Peter DiMartino
(212) 816-8382
peter.a.dimartino@ssmb.com

Prepayment Penalties Reduce Subprime MBS Speeds

In subprime MBSs, prepayment penalties substantially reduce overall pool speeds. The rate at which subprime MBS pools prepay has been a sore spot for many lenders, issuers, and investors alike. In an effort to help contain prepayment speeds on subprime pools, some lenders began to originate mortgage loans with prepayment penalties as early as 1996 (in those states where prepayment penalties are permitted). In a typical, recently issued Salomon Brothers Mortgage Securities VII, Inc. (SBMSI) transaction, for example, more than 70% of the loan balances are collateralized by prepayment-penalty mortgage loans. The most common prepayment penalty has a three-year term requiring the borrower to pay six months' interest on any amount in excess of 20% principal paid annually. Penalty types can vary by term (typically one to five years) and by penalty requirement.

Penalty loans prepay at about 40% to 70% of no-penalty loans depending on seasoning.

How effective have the prepayment penalties been in containing overall speeds on SBMSI transactions? For transactions issued in 1996 and 1997, penalty loans have prepaid at about 70% of the rate at which no-penalty loans have prepaid over the life of their respective pools (on average, 32% CPR versus 44% CPR). Overall, this group is prepaying at a life speed of about 35% CPR. For less seasoned transactions (issued in 1998 and 1999), prepay-penalty loans have prepaid at about 45% of the speed, on average, than that for no-penalty loans (about 11% CPR versus 26% CPR, on average). Overall, this group is prepaying at a life speed of 16% CPR.

We surveyed two dozen SBMSI transactions issued from October 1996 to March 1999 and examined the differences in life speeds for their respective penalty and no-penalty loan cohorts. Figure 22 lists those transactions and shows the collateral type, as well as the issue date, the percentage of collateral balance with prepay penalties, and life CPRs for the no-penalty and penalty loan cohorts (as well as for all loans) in each transaction. The figure also shows the ratios of penalty to no-penalty life CPRs.

The transaction names in the figure identify the originator of the loans that collateralize each pool. For example, the LB suffix is for Long Beach Financial (in most cases, these transactions contain loans originated prior to the reorganization that resulted in LB's separation from Ameriquest Mortgage); likewise, AQ is for Ameriquest Mortgage, and NC is for New Century Financial.

Early on, penalty loans prepay at about 25%-50% of no-penalty loans.

Keeping in mind the substantial difference in seasoning, product mix, and penalty percentages (shown at the time of issuance) for the transactions in the figure, we see that the life speeds for the entire pool ("all loans") range from less than 10% CPR to just over 50% CPR. However, shown uniformly throughout the survey is that penalty loans experience dramatically slower life speeds than those of no-penalty loans. The ratios of penalty to no-penalty loans range from 0.56 to 0.85 for 1997 transactions, 0.33 to 0.62 for 1998 transactions, and from 0.23 to 0.45 for 1999 issues.

Penalty and no-penalty speeds on 1996-1997 deals are converging.

Part of the explanation for these differences is that most 1998 and 1999 penalty loans are still in their penalty period and are less likely to prepay. However, many 1996 and 1997 penalty loans have exited their penalty periods, causing the penalty CPRs to rise (that is because the penalty flag is "at-issue", so even if the loan is no longer in the penalty period, it is identified as a penalty loan when it has prepaid). As a result, the penalty and no-penalty loan speeds on 1996 and 1997 transactions have started to converge.

Figure 22. Selected SBMSI Subprime MBS Transactions: No Penalty versus Penalty Loans — Prepayment Speeds, Jun 99

Lender/ Transaction Name	Collateral Type	Issue Date	Penalty Percentage	Life CPRs (%) No-Penalty	Life CPRs (%) Penalty	Life CPRs (%) All Loans	Ratio of Penalty to No-Penalty Life CPRs
1996-LB2	FRM	Oct 96	75%	30.4	23.5	25.2	**0.77**
1997-LB2	FRM	Apr 97	74	33.3	24.2	26.5	**0.73**
1997-LB3	6LIB	Jun 97	53	55.6	47.1	50.7	**0.85**
1997-LB4	2/28, 6LIB	Aug 97	61	59.6	37.6	45.0	**0.63**
1997-LB5	2/28	Nov 97	63	54.4	30.7	39.1	**0.56**
1997-LB6	FRM	Nov 97	78	32.9	22.3	24.7	**0.68**
1997-NC1	2/28, 6LIB	Feb 97	59	56.7	37.4	44.2	**0.66**
1997-NC2	2/28, 6LIB	May 97	63	47.2	33.4	38.1	**0.71**
1997-NC3	2/28, 6LIB	Jun 97	61	45.5	28.2	34.4	**0.62**
1997-NC4	2/28, 6LIB	Aug 97	65	40.3	29.3	33.2	**0.73**
1997-NC5	2/28, 6LIB	Nov 97	69	36.0	21.0	25.5	**0.58**
1998-NC1	2/28, 5/25	Mar 98	72	35.9	16.5	21.8	**0.46**
1998-NC2	2/28, 5/25, 6LIB	May 98	63	49.7	22.2	32.3	**0.45**
1998-NC3	FRM	Jun 98	81	18.5	9.9	11.6	**0.54**
1998-NC4	2/28	Sep 98	72	28.9	9.5	15.0	**0.33**
1998-NC5	2/28	Dec 98	70	39.0	12.7	21.2	**0.33**
1998-NC6	FRM	Sep 98	77	15.9	9.2	10.8	**0.58**
1998-NC7	FRM	Dec 98	82	16.4	10.2	11.3	**0.62**
1999-NC1	FRM	Mar 99	73	14.2	6.2	8.4	**0.44**
1999-NC2	2/28	Mar 99	73	21.1	4.9	9.6	**0.23**
1997-AQ1	6LIB	Aug 97	53	59.1	45.2	51.5	**0.76**
1997-AQ2	6LIB	Nov 97	50	58.0	44.4	51.1	**0.77**
1998-AQ1	FRM	May 98	72	32.2	19.2	22.8	**0.60**
1999-AQ1	3/27	Mar 99	70	14.6	6.5	8.9	**0.45**

2/28 Two-year hybrids. 3/27 Three-year hybrids. 5/25 Five-year hybrids. 6LIB = Six-month LIBOR. FRM Fixed-rate mortgages.
Source: Salomon Smith Barney.

Collateral characteristics add to the overall production-year speed differences. For example, 1997 transactions had significant percentages of six-month LIBOR collateral. Subprime borrowers that chose six-month LIBOR-indexed mortgages were somewhat short-term in their approach to mortgage financing and exhibited a willingness to prepay at a faster pace than hybrid and fixed-rate borrowers. These borrowers also were easy prey for the industry’s aggressive wholesale brokers (at that time). However, even for those transactions backed entirely by six-month LIBOR loans, the penalty cohort has prepaid significantly more slowly than the no-penalty cohort (with ratios of about 0.75, see 1997-AQ1 and 1997-AQ2).

Hybrid mortgages also help to contain speeds.

Once hybrid mortgages became a popular choice among subprime borrowers, those loans were blended into pools with six-month LIBOR loans (mainly in 1997). For this group of transactions (see 1997-LB4 and 1997-NC1 to 1997-NC5) the aggregate pools speeds are substantially slower than the pure six-month LIBOR deal speeds (about 35% CPR versus 50% CPR). Meanwhile, the penalty loan cohort for these transactions has prepaid at approximately 0.65 of the loan group without a prepayment penalty.

In conclusion, there is real value in the prepayment penalty. Because subprime penalty loans have exhibited substantially slower speeds than those without, investors can better gauge prepayment speeds, especially in the early years of a transaction. The greater the percentage of penalty loans in a pool, the less likely a pool will be to experience runaway speeds. SBMSI transactions typically contain generous percentages of prepayment-penalty loans. We believe that investors should express a preference for transactions with high percentages of penalty loans when comparing subprime MBSs.