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

The Nonagency MBS Market — A Look Back at the 1990s

In the 1990s, the nonagency MBS market matured. A dynamic and efficient market, nonagency MBSs fill a vital role in the capital markets and in the management of fixed-income portfolios. Facilitating that growth, several structural innovations and the widespread availability of loan-level data occurred in response to feedback from institutional investors. A heterogeneous sector, the nonagency market gave birth to the subprime, alt-a, reperforming MBS niches. During the decade, subordination became the primary use of credit enhancement, spurring on credit tranching and liquidity in subordinate MBSs. A few large mortgage conduits dominated issuance

[11] See *Bond Market Roundup: Strategy,* Salomon Smith Barney, June 30, 1999, and November 19, 1999.

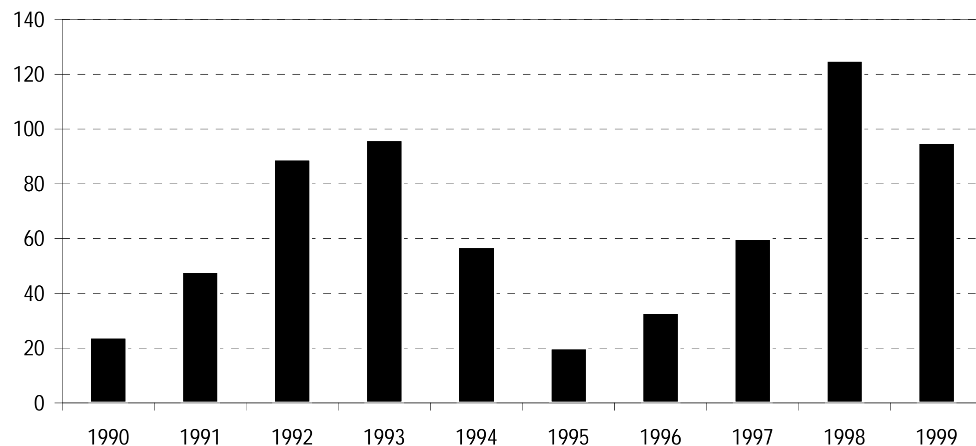
throughout the decade. In this section, we present a brief account of some of the major events marking the nonagency MBS market in the 1990s.

Historical Issuance

Issuance volume rose fourfold before dropping, then rising again.

One way to measure the nonagency MBS market's growth is by observing its securities issuance in the 1990s. From 1990 to 1999 securities issuance quadrupled. As shown in Figure 37, 1990 volume was recorded at about $24 billion (at no time prior to that did nonagency securities volume top that of 1990). In 1999, volume topped $95 billion. From 1990 to 1992, nonagency issuance just about doubled annually before topping out at $96 billion in 1993. Issuance dropped off considerably in late 1994 and 1995 as rates backed up. Hence, the decade's lowest securities volume was posted in 1995 at $20 billion. After 1995, however, issuance rallied along with mortgage rates and refinancings. The decade's highest volume occurred in 1998 at $125 billion. Rates backed up again in 1999, and along with Y2K considerations, issuance slowed substantially in the second half of the year, causing a 20% decrease in supply.

Figure 37. Nonagency Mortgage-Backed Securities: Historical Issuance, 1990-1999 (Dollars in Billions)



Source: Salomon Smith Barney.

Top Issuers

RFC, NASCOR, and GE were the dominant issuers for the decade.

The nonagency market's top five issuers have dominated issuance in the 1990s. Figure 38 compares the top five issuers in 1999 to those from 1993. At the end of the decade, three of the top five issuers were the same as those who dominated at the early half of the decade. Actually, for the past several years RFC has topped the issuer league tables. In 1993, however, Prudential Home (acquired by Norwest Bank in 1996 to form Norwest Asset Securities Corporation) was the number one jumbo issuer. These issuers held the top two rankings for most of the decade. Since 1991, GE Capital has also been among the top four issuers as well. The top five issuers have typically accounted for more than half of the market's total issuance volume.

Figure 38. Top Five Issuers of Nonagency MBS, 1999 versus 1993

1999			1993		
Rank	Issuer	Volume	Rank	Issuer	Volume
1	Residential Funding Corp.	$14.5	1	Prudential Home	$27.0
2	Norwest Asset Securities Corp.	12.2	2	Residential Funding Corp	12.5
3	PNC Mortgage Securities Corp.	9.6	3	Countrywide	7.8
4	GE Capital	9.0	4	GE Capital	7.7
5	Bank of America	6.5	5	Chase Mortgage	4.9
Combined Market Share		54.5 %	Combined Market Share		62.4 %

Source: Salomon Smith Barney.

Loan-level data helped to improve liquidity.

The availability of loan-level data helped pave the way for these institutions to repeatedly rank among the top issuers. Investors demanded information. In many cases, they altered their purchase activity based upon the reliability of the issuer to support their transactions after issuance. By 1994, most nonagency issuers provided monthly loan-level data to investors. Furthermore, much of the necessary information needed to track the performance and cash flows became available on several publicly available analytical systems in user-friendly formats. As a result, liquidity improved and spreads tightened. In fact, as the GSEs extend their reach into nonconforming mortgages, they would be well advised to anticipate the information needs of the nonagency clientele.

Structural and Origination Innovations

Innovations affected cash flow distribution and the preservation of credit enhancement.

To help make nonagency securities more attractive to investors, issuers created some structural innovations early in the decade. Each affects the manner by which cash flow is distributed to bondholders.

- First, virtually all issuers agreed to pay **compensating interest** for interest shortfall by 1995. Although provisions are not uniform among all issuers, compensating interest affords some protection to an investor's cash flows.

- Second, the **shifting-interest** structure was implemented to protect credit enhancement by directing unscheduled principal, which otherwise would have been distributed to the subordinate class, to the senior class. This lock-out feature helps to ensure that an adequate amount of credit enhancement is available later in the life of the transaction.

- Third, for a transaction to exit its lock-out period, various performance tests must be met on the anniversary, or stepdown, date. The **stepdown tests** address the collateral's loss and delinquency performance. Passage or failure of the stepdown tests affects the yield and WAL characteristics of the bonds. At the beginning of 1996, these stepdown tests were loosened because many transactions that experienced acceptable credit performance still failed the old tests.

- Finally, the waterfall structure was abandoned in 1994, reducing the potential for temporary interruptions in cash flow to subordinate MBS holders.

Credit scoring, AU systems, and Internet originations are changing the landscape.

In addition to structural innovations, some underwriting innovations changed the way lenders originate mortgage loans. The introduction of **credit and mortgage scoring** allowed lenders to ascertain borrower credit and loan-level risk more accurately. In addition to the lender, rating agencies and investors gained a better understanding of overall risk in a pool. More recently, electronic (Internet) loan originations hold the potential to help lenders attract more borrowers.

New Sectors

The nonagency sector was born in the mid-1980s, but subprime securitization was not too far behind. Referred to as the "B&C" mortgage market in the early 1990s, subprime volume grew over the years and ended 1999 at about $70 billion. Subprime MBSs are collateralized by loans made to borrowers with less than perfect credit history or perhaps no credit history.

Subprime and alt-A collateral have unique characteristics and trade in their own market niches.

In late 1994, the alt-A market was born (actually, it took another year or two before we settled on the term "alt-A"). These loans always existed; its just that they were included in standard nonagency transactions. Although alt-A borrowers did not necessarily have credit problems, their loan characteristics did not fit into standard agency underwriting guidelines. These borrowers qualified under alternative or expanded criteria underwriting (hence the term alt-A), typically at a higher loan rate.

Subprime and alt-A securities have credit and prepayment performance characteristics that are unlike those found in the prime/jumbo market. For that reason, these loans were segregated into their own respective sectors. Now, jumbo, subprime, and alt-A securities can be examined, modeled, and valued in a way that addresses their unique characteristics.

The conforming loan amount grew by 28% in the 1990s.

The conforming loan amount limit has increased over the decade to its present level of $252,700 ($240,000 in 1999). In 1990, the conforming limit was $187,450. However, when housing price appreciation is measured over the same period, the rise in the conforming loan limit is not alarming. Still, the GSEs *are* expanding into the nonconforming mortgage market in the subprime and alt-A sectors. Several lenders of subprime and alt-A mortgages now sell into the GSEs, as opposed to issuing private-label securities in the nonagency MBS market. This trend has been a bit more alarming to various groups in the mortgage industry.

Subordination Rules

The 1990s saw the shift from external credit enhancement to internal.

Unlike in the agency mortgage market, where investors do not face credit risk, nonagency mortgage transactions require the use of credit enhancement to achieve a triple-A rating. In the late 1980s (when the market was still referred to as the "Double-A" market) credit enhancement was accomplished through one or more of the following external methods: (1) corporate guarantee; (2) letter of credit; (3) excess interest; and (4) pool insurance. Shortly thereafter, subordination, an internal form of credit enhancement, became the dominant method. We refer to it as an internal method because a percentage of the collateral balance is carved out and becomes subordinate to the senior classes. By 1992, credit tranching had become more popular. Subordinate classes, carved out on the basis of credit ratings, allowed investors to participate in single-family credit risk.

Today, investors enjoy a substantial amount of liquidity in the investment-grade subordinate MBS market. The same could once be said for the below-investment-grade market, but the decade ended with few buyers of these classes. Yet, as recently as 1996 and 1997 demand was strong for these classes. Leveraged investors accounted for most of that sponsorship.

Credit enhancement requirements went from more than 10% in 1990 to 4% in 1999.

Steadily decreasing subordination levels (required by the rating agencies) stand as one of the reasons that traditional investors have exited this market. Figure 39 lists representative credit enhancement levels for each of the past ten years.

Figure 39. Representative Triple-A Credit Enhancement, 1990-1999[a]

Year	Triple-A Credit Enhancement
1990	10.50%
1991	8.50
1992	7.25
1993	6.50
1994	6.00
1995	6.50
1996	5.75
1997	4.50
1998	4.25
1999	4.00

[a] Fixed-rate, 30-year, generic jumbo mortgages.
Source: Salomon Smith Barney.

Subordination levels have fallen over the years for many sound reasons:

➤ Excellent credit performance in the prime/jumbo sector;

➤ Better credit risk assessment brought on by credit scoring;

➤ More diverse collateral;

➤ Removal of alt-A loans from prime pools; and

➤ Improved origination and servicing techniques.

As we embark on a new decade, the nonagency market is poised for continued growth, having proven in the 1990s its ability to adapt to changes in borrower and investor preferences. In addition, the lender and dealer communities stand ready to facilitate dynamic and liquid markets.