	28.73%
90Q1	115,387,174	30,108,138	947	268	121,845	112,348	9.802	8.375	10.750	318	66.18%	70.68%	72.08%	64.18%	32.06%
90Q2	202,087,223	43,697,323	1,676	395	120,421	110,626	10.078	8.500	11.000	321	70.04%	67.61%	69.11%	60.77%	35.21%
90Q3	303,087,235	63,850,808	2,491	752	121,673	111,504	9.749	8.500	11.000	324	70.96%	65.02%	68.71%	59.50%	35.85%
90Q4	234,960,390	70,713,905	1,958	643	120,000	108,975	9.770	8.335	10.750	327	77.05%	66.89%	67.23%	54.18%	32.25%
91Q1	149,105,044	57,234,285	1,202	495	124,047	115,625	9.338	8.000	10.625	330	68.81%	66.43%	66.78%	50.80%	30.80%
91Q2	235,625,300	104,516,647	1,861	690	126,812	117,434	9.213	7.500	10.750	333	72.43%	65.76%	64.82%	48.20%	31.19%
91Q3	294,672,280	142,036,510	2,343	1,218	125,787	116,608	9.117	7.500	10.375	336	81.87%	65.21%	64.82%	48.20%	31.19%
91Q4	256,329,156	186,130,174	2,070	1,653	123,831	118,661	8.484	7.500	10.125	339	81.87%	65.21%	64.82%	48.20%	31.19%
92Q1	221,619,240	189,217,085	1,717	1,498	129,074	126,313	8.208	6.875	9.500	342	33.67%	25.07%	20.97%	13.25%	13.65%
92Q2	266,676,320	241,255,447	2,250	1,938	127,413	124,487	8.430	7.375	9.750	345	38.33%	29.61%	24.16%	14.63%	13.07%
92Q3	420,583,005	396,077,004	3,264	3,127	128,655	127,303	7.702	6.375	9.375	348	11.41%	10.26%	7.90%	4.50%	4.98%
92Q4	362,244,252	351,064,022	2,757	2,889	131,391	130,079	7.618	4.500	8.250	351	8.08%	6.66%	4.37%	3.73%	3.73%
93Q1	208,160,870	205,626,366	1,504	1,566	132,046	131,219	7.653	6.625	8.250	354	4.26%	2.80%	2.50%	3.16%	3.16%
93Q2	367,467,425	365,706,667	2,769	2,787	131,754	131,219	7.055	5.875	8.500	357	0.98%	0.93%			1.88%
93Q3	508,328,987	509,328,667	3,776	3,776	134,686	134,686	6.853	5.750	8.250	360					

Source: Prudential Home Mortgage Company

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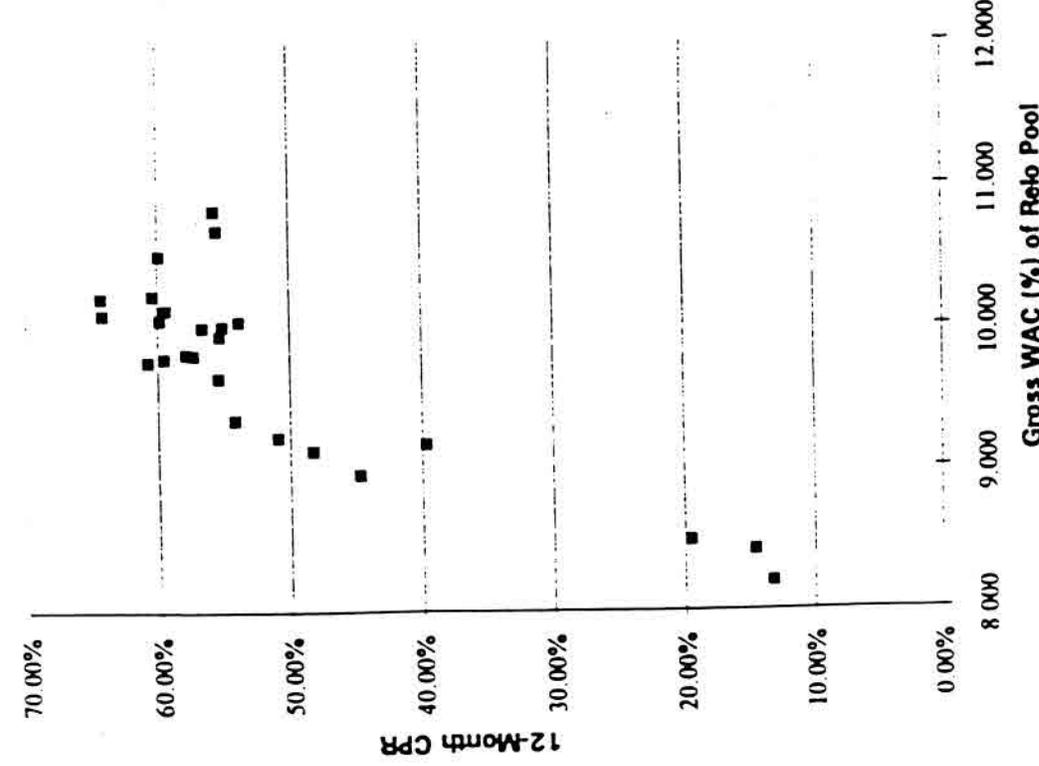
CPR History

Issue Quarter	Original Balance	Remaining Balance	Loans Originated	Loans Remaining	Original Average Loan Size	Current Average Loan Size	WAC	Low Rate	Hi Rate	WART	1 Month	3 Month	6 Month	12 Month	To Date
86Q2	128,824,884	22,697,413	1,557	318	81,326	71,378	10.070	9.250	11.375	273	46.68%	52.45%	55.17%	53.74%	20.70%
86Q3	115,328,539	21,362,403	1,390	294	82,969	72,729	10.230	8.625	11.125	276	49.12%	47.46%	53.89%	52.40%	21.03%
86Q4	131,014,970	29,848,732	1,528	395	85,743	75,815	9.879	8.750	11.750	279	66.12%	54.36%	54.75%	51.28%	19.23%
87Q1	107,825,665	40,100,227	1,228	507	87,734	79,093	9.181	8.500	10.625	282	51.58%	47.46%	47.59%	37.41%	13.53%
87Q2	199,688,010	81,360,327	2,233	992	89,426	82,016	9.378	8.500	11.375	285	46.32%	37.53%	41.88%	34.97%	12.83%
87Q3	94,941,181	30,626,153	1,127	412	84,242	74,335	10.588	9.375	11.500	288	43.87%	33.73%	36.49%	37.11%	16.85%
87Q4	80,427,000	21,541,772	723	278	83,578	77,488	11.030	9.250	12.625	291	19.86%	28.44%	30.29%	30.81%	16.13%
88Q1	90,246,225	39,669,318	1,041	492	86,692	80,669	10.368	8.675	12.250	294	27.46%	29.21%	31.39%	29.61%	13.50%
88Q2	223,215,650	105,112,535	2,500	1,243	89,268	84,584	10.508	8.355	11.500	297	23.72%	24.81%	27.51%	28.10%	13.00%
88Q3	210,326,771	93,512,545	2,482	1,146	84,741	81,589	10.774	8.335	11.750	300	26.70%	29.37%	29.71%	28.73%	14.69%
88Q4	219,005,400	111,040,585	2,878	1,415	81,749	78,474	10.770	8.335	11.875	303	26.34%	27.41%	26.58%	25.35%	13.03%
89Q1	183,466,200	90,471,956	2,146	1,110	85,492	81,508	11.087	8.625	12.000	306	28.74%	28.40%	23.56%	26.02%	14.32%
89Q2	192,622,100	86,071,445	2,268	1,058	84,930	81,353	11.282	8.355	12.375	309	27.96%	28.96%	28.78%	28.80%	17.15%
89Q3	307,499,665	155,570,661	3,260	1,744	93,750	89,203	10.669	9.000	12.375	312	30.95%	29.53%	30.13%	28.80%	15.49%
89Q4	245,781,515	134,822,105	2,539	1,441	96,802	93,423	10.552	8.900	11.875	314	26.37%	28.23%	27.85%	28.61%	14.84%
90Q1	177,819,225	100,259,201	1,728	1,024	102,789	97,909	10.451	8.875	12.000	317	17.18%	26.29%	28.10%	28.77%	14.91%
90Q2	208,801,840	91,878,899	2,075	965	100,627	95,002	10.629	9.375	11.500	321	43.56%	33.66%	33.81%	36.28%	22.46%
90Q3	285,570,175	119,881,260	2,557	1,238	103,860	96,835	10.366	8.605	11.625	324	43.20%	44.30%	42.14%	39.99%	23.42%
90Q4	224,283,830	105,821,005	2,171	1,098	103,309	96,194	10.426	7.750	11.125	326	30.96%	32.61%	39.52%	38.96%	24.17%
91Q1	134,455,700	75,590,743	1,315	778	102,248	97,147	10.068	8.335	11.250	329	30.80%	35.00%	40.62%	35.51%	20.73%
91Q2	222,578,395	121,910,772	2,161	1,291	102,968	94,431	9.840	8.500	10.875	332	49.29%	45.70%	46.89%	38.75%	23.78%
91Q3	321,137,180	187,002,424	3,044	1,914	105,498	97,702	9.756	8.250	10.750	335	44.73%	47.86%	48.70%	37.26%	24.11%
91Q4	363,967,605	278,792,221	3,562	2,750	107,796	101,743	9.151	7.625	11.125	338	45.30%	39.86%	36.20%	24.61%	16.72%
92Q1	362,358,370	322,859,497	3,562	3,045	110,151	106,029	8.607	7.125	10.500	341	36.86%	31.43%	26.17%	18.02%	12.22%
92Q2	429,029,340	341,028,652	3,798	3,151	113,021	108,229	8.951	6.000	10.625	344	47.06%	35.35%	31.71%	19.33%	17.28%
92Q3	477,558,657	440,106,111	4,183	3,934	114,187	111,672	8.393	6.875	10.125	348	20.55%	16.43%	12.10%	7.12%	7.81%
92Q4	652,828,093	617,609,608	7,338	7,125	116,221	114,752	8.142	6.625	9.750	350	11.40%	8.35%	6.30%	4.70%	4.70%
93Q1	425,204,432	409,016,321	3,846	3,548	116,622	115,281	8.253	6.500	9.875	353	9.62%	9.15%	6.74%	6.16%	6.16%
93Q2	1,028,668,110	1,018,179,653	8,671	8,631	118,656	118,064	7.576	6.125	9.500	357	3.21%	2.86%		4.68%	4.68%
93Q3	1,198,660,149	1,196,660,149	10,036	10,036	118,458	118,458	7.373	5.875	9.625	359					

Source: Prudential Home Mortgage Company

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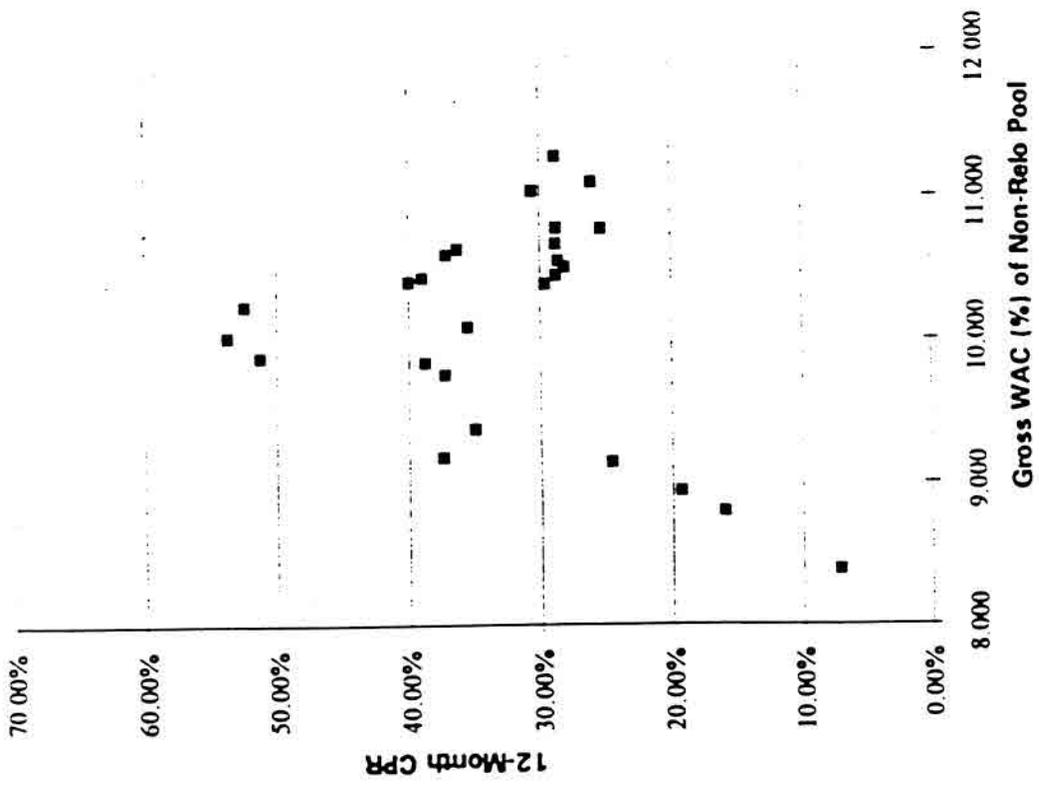
Relo 12-Month CPR (September 1993)



Source: Prudential Home Mortgage Company

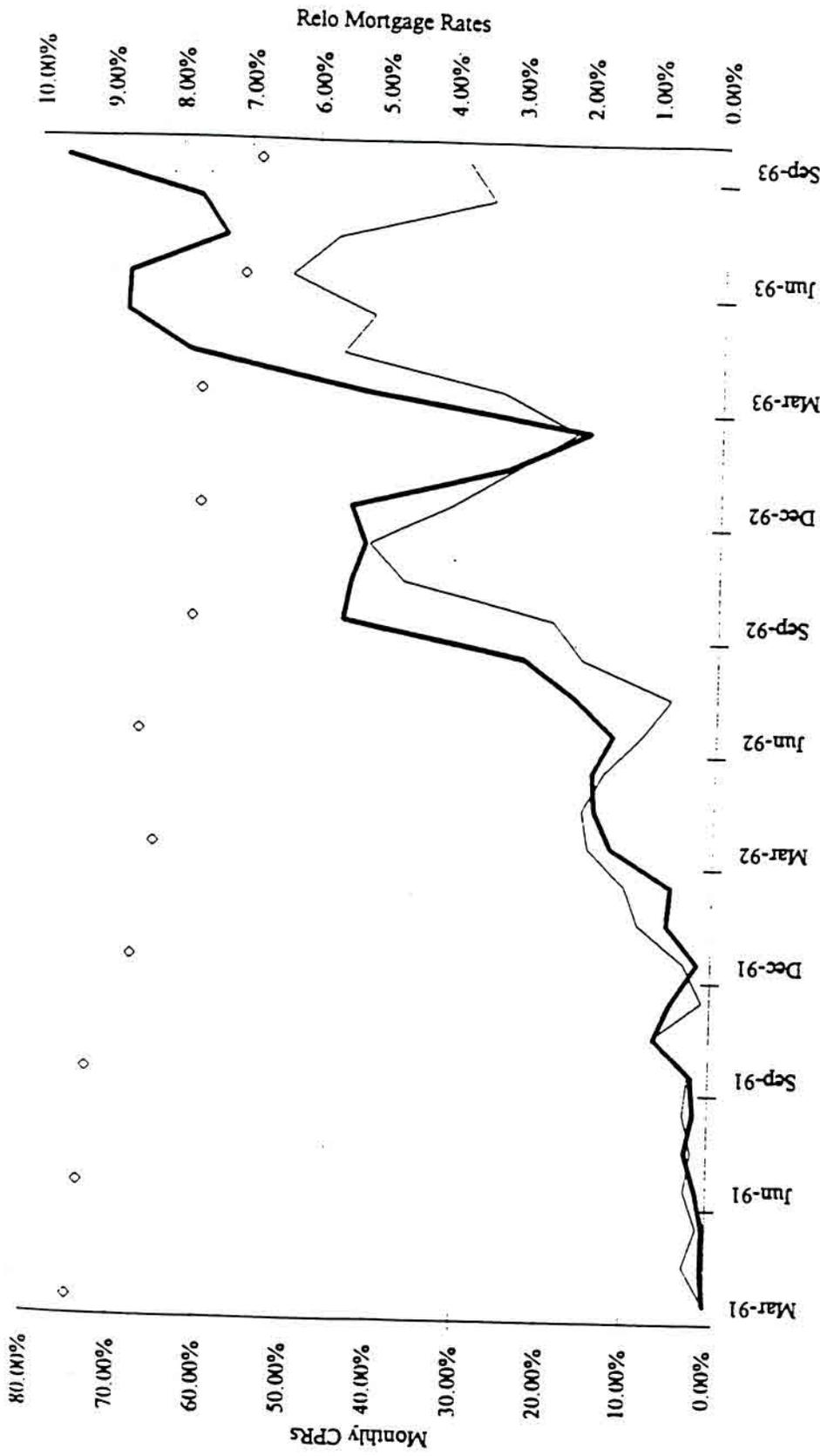
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Non-Relo 12-Month CPR (September 1993)



Source: Prudential Home Mortgage Company

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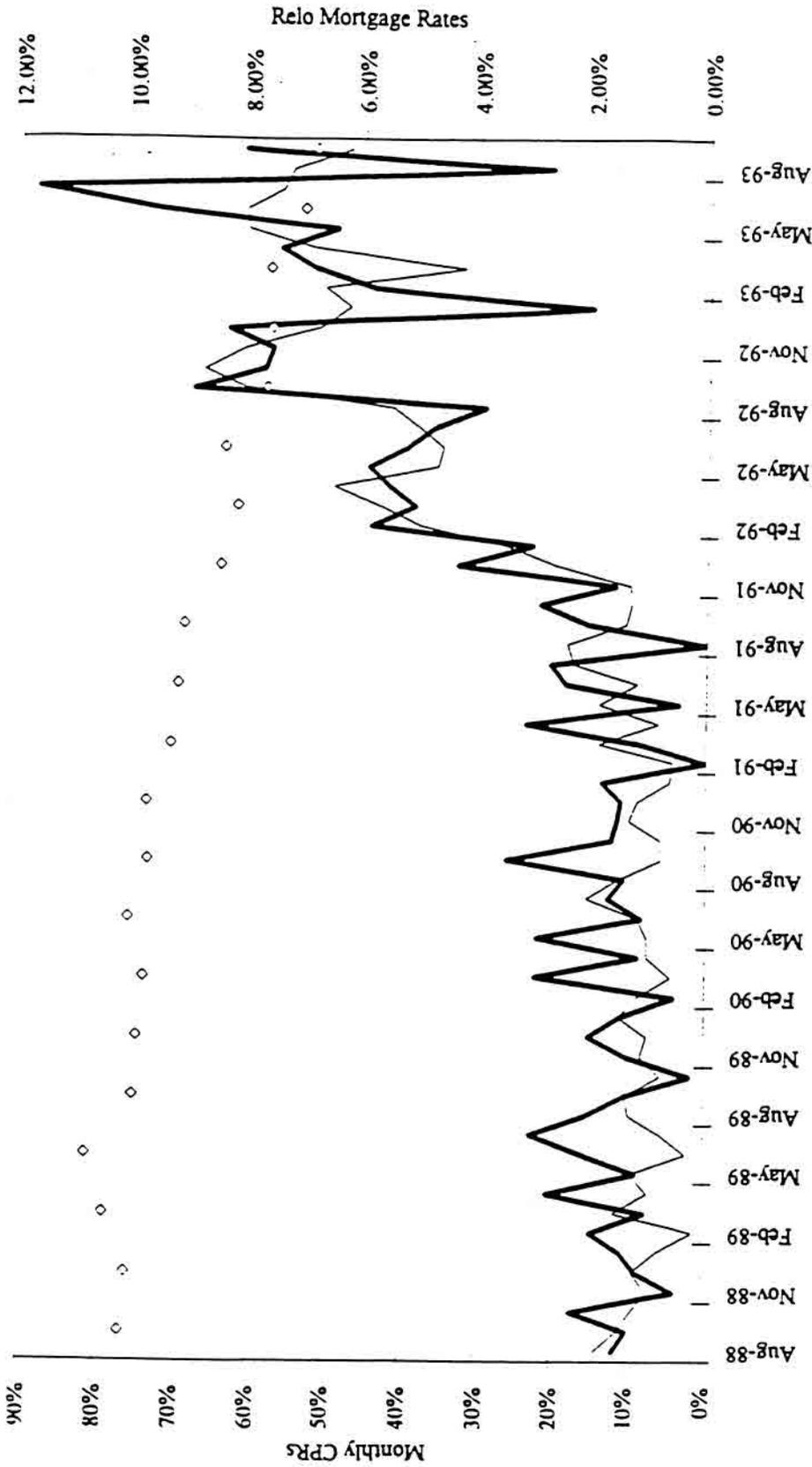


Source: Prudential Home Mortgage Company

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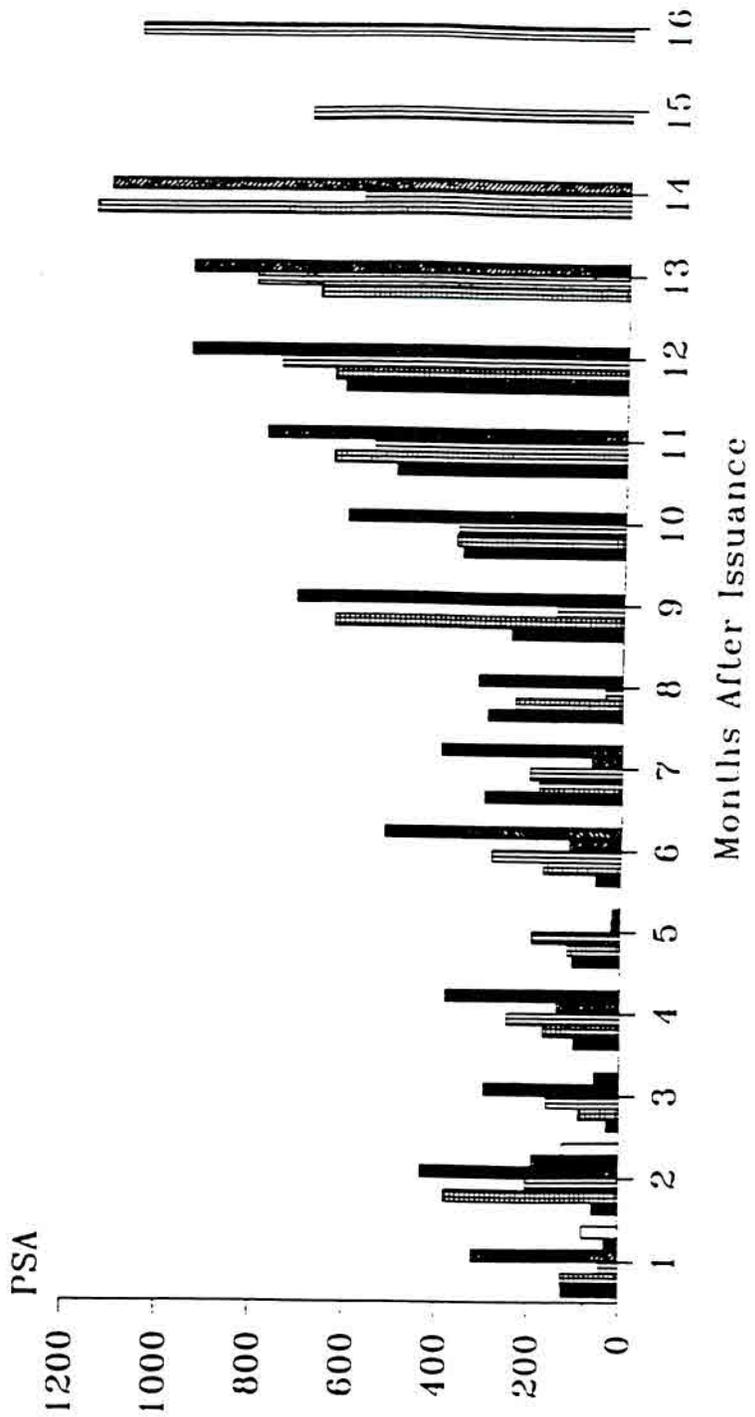
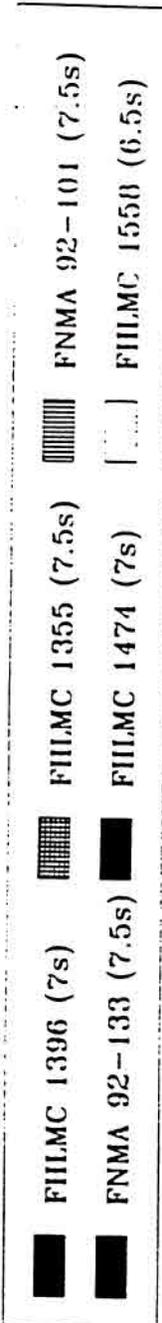
MBS Strategies Group



Source: Prudential Home Mortgage Company

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Prepayment History of Pru Home
 Originated Relos Sold Through
 Agency REMICs, 1992-1993



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FHLMC 1632 Collateral Description

100% Conforming 30-Year Fixed Relocation Mortgages
Originator: Prudential Home Mortgage Co.

Pricing Date: October 20, 1993
Settlement Date: November 30, 1993

Preliminary Pool Parameters

Pool Size:	\$ 320,000,000
Pass-Through Coupon:	Gold 6%
WAC:	6.764%
Interest Rate Range:	6.25% to 8.375%
WAM:	358
Average Loan Size:	\$ 134,442
Number of Corporations Represented:	559
Highest Concentration by Corporation:	11.74% (IBM)
Number of States Represented:	49
Highest Concentration by State:	11.98% (Texas)

Collateral Concentration

Distribution of 5 Most Heavily Represented Employers	
Corporation	% of Pool
IBM	11.74
AT&T	6.39
GE	2.59
Burlington Northern	1.94
3M Co.	1.77
Total	24.43

Distribution of 5 Most Heavily Represented States	
State	% of Pool
Texas	13.04
New Jersey	7.69
Georgia	6.65
Pennsylvania	5.48
New York	4.53
Total	37.39

MBS Strategies, 212-667-2060

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Pru Home Agency Relo CMOs

DEAL	PRICING DATE	UNDERWRITER	SIZE (\$mm)	STRUCTURE
FH 1123	JUNE 91	Smith Barney	85.49	Sequential
FH 1158	SEP 91	Bear Stearns	122.00	Sequential
FN 91-171	NOV 91	Goldman	169.33	Sequential
FN 92-101	MAY 92	Merrill	200.00	Sequential
FH 1355	JUL 92	Smith Barney	212.54	Sequential
FH 1396	SEP 92	First Boston	220.21	Sequential
FH 1448	NOV 92	Salomon	268.00	Sequential
FH 1474	JAN 93	Nomura	213.08	TAC
FH 1525	APR 93	Smith Barney	173.14	TAC
FH 1558	JUN 93	Nomura	250.00	TAC
FH 1589	AUG 93	Morgan Stanley	329.13	PAC
FH 1632	OCT 93	Nomura	320.00	PAC

MBS Strategies, 212-667-2060

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Understanding Relocation Mortgage Prepayments II

- **Prepayments are usually differentiated into two categories:**
 1. Housing Turnover
 2. Refinancings
- **Relo loans prepay differently than non-relo loans.** Relo turnover is more closely related to corporate economic activity, whereas non-relo turnover tends to be more related to the demographic composition of the borrowers. However, both groups would be expected to refinance in a declining rate environment, especially if transaction costs are low.

Relo vs. Non-Relo Loans - Expected Prepayment Behavior

	Relo Loans	Non-Relo Loans
Rising Rates	<u>Prepay fast</u> - higher rates imply increasing corporate activity; however, corporations are unlikely to relocate previously relocated employees for 1-2 years, because of the high costs of relocation.	<u>Prepay slow</u> - rising rates imply greater mortgage costs. Housing turnover dominates; however it is typically low and increases to around 6% -8% with seasoning.
Declining Rates	<u>Prepay fast</u> - refinancing related and also affected by corporate activity.	<u>Prepay fast</u> - refinancing related.

- **Relo loan prepayments have historically been significantly faster than non-relo loan prepayments.** This can be seen in chart 1. This could be because:
 1. Relo loan turnover is greater than non-relo turnover.
 2. Relo loans have a greater propensity to prepay than non-relo loans (we have been in a rally during the entire period for which we have data.)
 3. Both of the above.
- **We wish to estimate Relo Loan turnover, especially in a rising rate environment, for which there is no data.** We do, however, have data for non-relo turnover.

Step 1: Non-relo refinancing is estimated by taking the difference between non-relo CPRs and non-relo turnover.

Step 2: We assume that relo loans have a similar refinancing propensity as non-relo mortgages.

Step 3: Relo turnover is then the difference between relo CPRs and non-relo refinancing.

The attached charts show the result of this transformation, for numerous cohorts of relo loans.

Samir Shah, Tim Mamin, 212-667-2060

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Analysis

The hypothesis is that relo loans have a similar refinancing propensity as non-relo loans. If this is true, then we would expect our estimate of relo turnover to be unrelated to relo CPRs, and we will have successfully "extracted" Relo turnover. However, if relo turnover is "correlated" with relo CPRs, then we can conclude that our estimate of relo turnover is not "clean", and that relo loans do indeed have a higher propensity to prepay than non-relo loans.

Conclusions

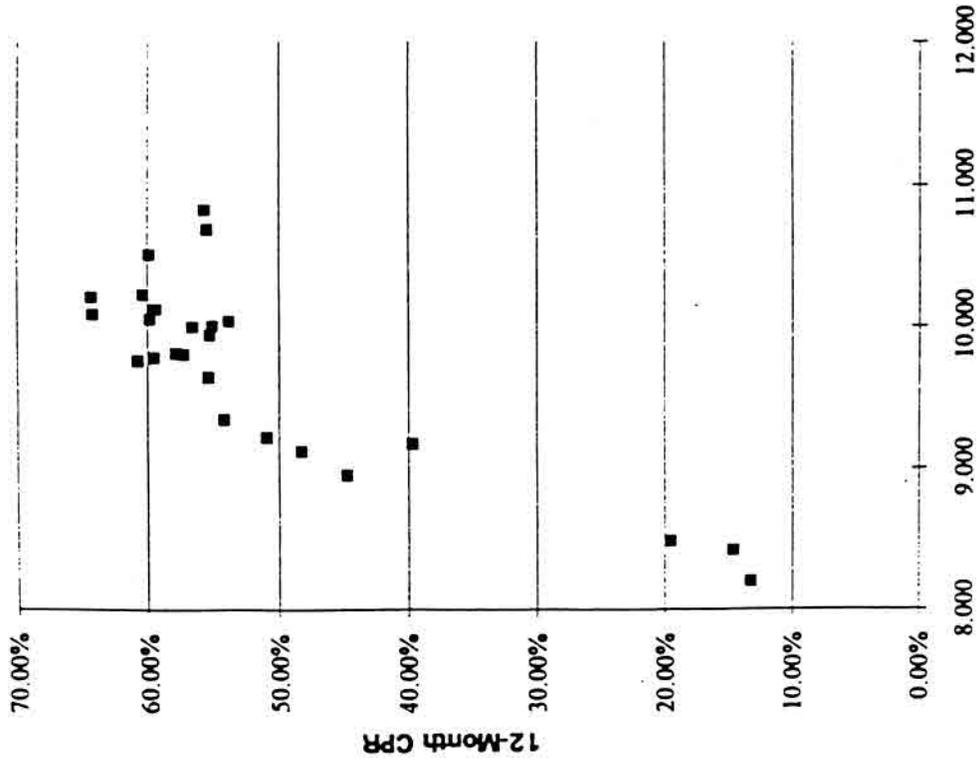
- a. **Relo loans have high turnover rates.** Even after extracting non-relo refinancings, the CPRs tend to be high, especially after 2 years of seasoning. This can be readily observed in the earlier cohorts, such as the 2Q 1986, 3Q 1986, 4Q 1986, 1Q 1987 and 2Q 1987, where the pools were not economically refinancible in the earlier years. The average CPR attributable to turnover, after 24 months of seasoning, for these cohorts was 13.2% CPR. This corresponds very closely to the Atlas Van Lines survey data, which suggests that 40% of all relo turnover occurs between year 3 and year 5, an average of 13.3% per year.
- b. **Relo loans have a greater propensity to refinance than non-relo loans.** This is in spite of relo loans having an initial rate subsidy. This is observed through the correlation of the "Estimated Relo Turnover" data with Relo CPRs, suggesting that the Relo Turnover estimate is not free of refinancing related prepayments. This is especially observable in the newer cohorts (post 1987), which have been refinancible from the time they were originated.
- c. **It takes a greater than 150 bps incentive to induce relo refinancings.** This is attributable primarily to the subsidized rates available to relo borrowers, since they would be refinancing into conventional mortgage rates. In addition, it is unlikely that they would be willing to pay points or costs to refinance, thus requiring a greater decline in "market rates" (which are typically quoted with points) for relo borrowers to refinance. This is observable in most of the charts after 1988, by noting the difference in the relo WAC and FRM (FHLMC Fixed Rate Mortgage) rate that is required before the prepayments on the relo loans accelerate.

For more details, please refer to the following Nomura MBS Research articles:

1. *FHLMC Relo Remic Series 1558*, Joseph Hu & Tim Mamin, June 1993,
2. *Agency-Guaranteed Relocation Mortgage Backed REMICs*, Joseph Hu & Tim Mamin, Jan 1993.
3. *Relocation Mortgage Loan Prepayment Characteristics*, Samir Shah, Tim Mamin, Oct 1993.

This article has charts for selected cohorts attached. Graphs for each relo cohort since 2Q 1986 (28 cohorts) are available.

Relo 12-Month CPR (September 1993)

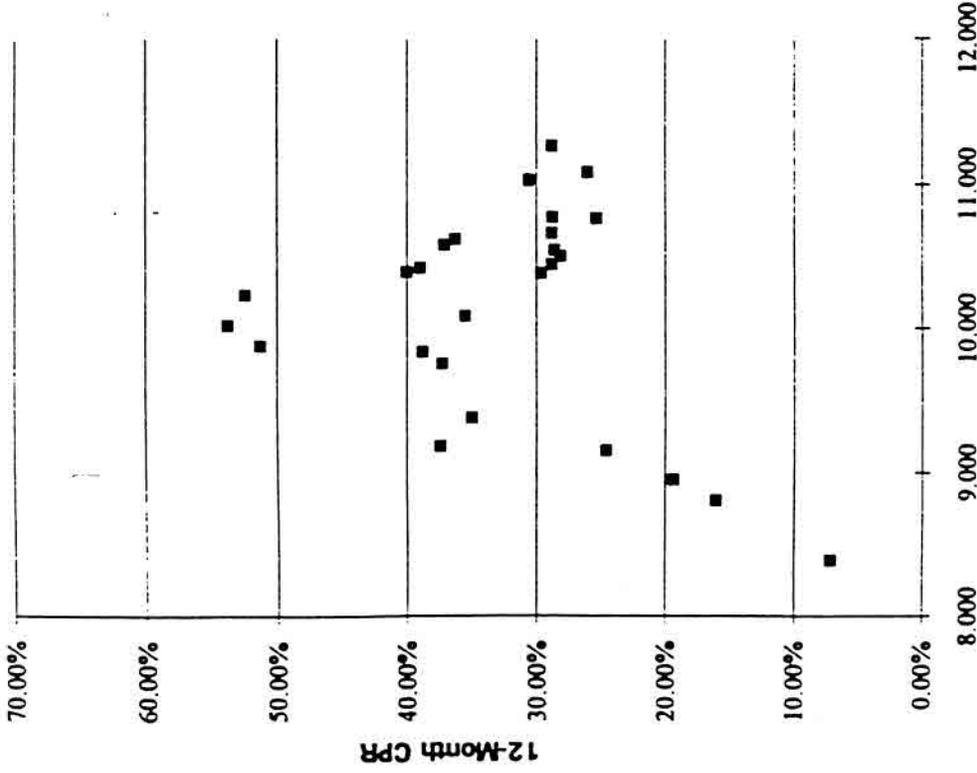


Source: Prudential Home Mortgage Company

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Non-Relo 12-Month CPR (September 1993)

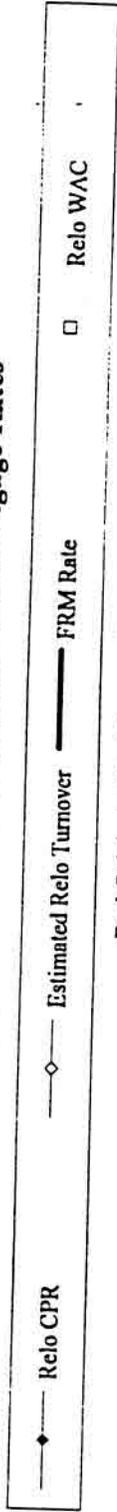


Source: Prudential Home Mortgage Company

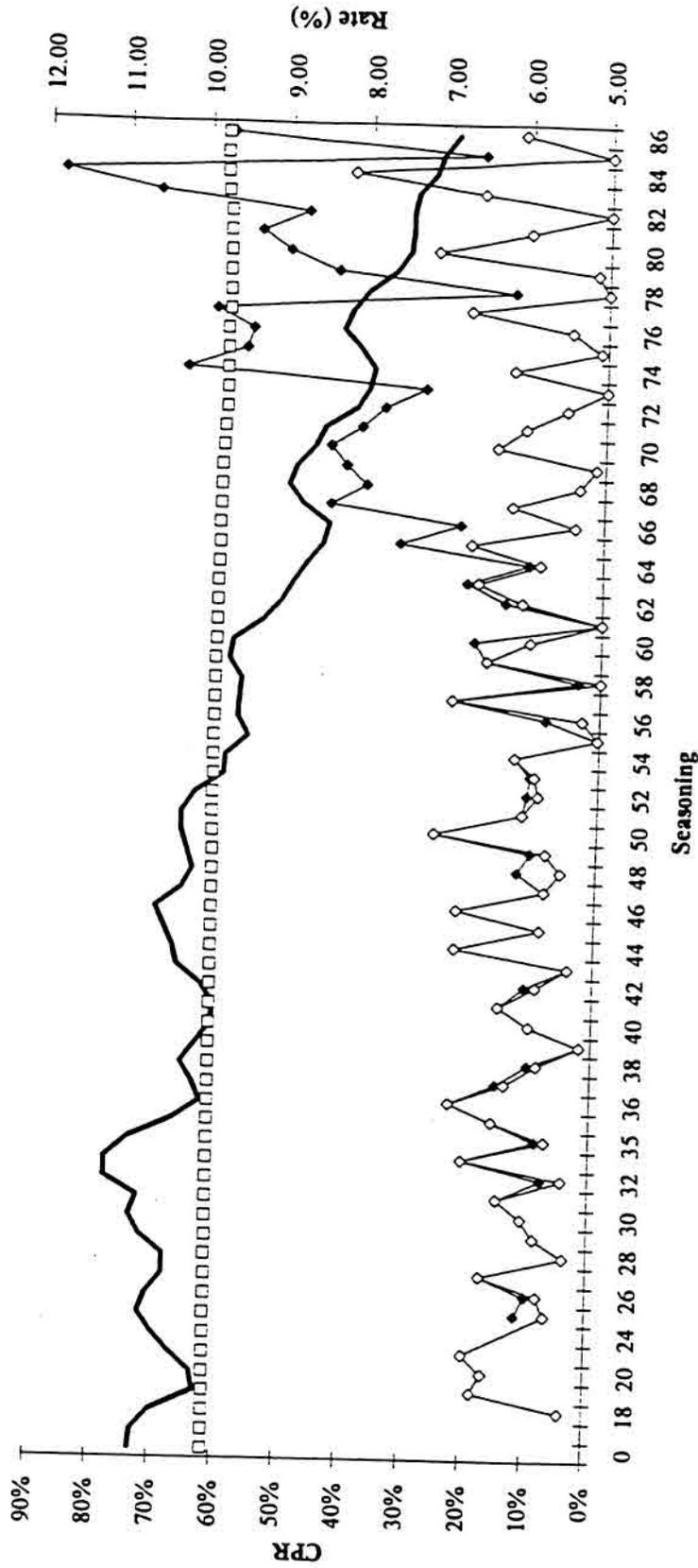
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Relo Prepayments in CPR vs. Turnover and Mortgage Rates



Pool Originated 2nd Quarter 1986

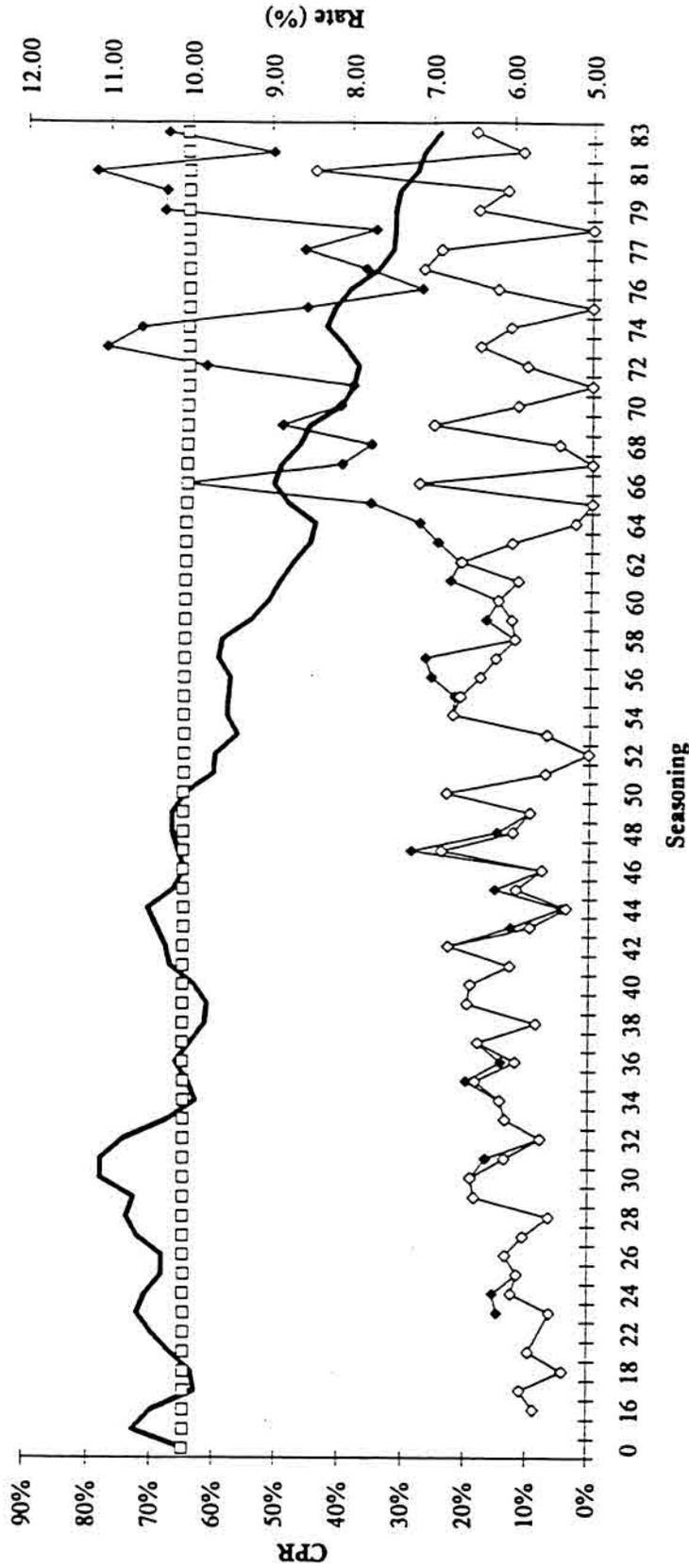


Relo Turnover = Relo CPR - (Non-Relo CPR - Non-Relo Turnover)

Relo Prepayments in CPR vs. Turnover and Mortgage Rates

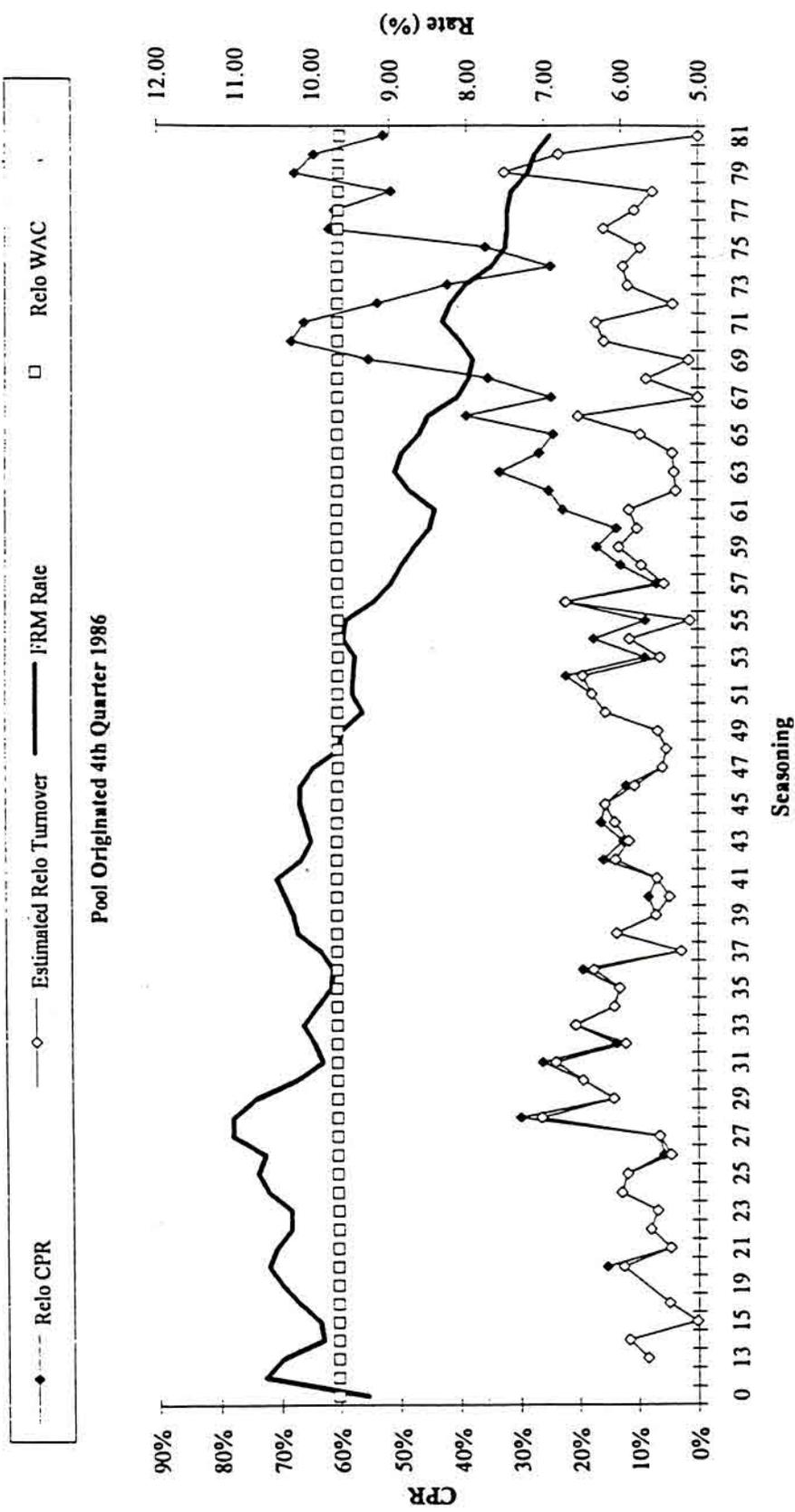


Pool Originated 3rd Quarter 1986



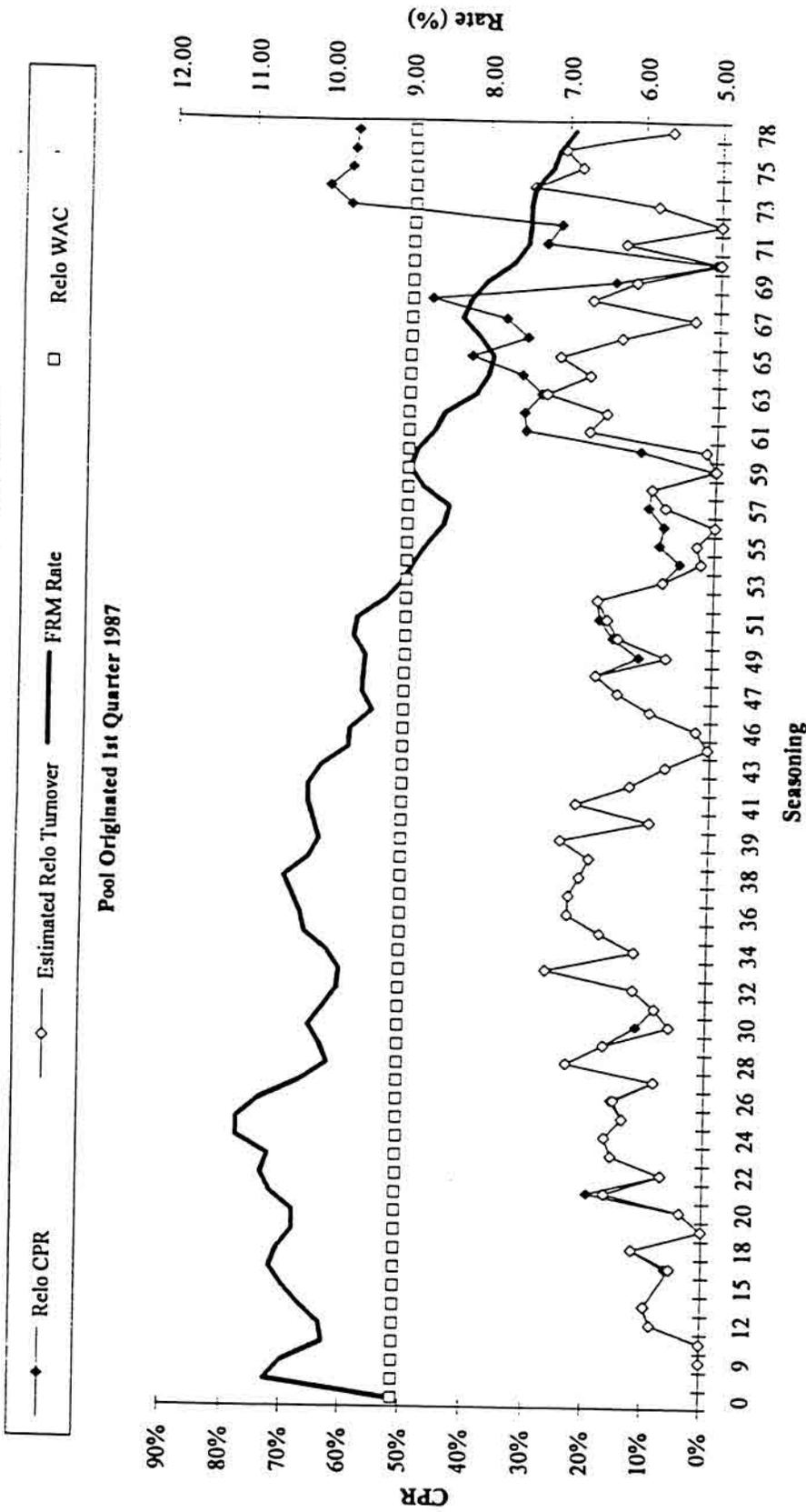
Relo Turnover = Relo CPR - (Non-Relo CPR - Non-Relo Turnover)

Relo Prepayments in CPR vs. Turnover and Mortgage Rates



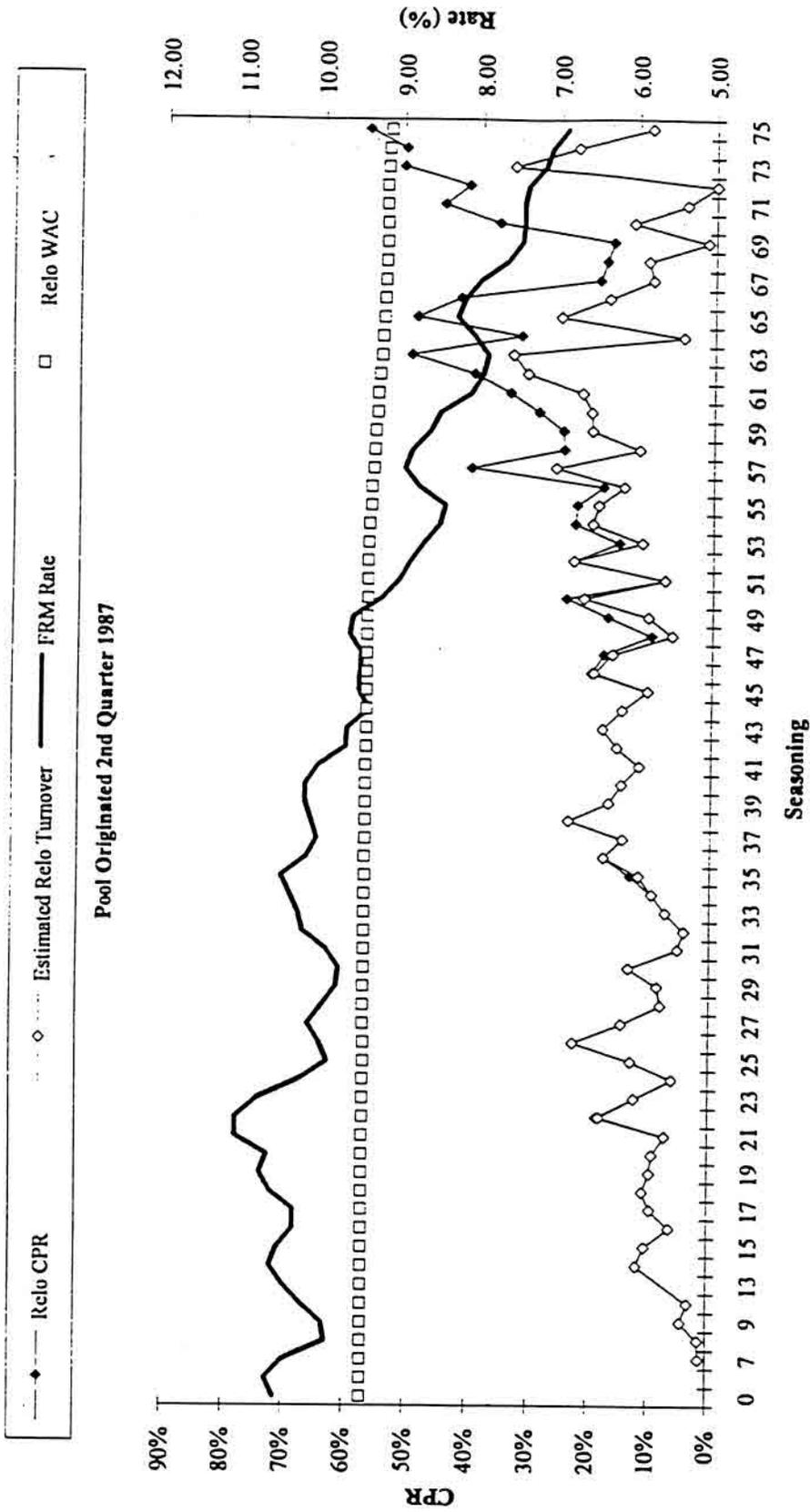
Relo Turnover = Relo CPR - (Non-Relo CPR - Non-Relo Turnover)

Relo Prepayments in CPR vs. Turnover and Mortgage Rates



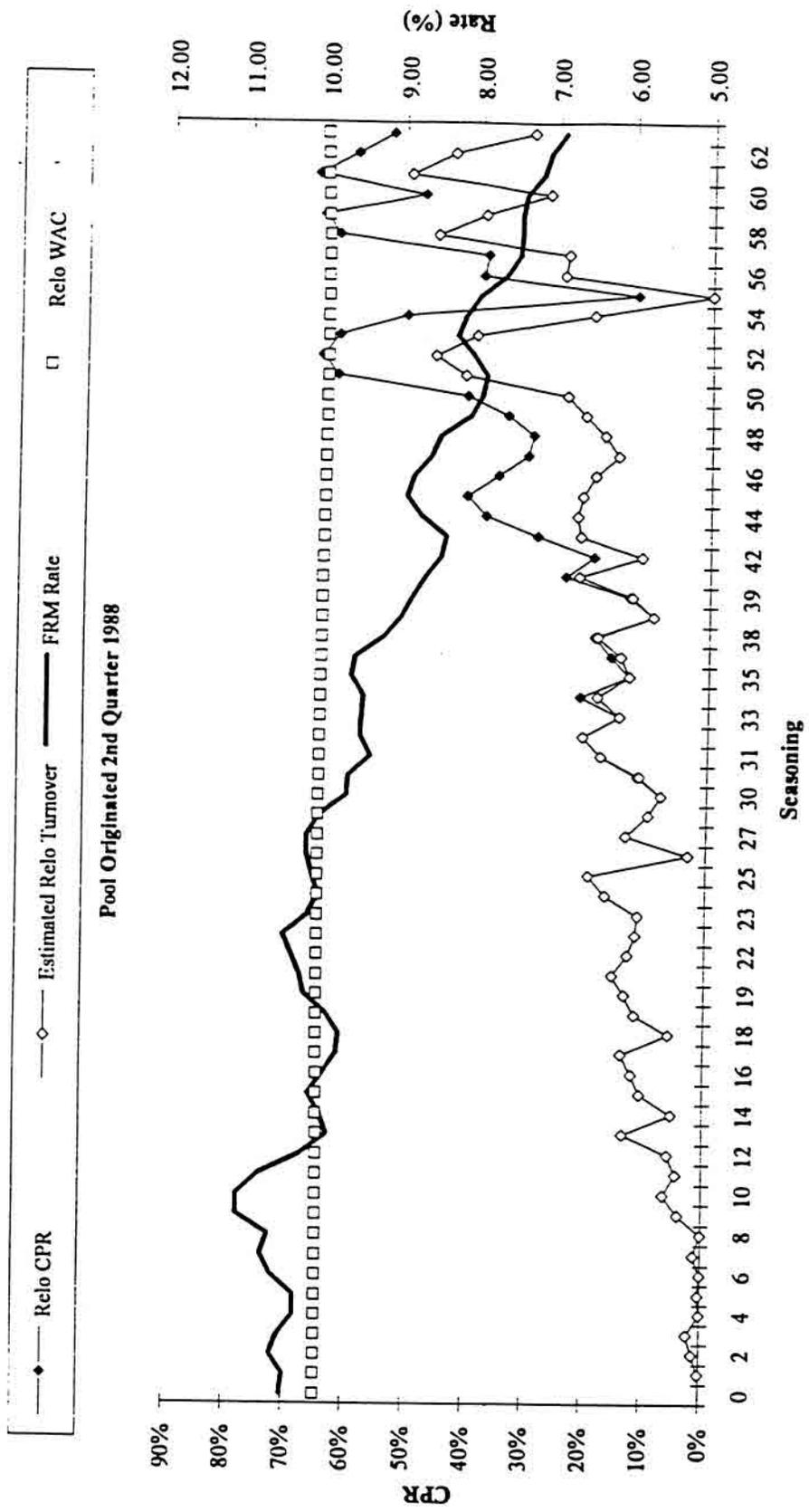
Relo Turnover = Relo CPR - (Non-Relo CPR - Non-Relo Turnover)

Relo Prepayments in CPR vs. Turnover and Mortgage Rates



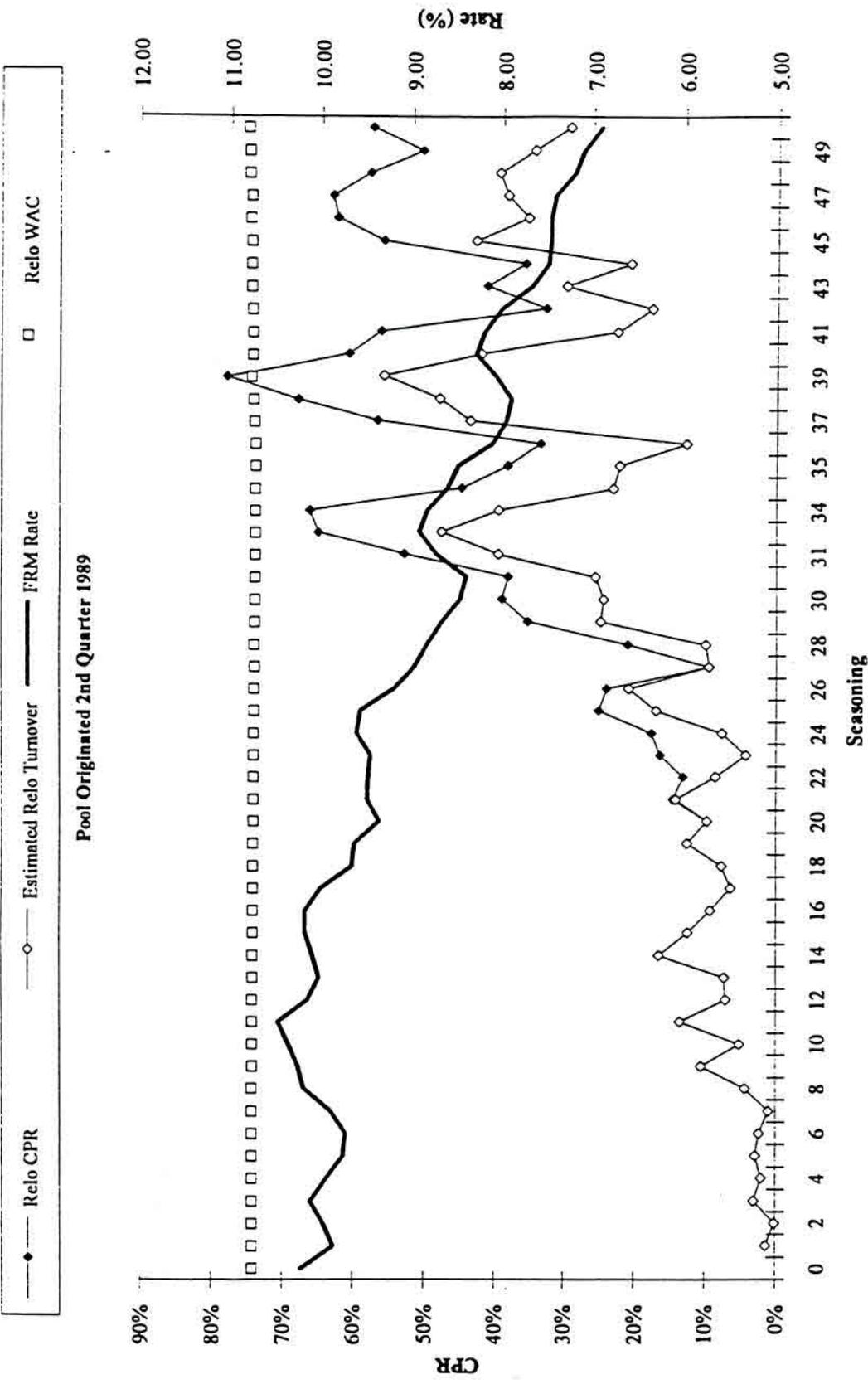
Relo Turnover = Relo CPR - (Non-Relo CPR - Non-Relo Turnover)

Relo Prepayments in CPR vs. Turnover and Mortgage Rates



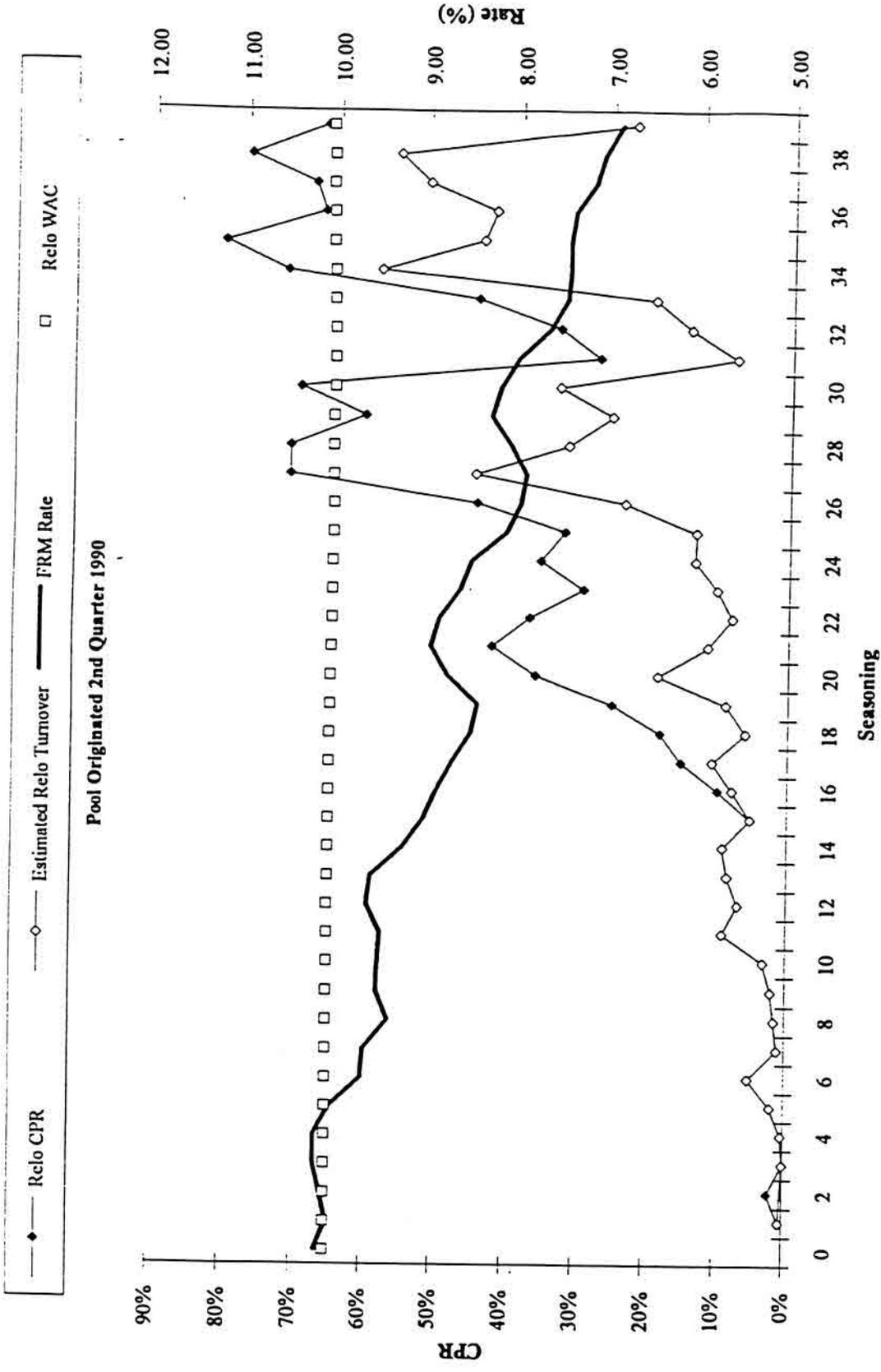
Relo Turnover = Relo CPR - (Non-Relo CPR - Non-Relo Turnover)

Relo Prepayments in CPR vs. Turnover and Mortgage Rates



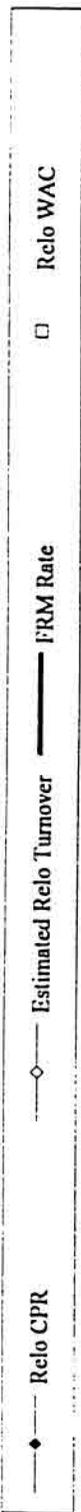
Relo Turnover = Relo CPR - (Non-Relo CPR - Non-Relo Turnover)

Relo Prepayments in CPR vs. Turnover and Mortgage Rates

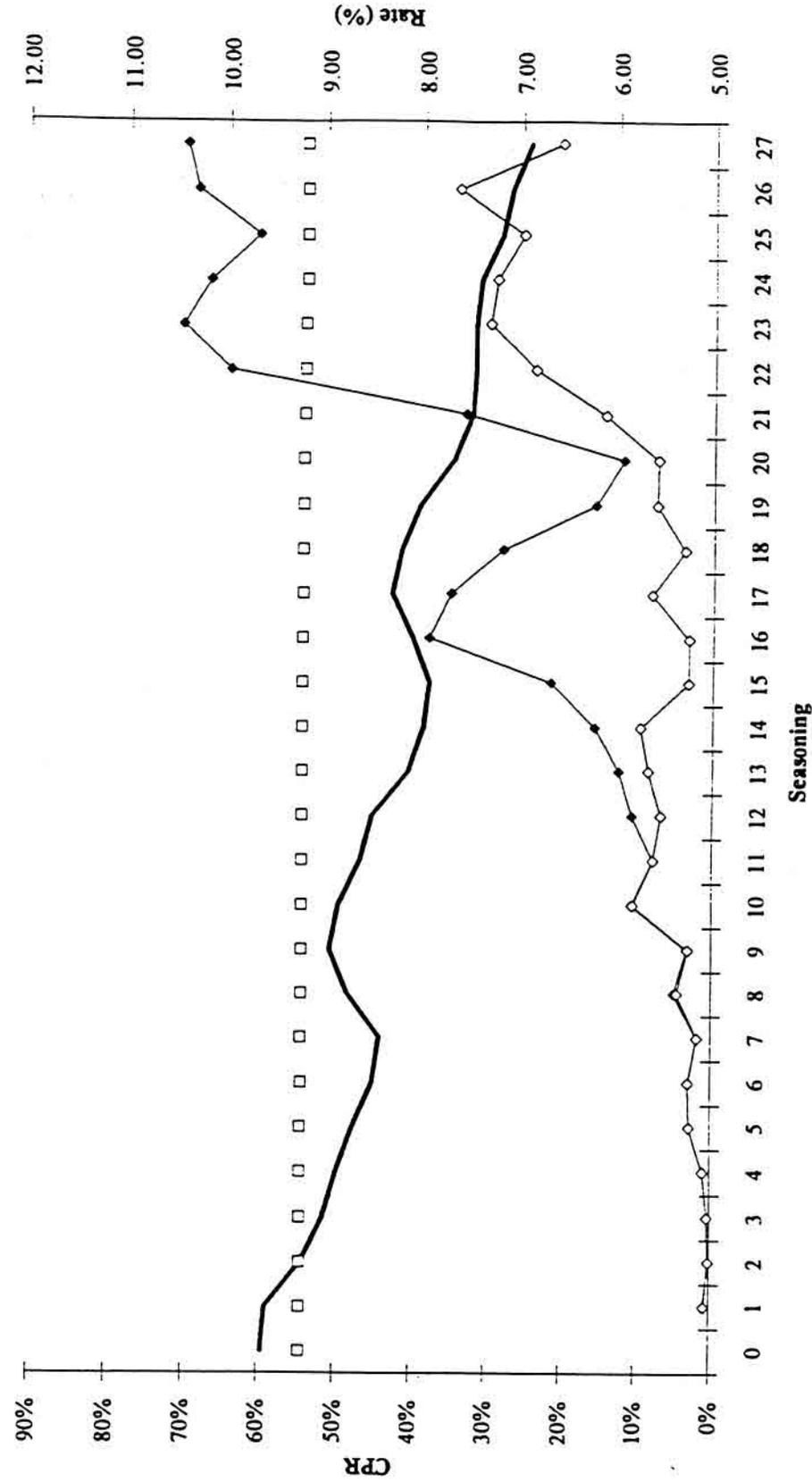


Relo Turnover = Relo CPR - (Non-Relo CPR - Non-Relo Turnover)

Relo Prepayments in CPR vs. Turnover and Mortgage Rates

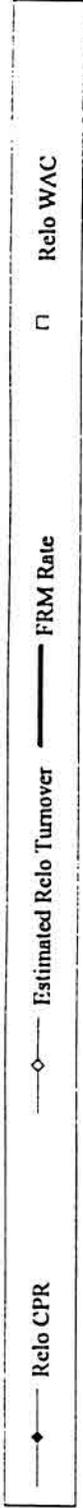


Pool Originated 2nd Quarter 1991

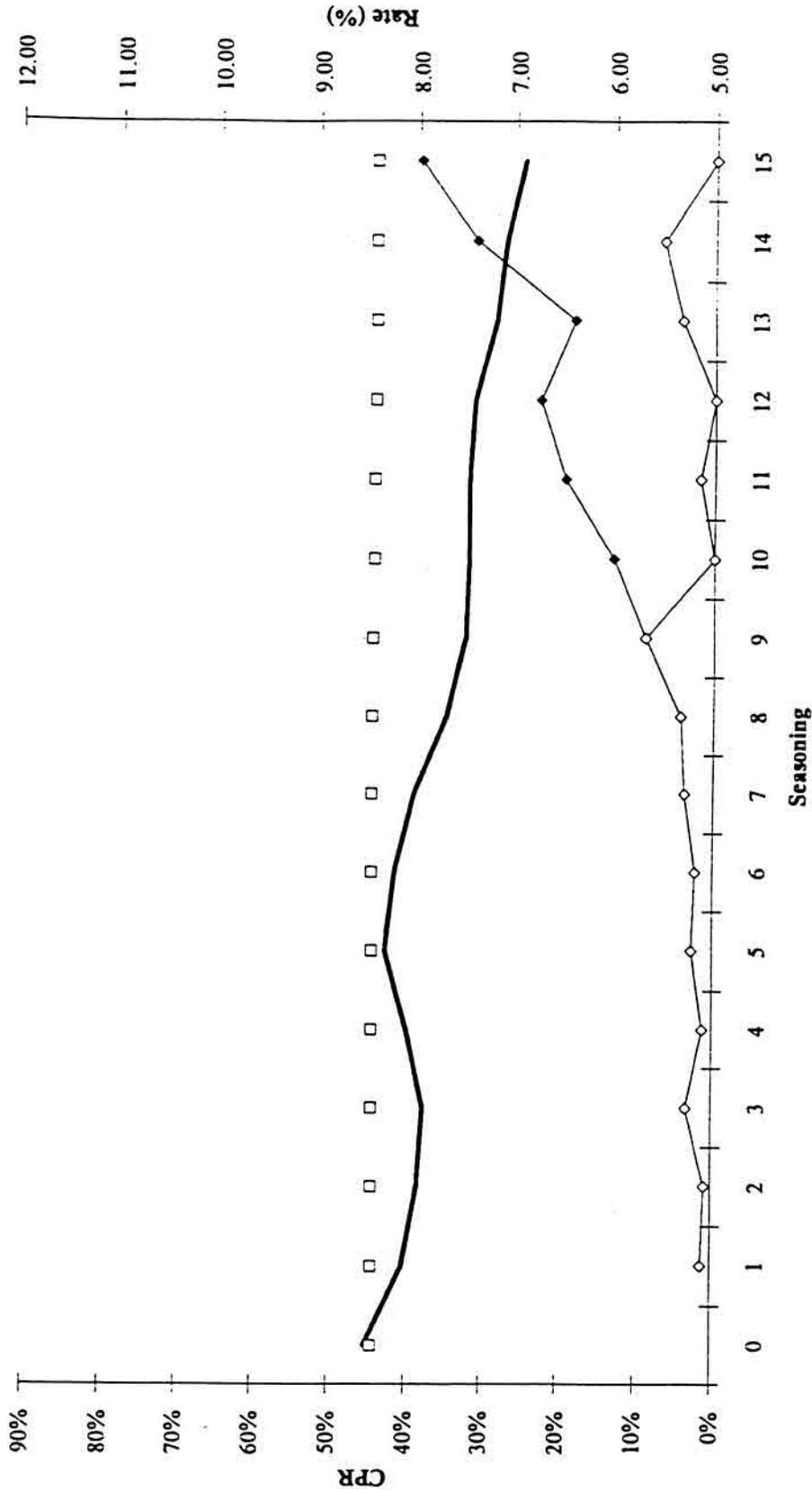


Relo Turnover = Relo CPR - (Non-Relo CPR - Non-Relo Turnover)

Relo Prepayments in CPR vs. Turnover and Mortgage Rates



Pool Originated 2nd Quarter 1992



Relo Turnover = Relo CPR - (Non-Relo CPR - Non-Relo Turnover)

NOMURA SECURITIES INTERNATIONAL, INC.

Mortgage Sales Memorandum

Joseph Hu (212) 667-9497
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January 23, 1993

Agency-Guaranteed Relocation Mortgage Backed REMICs

General Comments

- Mortgage pass-throughs backed by relocation loans (hereafter referred to as relos) have markedly shorter expected average lives than those of regular pass-throughs (non-relos). In general, the expected average life of a current-coupon 30-year relo is slightly shorter than 6 years, less than two-thirds of that of a comparable-coupon 30-year non-relos. Relocation loans are no different from regular mortgage loans in amortization structure. They are, however, called relocation loans to differentiate from regular loans due to their tendency of early prepayments.
- Relocation loans are originated for transferred corporate employees (transferees) to facilitate their purchases of homes at new locations. Transferees are generally members of middle- to high-level management. Corporations that have extensive relocation programs are mostly Fortune 500 companies. To provide efficient financial assistance to transferees, major corporations usually work with mortgage lenders with a national origination network and quality mortgage underwriting standards.
- Leading surveys of relocation programs of major corporations have revealed that the average stay of transferees is around 4 years. Based on this average, relos would have an expected average life of even less than 5 years. This is comparable to that of current-coupon 5-year balloon mortgage backed pass-throughs.

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- Relos prepay slightly slower than non-relos in the initial years, but substantially faster than non-relos in later years. Relos' prepayment acceleration in later years makes them unique mortgage pass-throughs. This unique pattern stems from the economics and the frequency of employee transfers. The average cost of transferring employees (relocation expenses, mortgage origination fees, temporary lodging, etc.) has been rising steadily, exceeding \$50,000 in recent years. Thus, corporations are unlikely to move the same employee again within the first two years. But after a few years, transferees normally will be moved again for reasons of promotion or changing assignments. Surveys suggest that transferees on average experience more than 4 transfers during their careers. The high cost of transfers slows the prepayment speed in initial years, but the frequency of career changes accelerates it in later years.
- In 1992, relocation programs of major corporations involved approximately 100,000 employees. Originations of relocation loans amounted to \$12 billion. Voluminous originations assure an increased secondary-market liquidity of relos. And there are reasons to believe that corporate relocation programs will be more active and originations of relocation loans will grow significantly in 1993. As the economic recovery broadens, most corporations will expand their production and services. This expansion would entail increasing branch offices and more frequent transfers of middle- and high-level employees. Meanwhile, other corporations will continue to reorganize and retrench to increase efficiency through closing plants and branches. Reorganization and retrenchment often results in more employee transfers.
- The growth of relocation loan originations will expand the issuance of agency-guaranteed relo REMICs. For loans with original balances less than the FHLMC/FNMA loan limit, mortgage lenders have been increasingly opting for selling their newly originated relo loans in the form of agency-guaranteed REMICs.

Specific Comments: FHLMC REMIC Series 1474

- The collateral of FHLMC REMIC series 1474 (FHLMC-1474) consists of 1,631 30-year relocation loans totaling \$213 million. These loans are originated by Prudential Home Mortgage Company, Inc. (Pru Home), the nation's largest originator of relocation mortgages. A total of 341 corporations were involved with the origination of this mortgage pool. The bulk of the loans are originated for employees of Fortune 100 companies. But, no single company accounts for more than 11% of the pool.¹ The relocation loans scatter in all 50 states with no single state accounting for more than 12.3% of the pool. The average mortgage rate of the loans (gross WAC) is 7.803% and the pass-through coupon rate of the pool is 7%.

¹Interestingly, IBM is the most important company, accounting for 10.24%, or 167 loans, of this particular pool. In the relo jargon, IBM stands for "I've been moved."

- In 1992, Pru Home originated \$898 million worth of relocation loans that were sold in four different agency REMIC deals, three through FHLMC and one through FNMA. Chart 1 identifies these deals and presents their collateral prepayment history (the last deal in 1992, FHLMC-1448, was priced in November and has no prepayment history). For 1993, Pru Home anticipates to originate and sell \$1.2 to \$1.5 billion worth of relocation loans in six different REMIC deals.
- The two-tiered pricing speed for FHLMC-1474 consists of 175% PSA for the first year and 300% PSA for the remaining life (see Appendix for the two-tiered speed in CPR). This pricing speed is identical to that of FHLMC-1396 issued in September, 1992, which has a gross WAC of 7.84%.
- The Pru Home data show that relos have consistently prepaid between 30% and 50% slower than comparable-coupon non-relos during the first year after issuance (Charts 2) The difference between the two, on a since-issuance basis, narrows quickly in the following two quarters. After 18 months, relo prepayments begin to accelerate. Their speeds jumped to between 75% to 145% faster than those of non-relos. The actual prepayment difference in CPR percentage points between the two is depicted in Chart 3.
- Relos' acceleration of prepayments in later years, the second tier speed, has a far more significant and stabilizing effect on their expected average lives than the first tier speed. Based on the two-tiered pricing speed of 175% PSA for the first year and 300% PSA thereafter (175%-300%) the average life of the relo collateral is 5.84 years. If the speed is changed to 50%-300%, the average life of the collateral lengthens only marginally to 5.94 years. Even if the first tier speed lasts for 2 years at 50% PSA, the collateral average life still extends only slightly to 6.4 years. Because of this effect, the average lives of prepayment-protected REMIC classes, such as TACs, are also stable. Varying pricing speeds in the initial years will only marginally alter the average lives of TACs.

- The stability of TACs of FHLMC-1474 (Classes A to D in particular) under various two tiered pricing speeds is shown in the following table. The first "average-life pricing speed" column presents average lives of all classes under the actual pricing speed, i.e., 175% PSA for the first 12 months, and 300% PSA for the remaining life. The other three columns show average lives, assuming the first tier speed lasts for 24 months before accelerating to the second tier speed.

Bond Type	Average Life (years) at Pricing Speed (PSA%)			
	175% 12 mos 300% after	50% 24 mos 300% after	50% 24 mos 200% after	50% 24 mos 600% after
A, TAC	2.44	3.06	3.62	2.66
FA TAC Floater	2.44	3.06	3.62	2.66
SA, TAC Inverse IO	2.44	3.06	3.62	2.66
C, TAC	5.69	6.27	8.34	5.80
D, TAC	7.94	8.51	11.57	9.61
E, TAC	9.96	10.52	14.36	4.95
FB, TAC Floater	9.96	10.52	14.36	4.95
SB, TAC Inverse	9.96	10.52	14.36	4.95
F, Floater	16.31	16.81	21.78	2.83
S, Floater	16.31	16.81	21.78	2.83

NOMURA SECURITIES INTERNATIONAL, INC.

Mortgage Sales Memorandum

Joseph Hu (212) 667-9497
Timothy Mamin (212) 667-9769

June 24, 1993

FHLMC Relo REMIC Series 1558

General Comments

Since the write-up on relo mortgages six months ago for our first underwriting of FHLMC Relo REMICs, more information has become available on prepayments of relo mortgages and the general economics of relocation as an on-going project of many major corporations. Two recent relo surveys provided insights for the analysis of relo mortgage backed securities.

- The Twenty-Fifth Annual Survey of Corporate Relocation Policies conducted in 1992 by Atlas Van Lines reveals that
 1. More than 95% of the 280 surveyed companies have a written policy on employee relocation—and 43% have had a relocation policy for 16 years.
 2. On average, more than 50% of corporate transferees are relocated once every 3 to 5 years, 10% are relocated at least once every two years.
 3. Within the next three years, 60% of surveyed corporations think that the number of their transferees will increase.
 4. Economic conditions is the single-most important reason for the growth of corporate relocation.

- Also, the 1992 *Relocation Trends Survey* of 384 companies conducted by Employee Relocation Council finds that
 1. Transferees have an average salary of \$51,348; average age, 37 years.
 2. Most relocations result from a promotion, not a lateral move.
 3. The average relocation cost for transferring a home owning employee is \$46,667.

Additional information is available upon request. The information contained herein is based on sources which we believe to be reliable but we do not represent that it is accurate or complete. It is not to be considered as an offer to sell or solicitation of an offer to buy the securities discussed herein. All prices, yields, and opinions expressed are subject to change without notice. Nomura Securities International, Inc. and its affiliates may have a position in the securities discussed herein and may make purchases from and/or sales to customers on a principal basis, or as agent for another person. In addition, Nomura Securities International, Inc. and certain of its affiliates may have acted as an underwriter of such securities, and may currently be providing investment banking services to the issuers of such securities.

These findings enhance our earlier understanding of prepayment and average-life characteristics of relo mortgage backed securities.

- Since the majority of transferees are relocated again within 3 to 5 years, the average life of relo mortgage pools is likely to be less than 5 years, or just slightly more than one-third of that of regular 30-year mortgages.
- Relocation activity is positively associated with economic conditions, and almost all major corporations have a relocation policy. The current economic recovery is likely to significantly increase the origination volume of relo mortgages. More important, as the economic recovery picks up steam, the average life of relos can be even shorter than 5 years.
- Relo pools clearly have a two-tiered prepayment pattern. Their prepayments are slow relative to those of regular 30-year pass-throughs in first year of so, but accelerate rapidly afterwards. The slow prepayment speeds early on are attributable to the prohibitively high cost (an average of almost \$50,000 per transferee) of relocation. It's not economical for corporations to relocate transferees again within a short period of time. However, the acceleration of prepayments in later years is due to the relocation of transferees who are generally young and moving up through the ranks. They are transferred as result of promotion which takes place about every 3 to 5 years.

Specific Comments on FHLMC Relo REMIC 1558

- The collateral of FHLMC REMIC series 1558 consists of 1,912 30-year relocation loans totaling \$250 million. These loans are originated by Prudential Home Mortgage Company, Inc. (Pru Home), the nation's largest originator of relocation mortgages. A total of 358 corporations were involved with the origination of this mortgage pool. The bulk of the loans are originated for employees of Fortune 100 companies. The relocation loans scatter in all 50 states with no single state accounting for more than 11.9% of the pool. The average mortgage rate of the loans (gross WAC) is 7.105% and the pass-through coupon rate of the pool is 6.5%.
- To date, Pru Home has originated \$1.4 billion worth of relocation loans that were sold through eight different agency REMICs: six FHLMCs and two FNMA's. Chart 1 identifies these deals and presents their collateral prepayment history (the last deal in 1993, FHLMC-1525, was priced in April and has no prepayment history). For 1993, Pru Home anticipates to originate and sell \$1.2 to \$1.5 billion worth of relocation loans in six REMICs.

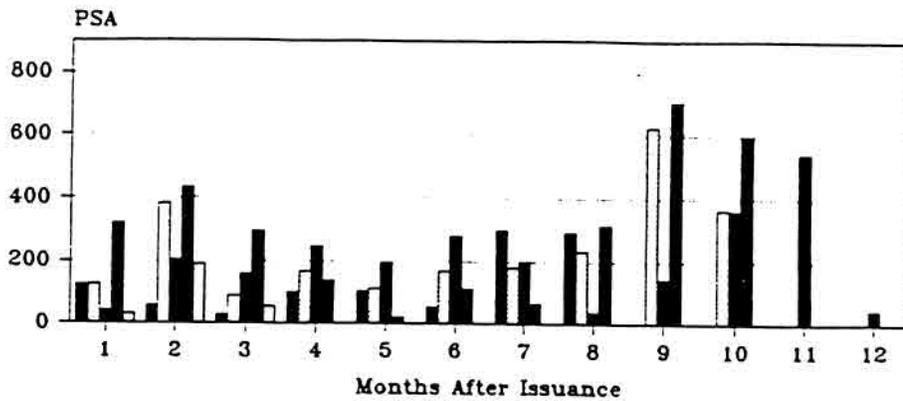
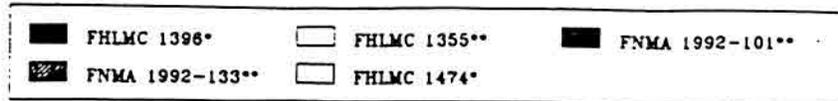
- The two-tiered pricing speed for FHLMC-1558 consists of 145% PSA for the first year and 325% PSA for the remaining life (see Appendix for the two-tiered speed in CPR). The first-tier pricing speed of this deal is slower than that of FHLMC-1474 issued in last January, which has a higher gross WAC of 7.803%. But the second-tier speed is slightly faster than that of FHLMC-1474. The faster second-tier speed is consistent with the findings of the two surveys and the potentially quickened pace of relocation in the midst of a modest but steady economy recovery.
- The Pru Home data show that, for loans originated between 1988 and 1993, relo pass-throughs have prepaid between 20% and 55% slower than comparable-coupon regular pass-throughs during the first 6 quarters after issuance (Chart 2). The difference between the two, on a since-issuance basis, narrows quickly in the following two quarters. Between the third and the sixth years, relo prepayments accelerate to 75% to 150% faster than those of regulars. After the sixth year, the difference between relos and regulars narrows probably because relos have reached a burnout stage and the regulars continue to gain speed as they season. The actual prepayment difference in CPR percentage points between the two is depicted in Chart 3.
- Relos' acceleration of prepayments in later years, the second tier speed, has a far more significant and stabilizing effect on their expected average lives than the first tier speed. Based on the two-tiered pricing speed of 145% PSA for the first year and 325% PSA thereafter (145%-325%) the average life of the relo collateral is 5.4 years.
- It is important to note that the testing of average-life stability of relo-backed REMIC classes should not be the same as that for regular REMICs. Prepayments of relos are not as sensitive to changes in interest rates as those of regular pass-throughs. Neither are relo prepayments (particularly current-coupon) heavily influenced by housing conditions. As the relo survey results indicate, the average life of relos and relo-backed REMICs are inherently stable due to the economics of corporate relocation policy.
- Nevertheless, in reality, the eventual relo speeds can be moderately different from the pricing speed. But the average-life variation of relos should be significantly more stable than regulars. If the first tier speed slows to 100% PSA for 18 months and the second tiered speed slows to 250% PSA, the average-life of relos lengthens to 6.8 years. On the other hand, if after 18 months the second tier speed accelerates to 400% PSA, the average life shortens to 4.9 years. Thus, 5 to 7 years should be the realistic range of average life for relos.

- Given the stability of average life of relos, the average lives of relo-backed REMIC classes should also be more stable than those of regular REMICs. The following table shows the average lives of various classes of FHLMC Relo Series 1558 under the pricing speed and three alternative speeds. The first tier speed of the alternative scenarios is 100% PSA for 18 months. The second tier speeds, however, varies between 250% PSA, 300% PSA, and 400% PSA.

Expected Average Lives of Various Classes of FHLMC Relo REMIC Series 1558 under Pricing and Selected Alternative Speeds

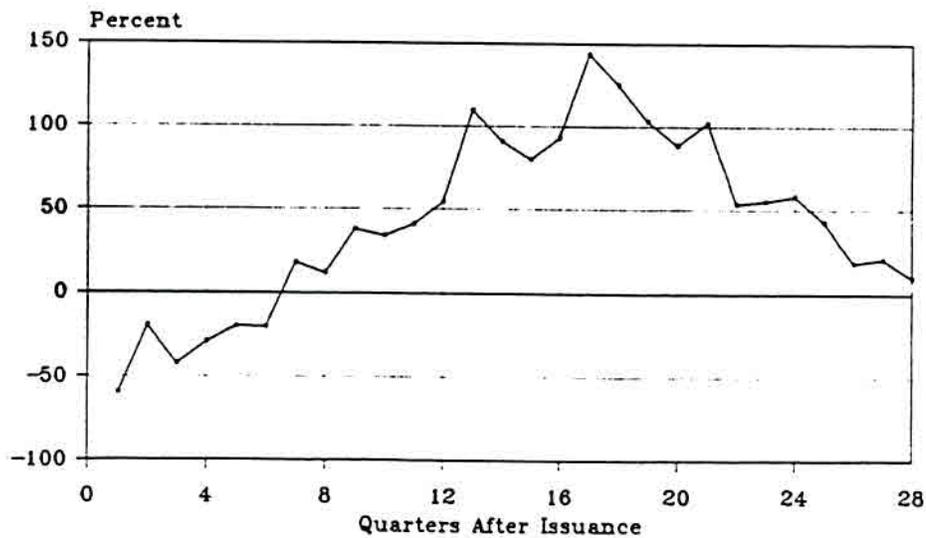
Bond Type	Average Life (years) at Pricing Speed (PSA%)			
	145% 12-mos 325% after	100% 18 mos 250% after	100% 18 mos 300% after	100% 18 mos 400% after
A, TAC	3.44	4.30	3.85	3.49
F, TAC Floater	3.44	4.30	3.85	3.49
S, TAC Inverse IO	3.44	4.30	3.85	3.49
B, TAC	7.89	10.02	8.65	7.99
C, TAC	9.99	12.66	10.91	10.76
D, TAC	11.98	15.12	13.04	14.97
FA, Floater	16.35	19.99	17.60	5.6
SA, Inverse	16.35	19.99	17.60	5.6
FB, Floater	16.35	19.99	17.60	5.6
SB, Inverse	16.35	19.99	17.60	5.6

Chart 1. Prepayment History of
Pru Home Originated Relos Sold Through
Agency REMICs, 1992-1993



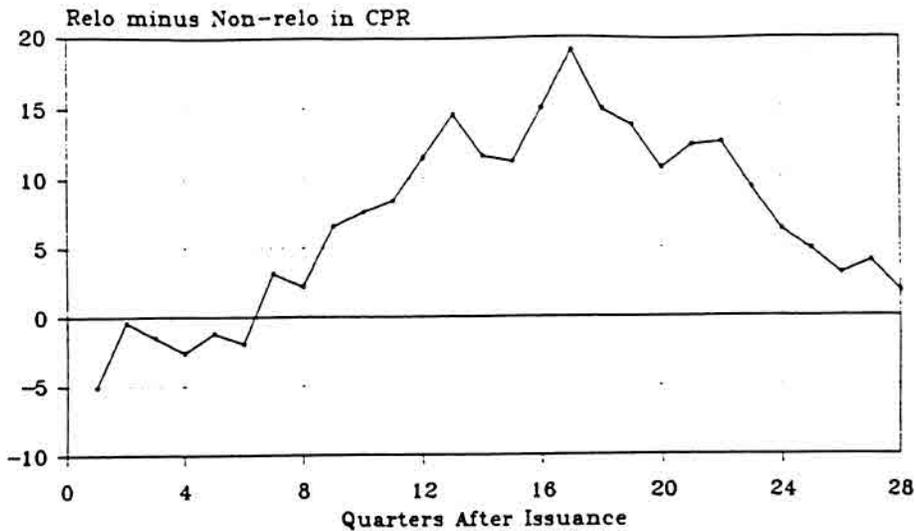
* Pass-through coupon rate is 7%
 ** Pass-through coupon rate is 7.5%
 Source: Prudential Home Mortgage Co.

Chart 2. Prepayment Difference, in
Percent*, of Pru Home Relo vs. Non-Relo
Mortgages, Since Issuance, May 31, 1993



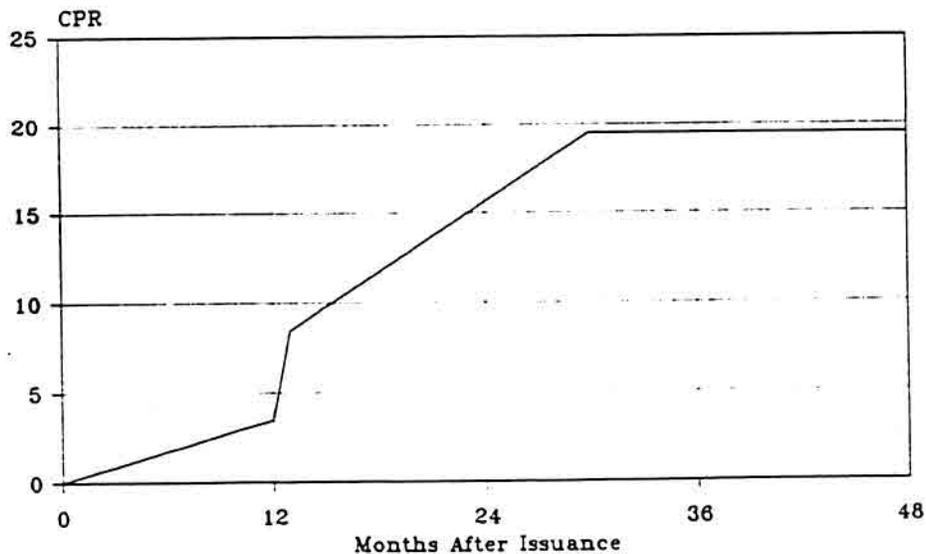
*Percentage difference in prepayments =
 $(\text{Relo CPR} - \text{Nonrelo CPR}) / (\text{Relo CPR}) \times 100$
 Source: Prudential Home Mortgage Co.

Chart 3. Prepayments of Pru Home Relo vs. Non-Relo Mortgages*, Since Issuance, May 31, 1993



*Difference in the actual CPR in points.
Source: Prudential Home Mortgage Co.

Appendix. Two-Tiered Pricing Speed* in CPR of FHLMC 1558 for 48 Months After Issuance



* 145 PSA for 1 year and 325 PSA thereafter