

INTRODUCTION TO COMMERCIAL REAL ESTATE SECONDARY AND SECURITIZATION MARKET

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INTRODUCTION TO COMMERCIAL REAL ESTATE SECONDARY AND SECURITIZATION MARKET

HISTORY OF COMMERCIAL REAL ESTATE SECONDARY AND SECURITIZATION MARKET

There has always been a need to create liquidity and a secondary market in commercial real estate (CRE) investments. Over several decades, this liquidity need spawned many private sector, capital market and government agency initiatives. These initiatives brought forward the mortgage-backed bonds of the 1920's, the real estate investment trusts of the early 1970's, the industrial revenue bonds and mortgage participations that followed the REIT's and then, the syndications of the 1980's. Beginning in the late 1960's, the private placement mortgage-bond vehicle became a substitute for credit-leased commercial mortgages. Government-sponsored programs aided the entry of multi-family and small business lending into the capital markets. Some of these efforts were designed to allow the small investor an opportunity to participate in larger commercial real estate investments while other efforts were focused on carrying out social and/or political agendas. All of these activities were substitutes for a true secondary marketplace for commercial real estate investments in mortgage debt or ownership equities.

Today, in early 1996, the evolution of commercial real estate finance from an illiquid cottage industry dominated by proactive institutions to a capital market asset class populated by both portfolio investors and passive securities investors is well underway. When completed, this evolution is viewed by many as the permanent and final solution to the lack of liquidity in commercial real estate investments.

Currently the most developed format for liquidity is a process commonly known as portfolio securitization; however, securitization is but one part of the emerging secondary marketplace. As time passes, it is probable that today's securitization processes will be the basis from which a more active whole loan trading market will evolve.

The subject of this chapter is a cryptic effort to capture significant events in the history of commercial real estate securitization from its conception in the early 1980's to the present time. A marketplace evolution of fifteen years is indeed a fairly long incubation, when one considers how much more development is necessary before the commercial real estate secondary market is universally accepted as efficient by whole loan and securities investors. As an example, after a fairly slow start, the single-family mortgage securities market reached efficiency in about eight years. The very complex nature of commercial real estate investments would, in itself, be an adequate

explanation for this slow evolution. However, many other factors have played an important role in the development of the marketplace. As a participant in and observer of the CRE secondary market since its inception, I have taken the liberty of capsulizing the secondary market evolution into four distinct phases. To sell a product, it has to be designed, engineered, manufactured and then recycled. Those phases are also applicable to the Commercial Mortgage-Backed Security (CMBS) business as well and will be used to trace the evolution of the CMBS component of the CRE Secondary Market. We begin with the DESIGN PHASE in the 1980's. We then move to the ENGINEERING PHASE brought on by the advent of the RTC. Next, the chapter focuses on the MANUFACTURING PHASE now underway. We end with discussion about the last phase of the evolution: the RECYCLE PHASE.

The Design Phase Begins!

1979 - The CRE Secondary Market can trace its origins to **October 6, 1979** -- "Bloody Sunday". In an effort to combat inflation, the Federal Reserve Board meets on a Sunday and raises the discount rate 1%. Both the Sunday meeting and a 1% jump

in the discount rate are firsts that send shock waves through the investment markets.

In the next twenty-four months, interest rates reach all time highs and nearly all capital to commercial and residential mortgages stops. Portfolio lenders are struggling with disintermediation of their assets and the illiquid mortgage quickly fall from favor. During this period, the residential mortgage switches from being a primarily portfolio asset to a capital market asset. Some of the residential techniques used are found to be applicable for a secondary market in commercial mortgages.

1982 - The 1981 Economic Recovery Tax Act incentives and declining interest and inflation rates set the stage for the first securitized transactions. The 1982 economy starts off on a grim note, but, by the end of the year, the commercial mortgage market begins a slow recovery. In the Spring, the life insurance industry launches a task force on commercial mortgage liquidity and approaches Wall Street for response. Salomon Brothers, bolstered by its success in the residential secondary market, is quick to respond.

1983 - Interest rates fall and CRE syndications sales climb. LICs (life insurance companies) experience strong capital gains from their bond portfolios, and many begin active bond trading for the first time. After the bond portfolio is repositioned, commercial mortgages come under review.

Several private whole-loan trades are made between LICs. These transactions identify many impediments and obstacles to the secondary marketing and securitization of commercial mortgages.

For the first time, inflation-weary LICs apply many new and old investment techniques, such as duration, asset-liability matching, IRR and hedging, to the commercial mortgage. The

deregulated savings & loans (S&Ls) and banks plunge into commercial lending to offset their recent problems with low interest rate residential portfolios in a high interest rate environment. The excessive tax benefits, over-abundance of capital and poor market discipline set the stage for the CRE crisis of 1990.

December, 1983 - The first securitization in the CRE secondary market occurs when Fidelity Mutual Life Insurance sells \$60 million of 100% beneficial ownership participations in commercial mortgages to three LICs through Salomon Brothers Realty Corporation. Fidelity retains servicing and agrees to advance principal and interest and repurchase or substitute new mortgages for any in the pool that defaults. The transaction is rated "AAA" and three other smaller LICs follow the same format over the next twelve months. The Mortgage Bankers Association of America (MBA) starts a sub-committee on commercial securitization and tries to organize and develop the effort for the future benefit of its membership, as it did for residential mortgages.

1984 - By 1984 the credit crunch is over. New yield-sensitive life insurance products force the LICs back into market in a big way. Portfolio lending matches tax-induced building, which begins to drive the debt market to heights unforeseen. Banks and S&Ls undergo a similar push to lend. In the secondary and securitization markets, Penn Mutual Life uses the Collateralized Mortgage Obligation (CMO) vehicle and Salomon places it with investors in the private market. Prudential issues a commercial mortgage-backed bond in the European market. New England Life issues a fixed payment bond in the European market. Both use multiple classes, and the term "tranches" becomes the descriptive term for the various classes in a commercial mortgage-backed security. A zero coupon class (all interest and principal is paid at maturity) is used for the first time in a CMBS. Three other LICs follow over the next two years. Wall Street gears up and First Boston, Morgan Stanley, Drexel, Dean Witter and others become involved. Standard and Poor's presents the first CRE risk-rating format in the Fall of 1984 with its actuarial and property specific guidelines for the CMBS vehicle. Drexel closes the first developer securitization on Mel Simon shopping centers.

1985 - Everyone is back into commercial mortgage lending. Equity syndications are selling like hamburgers at McDonald's. Lincoln National Life issues a pass-through Commercial Mortgage-Backed Security (CMBS); five other LICs follow. Midwest Federal of Minneapolis does the first thrift securitization. The volume of commercial mortgage debt put in portfolios over the next 3+ years is the largest in history. Steve Roth, then with Drexel Burnham, starts planning MBA's first NYC Securitization Conference to be held in January, 1986. Capital gains are still being taken at LICs.

1986 - This is the peak year of the "Design Phase" of the CRE secondary market. MBA publishes the first handbook on the subject. LICs do not increase their level of CRE secondary market activity but developers, owners, thrifts, and syndicators keep investment bankers busy. Portfolio lending and direct deals pull many quality transactions back into private markets. Former sellers and lenders start deciding to hold the higher yielding mortgages instead of securitizing, but there is plenty of activity to carry the secondary market through the year. The 1986 Tax Reform Act is passed, which substantially reduces the tax advantages in owning commercial real estate.

Imbedded in the Act is legislation authorizing the Real Estate Mortgage Investment Conduit (REMIC) as a securities instrument to enhance the single-family mortgage market. This legislation eliminates some limitations imposed by law on certain classes of investors in mortgage-backed securities. Today, most multiple-class mortgage-backed securities are REMICs.

1987 - The year begins well, but the impact of the tax disincentives in the 1986 Tax Act starts to take effect. Portfolio securitization deals slow, but other deals carry the year to a slow finish.

1988 - The cycle shows signs of running out of steam. By year end, the market for secondary and securitized transactions goes into remission as other factors of concern and opportunity begin to divert attention elsewhere.

The Design Phase Ends!

Design Phase results over the eight-year period:

- Twenty major public financing of commercial property are securitized.
- Twenty-one major financing are placed privately.
- It is estimated twenty-five pools are securitized publicly or privately.
- Three methods of credit enhancement are created to offset the inability to risk rate specific real estate deals: corporate guarantees, guarantees backed by letters of credit and subordination of a junior interest to senior investors. Market establishes subordination or overcollateralization as preferred enhancement and senior/subordinated (also known as A/B splits) becomes the standard CMBS format.
- The concept of commercial mortgage liquidity is established within the investment community.
- Software is engineered to handle cash flow modeling for multi-class multi-asset CMBS.
- Investment bankers are trained for the next cycle.
- Because of a lack of a CRE risk-rating standard and third-party CRE mortgage servicers, it is realized that to get a deal done requires credit enhancement and involvement by the seller in the servicing after closing.
- Duff & Phelps joins Standard & Poor's and Moody's in the rating of CMBS.
- The foundation for a secondary market is laid, but the financial engineering is not finished yet. Several formats, documents, procedures and expertise are put on the shelf for the next opportunity as portfolio lending runs the market.

1989 - Storm clouds are gathering over commercial real estate and the economy. Congress passes the FIRREA, and the Resolution Trust Corporation (RTC) is created to handle the savings and loan crisis. There is almost no activity in commercial mortgage pool securitizations this year, (nor is there in the next two), and portfolio lending becomes cautious.

1990 - Storm clouds burst. Another credit crunch cuts off commercial real estate capital as portfolio lenders suffer losses worse than at any time since the Great Depression. Outcries for institutional regulation of commercial lending begins in earnest for the banks and, to a lesser degree, the LICs. Thrifts leave the business and the FIRREA-created RTC must find a way to liquefy failed

thrift assets before its sunset charter expires in 1995. Commercial mortgages are out of favor, so the RTC cannot sell whole-loan assets effectively. It turns to the capital markets to solve the dilemma .

The Engineering Phase Begins!

What did the RTC find when it turned to the capital markets? Not much, except some bright, eager people with new concepts and some holdover experience from the earlier market activity. They also found a cottage industry of portfolio lenders wherein no one entity held more than 1/2 of 1% of the mortgage loans (see Attachment 1). These entities were not in a position to assist the RTC liquidation efforts.

Obstacles facing the RTC liquidation and commercial mortgage securitization:

- No infrastructure to service the mortgages.
- No standards to use for determining the servicing requirements.
- No national organizations to handle the processing or servicing transfer.
- No risk-rating system in place for commercial mortgages.
- No standard underwriting or due diligence criteria.
- No asset managers with local expertise on a nationwide basis.
- No legal work accomplished for establishing third-party servicing and asset management for CMBS.
- No central source for local or national market information.
- No standards for legal documentation.
- No standard securities product for whole loans.
- No organization for leadership, training, education, information and lobbying in the secondary markets for commercial real estate.
- No information on the costs, timing and expertise on any of the processes in commercial mortgage lending or of the processes to securitize commercial mortgages.
- No historic performance data on portfolio types, locations, etc.
- No software systems available to handle the situation.
- No risk insurance to handle unknowns, i.e., environmental.
- Unfavorable laws, such as bankruptcy, SMMEA, ERISA, REIT, TAX.
- Absolutely no expertise or experience in liquidating non-performing or low quality commercial mortgages.
- No experience with total liquidation of portfolios without continuing involvement by seller as servicer/warrantor/guarantor.
- A hostile market for commercial real estate investments.

1991 - RTC is at full speed and hires six investment bankers to advise on commercial mortgage liquidations. During the spring, they meet in Washington, D.C. to develop a plan for RTC liquidators. The group comes up with a plan in June, but cannot find a national servicer (see

Attachment 2). A new credit crunch has shut down lending to the seriously over-built commercial real estate markets across the country. Most large portfolio lenders are immersed in their own portfolio problems and do not respond to Request for Proposals from RTC for commercial real estate assistance in servicing and asset management. "Hat in hand", the group approaches, Equitable Real Estate to service their first CMBS. Equitable agrees and other entrepreneurial organizations take notice and begin to respond to a new opportunity. CPA firms quickly develop due diligence services. J. E. Roberts Company steps up its FDIC work to include service to the RTC in asset management. Former real estate entrepreneurs jump on the RTC opportunity as a "stop gap" to stay in business until the market turns around. "*Stay alive until 1995*" becomes the song of the early 1990's. The largest portfolio lenders retrench. Aetna Life restructures and leaves the market, followed by others such as Conn Mutual; most of the national lenders become asset managers instead of real estate lenders. Rating agencies increase staffs to rate new RTC CMBS. They begin serious research into the components of commercial real estate lending and servicing. Separate functions are identified. Standards are developed and costs are segregated. For the first time, serious institutional research is applied to the CRE investment processes. The MBA reorganizes the commercial side of its organization and publishes the first research study of the cost components of CRE lending. The components of CRE lending start unbundling into separate components. A functional process approach to CRE investment begins to supplement the all-inclusive portfolio approach tied to loan origination that was being used by the CRE lending industry.

The first servicer ratings are published for third-party CMBS servicers. Midland Loan Services of Kansas City is awarded the largest CRE servicing contract in history by the RTC (15,000 loans). Midland becomes the first rated independent commercial mortgage servicer and grows to four hundred employees in eighteen months -- four times the number of employees in any servicing organization on January 1, 1991, and five times the number of loans of the largest servicer or portfolio lender on January 1, 1991 (Aetna with just over 3,000 portfolio loans). The servicing and asset management business is elevated from the "back room to the board room". Secured Capital of Los Angeles demonstrates that non-performing loan pools can be sold and liquidated -- First Chicago joins in! Risk players step forward while the traditional investors retreat and nurse their own portfolios. G. E., Bass, The Patriot Deal, Lennar, Morgan Stanley, Lewis Ranieri and others step in to take advantage of the opportunity. Wall Street steps up to help liquidate the RTC holdings and a private financing business starts to become a public commodity. Several companies prepare to be rated as commercial mortgage-backed servicers. RTC adopts the Master Servicer Special Servicer concept at year-end and finally commits to a capital market solution to its liquidation efforts. At year-end, a sizable group of LICs meet with the rating agencies to investigate a Portfolio Seller-Servicer Program™ that can be used in the future for its portfolio liquidity needs, as to well as convert its mortgage department's expertise into a potential profit center for the industry (see Attachment 3). 1991 ends with a lot of engineering accomplished in CRE investments. Master servicing, primary servicing and special servicing become recognized occupational professions rather than adjunct activities to CRE mortgage origination and production. This is a fortuitous event, as new CRE

mortgage production is virtually non-existent in 1991. *"Do work out or be out of work"* is the cliché of 1991.

1992 - The bottom is reached in CRE investment market. Traditional portfolio lenders are hard to find, but Wall Street responds with expertise primed by the RTC effort. Fourteen servicers for CMBS are approved by the rating agencies. New investors start looking at opportunities in RTC and FDIC deals. Traditional investors start thinking about the future as they determine they will survive the cycle. Bidding for the RTC assets and CMBS servicing becomes highly competitive. Bankers Trust, Bank One and First Chicago grab some of the third-party servicing business. Private portfolio lenders look to the capital markets to solve their portfolio liquidity problems for the first time. The first of the 1991 RTC, CMB Securities close with Equitable, Midland and First Chicago as master servicers. Investment bankers start getting serious about the post-RTC era and begin planning the conduit business in earnest. The Capital Market Consortium effort is launched by three primary market real estate trade associations to assist in developing standards that will assure a capital market option for commercial real estate investments in the future. Duff & Fitch are both moving at full steam to join in the rating business for CRE. Former developers are now re-developers. Portfolio lenders begin to think they will survive. They begin to figure out what they will do in the future; portfolio lending begins a weak comeback late in the year. Securitization is the number one interest item in CRE, and 1992 ends with an upbeat momentum.

1993 - The CRE market bounces off the bottom. Capital begins to re-emerge. Several portfolio lenders come back, but on a very conservative basis. REITs are popular for the first time in twenty years. RTC bidding is so competitive many early entrepreneurs give up trying. Regulatory agencies publish draft guidelines for portfolio risk ratings and reserve requirements. Capital-based lending is accepted as a future inevitability by traditional portfolio lenders.

The Engineering Phase Ends!

Engineering Phase results over the three and one-half year period:

- Commercial mortgage servicing and asset management became distinct occupations.
- The components of CRE lending, servicing, management and securitization were unbundled, priced and sold separately for the first time in history.
- Property specific and process risk-rating criteria were developed.
- Documentation for third-party servicing and asset management were completed, thus allowing the transfer and total liquidation of CRE mortgage portfolios.
- A framework for the scientific analysis of the components of demand for CRE space was developed and began to be applied on a localized city-by-city basis.
- Multi-family real estate was established as a legitimate collateral asset for securitization.
- Due-diligence, representations and warranty standards acceptable to the rating agencies and the capital markets were created.
- Portfolio data and information formats were developed and reputable software vendors were recruited to develop shelf software for the industry.
- The regulatory agencies became focused and developed criteria for maintaining adequate control and adequate reserves for institutional investors in CRE that are designed to prevent excessive lending practices in the future.
- A procedural process was finalized for CRE mortgage pool securitizations. This process included the ability to totally liquidate a portfolio without seller involvement or guarantees after the sale.
- A capital market infrastructure was built to support CRE liquidity in the future.
- The four rating agencies were motivated to build staff and processes for quick CRE portfolio risk ratings.
- There was a virtual explosion of information about commercial real estate derived from newly formed CRE investment research sources and publications.
- An overall investment community appetite for commercial mortgage-backed securities was created not only in the U.S., but worldwide.

Mid-1993 - *The Market Turns.* For those who survived the cycle, it was time to get back into the market for commercial real estate investments. Commercial real estate is "marked to market", and real cash equity is again a part of real estate project capitalization. This combination makes CRE look more attractive than at any time in the last five years. Spreads begin to tighten and the yield curve remains positive but shifts downward, enhancing CRE values. Speculative construction is non-existent while the economy recovers and slowly begins to absorb existing CRE space inventories. New conduits are announced regularly. The entire RTC and FDIC service infrastructure begins to focus on the private sector, just as the historic private sector begins to re-enter the market. By year-end, LICs, banks, conduits, and pension fund managers are planning to pursue new production of commercial mortgages for their portfolios. Without fanfare, Diawa Securities, DLJ and Kidder issue the first CMBS backed by commercial mortgages originated by a conduit, and the Manufacturing Phase begins.

The Manufacturing Phase Begins!

The Manufacturing Phase begins when the first conduits convert their pools of commercial mortgages into CMBS. Why would this event be deemed the beginning of the manufacturing phase of the CMBS market? Because the loans are originated, accumulated into a pool and converted into a security based solely upon capital market criteria. The loans are manufactured for a secondary market execution.

The Manufacturing Phase brings a more systematic approach for loan originations. The underwriting process incorporates more standardized documents, bankruptcy remote SPEs (Special Purpose Entities) as owner/borrower organizations, in-depth environmental due diligence and third party evaluation/inspections. Because of the legal fiduciary responsibilities attached to the rated public markets, the manufacturing phase has broadened the number of professionals involved in the loan origination process. These third-party costs have widened the interest rate spreads to levels above the yields required by portfolio lenders who have accomplished most of the process with in-house staff using lower-cost established procedures. This cost differential has created a perceived "two-tier" commercial mortgage market with the impression (or actual fact) that the highest quality "A" mortgages are being made by life insurance companies at tighter spreads and the lower quality mortgages "B" & "C" are being made by conduits. Given that the CMBS market has created a risk bifurcation and allocation process that applies specific risk in a transaction to separate and appropriate parties capable of assuming and managing the components of total risk, we find many new risk investors in the secondary market that are not in the primary market. Examples of this new investor risk stratification are the specialty funds who buy and manage only the "B" piece risk. Such stratification does not exist in the primary market where portfolio lenders assume all components of risk in the commercial mortgage investment. Some observers of the commercial mortgage market applaud this development as a necessary evolution of proper commercial mortgage risk placement, particularly for higher risk property types and transactions.

1994 - The commercial real estate down cycle is in full reverse. MBA's Secondary Market and Securitization Conference in early January is the biggest ever. The MBA CREF Conference in San Diego has seventy-five investors in attendance looking for new loans. Three thousand people show up, a 700% increase over the first CREF Conference in 1990. Money becomes plentiful and is chasing deals again. CRE is considered as a very attractive spread market by most portfolio lenders and if their current portfolio experience allows it, they re-enter the market; some for the first time since the 1980 Credit Crunch! Early in the year, conduits popup everywhere. Investment bankers are scouring the country for commercial mortgage opportunities. Pension funds, mutual funds, foreign banks, domestic banks, and surviving and *de nova* thrifts are in the hunt. CRE investment is once again driven by capital availability rather than demand for space. Conservative investment underwriting is replaced with "normal" underwriting guidelines. The commercial mortgage has

become a capital market asset with trading and pooled investment requirements established. A new trade association, Commercial Real Estate Secondary Market and Securitization Association (CSSA), is formed with over 80 founding members. These founding members are specialists in the secondary market and focus on developing an ethical and orderly secondary market in CRE mortgages and equities. Market information systems, such as Telerate and Bloomberg, begin development of CRE secondary market information programs. CRE secondary marketing and securitization shift from being a "problem-solving" tool to an "opportunity" tool. An industry consortium consisting of the Mortgage Bankers Association, National Association of Realtors and the National Realty Committee begins drafting standards and documentation for the secondary market.

1995 - The commercial mortgage market is once again dominated by portfolio lenders at fairly tight spreads. Some conduits which seemed so full of promise at the beginning of 1994 have real difficulty finding an adequate number of mortgages and give up trying. Other conduits begin specializing in certain property types or lower quality mortgages. This conduit focus is applauded as a necessary supplement to the lending once done by the savings and loan industry. Investment bankers begin re-sizing their staffs in the commercial mortgage areas; only one decides to leave the business but returns in 1996. A flat yield curve takes much of the holding profit out of the pool accumulation phase of CMBS. Despite the best year ever in private label CMBS, the high costs of the transaction, both in time and money, have slowed the rate of growth in the secondary market while portfolio lenders decide to hold portfolios that cannot be replaced at current yields. Production of new portfolio investments is the single focus of the primary whole loan market in 1995. Many portfolio lenders begin to regard the capital markets as competitors rather than as allies in developing liquidity in commercial mortgage portfolios. They lose interest in the securitization process, at least for the moment. The Manufacturing Phase is now slowed because the market is divided between portfolio lenders who are focusing on higher quality, lower spread mortgages and capital market conduits who are focusing on niche properties, large single properties, and lower quality, wider spread mortgages. Cost inefficiencies and the lack of a standardized whole loan risk-rating system are inhibiting participation by today's traditional portfolio lenders in the CRE secondary market! However, it is expected that other secondary market sources will continue to produce CMBS in the \$10 billion to \$20 billion range annually for the next three or four years. Since CMBS tend to have long average lives and therefore do not liquidate quickly, the absolute size and growth of the market should continue to be positive at least into the next decade. Even though the CMBS market is well into the manufacturing phase, it is well removed from beginning the recycle phase.

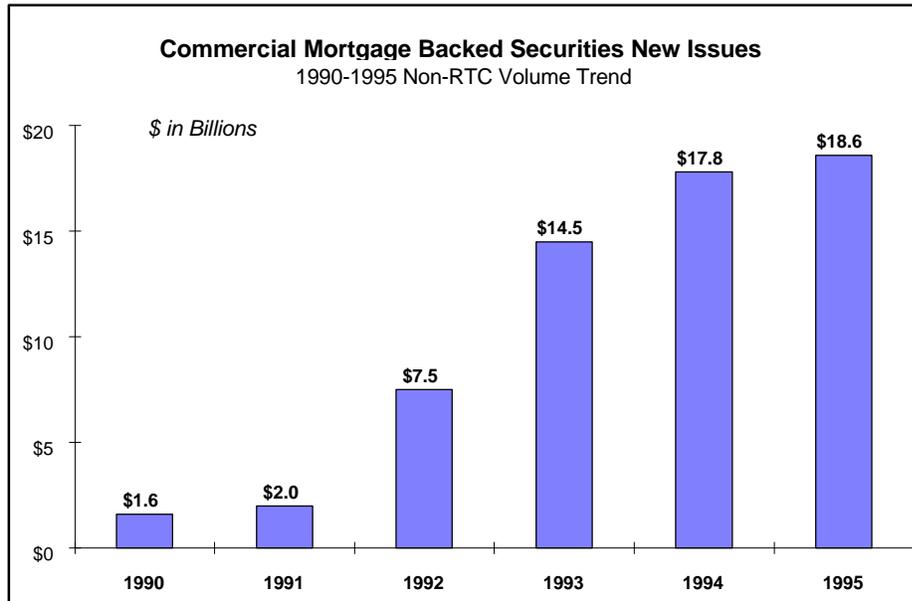
1996 - Is the cycle poised to begin again, just as it did after the credit crunches of 1970, 1974-75, 1980-82? Will this be another repeat of past cycles? Probably not! So much engineering was accomplished in this last cycle that the marketplace has been restructured. However, most of today's portfolio lenders did not participate in developing that new infrastructure and are unaware of the benefits it may have for them when the next cycle comes around! While the capital market was engineering a future option for commercial real estate portfolio holders, most of the current portfolio

lenders were out of the market or immersed in managing their own problem assets. Although there has been considerable discussion in the media about these developments, very few portfolio lenders are originating or servicing their portfolios with an exit strategy in place! There are options now available for consideration beyond the historic "buy and hold" strategy in commercial mortgage portfolio management.

When portfolio lenders integrate a cost-effective secondary market option into their commercial mortgage lending activity, the Manufacturing Phase will be completed in commercial real estate secondary marketing and securitization and the final Recycle Phase will begin! **This means that lenders will originate and service commercial mortgage loans with a recycle plan to sell them, based upon the risk rating and loan management criteria of an efficient capital market discipline.** This activity will develop a discipline for portfolio lenders that will ultimately result in a specific property risk-based pricing mechanism that will, over time, evolve into a reasonably efficient whole loan secondary market. It is argued that a capital market discipline will keep CRE capital available and wave red flags when over-building and excessiveness appear. It is hoped that the capital market discipline would dampen the wide swings of the commercial real investment markets.

CURRENT CMBS MARKETPLACE

At year end 1990, there were less than \$10 billion of CMBS outstanding with a minimal secondary market. In addition, the whole loan secondary market did not exist. Most of the CMBS issues had been created in the period of 1985 to 1989, and all required the issuer (seller) to service and guarantee, in some way, the performance of the loans supporting the CMBS. All below-investment-grade tranches (that is, the B-Pieces) were held by the seller of the assets because, among other things, the financial and legal engineering were not yet developed enough to allow a total liquidation. There had never been a complete liquidation of a commercial mortgage portfolio by a solvent institution, nor had there ever been a liquidation of non-performing commercial mortgage assets. Today, these are common occurrences. The market is nearing \$100 billion in size and growing at the rate of \$15 to \$20 billion per year. Though small, the CMBS market is now considered permanent within the nation's capital market infrastructure and is forecasted to be a \$200 billion market within a few years. As a reference, the current non-financial corporate bond market is approximately \$1,292 billion in size. The total value of all the stock listed on the American Stock Exchange is approximately \$125 billion.



Sources: *Kenneth Leventhal & Company Income Property Securitization Survey, 1994*
Commercial Mortgage Alert, 1995

New CMBS issues are rated by all four rating agencies with the same risk-rating system (“AAA” down to “B”, then “unrated”) used on investments with fixed income characteristics. However, because of the lack of a historical data base and other factors, the investment community generally does not place as much faith in agency ratings of CMBS as in corporate bonds, particularly in the below-investment-grades securities. The B-Piece investment community does its own analysis using real estate professionals for evaluations. Though CMBS investment-grade tranches are frequently issued as public securities, most of the B-Piece tranches are issued as Rule 144a Private Placements available to professional investors only. Many issues are 100% rated private placements, and some issues are unrated private transactions between institutions.

The level of stratification of the B-Piece can vary from issue to issue, but generally these securities are issued in three classes and rated “BB”, “B”, and “unrated” (see chart below). Unrated securities are also known as “not rated” and “first loss”. Many CMBS in the market have another class, that historically has been kept by the issuer, called the “residual”. The residual is any remaining cash flow after all the securities are paid off, and it may serve as a buffer to the first loss piece. To date, residuals have not been traded.

TYPICAL MORTGAGE POOL				
	Collateral Pool	Loan to Value Ratio	New Securities	Debt Service Coverage Ratio
Mortgage Loans		40%	AAA	1.7
		50%	AA	1.7
		60%	A	1.5
		65%	BBB	1.4
		70%	BB	1.35
		75%	Unrated Tranche	1.3
Total Loan to Value Rate 75%				
Debt Service Coverage 1.3:1				

Source: *Capital Sources for Real Estate*, Volume 1, Number 3, March, 1994.

Sources of Loans for CMBS

1. Liquidations By Regulators

Portfolio liquidations by the Resolution Trust Corporation (RTC), Federal Deposit Insurance Corporation (FDIC) and National Association of Insurance Commissioners (NAIC).

2. Conduits and Aggregated Pools

Loans newly originated, purchased and held by investment bankers or others until pool size is large enough for an efficient execution of a CMBS transaction. There is a movement toward allowing the B-Piece investor to participate in the original underwriting and selection of loans put in the CMBS. This movement could be a market benefit if it allows for some cost efficiencies by reducing the redundancy in the analysis of CMBS investments.

3. Government Agencies

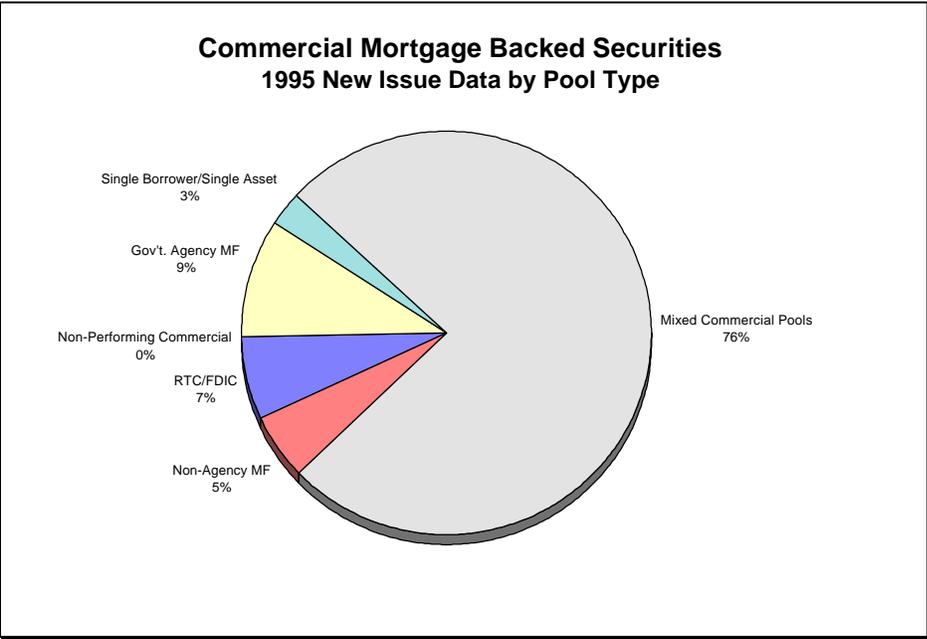
Federal National Mortgage Association (FNMA) and Federal Home Loan Mortgage Corporation (FHLMC), also known as "Fannie Mae" and "Freddie Mac", have a highly developed multi-family CMBS market in which the B-Pieces represent a 10% subordination of the issue.

4. Private Portfolio Loans

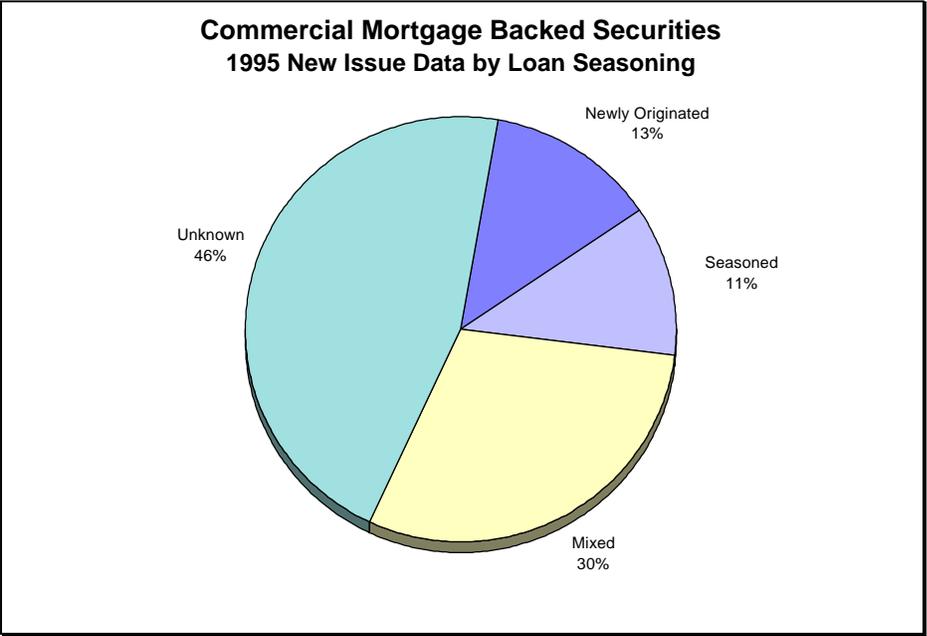
Large owners and developers who consolidate all their mortgage debt into a CMBS.

5. Institution Portfolio Loans

Life insurance companies, banks, and occasionally pension funds who have been long term institutional commercial mortgage portfolio investors. These institutions are either liquidating part or all of their seasoned whole loan portfolios or securitizing newly originated loans.



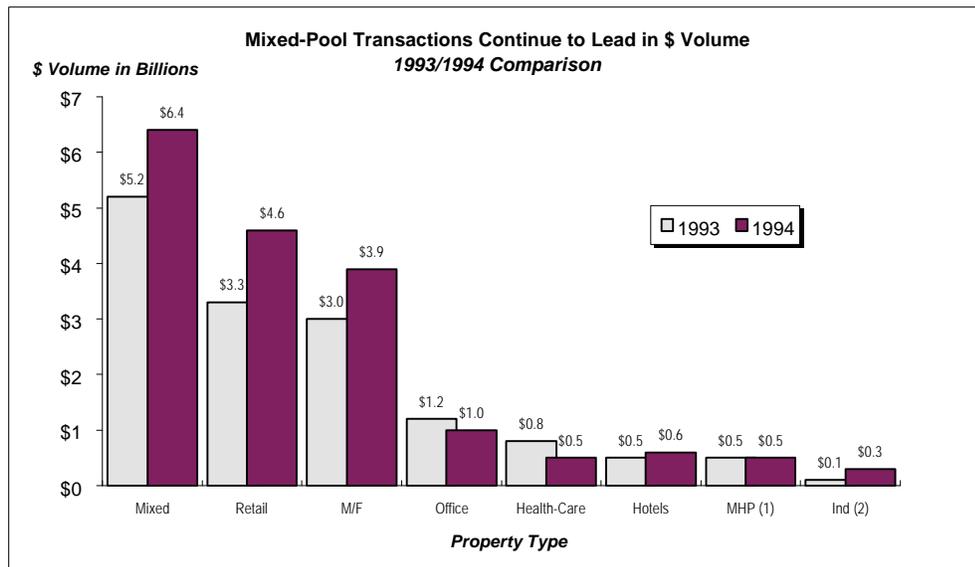
Source: CS First Boston



Source: CS First Boston

Transaction Structure

- 1. Multi-Borrower, Multi-Property (“Pooled”)**
 These transactions are secured by loans to multiple borrowers and on multiple properties.
- 2. Single-Borrower, Multi-Property**
 These transactions are backed by loans to a single borrower on a pool of real estate assets. The loans are frequently cross-collateralized and cross-defaulted.
- 3. Single-Borrower, Single-Asset**
 These transactions have typically involved loans on large retail and major office properties.



Excludes RTC Deals

(1) Mobile Home Parks (includes Manufactured Home transactions)

(2) Industrial (includes Mini-Warehouse transactions)

CMBS Market Size

CMBS Market Size as of December 31, 1995	
Government Agency Multi-family CMBS	\$23.9
Non-Agency Multi-family CMBS	\$16.6
Commercial Real Estate CMBS	
RTC-FDIC	\$11.8
Single Borrower/Asset	\$10.8
Non-performing	\$2.0
Mixed pools	\$30.9
Total	\$96.0

Figures in billions of dollars

Source: CS First Boston

The above numbers are for total CMBS but do not include private transactions between institutions which are estimated to amount to \$5.0 billion (outstanding).

B-Piece Market

There is very little published information on the size of the B-Piece market. It is difficult to derive B piece data from total CMBS data because the below-investment-grade classes vary in size and some issues do not have B-Pieces. It is estimated that outstanding B-Piece issues total approximately \$4 billion, with the unrated portion \$1.25 billion. Approximately 50% of the B-Pieces have historically been retained by the seller for a long-term hold. Therefore, the current amount which has the potential of being traded is \$1.5 billion. In the immediate future, it is expected total new conduit issues will average \$5 to 10 billion annually. At a typical 15% subordination, the conduits should produce approximately \$1 to 2 billion of new B-Pieces per year. Additional new CMBS product will come from life companies, banks, and pension funds, particularly if these

institutions develop some form of a Portfolio Seller-Servicer Program™ (PSSP). In the past few years, a few large whole loan pools have been sold to investment banks and securitized; however, because of resurging portfolio lending, it is unlikely that much new product will come from this source in the immediate future.

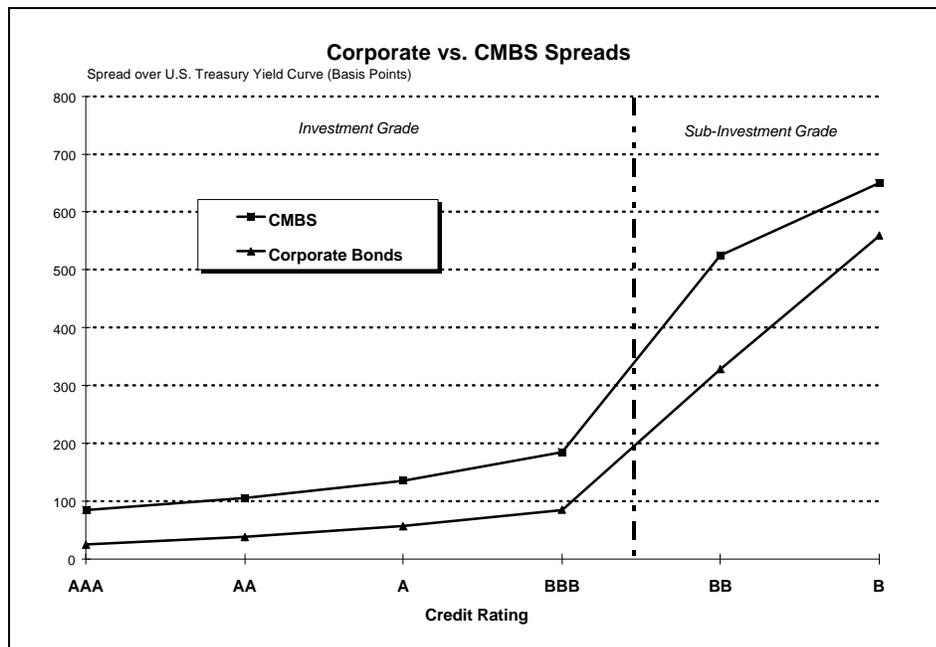
INVESTORS, YIELDS AND PRICING OF THE CMBS MARKET

Investment Grade

The investment grade tranches of CMBS (classes rated “BBB” or higher) are managed much like any fixed income bond or private placement. Spreads continue to tighten as the market grows in acceptance.

The universe of investment grade CMBS holders is populated by traditional institutional debt holders and functions much like the corporate bond and private placement market in that trades are made based on the rating of the investment, particularly at the higher rated classes. It is estimated that life companies hold 40% of the outstanding investment grade CMBS issues. It is expected LICs will increase their positions over the coming years.

Fixed rate investment grade classes trade near par at spreads of around 80 b/p over Treasuries for “AAA” rated to 185 b/p over Treasuries for “BBB” rated. A few issues have been structured with floating rate investment grade tranches. Floating rate investment grade CMBS fluctuate with interest rate changes and trade at a wider spread range from 40 to 200 b/p over Treasuries. There is a secondary market for investment grade CMBS with trades primarily based on debt quality ratings.



B-Piece (Below Investment Grade)

The B-Piece market functions in an altogether different manner. While investment grade CMBS are bought and traded near par as described above, B-Pieces are “buy and hold” discount investments. Due to the real estate expertise that is required to truly value these securities, the B-Piece market is not liquid. However, the asset class is marketable, provided the issue is large enough to justify the considerable due diligence expense that is incurred by investors to determine the true underlying real estate risk in the transaction. The market is made between a small group of principals. Investment bankers play more of a convening role in the B-Piece market after the initial structuring and issue.

The B-Piece market functions much like the commercial mortgage market, but it is populated with entrepreneurial and “momentum” investors looking for extraordinary returns using leveraged capital, mutual funds, or REIT’s as the capital vehicle. B-Piece investors are third-party money management companies, investment banks, and a few pension fund advisors; as yet, traditional commercial mortgage portfolio holders have not been major participants in the B-Piece market.

Investors are currently requiring yields on B-Pieces of approximately 450 to 550 over Treasuries for the “BB” risk, 600-750 over Treasuries for the “B” risk, and 20%+ for the unrated first loss piece. In addition, as Treasuries fluctuate, there appears to be a soft “floor” in the yield requirements for the “BB” and “B” at 11% and 13% respectively. The unrated piece yield requirement is more commonly quoted in absolute terms, as opposed to a spread over Treasuries.

There are eight or nine groups actively participating in the B-Piece market . Each does full due diligence with respect to an acquisition (that is, they review each loan file, inspect each property, and do their own modeling of the transaction) and, as they all are buying to hold, they all want approval rights over the special servicer.

As stated above, the market is not a trading market, but B-Pieces are bought and sold, primarily in privately negotiated transactions among this small group of dedicated principal investors.

The “BB” risk has recently attracted a few more yield investors and has a small trading market. Much of the illiquidity is due to the lack of acceptable, on-going property level information after issue.

Because the CMBS market, and in particular the B-Piece market, is still in its formation stages, current investors in these securities are receiving a market premium, i.e., yields are higher than those of alternative investments with comparable agency ratings (“BB” and “B”). This premium is expected to continue to be available to those investors adequately equipped to effectively handle the intensive due diligence and after-issue special servicing required to offset the risk in these transactions.

COMMERCIAL MORTGAGE PORTFOLIO LOSS EXPECTATIONS

A major factor in the pricing, or value, benefit to the seller of a CMBS is derived from the loss expectations in the collateral pool supporting the issue. Participants in the CMBS market have

different loss expectations for commercial mortgage portfolios. The common analysis employed by the participants, though, is that loss is a function of the percentage of the pool balance that experiences delinquency, the percentage of the delinquent loans (again by pool balance) that go into default, and the loss severity associated with the defaulted loans; overall portfolio loss is the delinquency percentage times the default ratio times the loss severity.

Fitch Investors Service, in a study based on ACLI data, states that on the average a portfolio of commercial mortgages will experience 1%-2% per year delinquency in the best years and 5%-7% per year delinquency in the worst years. The default ratio for the delinquent loans is between 5%-50% based on the DSCR of the delinquent loans, and the loss severity utilized is 40%. Fitch estimates that under "light stress" conditions, a commercial mortgage portfolio can expect to lose 4.5%-7.0% over its life.

One B-Piece fund advisor states that during the life of a diversified commercial portfolio, its study reveals that 14% of the loans default; of these, 46% will be foreclosed with a loss severity of 36%, and the remaining 54% will be modified with a 10% loss severity. This analysis results in an overall portfolio loss rate of 3.08%. When analyzing an actual commercial mortgage pool, a loan-by-loan matrix is employed that analyzes each loan according to DSCR and LTV and then determines if a default or modification is anticipated, and if so, what loss severity is expected.

Another states that, over time, commercial mortgage pools experience cumulative default rates between 15%-25%, with historical loss severity running between 35%-45%; this results in overall portfolio loss rates between 5.25%-9.00%.

Another market participant uses a cumulative default rate of 17.2%, and a 40% loss severity, resulting in a 6.88% overall portfolio loss rate.

The different scenarios outlined above are all admittedly imprecise. A "deal specific" analysis is used by most CMBS B-Piece market participants. This labor-intensive, real estate application applies a loan-by-loan detailed approach to loss expectations based on DSCR, LTV, and determinations as to likelihood of default based on real estate and market factors.

Furthermore, the overall portfolio loss rates outlined above are loss expectations with respect to a diversified pool of commercial mortgages and are not the credit loss expectations associated with B-Piece CMBS investment. It is important to remember that B-Pieces, particularly the unrated pieces, are typically sold at a significant discount to par. Note that the above is concerned with cumulative losses only, and the crucial element of timing of the losses and their impact on yield is not addressed. The loss expectations above, though, do illustrate that the pool of mortgages underlying a CMBS investment will almost certainly suffer loss, and therefore the pricing of the B-Pieces must be made in light of the frequency and severity as well as the timing of the anticipated portfolio loss and its attendant impact on the yield of the CMBS investment. Because the sale proceeds of a CMBS are the sum total of the values of each class of security (tranche), the loss expectations become very important to an issuer. High loss expectations dramatically lower the value and the price of the lower rated tranches and reduce the proceeds to the seller of the CMBS.

In addition, high loss expectations also require that the rating agencies allocate more of the collateral assets value to the lower classes, thereby further reducing sale proceeds by shrinking the size of the fully priced higher rated tranches. This one part of the capital market pricing mechanism is reflective of the overall quality of the collateral assets and prices any differences in collateral pool quality. Clearly, considerable real estate expertise is required to judge loss expectations in a commercial real estate security. There are many variables in the pricing of CMBS, such as the values associated with loan maturity, prepayment protection and various concentrations. However, the overall market quality of the real estate drives the size of the B-Piece, which consequently drives the size of the proceeds from the sale of the CMBS. It is from this basis that it is said that the B-Pieces segment drives the CMBS market and that real estate expertise drives the B-Pieces segment.

The Future Beyond 1996!

Portfolio lenders with established mortgage departments are the logical hope for the continued expansion of the users of a commercial mortgage secondary market. They have the resources and expertise to act as accumulators, issuers, servicers and asset managers. However, these “Main Street” lenders are said to be, at this moment in early 1996, “disconnected” from the capital markets and secondary market activities.

Some of the reasons for this “disconnect” are:

- A general lack of understanding and experience in the secondary market.
- The costs in both time and money of secondary market transactions.
- A perceived sense of competition with the capital markets for new loan originations:
- Disagreements over interest rate spreads brought on by the lack of a standard whole risk-rating system to adjust for differences in loan quality.
- Apprehension of the complexity inherent to the secondary market process.
- Apprehension that the secondary market processes will disrupt business practices and customer relationships.
- The need for investment yield to support products or deposits which overshadows any potential gain that might be derived from selling commercial mortgage assets.
- The lack of widely accepted industry standards that can be installed by a portfolio lender prior to marketing commercial mortgage assets.
- The lack of a centralized forum for secondary markets in whole loans.

To penetrate the capital markets, the RTC was forced to pioneer many new concepts to sell and convert commercial mortgages into securities for sale to the capital markets. These concepts have created a framework for today’s lenders to work within for the conversion of their commercial mortgage portfolios into securities or to sell them as whole loans. However, the new processes in their present forms are too expensive or complex for many of these institutions to use on an occasional basis. Until efficiency and simplicity is

incorporated into the commercial mortgage securitization and whole-loan sales process, it is an option that will rarely be used by portfolio lenders until a crisis situation appears.

Because of the lack of standardization, a major component of the cost impediment is the redundancy of the due diligence process for the evaluation and marketing of whole loans and portfolios of whole loans. Each time a commercial mortgage is sold or securitized, it is reunderwritten, documentation is completely reviewed and analyzed, inspections and appraisals are reaccomplished and, in general, all of the processes and costs of the origination are replicated all over again. Add these costs to the costs of the legal and financial structuring of a commercial mortgage-backed security, and a portfolio lender finds that it can cost more to sell or securitize a commercial mortgage than it did to originate it for its portfolio. Then, if the seller remains in the transaction as a master and/or a special servicer, it finds the higher level of servicing, asset management and reporting requirements of a public, regulated security results in servicing costs that well exceed the cost of managing the assets as portfolio investments. Because the emerging secondary market is just now getting organized, there is an additional marketing cost involved in locating the real buyers and sellers of commercial mortgages. However, as the market volume continues to grow, the “real” participants will become more easily identified.

The challenge facing the CRE financing industry today is the identification and then elimination of the complexities and lack of standardization that drive up the cost and time requirements of commercial mortgage whole loan sales and securitization. This cost impediment is a major restriction to further advancement in the secondary market for commercial real estate mortgages.

ASSUMPTIONS

It is assumed that the pressures to create marketability for commercial mortgages and, therefore a secondary market, will continue well into the future for all regulated institutions. Another important assumption is that if industry standards are adopted, the resulting efficiencies will encourage the acceleration of the secondary market processes while lowering the costs to the selling institutions. Also, it is assumed that portfolio lenders will respond to the new opportunity and take advantage of any economic benefits it may offer. Finally, it is hoped that the regulatory environment will remain favorable for the development of an efficient secondary commercial mortgage market, as it has for most other lending fields in recent years.

QUESTIONS

Because of innovations within the secondary and securitization markets, we now see that the opportunity exists to create additional value in the commercial mortgage portfolios of traditional lenders if efficient processes and standardization can be achieved. Achieving this goal raises the following questions that need answers from the CRE industry: Can we create an industry-wide consensus on formats and standards to be used in the processes of commercial mortgage lending?

If we can create the standards, can we then use them for a cost-effective risk-rating system for commercial mortgage portfolio holders? After creating the standards and incorporating them into a cost effective risk-rating system, would portfolio lenders use the service with enough frequency to support the costs and efforts of those who maintain the system and consequently allow an efficient secondary market to develop?

THE SECURITIZATION PROCESS

(1) Production-Origination-Underwriting

The production of commercial mortgage loans that serve as the underlying collateral for the commercial mortgage-backed securities (CMBS) may come from traditional portfolio holders who originate mortgages for their own portfolio or from conduits who originate mortgages solely for securitization; these loans may or may not have been originated with the expectation of being securitized. The underwriting of a commercial mortgage loan assesses, among other things, real estate risk, borrower quality, tenant quality, existing lease terms, property condition, and potential for environmental liability in order to determine whether to originate a loan on the subject property, and if so, the appropriate loan amount and terms. The underwriter will analyze whether the proposed loan-to-value is prudent, as well as whether the debt-service coverage ratio is acceptable, given the anticipated cash flows. It is the quality of the initial underwriting that will in large part, drive the rest of the securitization process, for the quality of the underlying loans will dictate the amount of necessary credit enhancement and the ultimate pricing of the Certificates.

(2) Mortgages

These are the underlying collateral for the CMBS. As important as the quality of the underwriting of the loans is the quality of the documentation. Each component of the mortgage loan, such as its prepayment structure, interest rate provision (floating vs. fixed), borrower reporting requirements (for rent rolls and operating statements), exculpation carve-outs, representations and warranties, indemnification of environmental liability, borrower organization, and cross-collateralization, has a direct impact upon the pricing of the mortgage loan in the securitization process. In short, a mortgage that does not contain necessary provisions to ensure an uninterrupted cash flow will be priced at the worst case scenario when securitized.

(3) Underwriting

As opposed to the loan specific underwriting of step (1), this underwriting step is concerned with whole pool issues such as geographic concentration, industry concentration, borrower concentration, weighted average coupon, weighted average life, weighted average maturity, and modified duration.

This is the step where the pool of individual mortgages begins the transformation from several distinct instruments evidencing indebtedness to being, in the aggregate, the underlying collateral for the CMBS. The underwriter will solicit input from the rating agencies as to any issues (such as the concentration issues referred to above) which may necessitate an increase in the credit enhancement. An underwriter may determine that it is advantageous to remove certain mortgage loans from the contemplated securitization.

(4) Accumulation-Warehousing-Aggregation

The mortgage loans in the post-originated but pre-securitized stage of the securitization process are said to be warehoused. If the mortgages have been originated by a portfolio lender, the portfolio lender will likely hold the loans in its own portfolio until the securitization closing. If the mortgages have been originated by a conduit, the loans will be placed with a depository.

(5) Structuring

This is the process of experimenting with various combinations of mortgages and security classes to achieve the highest price for a CMBS based upon capital market forces at that moment.

(6) Credit Enhancement

This includes provisions provided by issuers to reduce default risk in CMBS. A third party may provide this by issuing a standby letter of credit, a surety bond, or a corporate guarantee, or the structure itself may provide the enhancement through reserve accounts, cross-collateralization, cross-default, advance payment agreements, loan replacement provisions, and creating separate senior and subordinated classes of securities.

(7) Closing

Closing is the period where all legal documents, such as the Pooling and Servicing Agreement, and all necessary opinions are finalized, the ratings letters are received, and the funding is authorized.

(8) Collateral Pool

This is the pool of mortgages which now serves as the underlying collateral for the CMBS, and which is owned by the Trustee for the benefit of all class holders (tranches) of the Certificates.

(9) Distribution

Simultaneous with closing, the loans are transferred from the depository or portfolio holder to the Trustee in exchange for the requisite money, and the Trustee issues Certificates of beneficial ownership, which are undivided interests in a Trust which owns the collateral pool. The Certificates, if publicly offered, have to be distributed by a registered broker-dealer (usually an investment bank) and are distributed according to the trust indenture.

(10) Trustee

The Trustee represents the Trust that holds the legal title to the collateral for the benefit of all class holders (tranches) of the Certificates. The Trustee's duties include, among other things: (1) holding the mortgage collateral; (2) passing all funds collected by the Master Servicer to the Certificateholders; (3) acting as a supervisor to the Master Servicer and Special Servicer; (4) ensuring that the servicers act in accordance with the terms of the Pooling and Servicing Agreement; and (5) appointing a new servicer if the terms of the Agreement are violated.

(11) Master Servicer

The Master Servicer is required to service the mortgage loans which collateralize the CMBS on behalf of and for the benefit of the Certificateholders. Responsibilities vary according to the Pooling and Servicing Agreement. Common responsibilities include: (1) collection of mortgage payments and passing the funds to the Trustee; (2) advancing any late payments to the Trustee; (3) providing mortgage performance reports to Certificateholders; and (4) passing all loans to the Special Servicer that go into REO or non-performing status.

(12) Special Servicer

A Special Servicer is the servicer who assumes servicing responsibilities when a loan goes into default and conducts the "work-out" or foreclosure process. There are various scenarios typical for determining Special Servicers: (1) those seller/issuers retaining the first-loss piece; (2) those investing in "B" pieces in return for special services rights; and (3) those appointed solely because of asset-management expertise.

(13) Sub-Servicer/Primary Servicer

The Master Servicer and the Special Servicer may each sub-contract their duties to a sub-servicer or primary servicer. The Master Servicer or the Special Servicer remains responsible for the performance of the duties that are delegated.

(14) Securities Instrument Servicing

Most Certificates are held by the Depository Trust Company as custodians for the Trustee for the benefit of the Certificateholders, and the notice of book entry is made to the Certificateholders simultaneously with the distribution. This notice shows the Certificateholders their ownership and where the security is held for safekeeping. In other words, the Certificateholders rarely possess the actual Certificates, but instead only possess a record of where they are. The Depository Trust Company performs this service for nearly all public securities and the majority of private placements.

(15) Securities Administration

The Master Servicer collects all money, including their advances of principal and interest and other property protection and preservation funds, to an account controlled by the Trustee. The Trustee then issues wiring or check instructions to the Certificateholders of record. Sometimes the Trustee physically performs this service, and other times it is contracted out to paying agents who actually manage the cashflows. The Trustee also submits reports to the Certificateholders in accordance with the Pooling and Servicing Agreement. In some transactions, these reports are submitted directly to the Certificateholders by the Master Servicer and/or the Special Servicer, but in all cases the Trustee has the responsibility for these operations or functions.

(16) Securities

Securities are the Certificates of beneficial ownership which are undivided interests in the Trust which owns the collateral pool. The rights of the Certificateholder are as provided in the trust indenture, with the servicing and administration functions of the Trust performed for the benefit of the Certificateholder as spelled out in the Pooling and Servicing Agreement.

(17) Investors

In the category of the investment-grade tranches, the primary investors have been life insurance companies, pension funds, and commercial banks; it is estimated that life insurance companies now own at least 50% of the outstanding investment-grade CMBS. For the below-investment grade tranches, the securities are placed pursuant to Rule 144(a), and thus must be sold to a Qualified Institutional Buyer (QIB); the core demand for the below-investment-grade tranches has come from prominent real estate investment funds or CMBS servicing entities, both of whom have the real estate sophistication necessary to properly underwrite the real estate risk inherent in these tranches.

(18) Trading

CMBS Certificates are liquid instruments, but in reality, the higher the credit rating, the more trading actually occurs. Mid-level ratings and below tend to be a buy-and-hold market; note that the lower

the credit rating of the tranche purchased, the more due diligence is typically performed by investors prior to purchase; it follows that the below-investment-grade CMBS is a relatively illiquid market due to the high amount of due diligence typically performed. However, for all Certificates other than residuals, there has been marketability demonstrated in actual sales and purchases.

COMMERCIAL MORTGAGE-BACKED SECURITIES TERMINOLOGY

“A” Pieces - Refers to security classes (tranches) rated as investment grade for institutional investors. The term can also include the class rated BBB, as that is considered an investment grade for most regulated institutions. *Also called Senior Pieces.*

ACES (Alternative Credit Enhancement Structure) - A program created by FNMA to provide liquidity to the multifamily CMBS market.

ACLI (American Council of Life Insurance) - The ACLI collects data from life insurance companies regarding their portfolios. The ACLI has information on approximately 87% of all mortgages held by life insurance companies. It is a Washington D.C. trade association representing over 500 life insurance companies, including all of the larger LICs.

ADA (American with Disabilities Act of 1990) - The Act requires public buildings to remove architectural and communications barriers for the disabled.

Administration Rate - The annual rate as a percentage of the outstanding principal balance of each loan that equals the servicing fee and trustee fee.

Advances - Payments made by the servicer on delinquent loans. In addition to principal and interest, administration rate advances can be required for property protection, taxes, insurance and foreclosure costs. The servicer has a proxy claim to subsequent collections and foreclosure proceeds as reimbursement for advances up to an amount that was determined “recoverable.” Servicers do not have to advance fees that are deemed “non-recoverable” by the trustee or an officer of the servicers. Servicers are usually paid prime plus 1% for their advances.

Agency Securities - Securities issued by government or quasi-government agencies such as FNMA - FHLMC.

All-In Cost - The term applied to the total costs of a securitization. Usually quoted in basis points to reflect what the costs would have added to yield if they had not been spent on the creation of the security.

Allocated Loan Amount - The portion of the principal amount of a blanket mortgage associated with each individual property. This term is applicable when a number of properties are financed under one blanket mortgage, with each property allocated its share of the total mortgage balance.

Allocation of Realized Losses - A CMBS provision that defines how realized losses will be allocated to certificate holders.

Appraisal Reduction - Upon certain events based on loan delinquency, an appraisal will be made to determine if the property value justifies any further advances by the master servicer. If the value is reduced below the loan balance plus authorized advances, the master servicer will stop or reduce principal and interest payments on that loan to the Trustee. The Trustee will then reduce principal and interest payments to the certificate holders in order of their priority, beginning with the first-loss security.

Available Funds - All funds available or collected including prepayments, servicer advances, etc.

Available Funds Cap - Limited amount of interest payable to certificate holders to the extent of interest accrued on a group/pool of mortgage loans.

“B” Pieces - A term applied to the classes (tranches) of CMBS rated “BB” and lower. *Also called B.I.G. (below investment grade) by regulated institutional investors.*

Balloon Risk - The risk that a borrower is unable to make a balloon payment at maturity.

Bank Insurance Fund - Members are primarily commercial banks.

Basis Risk - Refers to the risk of the underlying mortgage loans and offered certificates tied to different indices. It is the possibility of the certificate accruing interest at higher interest rates than the underlying mortgage loans. When the aggregate amount of interest on the certificates is greater than the collateral, the amount is known as the *basis risk shortfall*.

Bond Net Lease - The tenant assumes nearly all of the obligations of ownership, therefore making the lease payments net of any offsets or deductions and net to the lessor or owner.

Bullet Mortgage - A mortgage that requires monthly payments of interest only until the final mortgage payment

when full payment of principal is due.

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act of 1980) -The act that establishes the potential lender liability for environmental clean-up on a mortgaged property.

CMBS - Commercial mortgage-backed security(ies)

Cash Flow - The term “cash flow” takes on a very important meaning in a CMBS structure. CMBS are securities based upon paying all principal and interest cash flow from a pool of mortgages to certificate holders in a sequential manner. Early prepayments or extended maturities change cash flows and therefore can have a material effect on how some certificates receive their sequential payments. A CMBS cash flow is very unlike the commercial mortgage market wherein the cash flow contract is divided between receipt of principal payments and interest payments.

Certificate - An actual certificate that defines the beneficial ownership in a trust fund. *See Securities.*

Certificate Holder - The owner of record that actually owns the certificate (security).

Collection Account - An account set up by the Master Servicer in the name of the Trustee for the benefit of the Certificate holders. Usually all payments and collections received on the mortgages and from advances made by the servicers are deposited into this account.

Controlling Party - A party designated in a CMBS that has the right to approve and direct certain actions of the Special Servicer with respect to specially serviced loans.

Convexity - The measurement of the rate of change of duration of a security.

Corporate Guarantee - A guarantee made by the issuer (issuer guarantee) or a third party to cover losses due to delinquencies and foreclosures up to the guaranteed amount. The rating of the guarantor is commonly required to be, at minimum, equal the highest rating of the securities. A form of credit enhancement.

CPR (Constant Prepayment Rate) - A percentage of the outstanding collateral principal that will prepay in one year.

Credit Enhancement - Provisions provided by issuers to reduce default risk in CMBS, e.g., reserve accounts, cross-collateralization, cross-default, advance payment agreements, loan replacement, etc.

Cross-collateralization - A provision which joins two or more commercial properties that allows cash flows from all properties to be available for any debt payments, property improvements, maintenance, etc. CMBS backed by cross-collateralized properties reduces delinquency risk and adds value to the deal. A form of credit enhancement. *Also called blanket mortgage.*

Cross-default - A provision which joins two or more commercial mortgage loans and gives the lender the right to call any or all loans into default if any single loan is in default. A form of credit enhancement.

Cured - With respect to delinquent mortgage loans, all missed payments have been made and loan payments are current.

Cut-off Date - The date on which the portfolio (securing the CMBS) numbers are cut off and used for the final calculations for issuing securities.

Dark Space - Vacated retail space. Tenant may be still paying rent but “induced” smaller tenants may exercise right to cancel leases when the major tenant goes “dark”.

Debt Service Coverage Ratio (DSCR) - Measures a mortgaged property’s ability to cover monthly payments, defined as the ratio of net operating income over the mortgage payments. A DSCR less than 1.0 means that there is insufficient cash flow by the property to cover debt payments.

Deferred Interest - The amount when the interest a borrower is required to pay on a mortgage loan is less than the amount of interest accrued on the outstanding principal balance. This amount is usually added to the outstanding principal balance of the mortgage loan.

Deferred Maintenance Account/Replacement Reserve Account - A reserve account established by a borrower to cover repairs or future property maintenance costs.

Delinquency - A loan payment that is at least 30 days past due. Usually after 90 days delinquent, the lender has the right to foreclosure proceedings in which the loan will be in default.

Delivery Date - The date on which the securities will be delivered to the purchaser or the Trustee if the Trustee is the custodian for the DTC (Depository Trust Company). The DTC handles the security certificates for the purchaser by acting as custodian of the certificate and issuing a form showing the “book entry” safekeeping to the certificate holder.

Demand Notes - Notes or loans that are short-term and might include a provision that repayment can be “demanded” or the note called at the discretion of the lender.

Demand Notes (Fast-Pay) - If the balloon payment of a balloon mortgage is not met, the borrower is required to apply all excess cash flows generated by the property to pay down the remaining loan balance to accelerate amortization.

Depositor - The entity that accumulated the mortgages and transferred them to the Trust simultaneously with the issuance of the securities to the certificate holders. The depositor can be the seller of a portfolio of mortgages or an entity established just for the purpose of holding the mortgages until the pool accumulation is completed.

Determination Date - The date of the month (usually the 15th or the next business day) that is used as a cut-off date for calculation of the payments due on the securities.

Discount Rate - The rate applied to each year’s cash flow from a building to determine the net present value (NPV) of a series of cash flows.

Disposition Fee - “Workout fees” paid to a special servicer for making a loan current or liquidating a problem loan or foreclosed property. Can also include late fees, modification fees and loan administration charges. These fees are negotiated with each CMBS.

Distribution Date - The date of the month (usually the 20th or the next business day) the payments on the securities will be paid to the certificate holders.

DIV (Derived Investment Value) - A valuation procedure created for the RTC to price existing commercial mortgages.

DM (Discount Margin) - The difference between the price of a security and the face amount of the security.

Due Diligence - The legal definition: due diligence is a measure of prudence, activity, or assiduity, as is properly to be expected from, and ordinarily exercised by, a reasonable and prudent person under the particular circumstances; not measured by any absolute standard but depends on the relative facts of the special case. In CMBS, due diligence is the foundation of the process because of the reliance securities investors must place on the specific expertise of the professionals involved in the transaction. It is physically and financially impossible for most CMBS investors to perform the many duties required to prepare, analyze, deliver and service commercial mortgages. Due Diligence protects these investors from unethical improprieties and unprofessional practices. Prevailing industry standards are used as the primary benchmark from which prudence is judged. Due diligence is said to be the cornerstone of securities law.

Duration - Provisions for an approximation of the percentage change in the price of a security relative to change in interest rates. It provides a measure of the price volatility of the security; the greater the duration, the greater the price volatility relative to a change in interest rates. Duration is the weighted average term-to-maturity of the security’s cash flows when the weights are the present values of each cash flow as a percentage of the present value of all cash flows of the security.

Economic Recovery Tax Act (1981) - Tax reform which created tax incentives for construction of commercial real estate. It fueled excess building, particularly of multifamily properties, which were only economically viable in that tax environment. *Also see Tax Reform Act (1986).*

Employment Retirement Income Security Act of 1974 (ERISA) - An act which stipulates the standards of risk that are appropriate/acceptable for private pension plan investments. A fiduciary of an employee benefit plan; i.e., pension fund subject to ERISA, may invest in CMBS only if the certificates meet specified investment guidelines.

Environmental Risk - Risk of loss of collateral value and lender liability due to the presence of hazardous materials, such as asbestos, RCB, radon or leaking underground storage tanks (LUSTS) on a property. CERCLA (Comprehensive Environmental Response, Compensation Liability Act) of 1980 discusses potential liabilities due to environmental problems.

Excess Interest/Spread - Interest received from repayments that is greater than the interest on the certificates. It is defined as the difference between the interest paid on the mortgage loans (net of servicing fees) and the interest accrued on the certificates.

Extension Advisor - A third party who has the right, or obligation, to approve loan extensions and modifications recommended by the master or special servicer. Not all CMBS have third party extension advisors.

Extension Risk - Potential inability to refinance balloon mortgages in a timely manner.

FAR - See *Floor-to-Area Ratio*.

FFIEC - Federal Financial Institutions Examination Council.

FHA - Federal Housing Administration.

FHLMC (Freddie Mac) - Federal Home Loan Mortgage Corporation.

Floor-to-Area Ratio (FAR) - The relationship between the total amount of floor space to a multi-story building and the base of that building. FARs are dictated by zoning laws and vary from one neighborhood to another, in effect stipulating the maximum number of stories a building may have.

FNMA (Fannie Mae) - Federal National Mortgage Association.

Foreclosure - The process by which a lender takes back a property on which the mortgagee has defaulted. A servicer may take over a property from a borrower on behalf of a lender. A property usually goes into the process of foreclosure if payments are more than 90 days past due.

GLA (Gross Leasable Area) - The area for which tenants pay rent.

GNMA (Ginnie Mae) - Government National Mortgage Association.

Going-In Cap Rate - The cap rate applied to the first year's income.

Ground Lease - A lease on undeveloped land or a lease covering the land but not improvements.

HVAC - Heating, ventilation, air conditioning.

Hurdle Rate - A break-even debt service calculation that establishes the maximum interest rate a mortgaged property can handle at maturity if the property must be refinanced. It is calculated using current net operating income and an interest only mortgage with a reasonably short maturity of less than 5 years. (Also called "Break Even Debt Service Analysis"). Usually calculated to answer the question, "Can all loans be refinanced at maturity, if interest rates are at a "Disaster Rate?"

Hyper-Amortization - An accelerated paydown of a class in a CMBS by allocating the scheduled principal an interest in that class.

Industrial Property - A property used for light or heavy manufacturing or warehouse space. Property types also include office/warehouse.

Institutional Property - A property used by special institutions, such as a university, hospital or government agency. Institutional properties may be similar to other property types; however, they are designed for a specific purpose and are difficult to adapt to other uses.

Interest Paid vs. Interest Impacted - An important clause in the CMBS structure that determines how and when losses are allocated. i.e., are losses allocated before principal is paid or after principal is paid? This clause impacts the yield of the lowest class of certificate holders.

Interest Rate Cap - Limits the interest rate or the interest rate adjustment to a specified maximum. This protects the borrower from increasing interest rates.

Interest Shortfall - The aggregate amount of interest payments from borrowers that is less than the accrued interest on the certificate.

Involuntary Prepayment - Prepayment on a mortgage loan due to default.

I/O Strip (Interest Only Strip) - When a mortgage interest rate exceeds the interest rate paid on the security backed by the mortgage, the excess interest is "stripped" and sold as an I/O strip. The "strip" is usually described in the (notional) amount of the original security classes it was stripped from and then sold for pennies on the dollar basis. These are very volatile securities. As an example, if several loans prepay earlier than expected, there may not be an interest stream to pay the interest on the "strips".

Issuer Guarantee - *See Corporate Guarantee.*

Lease Assignment - An agreement between the commercial property owner and the lender that assigns lease payments directly to the lender. Otherwise, lease payments would be to the owner who would then forward mortgage payments to the lender. In a CMBS, lease payments would go directly to the servicer. A form of credit enhancement.

Leasehold Improvements - The cost of improvements for a leased property, often paid by the tenant.

Letter of Credit (LOC) - An obligation by a third party to cover losses due to delinquencies and foreclosure. The rating of the third party is commonly required to be, at minimum, equal to the highest rating of the securities. A form of credit enhancement.

LIHTC - *See Low Income Housing Tax Credit.*

Liquidation - The sale of a defaulted mortgage loan.

Liquidity - A measure of the ease and frequency with which assets, e.g., CMBS, are actively traded in the secondary market. Large amounts of CMBS issues with similarities in collateral and structure are often traded more steadily in the secondary market, thus increasing the degree of liquidity of the CMBS issues.

Loan-to-Value Ratio (LTV) - The ratio of the loan amount over the appraised value of the property.

Locked-Box Provision - The trustee is given control over the gross revenues of the underlying properties in a CMBS. Property owners only have claim to cash flows net of expenses. Expenses include debt service, taxes, insurance and other operating expenses.

Lock-Out Period - A period of time after loan origination during which a borrower cannot prepay the mortgage loan.

Loss Severity - Rate of loss on a liquidated mortgage; defined as the ratio of (a) the outstanding principal on the mortgage loan(s) minus the realized loss over (b) the outstanding principal on the mortgage loan(s).

Loss to Lease - The difference of the market rental rate for a property and the rent being paid for a similar property. It is an indicator of the changing market conditions. For example, if a property was leased for a one-year term at \$1,000 per month and currently the market is getting \$1,100 per month on similar properties, the loss to lease is \$100 per month. *Also called Free To Lease Difference.*

Low Income Housing Tax Credit - A tax credit given to owners for the construction or rehabilitation of a low income housing. To qualify for the credit, the property must (1) be at least 20% occupied by individuals with incomes of 50% or less of the area median income or (2) be at least 40% occupied by individuals with incomes of 60% or less of the area median income.

Mark-to-Market - Adjustments made to rental income to reflect current market levels for the purpose of accurately projecting property income and property value.

Master Servicer - Required to service to mortgage loans collateralizing a CMBS on behalf of and for the benefit of the certificate holders. Responsibilities vary according to the servicing agreement. Common responsibilities include a) collection of mortgage payments and passing the funds to the trustee; b) advancing any late payments to the trustee; c) providing mortgage performance reports to bond holders; and d) passing all loans to the special servicer that go into REO or non-performing.

Mezzanine Pieces - Those security classes (tranches) rated in the middle range of a multi-class security.

Modeling - Cash Flow Modeling - When pools of loans are converted to securities, all payments, including balloon maturities, are chronologically collated into a cash flow pool and then sequentially allocated to the various classes of securities created with the issuance of a CMBS. Rarely do all loans in a pool perform exactly as the primary loan documents prescribe. This process takes considerable computing capacity. Investment bankers have invested sizable sums of money to develop their cash flow modeling capability.

Multi-family Property - A building with five or more residential units. Usually classified as a high rise, low rise or a garden apartment. There are three rating types for multifamily properties:

Class A - Properties are above average in terms of design, construction and finish; command the highest rental rates; superior location in terms of desirability and/or accessibility; and generally professionally managed by national or large regional management companies.

Class B - Properties frequently do not possess design and finish reflective of current standards and preferences; construction is adequate; command average rental rates; generally well maintained by national or regional management companies; and unit sizes are usually larger than current standards.

Class C - Properties provide functional housing; exhibits some level of deferred maintenance; below average rental rates; usually located in less desirable areas; mostly managed by smaller, local housing management companies; tenants provide a less stable income stream to property owners than Class A and B tenants.

NAIC (National Association of Insurance Commissioners) - Insurance Companies are regulated by the states in which they are domiciled. These regulators have an association headquartered in Kansas City.

Negative Amortization - Occurs when interest accrued during a payment period is greater than the scheduled payment and the excess amount is added to the outstanding loan balance. For example, if the interest rate on an ARM exceeds the interest rate cap, then the borrower's payment will not be sufficient to cover the interest accrued during the billing period. The unpaid interest is added to the outstanding loan balance.

Net Effective Rent - Rental rate adjusted for lease concessions.

- Asking Rent** - Rental rate offered by the landlord to a prospective tenant.
- Face Rent** - Rental rate before adjustments for lease concessions (if any).
- Gross Rental Rate** - Rental rate in which the landlord pays building expenses (a.k.a. full service rental rate).
- Net-Net Lease** - Usually requires the tenant to pay for property taxes and insurance in addition to the rent.
- Net-Net-Net Lease** - *See Triple-Net Lease.*
- Net Operating Income (NOI)** - Total income less operating expenses, adjustments, etc., but before mortgage payments.
- Notional Amount** - A stated dollar amount on which a calculation is made, such as a payment on an I/O Strip.
- OID (Original Issue Discount)** - The tax considerations of owning a CMBS REMIC are very complex with at least part of the issue subject to OID tax considerations. A violation of the REMIC qualification for a CMBS causes onerous tax penalties.
- OAS (Option Adjusted Spreads)** - A technique first applied to residential MBS to price the prepayment risk an investor assumes in residential mortgage backed securities. In residential MBS, borrowers have a legal "option" to pay off their loans when interest rates decline, thereby causing a reinvestment loss for the investor.
- Optional Termination** - A legal provision in a CMBS that defines when and who can liquidate a CMBS prior to the last payment on the mortgages in the pool.
- OREO** - *See Other Real Estate Owned.*
- Other Real Estate Owned** - An REO property usually originated by a different lender.
- Overcollateralization** - When the outstanding collateral principal of a security is greater than the outstanding certificate principal. A form of credit enhancement.
- Percentage Lease** - Commonly used for large retail stores. Rent payments include a minimum or base rent plus a percentage of the gross sales. Percentages vary from one to six percent of the gross sales depending on the type of store and sales volume.
- Pooling and Servicing Agreement** - A legal contract defining the responsibilities and the obligations for management of a CMBS particularly, for the Master Servicer and the Special Servicer. This primary document governs and controls much of the CMBS process.
- Prepayment Interest Shortfall** - Commonly occurs when prepayments are made prior to the payment due date. Interest received from the prepayment is less than the interest on the certificates. It is defined as the difference between the interest accrued on the corresponding certificates and the accrued interest from a prepayment.
- Prepayment Premium** - A penalty paid by the borrower for any prepayments made on a mortgage loan. The premium is usually set at a fixed rate which, at times, decreases in steps as the loan matures. For example, a mortgage loan can have a premium of 5% for the first seven years, and during the next five years decrease at a rate of 1% per year (4% in year eight, 3% in year nine); after year twelve there is no prepayment premium.
- Prepayment Risk** - The risk that a borrower will repay the remaining principal or an amount other than the scheduled payment on a mortgage prior to maturity, thus shortening the life of the loan. In order to reduce prepayment risk, commercial mortgages commonly have lockout periods and/or prepayment premiums or yield maintenance.
- Priority of Distributions** - The CMBS provision that defines how, when, and to whom the available funds will be distributed.
- Private Label Securities** - Securities backed by mortgages that conform to the standards of FNMA, FHLMC or GNMA. These securities are also known as non-agency securities.
- Private Placement** - Securities or bonds that are sold to institutional investors who meet specific criteria of net worth and/or income and who are deemed to be sophisticated investors, e.g., insurance companies. Private placement securities are generally exempt from registration requirements of the *Securities Act of 1933*.
- PSA Standard Prepayment Model** - A standard prepayment model for residential MBS developed in the 1980s by the Public Securities Association (PSA) and various Wall Street firms. The PSA model specifies a standard prepayment percentage (in terms of an annual percentage) each month from origination through the thirtieth month. Thereafter, the prepayment rates remains constant. The base case is at 100% PSA.

Here the annual prepayment rate is 0.2% CPR the first month, 0.4% CPR the second month, increasing each month by 0.2% CPR until the thirtieth month at 6% (30 x 0.2%). Thereafter, the prepayment rate is constant at 6% CPR. To determine the prepayment rate for any PSA, multiply the corresponding CPR at 100% PSA by the given PSA percentage rate, i.e., for 200% PSA at the fourth month, 4 x 0.2% CPR x 200% = 1.6% CPR. PSA is a Washington D.C. based trade association representing investment bankers and other registered broker-dealers.

QIB (Qualified Institutional Buyer) - A QIB is defined within the meaning of Rule 144A under the Securities Act. A QIB must have a minimum net worth, be involved and knowledgeable of the risks of the investment and investors for their own account or for the account of another QIB. Most CMBS can only be sold to QIBs.

Rate Step-Ups - An increase in mortgage rates with respect to balloon mortgages, when the borrower fails to show progress towards refinancing, such as an appraisal, engineering report, or environmental study, or is unable to obtain a signed commitment or sales contract on the underlying property.

Rating Agency - The agency that examines the securities and the underlying collateral and rates the securities based on its benchmarks. Ratings range from "AAA" (the highest rating) to "CCC" (the lowest rating possible). They are a major influence on CMBS. The four rating agencies of CMBS are Standard and Poor's, Moody's, Fitch and Duff and Phelps.

Realized Loss - The amount unrecovered from the sale of a foreclosed mortgage loan or REO property. It is equal to the amount of (a) the outstanding principal balance of the loan plus (b) all unpaid scheduled interest plus (c) all fees applied to the sale of the property minus (d) the amount received from liquidation.

Recreational Property - A property designed for a very specialized use. Property types include sports arenas, country clubs and marinas.

Red Herring - A preliminary prospectus or private placement memorandum that is subject to amendment. It is identified by the red printing on the front cover. It is very valuable marketing tool for securities transactions.

REIT (Real Estate Investment Trust) - A corporation formed to invest in real estate, mortgages and/or securities backed by real estate. REITs are required to pass through 95% of taxable income to their investors and are not taxed at the corporate level. The three major types of REITs are equity, mortgage and hybrid with equity being the dominant type.

Release Provision - If the loan associated with a property in a "crossed" pool is prepaid, the borrower must additionally prepay a portion of all other loans in the pool. This provides protection against a borrower "cherry picking" properties out of a "crossed" pool.

REMIC - Real Estate Mortgage Investment Conduit.

REO - Real Estate Owned by a lender pursuant to enforcement of loan security documents (through the foreclosure process or a comparable conversion such as deed in lieu of foreclosure)

Rent Step-Up - A lease agreement in which the rent increases every period for a fixed amount of time or for the life of the lease.

Residual - Refers to any cash flow remaining after the liquidation (full pay off) of all classes of securities in a CMBS. Multiple-Asset, Multiple Class CMBS frequently have a residual.

Reserve Funds - A portion of the bond proceeds that are retained to cover losses on the mortgage pool. A form of credit enhancement. *Also called reserve accounts.*

Retail Property - Property types range from super regional shopping centers with a gross leasable area greater than one million square feet to small stores with single tenants. *See Shopping Center.*

Reversionary Cap Rate - The cap rate applied to the expected ultimate sale price/value of a building after a several year holding period. Typically about 50 bp's higher than a going-in cap rate.

Reversion/Reversionary Value - Reversion is the ultimate sale of a building after a several year holding period.

Risk Based Capital (RBC) - The amount of capital (or net worth) an investor must identify as allocated to absorb a potential loss in an investment or investment class. This requirement was established by institutional regulatory bodies in the last few years because of losses in this last recession.

RTC - Resolution Trust Corporation.

Russell-NCREIF (Frank Russell Company and National Council of Real Estate Investment Fiduciaries) - A partnership that compiles numerous indices on commercial real estate performance.

SAIF (Savings Association Insurance Fund) - Members are primarily savings institutions.

Seasoning - The length of time since origination of a mortgage loan.

Securities - The generic term applied to Certificates of Ownership of the funds or assets of a trust fund. These undivided interests are issued by the Trustee in amounts of \$100,000 until less than \$100,000 is sold, then in amounts of \$1000. The Certificates are usually issued in lettered classes starting with Class A. There can be many classes if there are many different rated tranches in a CMBS. Each class is risk-rated by a rating agency such as Standard & Poors. If the higher risk first-loss class is included in the security and is sold instead of being held by the seller, the class is rated as "NR" (not rated). The "not rated" risk-rating is used for securities not qualifying for the minimum risk rate of B-. See *Rating Agency Risk-Rating Attachment*.

Securities Act of 1933 - This Act requires new issues to be registered and meet prospectus requirements with the SEC. New issues can be exempt from these requirements if (1) the issuer is found creditworthy; (2) the issuer is under the jurisdiction of a governmental regulatory agency or (3) the issued meets the SEC requirements of Regulation A, Regulation D, Rule 144a, or Rule 147.

Securitization - A term used to describe the process of raising funds through the sale of securities. It usually creates a new financial instrument representing an undivided interest in a segregated pool of assets such as commercial mortgages. The ownership of the assets is usually transferred to a legal trust or special purpose, bankruptcy-remote corporation to protect the interests of the security holders.

SEC Rule 144A - The sale of bonds not registered with the SEC is restricted to the conditions set forth by this rule originally contained in the Securities Act of 1934. Qualified institutional investors are among the few permitted to purchase unregistered certificates.

Senior/Subordinate Structure - A common structure used in CMBS involving a prioritization of cash flows. For example, in a simple two-class senior/subordinate (A/B) structure, (1) Class A will receive all cash flow up to the required scheduled interest and principal payment; (2) the subordinate class, Class B, provides credit enhancement to Class A; and (3) Class B will absorb 100% of losses experienced on the collateral until cumulative losses exceed Class B's amount; thereafter Class A will absorb all losses. Also called a *sequential pay structure*.

Sequential Pay Structure - See *Senior/Subordinate Structure*.

Servicer - Institution acting for the benefit of the certificate holders in the administration of mortgage loans. Functions include collection of payments from borrowers, advancing funds for delinquent loans, and taking defaulted properties through the foreclosure process.

Shell Rent - A portion of rental rates that are intended to amortize the costs of extraordinary tenant improvements.

Shopping Center - The following labels are customary usage, standardized by organizations such as the Urban Land Institute (ULI):

Type of Center	Size (Sq.Ft.)	Main Tenant(s)
Neighborhood	Less than 100,000	Provides daily essentials and everyday services
Community	100,000 - 400,000	Supermarket and/or department or discount store
Power	100,000 - 325,000	At least two anchor stores
Regional	400,000 - 800,000	At least two anchor stores
Super-Regional	More than 800,000	At least three anchor stores

SMMEA (Secondary Mortgage Market Enhancement Act of 1984) - Originally passed to assist the residential mortgage markets access to the capital market by eliminating legal restrictions that impeded certain investors groups from participation in residential MBS. Now being lobbied for modification for enlargement of the CMBS market.

SPC (Special Purpose Corporation) - A bankruptcy-remote entity established by the borrower whose sole asset is the property on properties being financed. The SPC protects the lender from having the underlying property involved in bankruptcy proceedings against the borrower of the property. (Also known as SPE (Special Purpose Entity) with other than corporate owners.

Special Servicer - Some transactions have a separate special servicer who assumes servicing responsibilities when a loan goes into default and conducts the "work-out" or foreclosure process. There are various types of special servicers: (1) those retaining first-loss pieces; (2) those investing in "B" pieces in return for special services rights and (3) those appointed solely because of asset-management expertise.

Spread Account - A reserve account funded on an ongoing basis by collateral interest in excess of bond interest.

Structure - Refers to the tax and legal structure of a CMBS such as a pass-through structure, a bond structure, a Collateralized Mortgage Obligation (CMO) or a Real Estate Mortgage Investment Conduit (REMIC). The "structure" can determine the tax benefits, or penalties, and the rights of the CMBS holders and the issuer in the event of a failure or default within the terms of the security. Most CMBS are senior/subordinated, multiple class pass-throughs classified as REMICs.

Structuring - A verb describing the process of experimenting with various combinations of mortgages and security classes to achieve the highest price for a CMBS based upon capital market forces at that moment.

Subordination - Structuring a security into classes in which the risk of credit losses are disproportionately distributed. It is commonly recognized as a *senior/subordinate structure*. A form of credit enhancement.

Sub-performing Loan - A loan that is making payments but not the full principal and interest payments that the Mortgage Note demands.

Sub Servicer - A servicer(s) who contracts with Master and Special Servicers to perform some of the real estate services required under pool and servicing agreements, such as property inspections and individual loan administration. The Master or Special Servicer is legally responsible for the activities of their sub-servicers.

Tax Reform Act (1986) (TRA) - Reversed tax reforms of 1981. Properties that were profitable in the tax environment of 1981-1986 were not economically viable after the TRA. Many markets had become oversupplied due to tax advantaged construction of properties which the underlying economic and geographic demand could not support. As a result, TRA triggered a sharp drop in new commercial construction. See *Economic Reform Act (1981)*.

Tenant Improvements (TI) - An owner's expense to physically improve the property to attract new tenants.

Third-Party Pool Insurance - Protects investors from any losses on the mortgage loans. A form of credit enhancement. The bond insurer paid on an annual fee by the issuer will absorb the losses. The CMBS issue is usually never rated higher than the credit rating of the third party insurer.

Tranche - A term applied to describe classes of CMBS securities. i.e., AAA Tranche.

Triple-Net Lease - A lease that requires the tenant to pay for property taxes, insurance and maintenance in addition to the rent. *Also called Net-Net-Net Lease*.

Trustee - Holds the mortgage collateral, issues the Certificates of Beneficial Ownership (securities) and passes all funds collected by the *master servicer* to the bondholders. Distributes statements on distributions and status reports on the collateral. Acts as a supervisor to the master servicer and *special servicer*. Ensures that the servicers act in accordance with the terms of the Pooling and Servicing Agreement. If there is a violation of the agreement, the trustee has the right to assume the authority of or appoint a new *servicer*. The Trustee represents the Trust that holds the legal title to the collateral for the benefit of all class holders of the security. He must carry out his duties according to the indentures established within the Trust Indenture. Some Trustees actually collect the proceeds from the Master Servicer and distribute them to the security holders while some Trustees sub-contract the distribution to "paying agents". This sub-contract does not release the Trustee from his legal obligations to protect the interests of the security holders.

Water Fall - A term used to describe the cash flow pay out priority of a CMBS. "The cash flow water fall first fills up the 'AAA' bucket, then the 'AA' bucket, and then the 'A' bucket, etc."

Yield Maintenance - A *prepayment premium* that allows investors to attain the same yield as if the borrower made all scheduled mortgage payments until maturity. Yield maintenance premiums are designed to make investors indifferent to prepayments and to make refinancing unattractive and uneconomical to borrowers.

BACKGROUND FOR THE ENGINEERING PHASE OF THE COMMERCIAL REAL ESTATE SECONDARY MARKET

The Resolution Trust Corporation (RTC), the liquidator of failed savings and loans, inherited approximately \$100 billion of commercial mortgages. The RTC needed to sell these mortgages but found a financial gridlock had created almost total illiquidity for commercial real estate mortgages. To liquidate this huge portfolio, they had to find new investors, so they turned to the eager capital markets which had little or no commercial mortgage exposure.

To understand the magnitude of the restructuring of the national network of CRE financial intermediaries, one must put the beginning order of participants in perspective. At the time of enactment of FIRREA (1989), the nation's financial **institutions** and their **long term** commercial mortgage investments were estimated as follows:

	Number of Loans	Commercial Mortgage Dollars	Third-Party Serviced
Banks	440,000	\$200 Billion	15,000
Life Ins. Co.	310,000	\$250 Billion	58,000
S & L's	375,000	\$205 Billion	17,500
Others	11,000	\$110 Billion	1,500
Securitized	<u>1,000</u>	<u>\$ 20 Billion</u>	<u>1,000</u>
TOTAL	1,137,000	\$785 Billion	93,000

SOURCE: Steve Duffy. Address, "Income Property Business Outlook." Mortgage Bankers Association Servicing Managers Workshop. San Francisco:13 June 1990.

Of the above institutions, only the securitized (capital markets) marketplace could absorb any new commercial mortgage debt, and its capacity was unlimited if a way to rate the credit risk and service the mortgages could be found. The above table indicated that the existing infrastructure of portfolio lenders and third-party servicers was only servicing eight percent (93,000) of the outstanding commercial mortgage loans on a third-party basis. Over one-half of that amount belonged to the life insurance industry which, at the time, remained active in the marketplace. These third-party servicers were Commercial Mortgage Bankers (CMBs) who were locally oriented with few offices outside of their immediate metropolitan areas. In addition, many CMBs staffs were fully employed in handling problem assets for their primary investors, the life insurance companies. The largest of the commercial mortgage bankers was servicing just 2,600 loans. The ten largest CMBs were servicing a combined total of 17,000 loans. **The challenge was immense. How could a small, labor-intense industry absorb a surging business volume estimated to equal its**

existing book of business in each of the next three years? In addition to the volume of loans, other problems existed with the location of the loans. Most CMBs were located in major metropolitan areas while many thrift assets were located in small and medium sized communities. Loan sizes of the thrift assets were considerably smaller than the traditional life insurance company loans CMBs were currently servicing. The industry standard for servicing compensation is a percentage of the interest collected. Small loans cannot be serviced profitably on a percentage of interest schedule. In addition to servicing capacity limitations, none of the third-party servicers had any experience with securitized transactions.

Following an industry telephone survey, a graph of the organizational obstacles facing the new needed infrastructure was accomplished.

Practice Requirements	Current	New
1. Compensation	Percentage of Interest	Fixed fee
2. Servicers Locations	Major Metropolitan	Small Town
3. Loan Size	Medium to Large	Medium to Small
4. Servicing Policy	Dedicated Staff	Functional
5. Management	Limited Service	Full Service
6. Investor Reporting	Simple	Complex
7. Judgment Required	Limited	Full
8. Automation	Limited	Advanced
9. Response	Reactive	Proactive
10. Staff Requirement	Small	Large
11. Individual Staff Expertise	Diversified	Specialized
12. Technical Requirements	Minimal	Maximum
13. Space Requirement	Small	Large
14. Security Requirement	Minimum	Maximum
15. Audit Requirements	Occasional	Frequent
16. Life of Contract	Indefinite	Long-Term
17. Work Layout Format	Process	Product
18. Source of Servicing	Self-Generated	Delivered in Bulk
19. Decision Making	Non-Programmed	Programmed
20. Business Basis	Relationship	Price Contract
21. Scope	Local	National
22. Work Flow	Regular	Surged
23. Function	Independent	Interdependent
24. Task Control	Loose	Tight
25. Management	Decentralized	Centralized

Source: A planned telephone survey of Commercial Mortgage Bankers conducted by Thomas F. Wratten, January, 1991.

Initial efforts by the RTC to transfer commercial mortgage servicing from failed thrifts to commercial mortgage servicers met with failure. The RTC attempted to handle the servicing internally through its field offices while seeking proposals from the private sector to solve the servicing dilemma that was impeding its access to the capital markets. After a period of time, the demand for third-party servicing and asset management created a whole new industry called Master

and Special Servicers. There are fourteen such servicers today.

PORTFOLIO SELLER-SERVICER PROGRAM™

What is the Portfolio Seller-Servicer Program™ ?

An initial effort to create a Portfolio Seller-Servicer Program™ was begun in 1991 by a group of life insurance mortgage officers and two rating agencies. The concept is based upon consistency, standardization and preparation for a whole loan or securitized secondary market transaction. The concept further evolves into creating data formats, minimum standard legal documents, risk matrixes for tracking variances and a rating agency pre-qualification standard for seller-servicers. Additional standardization was also accomplished within the software packages now available in the commercial mortgage business. The program focused on the mortgage function of the life insurance industry but could be usable by other portfolio investors as well.

What was the rationale behind the Portfolio Seller-Servicer Program™?

Any CMBS issue that will be sold in the primary or secondary market must be rated by an acceptable rating company. Rating agencies currently rate transactions after extensive loan file reviews and physical inspections of the mortgaged properties. This is, again, a costly and time consuming activity which could be reduced if a standardized program or a standard format for underwriting, processing, servicing and asset management could be created and maintained that would allow the rating companies to visit the seller/issuer and accept the rating information from the files or from summaries of those files.

To give the rating companies the comfort to accept the seller/servicer's file information, it would be necessary for them to have previous knowledge of the depth of the seller/servicer's expertise and consistency. This could be accomplished with a mortgage loan audit which could be renewed on a regular or scheduled basis. After the initial audit (based on rating company guidelines) of the seller/servicer was accomplished, the portfolio lender would be rated as a qualified seller/servicer. Upon a decision by the lender to sell or securitize commercial mortgages, the rating company would schedule a visit to the lender and accomplish most of its due-diligence from the files and reports housed in the company's mortgage department. After completion of the due-diligence, the rating company would rate the issue, and an intermediary would begin the distribution. Upon sale of the issue, the seller would become the servicer and report to the trustee. Why is this possible now? Regulatory and market pressures have intensified the servicing of commercial mortgage loans to levels nearing asset-management standards. Commercial mortgage lenders and their servicers are now required to report and analyze properties on an intensive basis. They often make evaluations and re-appraisals on a quarterly basis. **Commercial mortgages are no longer serviced -- they are managed.** Many lenders now maintain their loan files with up-to-date

information that could satisfy the risk-rating requirements of a rating company. This situation has created a new standard that is unlikely to change in the near future and, coupled with the portfolio risk-rating and reserve requirements being imposed, offers a chance for those companies who see an opportunity to use their existing staff to enlarge their financial services menu while enhancing their overall operations. The next step would be the creation of criteria and procedures to use this new standard of diligence as a basis for risk-rating commercial mortgages for the secondary market.

Under this concept a rated portfolio seller-servicer will:

- Use the servicing data formats adopted as an industry standard.
- Use the industry standard risk-rating matrix to track trends in loans.
- Use minimum standards "ratable" documentation.
- Report to a "Trustee" in most transactions.
- Do electronic "live" reporting to a network.
- Have a mortgage department that will be rated by a rating agency.
- Have a mortgage department that will have outside "capital" customers.
- Have fiduciary responsibilities for customers that are SEC protected.

What benefits can portfolio lenders expect from participation in a CRE secondary market program?

Profitability Issues

- Profit from spreads in the market between rated and unrated holdings (excess spread).
- Opportunities to take advantage of the movements and the steepness of the yield curve at issue and repurchase.
- Opportunities to take advantage of the junior/senior arbitrage (excess spread).
- Potential to participate in the "after issue" profit from master servicing and, possibly, from trading in the securities or loans.
- Opportunity to offset departmental expense with servicing income.
- Opportunity to sell mortgages at a substantially reduced issue cost.
- Opportunity to sell smaller pools of mortgages at "big" issue prices.
- Ability to reduce capital requirements with "internal" securitizations.

Portfolio Issues

- Marketability of an illiquid asset including the "B" piece and servicing income.
- Enhancement of asset/liability matching.
- Potential for larger allocations.
- Because of the awareness of the department's expertise and diligence, subordination and reserve requirements could be less than market requirements.
- Opportunity to purchase rated mortgage pools in the secondary market at private-placement yields.

Staffing Issues

- Ability to stay in the market at all times.
- Ability to keep staff fully employed.
- Enhance department corporate contribution and function.
- Enhance staff's expertise in the emerging capital markets for commercial real estate to include CMBS analysis.

Company Issues

- Potentially higher overall rating of the company because of the awareness of the mortgage portfolio quality by the rating companies.
- Alternative source of funds for commercial mortgages.
- Enlargement of contact base to new areas outside the main stream of historical portfolio investment in commercial real estate investment.
- Potential to use excess spreads for capital reserve requirements.

Industry Issues

- Continued use of existing origination and servicing arrangements.
- Enhancement of the image of the profession of commercial real estate finance.
- Chance to fill the "gaps" in commercial real estate financing created by the demise of portfolio lenders who decide to leave the business because of regulatory or capital pressures.
- Chance to build data base on commercial mortgage portfolio and specific issue performance for portfolio valuation and reporting.

What are the obstacles and impediments to development of the Portfolio Seller-Servicer Program™?

- Agreement on the criteria and standards for the department audit and the regular renewal.
- Regulatory acceptance.
- Finding acceptable levels of subordination for junior/senior transactions.
- Gaining corporate approval to participate.
- Overcoming apprehension of being scrutinized by rating companies.

- Adequate staff resources to prepare for becoming a rated portfolio seller-servicer.
- Achieving a spread on the junior piece that will allow for adequate “yield plus” reserve requirements.
- Building an industry consensus on ratable documents, risk-rating system, and pooling and servicing agreements for efficiencies in the future for new originations.
- Maintaining the system on a cost effective basis that equals or betters the cost of the current methods of private portfolio servicing and management.
- The purchase and installation of a software system that is compatible with the rating agencies, other portfolio investors, and the capital markets.
- Designing Pooling and Servicing Agreements that allow enough flexibility to maintain customer relationships and prudent portfolio management activities such as property expansion.

Suggested steps for participation in the secondary market by a portfolio lender.

- Investigate the costs as well as present and future benefits of being a whole loan seller or a CMBS seller-servicer.
- Make the commitment to proceed.
- Inventory the human and material resources necessary to participate.
- Appoint a project manager.
- Collect various rating agency requirements for a rating as a seller - servicer.
- Use guidelines to perform a mortgage loan department audit.
- Use audit results to prepare department for rating agency evaluation.
- Evaluate software system and upgrade if necessary.
- Do a final review before scheduling rating agency evaluation.
- Review rating agency evaluation and make department adjustments as necessary.
- Prepare a press release that you are a "rated portfolio seller-servicer".
- Analyze and develop portfolio positions for a sale or securitization.
- Discuss rating stratification with rating agencies for preliminary pricing considerations of a “go/no go” decision for securitization or whole loan sale.
- Investigate the five options available in the secondary market.
 - a. Whole loan sale
 - b. Whole loan pool sale
 - c. Private A-B-Z split sale
 - d. Private 144a rated transaction
 - e. Public securitization
- Begin marketing!
- Begin installing industry standards and formats and documents in new loan originations to facilitate secondary marketing in the future.

INDUSTRY AND COMPETITIVE CHARACTERISTICS OF COMMERCIAL MORTGAGE LENDING

- The industry is very fragmented with localized lenders who concentrate primarily in areas near their home or branch offices with the exception of the top 10% of the life insurance companies (LICs). Most LICs use local mortgage bankers to lend on a nationwide basis.
- Commercial Mortgage Bankers (CMBs) are dependent on the LICs for 80% of their servicing and loan placement revenue, though they will occasionally broker loans, servicing released. The CMBs are small entrepreneurial firms whose primary source of income is from placement fees that average less than one percent of the amount of the loan. Servicing income generally amounts to less than 25% of their income and is derived almost exclusively from loans they have originated and placed with the LICs.
- The industry is very cyclical and is impacted by nearly every micro and macro economic force at play in the market.
- Commercial real estate finance is generally considered to be a "cottage industry" with no one lender having more than 2.0% of the dollars in the market. The largest commercial mortgage investor has less than 3,000 loans, which represents a tiny fraction of the estimated 1.5 million loans outstanding. Other than RTC and CMBS servicing, the largest portfolio third-party servicing company (CMB) services just 2,300 loans. Each investor has its own forms, documents, reporting systems, policies and procedures. There are no accepted industry standards!
- Once the loan is closed with a portfolio investor, almost no secondary market exists for the investor to sell the loan. Some portfolio investors "participate" in investments with other like institutions without guaranteeing the credit worthiness of the investment. Guarantees of commercial mortgage investments is illegal for most regulated institutions.
- Information about the commercial mortgage industry, like the commercial real estate market, has been guarded and sparse and, when available, is not shared in a public manner or collected in standard format.
- Supply and demand forecasts for commercial real estate are anything but an exact science. The long lead times between the development and delivery of the finished product creates the major risk that the perceived demand may have vanished in the interim.
- Until recently, there was not a major trade association in existence that supported the commercial mortgage business beyond sourcing networks for originations of portfolio loans.
- The first commercial mortgage industry lobbying effort in history was completed during the 1994 congressional session by the Mortgage Bankers Association of America.
- Until 1993, no major vendor had developed software for the entire commercial mortgage industry and most internal information systems were home built.
- Doing business in the commercial mortgage market is as much relationship based as it is price driven.
- No major study of commercial mortgage investment performance has ever been undertaken by any academic, government or industry group prior to 1992. Prior to 1990, only one investment banker had published any serious research on commercial mortgages. Only the ACLI publishes information about its members commercial mortgage portfolios.
- The commercial mortgage market is nearly equal to the rated corporate debt market in size, but that is about the only comparison that can be factually made.
- There is an old axiom that says "You build when the money is available, not when there is

recognizable demand". Capital drives the market -- not demand.

- Until the RTC created third-party servicers, there appeared to be no real economies of scale in the industry; bigger was not better and today this axiom is still undisputed.
- The functions of the industry are very rarely integrated. The industry is populated with a wide range of specialists. Except for the primary money lenders, all the other functions are generally unregulated and have few barriers to entry.
- Before the creation of master servicers for the RTC, there was not a single nationwide third-party servicing company in existence.
- Wall Street and the primary capital markets have not played any role in this market until recently. It has been dominated by portfolio lenders, most of which were local or regional.
- Until recently, the industry was generally considered to be low technology and without "elegant" investment theories, sophistication, or innovation.
- The risk-rating companies have made significant progress in developing risk-rating models that can address the multiple variables of risk in the commercial real estate markets, but the process is not yet perfected to the point of total acceptance by the investment community, particularly in the higher risk categories.
- Despite, or because of, the items above, the industry offers tremendous opportunity for an innovative and focused strategic organization.

THE FOUR PHASES OF THE COMMERCIAL MORTGAGE SECONDARY MARKET

DESIGN PHASE

1980 to 1988

- ◆ CRE liquidity
- ◆ Credit enhancement
- ◆ CMBS software model
- ◆ Investment banks trained
- ◆ Rating agencies involved
- ◆ Market primed

ENGINEERING PHASE

1990 to 1993

- ◆ Industry unbundled
- ◆ Services priced
- ◆ Third-party servicers
- ◆ Asset Management
- ◆ CRE analysis refined
- ◆ Due diligence refined
- ◆ Portfolio management proactive
- ◆ Regulatory action
- ◆ Risk-rating refined
- ◆ Procedures established
- ◆ CMBS institutionalized
- ◆ Information explosion
- ◆ Software for all phases
- ◆ Multi-family capital
- ◆ Total process engineered
- ◆ A new profession established

MANUFACTURING PHASE

1994 to 1996

- ◆ Private goes public
- ◆ Capital market discipline
- ◆ Public awareness
- ◆ CMBS manufactured
- ◆ Lobby efforts
- ◆ Defined specialties
- ◆ Risk bifurcation

RECYCLE PHASE

1997 to ?

- ◆ Portfolio lenders become sellers
- ◆ Whole loan secondary market
- ◆ Whole loan risk-rating
- ◆ Secondary market costs identified
- ◆ Centralized forums
- ◆ Centralized market
- ◆ Main Street - Wall Street
- ◆ Private placement market
- ◆ Efficiency established
- ◆ New universe in CRE
- ◆ Pricing in depth
- ◆ Risks insured

The secondary market is an important factor in the way that mortgages function. This lesson will provide a brief overview of the secondary market, including the securitization of mortgages and the industry's use of the Mortgage Electronic Registration System, or MERS.

I. Overview. The secondary market involves the buying and selling of mortgages as investments. From the original mortgagee's perspective, there is an alert. To read the full transcript, please start your free trial or log in.

Lessons:

1. Introduction. 3m 35s. Welcome to Real Estate.
2. Listings, Brokerage, and Sales Contracts. 6m 05s. Introduction. The commercial real estate market makes up a significant economic global segment both in terms of asset base as well as transactional activity. According to an MSCI report, the size of the professionally managed global real estate investment market increased from \$7.4 trillion in 2016 to \$8.5 trillion in 2017. This advancement will be driven largely by the digital securitization of real estate properties (also known as "tokenization") and improved transaction processing that make it easier to buy and sell properties and/or shares of properties, process revenue streams, and record and perfect property transactions. Such a secondary market will reshape the real estate market into a much more dynamic and competitive trading situation than it currently is.