CHAPTER 16

Securitizations

Introduction

In October 1990, one year after the Resolution Trust Corporation (RTC) was created, a securitization program was established to facilitate the sale of mortgage loans. This chapter focuses on the creation, development, and performance of this program.

Overview

Mortgage loans were the largest single category of assets in the RTC's inventory. In August 1990, the total volume of those loans held in RTC-controlled institutions was estimated to be more than $34 billion. The size of this portfolio led the RTC to explore the concept of securitization as a method for broadening the potential range of mortgage loan purchasers because the market for mortgage-backed securities was large and well developed.

Securitization is the process by which assets with generally predictable cash flows and similar features are packaged into interest-bearing securities with marketable investment characteristics. Securitized assets have been created using diverse types of collateral, including home mortgages, commercial mortgages, mobile home loans, leases, and installment contracts on personal property. The most common securitized product is the mortgage-backed security (MBS). The following types of mortgage loans are most suitable for securitization.

Conforming Residential Loans

Conforming residential loans are single-family, performing (one-to-four family) mortgage loans that conform to Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac) guidelines and/or standards. In 1997, these agencies had more than $3 trillion of outstanding mortgage securities backed by conforming residential loans.

Nonconforming Residential Loans

Nonconforming residential loans are single-family, performing (one-to-four family) mortgage loans that do not conform to Fannie Mae or Freddie Mac standards. Private-sector sellers and government agencies other than FDIC and RTC securitized more than $159 billion of nonconforming mortgage loans between 1990 and 1997.

Multi-Family Residential and Commercial Loans

Multi-family residential and commercial loans are performing mortgages that secure residential (5+ family) and commercial properties. Although private-sector sellers securitized more than $135 billion of multi-family loans between 1992 and 1997, the market for these securities is still evolving.

The RTC's single-family mortgage loan portfolio was unique because most of the loans did not conform to the standards required by Fannie Mae or Freddie Mac. Because most of the RTC's loans were originated for retention in the lender's portfolio, some of the loan underwriting criteria deviated from normal secondary market standards. For example, there were loans with cross-collateralization, loans with nonstandard interest rate indexes, loans with high loan-to-value ratios, loans with no mortgage insurance, and many loans that had documentation deficiencies.

The RTC needed not only to maximize the return on its asset sales, but also to liquidate assets expeditiously. Early on, the most common method it used to move assets quickly was to sell mortgage loans through "whole loan" sales. Three types of whole loan buyers generally bid on these sales packages: (1) portfolio investors, (2) investment bankers, and (3) junk buyers. The last two categories of buyers tended to heavily discount any product that could not be readily made into investment-grade quality. Portfolio investors usually did not discount as heavily as the investment bankers and the junk buyers, if the portfolio generated sufficient yield, the loans were collectable, and the documentation was enforceable. Even though the RTC standardized the review process implemented by its contractors for due diligence (a thorough review of the individual loans or properties) and loan sale advisory services, the mortgage loans it held suffered from credit and delinquency problems and document deficiencies. Consequently, most buyers of RTC mortgage loan packages tended to be investment bankers and junk buyers. As a result, the RTC was not generating the return it expected on its whole loan sales. Returns were often in the 85 percent to 90 percent of book value range for performing residential mortgage loans.

One of the RTC's most successful whole loan sales took place in the summer of 1990. That sale was referred to as the Atlanta Pilot program, in which $17 billion of residential mortgage loans were sold for prices ranging from 93 percent to 99 percent of book value. Within months of the Atlanta Pilot program sale, officials at the RTC received calls from Fannie Mae and Freddie Mac about origination standards for various thrift institutions that were in the RTC conservatorship program. It was discovered that many of the loans that were sold in the Atlanta Pilot program had documentation deficiencies that were subsequently corrected by the purchaser. These corrections changed the status of the loans from nonconforming to conforming, and enabled the purchaser to submit the corrected loans for resale to Fannie Mae and Freddie Mac. Loans that were conforming except for the loan balance were subsequently resold to investors through private securitization programs. In both instances, when the loans were resold, the original purchasers received prices significantly higher than the original purchase price. These events made it clear that the RTC could receive higher prices by leaving out the intermediary. As a result, the RTC began to correct documentation deficiencies itself in order to sell loans directly to Fannie Mae and Freddie Mac. When that was not possible, the RTC sold loans through its own securitization program.

RTC Agency Swap Program

In October 1990, the RTC Oversight Board adopted a resolution that encouraged the RTC to use securitization as a method of disposition for financial assets. The board also directed the RTC to establish a single procedure for facilitating the securitization of mortgage loans from multiple receivership and conservatorship institutions. In November 1990, the RTC executed "master" agreements with Fannie Mae and Freddie Mac, thereby enabling the RTC to sell conforming loans directly to the agencies.

Both Fannie Mae and Freddie Mac are government-sponsored entities that purchase conforming residential mortgage loans from originators and other sellers, package such mortgage loans into more liquid securities (such as mortgage-backed securities and participation certificates), add a guarantee of payment of principal and interest, and sell the securities to investors. An investor in a Fannie Mae or Freddie Mac security receives guaranteed monthly payments of principal and interest that are generated by the mortgage loans underlying the security. Fannie Mae and Freddie Mac receive a fee from the mortgage loan seller for guaranteeing the principal and interest payments to the investor, and also earn interest income on the delay between receipt of principal and interest from mortgagors and payment to the security investors.

Under the RTC's Agency Swap Program, the RTC sold for cash, or swapped, for Fannie Mae or Freddie Mac securities, $6.1 billion of conforming residential mortgages in competitive auctions. In a typical cash sale, Fannie Mae and Freddie Mac bid to purchase pools of mortgage loans from the RTC for a cash price that is usually determined by calculating the amount that Fannie Mae or Freddie Mac received on the sale of their securities created from such pools, minus their guarantee fee and other costs. In a swap, the RTC received the Fannie Mae or Freddie Mac securities in exchange for the mortgage loans and then, with the assistance of Fannie Mae or Freddie Mac, sold such securities from the RTC's capital markets trading desk.

For both cash sales and swaps, the Fannie Mae and Freddie Mac master agreements required that the RTC supply credit enhancement for the mortgage loans in the form of cash collateral withheld from the purchase price by either Fannie Mae or Freddie Mac. The cash collateral was invested for the benefit of the RTC and then returned to the RTC when certain criteria were met. In addition, under the Swap Program, the RTC also competitively bid and sold to servicing firms the servicing rights associated with the underlying mortgage loans.

RTC Private Securitization Program

In December 1990, a private securitization program was established to sell the loans that did not conform to Fannie Mae and Freddie Mac standards. This program was established with the following expectations:

1. Enhanced Asset Recovery Values—Securitization should enable the RTC to reach a much larger base of investors. The market for whole loan sales was significantly smaller than the market for investors in mortgage-backed securities. As a result, private-market participants estimated that securitization should enable the RTC to increase recovery values, as compared to whole-loan sales, from 0.5 percent to 1 percent for better quality loans and from 2 percent to 10 percent for lower quality loans. The increase in recovery values translated to an additional $1 billion to $3 billion for taxpayers.

2. Expedited Asset Sales—The securitization process also should enable the RTC to close loan sale transactions more quickly. In a whole loan sale, the purchaser required 6 to 12 weeks between the sale date and the closing date to engage in its own detailed loan file review, in order to verify the due diligence information prepared by or on behalf of the RTC. In a securitized loan sale, the purchasers of the securities did not need to perform a second detailed loan file review, but instead relied on the credit enhancement's making it possible to close within two to three weeks after the sale.

In 1990, the RTC would have preferred to issue securities backed by the full faith and credit of the U.S. government. This feature would have expanded the “universe” of investors, including foreign buyers. Foreign governments would not need to issue a special ruling to make RTC securities eligible investments for mutual funds, because an

RTC government-guaranteed security would probably fit the existing exemption available for Government National Mortgage Association (Ginnie Mae) securities. A direct guarantee would also enable regulated buyers such as banks and thrifts to be subject to markedly lower risk-based capital requirements. With a direct government guarantee, RTC securities would have a zero-risk weight, which is similar to the risk weighting for Ginnie Mae securities.

The RTC's Oversight Board did not support the RTC's issuance of securities backed by a full government guarantee. That lack of support stemmed partly from concerns raised by the Department of the Treasury that (1) the government would retain all of the risk because there was no real asset sale, and (2) issuing a new security with a full faith and credit guarantee by the U.S. government would compete with the securities issued by the Treasury. As a result, the RTC did not use a government guarantee to enhance the credit of RTC securities. Instead, the RTC decided to use cash reserves and other methods to provide credit support. It issued publicly rated mortgage-backed securities for which the senior securities were rated in the two highest rating categories by at least two national credit rating agencies.

Another major issue concerning the RTC's securitization program was personal liability. Under the Securities Act of 1933, directors, officers, employees, and "controlling persons" of a private corporation may be personally liable for errors or omissions in a prospectus used to offer and sell securities. Some of the RTC board members were concerned that they would be sued by investors who purchased RTC securities. The board obtained a legal opinion stating that RTC directors, officers, and employees have a strong case for immunity from such personal liability, pursuant to the Federal Tort Claims Act (FTCA). However, certain ambiguities in the FTCA make it impossible to render a flat "no liability" opinion. Thus, the securitization program could not begin until the issue of personal liability was addressed through legislation. In the RTC Funding Act passed in 1991, the U.S. Senate included a provision that provided absolute immunity from claims based on the 1933 Securities Act, and granted authority to the agency to indemnify employees against common law and other liabilities that were awaiting action by the Supreme Court.

The passage of this legislation enabled the RTC to issue securities. In March 1991, the RTC Board of Directors authorized the filing with the Securities and Exchange Commission of a shelf registration statement (the RTC Shelf) for the issuance and sale of mortgage securities backed by residential loans from one or more RTC institutions. The board also authorized the RTC staff to use competitive procedures to select private-sector firms necessary to implement the securitization of mortgage loan sales. To further encourage the use of securitization as a primary method for asset sales, then-FDIC Chairman L. William Seidman announced that the RTC would sell at least $1 billion per month using the securitization sales structure.

Securitization Process and Participants

The mortgage loan securitization process of creating a trust to acquire mortgages and issue pass-through certificates to investors typically involves seven key participants. These participants are the seller, underwriter, trustee, servicer, rating agency, accountant, and legal counsel.

The seller is the owner of the mortgage loans sold to the trust and the ultimate beneficiary of the proceeds from the sale of the certificates to investors. The seller may provide some form of guarantee or credit support to enhance the value of the bonds. The seller will also usually provide certain representations and warranties related to the mortgage collateral.

The underwriter receives individual mortgage loan information, analyzes and structures the portfolio into multiple classes of certificates of varying maturities and interest rates, and underwrites (purchases) the securities from the seller. The underwriter then resells the certificates to investors.

The trustee represents the interests of the certificate holders and acts as administrator of the trust. The primary role of the trustee is to compute the amount of monthly distributions payable to the investors and make appropriate distributions. Each month, an account statement is prepared by the trustee that summarizes the cash received by the trust and explains the calculation of the amounts paid to the investors of each class of securities. The trustee is usually responsible for the preparation of the trust's income tax return and the related informational tax filings. The trustee for publicly rated securities must provide backup servicing for the securitized loans in case the appointed servicer is unable to service the loans. The trustee must also make advances for delinquent mortgage payments if the primary servicer fails to do so. For this reason, the trustee must have an unsecured debt or deposit rating of no more than one full rating level below that of the securities issue (that is, if the RTC issues double A rated securities [AA], the trustee must have an unsecured debt or deposit rating of single A [A]).

The servicer performs the traditional mortgage loan servicing functions of collecting and accounting for borrower's payments and resolving delinquent loans. The servicer prepares special reports for the trustee and forwards the monthly mortgage collection payments to the trustee so that investors in the securities may be paid. The servicer also transmits funds and special reports to the trustee.

Rating agencies evaluate the transaction structure, the underlying pool of assets, and the expected cash flows, and determine the extent of loss protection that should be provided to investors through various forms of credit enhancement. Securitization transactions typically involve the use of credit enhancement to create securities that have a very high level of credit quality. To achieve the highest ratings from the national credit rating agencies, mortgage-backed securities must satisfy cash flow, delinquency, and loss coverage tests that make default almost impossible. The rating agencies have developed loan loss models to estimate the required level of loss protection for a securitized mortgage loan pool. They use the Great Depression as a benchmark to estimate the level of losses that may occur if a mortgage pool is subjected to stressful economic conditions. Cash flow scenarios are run that subject a pool of mortgages to "stress tests" for which losses and delinquencies are assumed to be two to three times greater than the losses experienced in the Great Depression. The rating agencies monitor the performance of the transaction over time and adjust credit ratings as appropriate.

An accounting firm performs initial statistical data and accounting validation. The firm also provides "comfort letters" to underwriters and investors verifying the accuracy of information printed in the prospectus supplement to the securities offering.

Legal counsel writes and reviews all materials (including the prospectus and the prospectus supplement in the case of publicly offered certificates) related to the offering of the securities. Counsel also must ensure that the certificates and the underlying mortgage loans satisfy Real Estate Mortgage Investment Conduit (REMIC) eligibility requirements. In addition, legal counsel prepares the pooling and servicing agreement and negotiates the terms of the agreement on behalf of the seller, servicer, and trustee. Counsel also oversees the process of closing the transaction and ensures that all necessary documentation is prepared and executed.

Transaction Structure

RTC mortgage loans are conveyed to a trust that subsequently issues a series of mortgage-backed securities collateralized by the subject loans. These transactions constitute the sale of the beneficial interest in the loan portfolio. Almost all mortgage-backed securities are either guaranteed by a government-sponsored entity (Fannie Mae, Freddie Mac, or Ginnie Mae), or rated by national credit rating agencies (Standard & Poor's Rating Services, Moody's Investors Services [Moody's], Duff & Phelps Credit Rating Co., or Fitch Investors Services, L.P.) on the basis of private credit enhancement. The Oversight Board of the RTC authorized the RTC to use various types of credit enhancement: mortgage pool insurance, bond insurance, bank letter of credit, reserve fund or spread account, overcollateralization, and senior-subordinated structures.

Because of the cost and difficulty of obtaining third-party credit enhancement (such as bond insurance, pool insurance, and letters of credit), most private-market mortgage securitization transactions use some form of internal credit enhancement (for example, overcollateralization, reserve funds, spread accounts, or senior subordinated structures). The RTC used a number of sources for credit support, including cash reserve funds, subordination, excess interest, and overcollateralization. Table I.16-1 illustrates the structure of a typical RTC securitization transaction using a combination of a cash reserve fund, subordination, and excess interest as credit enhancements.

Cash Reserve Funds

For each transaction, cash reserves were funded by the RTC out of the proceeds of the offering. The funds were held in accounts by a collateral security agent, generally the same entity as the trustee, and were invested in cash and securities that met the credit rating agencies' definition of eligible investments. The reserve fund serves as the primary and most liquid source of credit support. It is used to protect investors against all shortfalls and losses, regardless of the cause. The reserve funds cover items such as delinquent principal and interest, interest rate shortages, and realized losses on liquidation of assets. The example in table I.16-1 required a $296 million cash reserve or 26 percent of the mortgage loan's unpaid principal balance.

Table I.16-1

RTC Securitization Transaction 1994-C1
($ in Millions)

Mortgage Loans		
Number of Loans		2,117
Number of Financial Institutions		238
Unpaid Prinicpal Balance		$1,138
Cash Reserve Fund Balance		
26% of Unpaid Principal Balance		$296
Bond Classes		
Rating:		
	AAA	$740
	AA	57
	A	102
	BBB	68
	BB	125
	B	46
		$1,138
Interest Rate (%)		
Mortgage Loan (WAC)*		9.45
Security (WAC)*		7.45
Excess		2.0

* Weighted Average Coupon
Source: FDIC Division of Resolutions and Receiverships.

Subordination

RTC securitization transactions contained one or more subordinate classes. Subordination provides protection to the senior certificate holders by requiring that the junior certificate holders absorb any shortfalls and losses until the balances are reduced to zero. Generally, once a senior class of security holders has been paid in full, principal payments are re-allocated to pay down junior classes of security holders. This feature preserves the integrity of each transaction and the intention that all senior classes have priority of payment over the junior classes.

Excess Interest and Overcollateralization

Excess interest is defined as the difference between the interest rate paid to investors by the security and the interest rate on the underlying mortgage loans. In most RTC transactions, excess interest is used to accelerate the payment of the subordinate security classes. At the beginning of the transactions, there were significant amounts of excess interest on RTC securitizations. In some cases, the excess interest is used to replenish the reserve fund to a certain level before it is distributed to security holders. The result of using excess interest to retire class balances is that the principal balance of the outstanding securities is reduced relative to the mortgage pool, thus creating overcollateralization. Such overcollateralization provides an added cushion against losses above the reserve fund and subordination. Because excess interest is applied to the subordinate classes, depending on the prepayment experience and the interest rate environment, the prepayment of the subordinate classes may be accelerated. In some instances, the subordinate classes may pay down at an accelerated rate, some at faster rates than the senior classes. Changes in the interest rate environment may affect the amount of excess interest available to pay down securities. In a low-rate environment, higher coupon loans (which produce the greatest amount of excess interest) prepay at faster speeds, thus reducing the pool's ability to generate excess interest and slowing the buildup of overcollateralization. In a stable- to high-rate environment, prepayments are slower, thus allowing the securities to generate excess interest and build up overcollateralization. The flow of funds in a typical securitization transaction is shown in table I.16-2.

Residuals

The residual cash flow represents the difference between the income stream generated by a pool of mortgages and the cash flow necessary to fund a series of collateralized mortgage obligations or real estate trust bonds. Residual value is the economic value or money received by the bondholder of a transaction when the bonds have been paid off and cash flows from the mortgage collateral are still being generated. Residual value also arises when the proceeds amount from the sale of the mortgage collateral as whole loans is greater than the amount needed to pay outstanding bonds.

Table I.16-2

RTC Securitization—Flow of Funds

Borrower

- Makes monthly payment of principal and interest.

Master Servicer

- Collects monthly payments.
- Holds or forwards payments to eligible accounts.
- Tracks payment status on each loan.
- Advances delinquent payments on behalf of borrowers.
- Pursues delinquent borrowers, handles foreclosures and liquidations of real estate owned.
- Reports on pool to trustee, investors, and the RTC.
- Monitors payments of taxes and insurance by borrowers.
- Files insurance claims if insured loans default.
- Performs tax reporting for trustee and investors.

Trustee/Custodian

- Holds certificate account before distribution date.
- Makes payment to investors.
- Holds mortgage note and security documents.
- Holds and draws on reserve fund.
- Advances on behalf of master servicer, if necessary.
- Maintains certificates register.
- Oversees master servicer's performance.
- Represents interest of all certificate holders.
- Holds and reinvests reserve fund amounts, pays out excess to the RTC.
- Calculates payments to certificate holders.

Source: Lehman Brothers Completed Transactions Book, Security Series 1991-1 (July 1991).

The First Transaction—Residential Securitization

In June 1991, the RTC began its securitization program with the issuance and sale of RTC Series 1991-1. This transaction consisted of $426 million of residential loans that were originated and serviced by Columbia Savings and Loan Association, Beverly Hills, California, and were nonconforming to Fannie Mae or Freddie Mac standards. The portfolio consisted of adjustable rate mortgage (ARM) loans that were tied to either six-month Treasury bills (T-bills) or the one-year constant maturity Treasury (CMT) index. The six-month Treasury-indexed loans were adjusted monthly, and the one-year CMT loans were adjusted on a six-month or an annual basis.

Securitization

During the structuring process for the first RTC securitization transaction, the issue of whether to include delinquent loans (loans for which payments were more than 30 days late) in the pool arose. The industry standard is to exclude delinquent loans when forming a collateral pool for any new offering of mortgage securities. This practice exists because the rating agencies require much higher credit enhancement levels for delinquent loans and diverging from this practice might make the securities appear less attractive to investors. The concern was that there would be a tremendous pricing concession associated with the inclusion of these loans, in addition to a substantial increase in the reserve fund. The underwriter for 1991-1 conducted a sensitivity analysis to determine the impact of including delinquent loans. The analysis used a "delinquency pricing concession" to estimate the above-market level yield premium that would be demanded by investors to compensate for the inclusion of those loans in the pool. As a result of the analysis, which valued the pricing concession at 0.05 percent, the RTC decided to include loans that were up to 89 days delinquent in the sale pool. This was the first time mortgage-backed securitization transactions had included delinquent loans.

There were six classes, or tranches, of security certificates, one for each of the three interest rate indexes represented in the loan portfolio and one interest-only (IO) strip for each of these indexes. These certificates were rated AA by two credit rating agencies. The loss coverage requirement (cash reserve) determined by the rating agencies was 12 percent in order to issue AA-rated securities. Table I.16-3 illustrates the classes of securities that were issued in securitization series RTC 1991-1.

The underwriter and the financial adviser reviewed various credit enhancement options and recommended the use of a reserve fund. They determined that the reserve fund credit enhancement structure would result in the best combination of favorable execution of the sale of the certificates, limited recourse to the RTC, and maximization of net proceeds.

Table I.16-3

RTC Residential Mortgage Loan Pass-Through Certificates
Series 1991-1

Loan Group A-1	Loan Group A-2	Loan Group A-3
6 month bond equivalent yield T-bill (rate adjusted monthly)	1 year CMT (rate adjusted semiannually)	1 year CMT (rate adjusted annually)
\$380 million Class A-1	\$43 million Class A-2	\$38.5 million Class A-3
IO Class X-1	IO Class X-2	IO Class X-3

Note: The residual and the IO strips were retained by the RTC as receiver of Columbia Savings and Loan Association, Beverly Hills, California.
Source: Prospectus supplement for RTC 1991-1.

The AA rated securities (tranches A-1, A-2, and A-3) on RTC Series 1991-1 were sold at a price of 100.50 percent, 100.75 percent, and 100.75 percent, respectively. All expenses were deducted from the gross sales proceeds. Expenses included, but were not limited to, the following items: (1) underwriters' fees; (2) due diligence fees; (3) accounting fees; (4) printing fees; (5) rating agency fees; (6) trustee expenses; (7) financial adviser fees; and (8) a cash reserve fund. Expenses for this transaction were approximately \$3.5 million, so that the securitization generated net sales proceeds of \$425.3 million on \$426 million in residential loans.

Subsequent RTC securitization transactions were structured in a manner similar to the first transaction except for two major differences: (1) the mortgage loans that were used as collateral for later transactions were originated and serviced by multiple RTC conservatorship and receivership institutions, as opposed to one institution, and (2) a cross-index structure was used. In a cross-index structure, the interest rate paid to investors is not tied to any of the interest rates on the underlying collateral (mortgage loans). The RTC frequently issued securities bearing an interest rate tied to the London Interbank Offered Rate (LIBOR) when the interest rates on the underlying mortgage loans were tied to U.S. Treasury indexes or cost of funds indexes.[1] Use of the LIBOR index allowed international investors to easily purchase RTC securities, because the securities were based on a familiar and frequently used interest rate index. International investors in LIBOR-based RTC securities were able to match their cost of lending to their cost of funds, thereby boosting international secondary market acceptance of these securities.

1. LIBOR is the interest rate in London that offers "Eurodollars" in the capital markets worldwide. The cost of funds indexes represent the monthly weighted average cost of funds for depository institutions whose home offices are in various Federal Home Loan Bank districts.

Securities issued with cross-index structures created a basis-risk concern for the rating agencies. Basis-risk occurs when securities are issued on the basis of a single index while being supported by a collateral pool containing varying indexes. This situation creates the risk that the interest to be paid on the securities will exceed the net interest received on the collateral, thus resulting in a payment shortfall. The rating agencies used very conservative assumptions based on historical index movements to ensure that there was enough credit support available to investors to cover this risk. In some of the RTC securitization transactions, this risk was covered in two ways: by requiring that additional money be added to the cash reserve fund and by using excess interest payments to accelerate the paydown of classes that were subject to basis-risk.

By October 1991, the RTC completed 12 residential and multi-family securitization transactions totaling more than $5 billion. In the four months since the program's first sale, the RTC had become one of the largest issuers of mortgage backed securities; the volume of mortgage securities issued was exceeded only by Fannie Mae and Freddie Mac. Before its termination in December 1995, the RTC would complete 45 residential securitization transactions totaling $25 billion. The RTC mortgage-backed securities were an important component of the overall portfolio of securities traded in the secondary markets of the United States and Europe.

Commercial Securitization

The RTC has been credited with expanding and educating the marketplace by creating unique and complex securitization structures to sell its commercial mortgage loans. In the past, securitization structures had been used to sell performing residential mortgage loans rather than commercial mortgages because commercial mortgages were perceived to be riskier because of the lack of homogeneity in loan term, size, and structure. The securitization of commercial loans evolved from a $6 billion market in 1990 to an $80 billion market in 1997. The commercial securitizations that were completed before 1990 were private placements issued by commercial banks and life insurance companies. Structures were simple, involving the issuance of one or two tranches of rated certificates that were secured by one or several commercial properties. Because the collateral involved only a few properties, the analysis of these transactions was very detailed and "property specific." Investors attracted to commercial securitization were primarily those that had a considerable level of commercial real estate expertise and that were able to conduct their own analysis.

The RTC's commercial loan portfolio was originated by savings and loan institutions in the 1980s, which was a growth period for the commercial real estate industry. During this time, commercial mortgage lenders often employed liberal origination guidelines to compete for loans. Consequently, the quality and integrity of the mortgage loans suffered. Many lenders did not require borrowers to regularly submit updated financial or property information for approved loans. Problems in the commercial loan portfolios were similar to those in the RTC's residential portfolio: The loans were originated by multiple lenders, loan documents were missing, and, in some cases real estate taxes and insurance premiums were in arrears and were not being addressed by the lender. These characteristics, coupled with generally lower quality real estate, resulted in the highest credit enhancement levels ever assessed by rating agencies for commercial loan securitized pools.

The RTC began its commercial mortgage securitization program in January 1992 with its first issuance of publicly rated commercial mortgage-backed securities. The structure that was used to issue the commercial securities was similar in many ways to the structure that was used to issue residential securities. (See table I.16-4.) Each transaction was structured as a multiclass pass-through, backed by fixed rate and adjustable rate mortgage loans that were divided into multiple loan groups. Each of these loan groups supported a specific class (or classes) of securities, and usually contained loans with similar indexes or other similar characteristics. ARMs with high lifetime interest rate floors often were grouped with fixed rate loans. The existence of several loan groups greatly contributed to the complexity of RTC commercial mortgage transactions.

The rating agencies required large cash reserve funds to protect classes from experiencing losses that may result from the poor performance of their corresponding loan groups. The cash reserves also take into consideration any losses that might be attributed to basis-risk and, in some cases, the availability of excess interest.

To alleviate concerns about document deficiencies and uncertainty about collateral quality, the RTC had to provide extensive representations and warranties for the commercial securitizations. The representations and warranties covered most aspects of the mortgage loans, the properties, and the documentation. In the event of a breach of any representation or warranty, the RTC was required to cover any monetary loss or expense incurred. In addition, the RTC could repurchase a loan that was the subject of a breach of a representation and warranty. The RTC also provided an environmental indemnification for each transaction. If a breach of an environmental representation and warranty occurred, the RTC had the option of curing the related problem within 90 days' notice or of repurchasing the related mortgage loan at its principal balance plus interest.

Many of the early RTC transactions did not allow the servicer much flexibility to work out delinquent loans. Later, RTC commercial mortgage transactions allowed the servicers greater latitude to work out delinquent loans. In most of the RTC commercial transactions, the servicing functions were divided between a master servicer and a special servicer. The master servicer was responsible for collections and general administration of all current loans and for those that were up to 59 days delinquent. Loans that were more than 59 days delinquent were transferred to the special servicer, who was responsible for resolving delinquent loans and advancing loans through the foreclosure and bankruptcy process. The special servicer was also responsible for the management of real estate owned (REO) properties. The addition of the special servicer was intended to ensure that an entity was highly experienced in the workout, asset management, and liquidation of commercial real estate. The special servicer had broad flexibility to

Table I.16-4

Commercial Mortgage Loan Pass-Through Certificates Series 1992-C1

85%
Class A-1
Rating Aa2
Fixed Rate $304mm

Loan Group 1F
Fixed rate loans

Loan Group 1A
ARMS with 8%+ floors

85%
Class A-2
Rating Aa2
1 Month LIBOR $146mm

Loan Group 2
ARMS with various interest rates

6%
Class B*
Rating A3
1 Month LIBOR $32mm

Loan Group 2

9%
Class C†
Rating Baa2
1 Month LIBOR $47mm

Loan Group 2

Residual

Reserve Fund
30%
(Funded from sales proceeds)

* Payments to holders of Class B securities are subordinate to holders of Classes A-1 and A-2.

† Payments to holders of Class C securities are subordinate to holders of Classes A-1, A-2, and B.

Source: Lehman Brothers Completed Transaction Book, 1992-C1, February 1992.

modify, waive, or amend the terms of the mortgage loans. All modifications were submitted for approval to the RTC, which had to respond to the proposal within 10 days; otherwise, the servicer's proposal was automatically approved. The special servicer received fees tied to a percentage of each loan that was worked out and/or returned to the master servicer as a performing loan. All servicers for securitization transactions had to be approved by the rating agencies.

Initially, investors were reluctant to accept the RTC's commercial mortgage securitization program. Most market participants remained skeptical after the first few transactions. There were large numbers of delinquent loans, and minimal information was available about transaction performance. The significant number of delinquencies was attributable largely to servicing transfers between the prior servicer and the master servicer. During these transitions, borrowers did not know where to send their payments and some borrowers used this situation as an excuse not to pay at all. Inaccurate information was often transmitted between the servicers and the trustees. In many cases, the servicers and the trustees had independent internal reporting systems. They also had their own method for reporting delinquencies.

In response to this scarcity of information, the RTC created the Portfolio Performance Report (PPR) to provide monthly information to investors and other market constituents about the performance of previously issued RTC commercial mortgage securitization transactions. This report detailed delinquency and loss information on specific mortgage pools and was the first attempt by an issuer of commercial mortgage-backed securities to provide monthly performance information in a standardized format. The report became an industry standard and now is produced by most commercial securitization issuers. The RTC issued and sold $17 billion of commercial mortgage-backed securities through 27 transactions. Although high numbers of delinquencies and losses were initially anticipated by the rating agencies, these transactions have performed better than expected because of the high level of prepayment activity (many loans were paid in full before their scheduled maturity date). The successful performance of the RTC securities was a significant factor in the further development and standardization of this market. Large commercial banks are now underwriting and originating commercial mortgage loans specifically for securitization.

The FDIC Securitization Program

FDIC performing mortgage loans were generally sold through whole-loan sales. The loan sales strategies used by the FDIC were usually determined on the basis of the analysis of a loan sale adviser. The FDIC mortgage loans, which were acquired from hundreds of receiverships from across the country, had disparate documentation and underwriting criteria, and generally were considered to be nonconforming.

In 1994, the FDIC managed a large portfolio of performing commercial mortgage loans with credit and collateral characteristics that had not been well-received in prior "whole loan" sales attempts. The FDIC's loan sale adviser performed an analysis of sales strategies for this portfolio and determined that the FDIC would maximize their value by selling the loans through a securitization. The FDIC used a structure that was similar in many ways to the structure used by the RTC in its securitization program. The major difference was the mechanism for credit enhancement. The FDIC provided a limited guarantee in the form of an interest-free demand note through the Bank Insurance Fund (BIF). The guarantee was based on an amount determined by the credit rating agencies to obtain investment-grade securities. In consideration for the limited guarantee, the BIF would receive the excess interest after payment of the securities' principal and interest. The loan sale adviser compared the use of a note to a cash reserve structure and determined that the note would be more appropriate for the FDIC because it would be drawn upon only as needed and would provide the FDIC with potential investment flexibility in the future. The note would also allow the FDIC to receive the entire sales proceeds on the date of funding, rather than wait for the delayed return of funds required to be deposited in a cash reserve fund. The FDIC felt that credit enhancement in the form of a cash reserve was more appropriately suited to RTC's funding and sunset provisions than for BIF receiverships.

In August 1994, the FDIC consummated the sale of $762 million of performing commercial real estate mortgage loans from 197 failed depository institutions in its first securitization sale (FDIC REMIC Trust 1994-C1). The offering was well received by the market, and investor demand resulted in the interest rates being set at lower yields than were initially offered. The execution of the adjustable rate pool set a record, at the time, for the tightest spread above LIBOR for this type of securitization.

On December 20, 1996, the FDIC completed its second securitization of commercial mortgage loans (FDIC REMIC Trust 1996-C1). This transaction was similar in many respects to the first FDIC commercial securitization. The FDIC sold approximately $723 million of performing mortgage loans from 180 failed depository institutions by issuing ten classes of securities with an FDIC limited guarantee as a form of credit enhancement. This transaction, like the first one, was well received by investors.

Program Overview

From June 1991 to June 1997, 72 RTC and 2 FDIC securitization transactions closed, secured by conservatorship and receivership mortgage loans with a book value of $43.7 billion. Almost 500,000 residential, multi-family, commercial, mobile home, and home equity loans were securitized. Credit support (both cash reserves and the FDIC limited guarantee) required for those transactions totaled approximately $8 billion.

RTC and FDIC securities are traded in capital markets worldwide. As of June 30, 1997, outstanding securities balances had decreased approximately 65 percent to $15 billion. The most significant decrease was for single-family securitizations, for which the amount of outstanding securities decreased by more than 68 percent (from $24.4 billion securities issued to $7.8 billion securities outstanding). Conversely, the credit reserves as a percentage of outstanding securities have increased over time. For example, on the commercial securities, the initial reserves that were required by the rating agencies averaged approximately 25 percent ($3.6 billion coverage for $13.9 billion commercial securities), while the amount of credit coverage available on the outstanding securities as of June 30, 1997 was approximately 55 percent ($2.8 billion credit support available to cover $5.2 billion of securities). Even though the amount of actual dollars of available credit reserves decreased, the credit support (percent of credit reserves to bond issues) increased from the original 18.9 percent to 38 percent at June 30, 1997. Statistical information on all RTC and FDIC securitizations is displayed in table I.16-5.

Those securitization transactions involve 14 servicers, 4 trustees, 18 underwriters, and 4 rating agencies. The RTC established a unit to oversee their interest as seller, owner of the credit reserve fund, and residual holder for the outstanding securitization transactions. This unit (which was subsequently transferred to the FDIC) oversees all of the transaction participants by monitoring and evaluating all information related to these transactions. They produce the *Guide to RTC and FDIC Securities (Guide)* which provides details on the cash flow distributions for each transaction. The *Guide* is distributed monthly to more than 900 investors. In addition, the FDIC generates current profiles of RTC-FDIC securitization transactions that are displayed daily on the Bloomberg Financial Network.

The most significant ongoing activity that the FDIC performs in administering these securities is the "call termination" process. The pooling and servicing agreements govern the servicing of the RTC-FDIC securitized transactions. Each of these agreements contain "early termination" provisions that vary, but typically provide for termination of the trust when the current security balance is 25 percent, a benchmark common in residential transactions, or 10 percent of the original security balance, typically found in commercial transactions. When the security balances reach these levels, the trustee for the transaction is responsible for soliciting competitive bids for the remaining collateral. This process is known as the "auction call." To the extent that the proceeds from a prospective auction satisfy the requirements of the termination price (enough funds are received to purchase outstanding securities), the trustee may complete the sale and retire the trust. If the bids do not satisfy the termination price, the trustee must decline to complete the sale and will solicit competitive bids from time to time until proceeds from the sale are sufficient to meet the termination price and to retire the trust. Upon termination of each trust, funds remaining in the credit enhancement reserves for each transaction are released to the FDIC. The FDIC, as owner of the residual, has a vested interest in ensuring that the trustee markets and conducts the call termination process in a manner that provides for maximum return on the remaining collateral in the trust.

The collateral security agreements, which govern the administration of the cash reserves, contain language that automatically allows a reduction in the reserve fund where certain benchmarks are met, as well as at the discretion of the FDIC, if the rating agencies that rated the transactions confirm that, in their opinion, such a reduction would not adversely affect the rating on the certificates. As of June 30, 1997, the negotiations with the rating agencies under that alternative had resulted in the return of $709 million of credit reserve funds to the FDIC.

Program Valuation

The RTC and FDIC securitization programs have been analyzed by numerous entities. Rating agencies, FDIC staff, and investment banks have conducted in-depth analyses of these transactions to measure the performance of the program and to provide information to the secondary mortgage markets. Each month, the trustee distributes a "Statement to Certificate Holders" to investors, rating agencies, underwriters, and the seller (the FDIC). This statement provides information on the performance of each security and its underlying collateral. It also includes original and current reserve fund balances; 30-, 60-, and 90-day delinquency data; foreclosure and REO figures; prepayment information; and realized losses. All of this information is categorized by loan group within each transaction.

Table I.16-5

RTC & FDIC Securitizations
As of June 30, 1997
($ in Millions)

	Bond Issues			Number of Loans			Credit Reserves		
Type and number of transactions	Original	As of June 30, 1997	Percent Decrease	Original	As of June 30, 1997	Percent Decrease	Original	As of June 30, 1997	Percent Decrease
Single-Family (41)	$24,351.50	$7,774.20	68.1	399,946	168,044	58.0	$3,253.60	$2,124.90	34.7
Multi-Family (11)	4,472.20	2,158.40	51.7	8,385	3,198	61.9	1,283.10	732.50	42.9
Commercial (18)	13,931.50	5,157.10	63.0	33,870	15,850	53.2	3,596.00	2,840.20	21.0
Mobile Home (3)	615.90	90.60	85.3	39,987	16,377	59.0	103.70	69.40	33.2
Home Equity (1)	311.49	0.00	100.0	17,600	0.00	100.0	39.40	0.00	100.0
Totals (74)	**$43,682.60**	**$15,180.30**	**65.2%**	**499,788**	**203,469**	**59.4%**	**$8,275.80**	**$5,767.00**	**30.3%**

Source: FDIC Division of Resolutions and Receiverships.

Realized losses are the primary factor used to measure the performance of securitizations. A realized loss is the unrecoverable amount of money that is deducted from the reserve fund after a delinquent loan is liquidated. In the RTC single-family securitizations, the master servicer is required to advance delinquent loan payments to the trustee until the property securing the loan is foreclosed upon and then sold. In multi-family/commercial securitizations, delinquent loan advances are funded directly from the credit reserve. When properties securing loans are liquidated, the sales proceeds are used to pay off the loan in full and to reimburse advances made by the servicer or through credit reserves. Payment shortfalls are recovered from the reserve fund. (For example, a servicer advances $30 on a loan that has remaining an outstanding principal balance [after allowing for the $30 in advances] of $100. The property securing the loan is sold for $85. Of the $85, $30 is refunded to the servicer for payment advances, and the remaining $55 is applied to pay off the outstanding loan balance. Forty-five dollars is deducted from the credit reserve [the amount needed to pay off the loan in its entirety]. The realized loss to the credit reserve would thus be $45.)

In December 1991, to accurately assess the risk exposure for securitization transactions, the RTC established a loss allowance for credit reserve funds for each transaction on the basis of Moody's actual loss experience for similar types of transactions. This approach provided a good initial methodology for calculating realized losses. From 1992 through 1994, actual losses were compared to estimated losses; it was discovered that loss estimates needed to be revised because Moody's methodology had no mechanism for changing estimates and no provision to incorporate actual loss experience. In 1994, while reviewing losses, the RTC staff also realized that some of the earlier securitizations would soon be subject to auction calls, and with the first early termination on the horizon, the RTC needed to ensure that terminations would be executed successfully and that the value of the residual would be maximized.

Given the importance of careful auction planning, coupled with the need to accurately determine risk exposure, the RTC devised a method to project each transaction termination date and to estimate realized losses. A model was developed to project cash flows for each transaction using available information on prepayments, delinquencies, defaults, and losses. It provides an estimate of credit reserve losses, termination dates, year-by-year cash flows, reserve funds, and residual values for each securitization. The model is run periodically using current information to generate up-to-date loss estimates and transaction terminations. (See table I.16-6.) The loss estimates are included in the FDIC's annual financial statement, which is audited by the General Accounting Office.

At the time of the closing, loss estimates for each securitization were provided by the RTC-FDIC financial adviser and by the rating agencies. In 1994, the RTC began to generate loss estimates using the model. In May 1996, the FDIC compared actual and expected loss estimates from the various sources. The comparison showed that the rating agencies were extremely conservative in their estimates, when compared to estimates by the model and the financial adviser. For example, rating agency-expected losses on the Multi-Family Securitization Program as a percentage of unpaid principal balances averaged approximately 29 percent, the FDIC model loss estimates averaged 12 percent; the financial adviser estimated losses to be 7 percent, and the actual realized losses were approximately 7 percent. Overall, the losses and recovery rates that were initially estimated by the rating agencies were severely overstated for the RTC-FDIC securitization program, as shown in table I.16-7.

Recovery Rates

Sales price, transaction expenses, realized losses, and expected residuals are factors that are used to calculate recovery rates for the securitization program. The FDIC uses the model to estimate losses and to value the residual on transactions that have not been terminated. Actual realized losses and the residual returned to the FDIC are used to calculate recovery rates for terminated securitization transactions. Interest income (approximately $25 million per month) is not included in the valuation of the cash reserve because the transaction trustees are directed to invest RTC cash reserve funds in Treasury securities. Consequently, the Treasury has immediate use of the money, and no opportunity cost is associated with the reserve funds. Estimated recovery rates for the single-family securitizations and the multi-family/commercial securitizations that have not been terminated are displayed in tables I.16-7 and I.16-8.

The RTC completed 44 single-family transactions and 27 multi-family and commercial securitization transactions, as well as 1 home equity transaction. As of July 1997, three securitizations had been terminated: one single-family, one multi-family, and one home equity loan transaction. In each of those transactions, the call termination provision was triggered, and the trustee auctioned off the remaining loan collateral. Bids for the collateral exceeded the outstanding security balance, thus enabling investors in the remaining bonds to be paid in full and the remaining credit reserve and residual to be released to the FDIC. Actual recovery rates for single-family and multi-family and commercial securitizations that have been terminated are displayed in table I.16-9.

By the time the RTC closed in December 1995, approximately $24 billion of single-family mortgage loans were sold through the securitization structure for a gross weighted average price of 101.3 percent of the aggregate unpaid principal loan balance. Expenses constituted approximately 1 percent of the aggregate loan balance, thereby reducing the proceeds received on single-family securitization transactions to approximately 100.3 percent. The FDIC model estimated realized losses, residual values, and transaction termination dates; these figures were included to calculate net recovery rates. As of September 1997, the estimated net recovery rate on single-family securitizations that had not been terminated was 98.5 percent of the aggregate unpaid loan balances.

As of June 30, 1997, $17.7 billion of multi-family and commercial mortgage loans had been securitized by the RTC and the FDIC. The FDIC continued to use securitization after the RTC closed in December 1995. The multi-family and commercial loans were sold through securitization for a gross weighted average price of 99.1 percent of the aggregate unpaid principal loan balance. Expenses on commercial securitizations are approximately 1.5 percent of unpaid principal balances, thus reducing the proceeds received to approximately 95.6 percent. The inclusion of realized losses (which are generally expected to be high for commercial loans) produced an estimated net recovery rate of 90.7 percent. Expected residuals were not included in the recovery rate calculation on commercial securitizations because of the uncertainty of losses; losses on commercial mortgage securitization pools may occur in ways other than through loan liquidation. Loan modifications and discounted mortgage loans may result in reserve fund deductions. In 1994, the RTC and its special servicers decided that modified or amended mortgage loans and REO properties should be written down to their realizable value.

Table I.16-6

Projected Final Call Dates, Reserve and Residual Values
First Ten Residential Transactions
As of March 31, 1997
($ in Millions)

Transaction	Issue Date	Original Collateral Balance	Call Percent Rate	Estimated Call	Initial Reserve	Released Reserve	Cumulative Loss to March 1997	March 1997 Reserve	Released and At Call Reserve	Loss March 1997 Forward	Moody's Total Loss	Model Total Loss	Residual NPV (0%)	Residual NPV (20%)
91-01	6/91	$425.8	2	6/11	$51.3	$0.0	$24.6	$26.7	$22.3	$4.4	$12.8	$29.1	2.0	1.6
91-02	7/91	579.6	10	6/99	133.3	84.4	15.1	33.8	29.7	4.1	19	19.2	59.7	37.6
91-03	8/91	476.2	2	9/10	128.6	59.3	6.7	62.5	59.4	3.2	18.4	9.9	1.7	0.8
91-04	8/91	453.4	10	10/00	79.5	44.3	4.6	30.6	29.5	1.1	14.9	5.7	40.5	19.6
91-05	8/91	183.8	2	11/08	19.3	6.1	2.1	11.1	10	1.2	4.8	3.3	0.1	0
91-06	9/91	606.3	10	8/01	127.3	60.4	7.1	59.8	56.9	2.9	18.2	10	0.2	0.1
91-08	9/91	290.2	25	10/98	36.3	0.0	4.3	32	31.2	0.8	5.2	5	1.5	1.1
91-09	9/91	211.7	12	8/97	17.5	0.0	17.5	0	0	0	2.6	17.5	2.7	2.4
91-10	10/91	201.4	12	3/99	22.7	0.0	3.2	19.4	18.8	0.6	5.7	3.9	2.3	1.5

Source: FDIC Division of Resolutions and Receiverships.

Losses on modified loans generally tend to offset or are larger than the expected residuals; consequently, expected residuals are not used to calculate net recovery rates.

On the RTC's single-family transactions, the recovery rates for securitizations were higher than original estimates by loan sales advisers. The reason for this discrepancy was that, initially, excess interest payments accelerated prepayments of the tranches in the security, which in turn created enormous residuals. From the inception of the securitization program through 1994, no value was given to the residuals created through securitizations. After 1994, more accurate residual information was generated through the model. The increase in the value of the residuals, combined with lower-than-expected losses generated recovery rates that were higher than anticipated for the securitization program overall.

Conclusion

The RTC managed the liquidation of $402.6 billion (book value) in assets. Of this amount, approximately $193 billion (about 48 percent) represented residential, multifamily, and commercial mortgages. More than $42 billion (almost 22 percent of the mortgages and more than 10 percent of all of RTC's assets) were sold through the RTC's securitization program. When the RTC was dissolved on December 31, 1995, only $8 billion of the original $402.6 billion in assets remained to be liquidated. The RTC's liquidation program was therefore deemed successful. Some of that success must be credited to the securitization process. The securitization disposition strategy used by the RTC created new markets with strong participants. These strategies also paved the way for an increasing number and variety of issuers seeking convenient and expedient ways to recapitalize "nontraditional" mortgage loans.

Although the best disposition method for single-family mortgage loans may be to sell them directly to Fannie Mae or Freddie Mac, the majority of RTC single-family mortgage loans were nonconforming; that is, they were not eligible for sale to the agencies because of the stringent underwriting requirements demanded by Fannie Mae and Freddie Mac. The RTC therefore needed other alternatives.

RTC securitization transactions generally have performed well. As of June 30, 1997, of the 74 RTC and FDIC securitizations, only 3 experienced significant losses. Most of the losses were on transactions that were composed of loans that originated from a single institution with poor loan underwriting standards or from loans concentrated in a single state, which, in this case, was California. Through June 30, 1997, the credit rating agencies had downgraded five RTC transactions that fit into one of the previously mentioned categories. Diversification of loan pools for securitization results in better performance than homogenous pools from few institutions, or pools with loans located in one state. Although the credit support presently is adequate to cover losses, future adequacy depends on the losses sustained when the remaining assets are liquidated.

Securitization is not a panacea. Market conditions and loan quality appear to be the primary factors that need to be taken into consideration when determining the best disposition strategy for selling mortgage loans. In general, however, it appears that securitization was successful in helping the RTC—and to a lesser extent, the FDIC—achieve its goals.

Table I.16-7

Credit Reserve Funds and Expected and Actual Cumulative Realized Losses As of March 31, 1997

($ in Millions)

			Rating Agency Credit Reserves		Estimated Realized Losses Percentage of OMB		Actual Cumulative Realized Losses	
Transaction	Date Issued	OMB*	Balance	% of OMB	Financial Adviser	FDIC Model	% of OMB	Balance
1991-M1	8/29/91	$373.3	$130.6	35	9	15	10	$37.4
1991-M2	9/24/91	452.6	122.2	27	7	27	24	108.8
1991-M3	9/26/91	183.3	49.5	27	7	23	13	23.5
1991-M4	10/30/91	413.2	107.4	26	7	16	11	46.3
1991-M5	11/26/91	386.8	116.0	30	8	6	3	12.6
1991-M6	12/23/91	651.5	162.9	25	6	15	8	50.3
1991-M7	12/30/91	240.5	69.7	29	7	4	2	6.0
1992-M1	1/29/92	290.6	87.2	30	8	9	4	12.6
1992-M2	3/30/92	520.1	156.0	30	8	6	3	13.6
1992-M3	4/29/92	526.7	158.0	30	8	9	3	16.2
1992-M4	5/28/92	447.7	120.9	27	7	6	1	5.5
Multi-Family		**$4,486.3**	**$1,280.4**	**29**	**7**	**12**	**7**	**$332.8**

Continued next page

* Original Mortgage Balance

Source: FDIC Division of Resolutions and Receiverships.

Table I.16-7

Credit Reserve Funds and Expected and Actual Cumulative Realized Losses As of March 31, 1997

($ in Millions)

Continued

			Rating Agency Credit Reserves		Estimated Realized Losses Percentage of OMB		Actual Cumulative Realized Losses	
Transaction	Date Issued	OMB*	Balance	% of OMB	Financial Adviser	FDIC Model	% of OMB	Balance
1992-C1	2/27/92	$496.6	$148.1	30	8	5	2	$9.6
1992-C2	3/30/92	370.8	107.5	29	8	11	4	13.3
1992-C3	4/30/92	483.4	144.1	30	4	8	3	15.6
1992-C4	6/30/92	936.0	280.8	30	4	6	2	16.1
1992-C5	7/30/92	884.4	247.1	28	4	7	2	18.4
1992-C6	9/30/92	823.1	246.9	30	5	10	7	54.7
1992-C7	9/29/92	892.8	259.2	29	8	9	4	33.8
1992-CHF	10/29/92	1,464.7	260.9	18	3	8	2	31.3
1992-C8	11/24/92	863.8	196.9	23	4	9	1	10.0
1993-C1	1/28/93	969.7	193.9	20	4	6	1	13.0
1993-C2	3/30/93	723.6	166.4	23	4	4	2	13.1
1993-C3	12/21/93	445.7	111.8	25	4	4	2	6.9
1994-C1	9/29/94	1,139.0	296.1	26	4	4	0	3.1
1994-C2	11/29/94	829.6	199.1	24	4	4	1	6.2
1995-C1	6/27/95	850.5	136.1	16	3	8	0	0.1
1995-C2	12/21/95	326.6	88.2	27	5	11	0	0
FDIC 1994 -C1	8/18/94	762.3	247.7	32	18	4	0	3.4
Commercial		**$13,262.6**	**$3,330.8**	**25**	**5**	**7**	**2**	**$248.6**
Totals		**$17,748.9**	**$4,611.2**	**26%**	**6%**	**8%**	**3%**	**$581.4**

* Original Mortgage Balance

Source: FDIC Division of Resolutions and Receiverships.

Table I.16-8

Estimated Securitizations
All-In Recovery Rate
As of September 30, 1997
($ in Millions)

Line		Single-Family	Multi-Family
1	Initial Mortgage Loan Balance	$24,334	$18,470
2	Gross Cash Proceeds	24,659	18,305
3	Credit Reserve Fund (initial)	3,079	4,879
4	Issuance Expenses	232	272
5	Net Cash at Closing (line 5 equals line 2 minus [line 3 + line 4])	21,348	13,154
6	Residual	140	38
7	Credit Reserve Fund Release	2,490	3,576
8	Total Cash Proceeds (line 8 equals line 5 + line 6 + line 7)	$23,978	$16,768
9	All-In Net Recovery Rate (line 9 equals line 8 divided by line 1)	98.5%	90.7%

Note: Residual estimates were present valued and discounted back to the transaction date.
Source: FDIC Division of Resolution and Receiverships.

Table I.16-9

Actual Terminated Transactions All-In Recovery Rate

($ in Millions)

Line		Single-Family RTC 1991-7	Multi-Family RTC 1991-M7
	Date of Termination	February 25, 1997	June 25, 1997
1	Initial Mortgage Loan Balance	$863.4	$240.5
2	Gross Cash Proceeds	863.4	240.7
3	Credit Reserve Fund (initial)	174.0	69.7
4	Issuance Expenses	6.5	4.0
5	Net Cash at Closing (line 5 equals line 2 minus [line 3 + line 4])	682.9	167.0
6	Residual	24.1	7.8
7	Credit Reserve Fund Release	161.6	53.4
8	Total Cash Proceeds (line 8 equals line 5 + line 6 + line 7)	$868.6	$228.2
9	All-In Net Recovery Rate (line 9 equals line 8 divided by line 1)	100.6%	94.9%

Note: Residual estimates were present valued and discounted back to the transaction date.
Source: FDIC Division of Resolution and Receiverships.

PREVIOUS NEXT TABLE OF

Equity partnerships can be used as a vehicle to convey a large volume of assets to private-sector management in a relatively short period of time.