Real Estate Securities: Asset Level Disclosure Issues

by

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B.S., Management, 1992
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Submitted to the Department of Architecture
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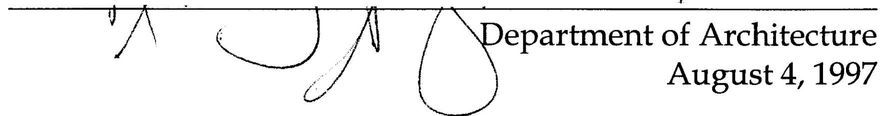

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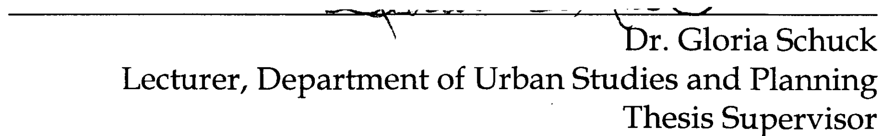

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ABSTRACT

This thesis is intended to identify and discuss the prominent issues related to the perceived gap between the supply of, and demand for, the disclosure of asset level information to the professionals who invest in two specific types of public real estate securities, Real Estate Investment Trust (REIT) stocks and Commercial Mortgage Backed Securities (CMBS). To achieve this eighteen interviews were conducted with various professionals in the public real estate markets. The information gathered was analyzed within an Information Sharing Framework developed in Chapter II. This framework focuses on three areas, the forces effecting the sharing of information, where the securities are on the continuums of sharing and information, and whether or not there is room for the sharing of information within the industry.

There are some broad trends that were discovered throughout this research which have interesting implications for the disclosure of information and the development of the real estate markets in general. There is a continued debate about the validity of valuing a REIT as an operating company versus a real estate fund. This valuation debate continues with the disagreement about whether or not REITs truly act as mutual funds, as they were intended, or if they are more like sector funds. This debate has strong implications for the effect of a declining real estate market on the stability of the REIT market. The CMBS issues appear to be far more clear cut. The industry is in the process of standardizing its information and the means for making it available. In both markets there are still important pieces of information that are being withheld to avoid possible liability issues. This withholding of information in both markets leaves the fears of selective disclosure alive and well. In order to maintain its growth, the real estate public markets may have to revisit current disclosure policies to attract new investors. Some of the means to explore this issue are discussed in the recommendations for future research.

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Chapter I: Introduction

The real estate market has a history of disastrous results from declines in values in the property markets. In addition to the erosion of underlying earnings from a falling property market, one of the reasons for the magnitude of loss in value during the crash in the early 1990s was the lack of information available to investors to help them determine the actual worth of the assets. For example, the value of the loans in first few rounds of in the RTC liquidation were deeply discounted as investors sought to understand how to value the assets being offered. Another example of a lack of information causing an additional decrease in value, was the desertion of investors from the REIT market in the 1970s. Due to the additional risk, investors will significantly discount the price they are willing to pay when there is doubt relating to the value. The real estate market is currently in a growth stage, and memories of the last recession seem to be fading quickly. Today's popular public real estate securities were developed as the market was beginning to emerge from the recession and they have not yet experienced any type of downturn in the property, or securities, markets during their growth. For this reason it is difficult to anticipate the public market reaction to a downturn in the real estate market. The current availability of enough asset level information necessary to avoid repeating one of these historical disasters, is a lingering question in the minds of many investment and real estate professionals.

Research Topic

This thesis is intended to identify and discuss the prominent issues related to the perceived gap between the supply of, and demand for, the disclosure of asset level information to the professionals who invest in two specific types of public real estate securities, Real Estate Investment Trust (REIT) stocks and Commercial Mortgage

Backed Securities (CMBS). This research looks at *what information is currently given to investors, how is it disseminated* and the always important question of *who pays for the collection and distribution of it.* To identify the gap between the supply and demand it is important to determine *what additional information investors want and why they want it, as well as the driving and restricting forces affecting operators' decisions to disclose information.* This paper begins with a brief review of the public real estate market, a discussion of some of the general disclosure issues facing this market, and an outline of why this topic is important to the industry. Chapter II provides a brief industry background and a history of each of the asset types, as well as, a discussion of the information sharing framework that is used. Chapter III includes the methodology for the data collection and a review and analysis of the eighteen interviews conducted. The paper concludes with general findings and areas for future research in Chapter IV.

Public Market Growth

The public real estate markets have experienced extraordinary growth over the past five or six years. The REIT market has grown from $56 billion in 1992 to over $142 billion currently (NARIET, 1997). The growth of the CMBS market has been equally sensational increasing from $10 billion in 1992 to nearly $100 billion in 1996 (Wratten, 1996) and is expected to grow another $30 billion in 1997 alone (Lehman Brothers, June, 1997). The cause of this growth can be attributed to many factors ranging from the capital crunch of the early 1990's to the changing investment preferences of many traditional real estate owners. This paper will focus on investor preferences and their resulting needs for information to make investment decisions.

There has been a shift in the goals and concerns of institutional investors in relation to their real estate portfolios. According to Fred Carr, a Principal of The Penobscot

Group, investors in the late 1980's were concerned primarily with pricing, liquidity and conflict (Carr, June, 1997). Institutional investors and their advisors had a difficult time determining an accurate value of privately held portfolios due, in part, to the many difficulties associated with appraisals including their "backward-looking" nature. Appraisals primarily use historical sales of comparable properties to assess the value of an asset. The inability to determine a value affected the liquidity of these investments, making the disposition of the assets very difficult, especially in a soft real estate market. The conflicts referred to by Carr appeared between the advisors and investors and can primarily be attributed to the compensation and investment structure of these ventures. In the private market, institutions typically invested capital into illiquid separate accounts which were managed by advisors, who were compensated with a percentage share of the total holdings of the account. This encouraged advisors to acquire and hold large portfolios for long periods of time without a personal concern for the ultimate return to the investor.

Many investors saw the securitization of real estate as the answer to the private market problems (Carr, June, 1997). According to analysts at A.G. Edwards & Sons, Inc. in St. Louis, public real estate securities offer investors "liquidity, instantaneous pricing and management expertise which is generally lacking in direct real estate ownership and the limited partner structure (Kerch, 1994, pN5)." The management structure of REITs has resolved many of the conflicts that existed between advisors and investors in private market investments. REIT managers often own shares of their company's stock, which helps to align their interests with those of the investors. In addition, with the market pricing the REIT on a daily basis "the valuation process is now open to all investors, instead of being vested in a few self-interested managers (Prigmore, 1997)" and relative liquidity has been brought to the real estate market.

Public market investment opportunities have made real estate once again a viable option for many investors who had liquidated their private portfolios.

One of the largest areas of growth potential for both sectors of the public real estate markets is the transfer of much of the institutional assets, that are currently privately held, to the public markets. There are a growing number of pension funds and insurance companies that are diversifying their real estate portfolios by purchasing public securities. Many of these investors are liquidating their equity portfolios by selling the properties to REITs and requesting stock and operating partnership units in the place of cash in the transactions. For example MetLife Realty recently handled a transaction in this manner with Beacon Properties (O'Boyle, 1997). Many insurance companies and other traditional owners of real estate loans are also expected to liquidate much of their holdings into the public markets through the securitization of their loans. However, "one of the main hampers on the enormous growth potential available to REITs through equity swaps for institutionally held properties has been the lack of property level disclosure (SNL, 1996, p11)." There are similar issues restricting this source of growth in the CMBS market. "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 (Wratten, 1996, p19)."

General Disclosure Issues

When making investment decisions, professionals want to know they are working with the most complete and accurate information available. This leads investors to continuously demand more and better information. However, it costs money to gather, quality control and report information. Additionally, much of the

information desired in real estate investments is personal and "non-public" or proprietary and considered a competitive advantage.

"Investors are demanding that servicers provide them with more detailed timelier information about the performance of transactions and the underlying collateral (Fitch, 1996, p1)." In exploring the causes for this "exploding demand for 'non-public' information" in the CMBS market "the most fundamental, and perhaps the most subtle, of these developments is simply the dramatically improved information analysis, processing and communication capacity of the entire industry (Pfeiffer, 1995, p2)." Now that the information is available and technology permits the manipulation and dissemination of it, the focus of the information distribution debate has shifted to other areas. First, issues of privacy and confidentiality must be addressed - *what information can be made available to investors?* Next, with public securities it is important to determine *who this information must be available to and how will it be disseminated* without breaking insider trading regulations. *Who is going to pay for the collection, management and distribution of additional information*? *When is the distribution of information detrimental to the competitive position of the company*? And finally, *how much is too much information for an investor*?

In the REIT market the primary focus of this thesis is on property level information disclosure. Regulations regarding how much information a REIT must disclose in its financial statements focuses specifically on corporate level financial data, and the materiality of the information to be disclosed. It is a REIT's discretion to determine how much property level operating information it wishes to disclose, however, all matters that are deemed material to an investors' ability to determine value must be presented. Additionally, a primary concern in disclosure issues is to make sure the information presented can not be considered misleading to the reader. Another important issue for REITs regarding regulations is to whom and in what manner

information must be distributed. Because of SEC regulations regarding insider trading these restrictions can be significant and detrimental to the company's ability to provide information to its investors.

"The relative importance of company-level and property-level disclosure is a matter of some debate in the REIT world (SNL, 1996, p11)." Most investors value a REIT primarily on its operating cashflow and the perceived ability of the management to grow this cashflow. "Others, however, insist that the ability to keep an eye on the performance of individual properties in various markets can tell one a great deal about a company's direction and its management's efficacy... (SNL, 1996, p11)." Property level information is often considered proprietary and the main concern is that it reveals important information to competitors. According to Donald Quinn (1997), an attorney with Goodwin, Procter and Hoar in Boston, there is significant time and expense involved for REITs to provide accurate property level information in their public financial statements. The primary problem is the strong penalty for a what can be considered a lack of disclosure. Real estate transactions, especially those involving multiple properties have an enormous amount of detail, therefore there is a concern about failing to provide any of these details. For example, providing lease expirations for each property could require significant footnotes to describe each extension, renewal or cancellation option for each tenant (Quinn, 1997). This concern can be a deterrent to REITs and act as a major contributor to their unwillingness to disclose additional detailed information.

In the CMBS market this thesis will focus on loan level information including details about the properties serving as collateral for the loans. These layers of information create more complicated issues. Servicers have a great deal of "non-public" information that has been gathered from the individual borrowers who's loans make up the securitized pool. There is an increasing pressure on these servicers from a

variety of directions to release more of this information. This pressure brings with it not only questions of who will absorb the cost of providing the data, but more critically who will accept the legal liability related to this issue. The current legislation regarding this subject is vague, leaving a great deal of room for interpretation and liability (Pfeiffer, 1995).

Why This Topic Is Important

It has always been difficult to measure real estate performance and value, however, in order for real estate to succeed in the public markets this will have to change. Real estate transactions are usually private and therefore obtaining accurate details is a formidable task. Even if this information can be obtained, the ability to use it to determine the value of other assets is involved because of the great differences between properties and transactions (Eagle, 1985). Now that real estate has entered the capital markets, operators must compete against other public securities in more established markets for each dollar they receive. This means their information disclosure standards are going to have to be par with those of other companies in these other industries. However, "unlike the more efficient stock and bond markets, the real estate market is characterized by a lack of a free flow of information... The absence of complete, accurate and reliable information is a classic example of an inefficient marketplace (Eagle, 1985, p47)." Convincing real estate practitioners to disclose accurate detailed information is a difficult task because most of them thrive on the opportunity to take advantage of the inefficiencies of the market.

If public companies are rewarded by the capital markets for disclosing more information, as indicated by Lang & Lundholm (1996) as well as Healy & Palepu (1993), more operators will give in to the temptation to do so. Once one operator gives in to this temptation in order to receive the financial rewards, the expectations

of investors will rise and there is likely to be a domino effect throughout the real estate market. If that does occur there could be significant and similar affects on the private investment community. There is also an argument that there is more of a need for asset specific information in public real estate securities than other public securities, because of dependence of real estate's value on the underlying market conditions. The underlying market has a tremendous impact on the ultimate performance of these securities. For this reason access to asset specific information could prove to be a necessity in a depressed real estate market.

The increasing availability of information from the real estate industry has not only had a significant impact on that industry, but has also spurred the development of what could be viewed as a whole new industry, data services. There are many third party real estate information providers that have surfaced over the past few years as more data has become available within the real estate industry. Continued disclosure by real estate professionals would create the opportunity for this market to develop into a thriving industry providing valuable resources to industry professionals. This third party information would also improve the efficiency of the market.

Chapter II: Industry Background and Literature Review

The intent of this chapter is twofold. First, it provides some background on the real estate industry and the role of the public markets, focusing especially on the development of REITs and CMBS. Second, it provides a summary of research on related topics in other industries that is used to develop an "Information Sharing" framework for the analysis of the data collected.

Industry Background

The real estate investment community commonly refers to commercial investment opportunities within a framework of four quadrants (see Figure 1).

	PRIVATE	PUBLIC
EQUITY	Direct Equity	REITs
DEBT	Whole Loans	CMBS

Figure 1: Four Quadrants of Real Estate Investments
Source: **Adapted from Wurtzebach Pension Real Estate Quarterly, Spring 1995**

The Public Equity quadrant includes publicly traded securities where the underlying assets are equity investments in real estate, the most common of which is equity Real Estate Investment Trust (REIT) stocks. Public Debt most commonly refers Commercial Mortgage Backed Securities (CMBS) in which investors can purchase certificates entitling them to specified cashflows from the underlying loans. Private Equity can refer to the direct ownership of real estate assets by individuals or institutions, commonly held in managed accounts or partnership vehicles. The Private Debt quadrant includes investment portfolios consisting of loans, which are normally held by the originator of the loan, often a commercial bank or insurance company.

Participants in each of the quadrants face similar issues regarding information disclosure. In the public, and often in the private, quadrants there are two primary participants, the investor who provides the funding for the venture and the operator who manages the day to day decisions affecting it. In REITs the operator is the management company, whereas in the CMBS deals the operator refers to the servicer. Assets are defined as buildings and other property owned, as well as, loans with real estate collateral. Operators in all four quadrants face difficult decisions associated with how much, and what information should be disclosed to their investors, especially in regard to asset level information. However, each quadrant has different attributes which make the relationship between investor and operator unique. Equity investors push for more information, while operators continuously try to keep as much as possible private and proprietary. Operators in the debt quadrants don't have the same ownership claim to the information their investors want. The sensitive operating information desired by debt investors belongs to the borrower not the operator. This creates a very different set of forces affecting the disclosure decisions. Equity investors in the public arena have different demands than those in the private one. Public investors have the benefit of daily market valuations of their investments, which affects their need for information from the operator. Private investors often have to rely on appraisals, which are known to lag actual market values. Appraisals are also known to be influenced by the operator's opinion of the value of the asset.

Different investment quadrants require distinct types of analysis to determine valuation opinions due to their diverse investment structures. Purchasing shares in a public equity investment is similar to investing in an open-end real estate fund, in which the company's assets are changing. In this case the primary force in determining the value of the share is the expectation of future cashflows, which is influenced by the ability of the people making the operating and investment

decisions. Public debt investments are more like a private closed-end fund in which the underlying assets are static and will never change. In this case the ability to accurately value the timing and amount of cashflow expected from each individual asset in the pool is vital. With debt investments there is only a downside risk, there is no upside potential because of the contractual nature of the cashflow.

This research paper will focus on the most common investments in the two public quadrants. Public investments were chosen because of the additional complexity of the disclosure decisions which is created by government regulations and public scrutiny, as well as, the constant change the market is experiencing in its growth stage. With the recent growth of the public markets there has been significant pressure on operators to disclose more detailed and accurate information. For this reason, it is likely that standardized disclosure practices will appear in the public markets before they reach the private one, if they ever do.

REIT History

Real Estate Investment Trusts (REITs) were developed to provide an opportunity for small individual investors to invest in real estate. REITs were "in effect serving as a mutual fund for real estate (NAREIT, 1989, p7)." There are three types of REITs which are differentiated by their primary investment strategies; equity, mortgage and hybrid. An equity REIT purchases real estate assets which it usually manages. A mortgage REIT focuses its capital on purchasing or providing mortgages to the real estate community, often in the form of construction loans. A hybrid REIT is one that has virtually equal holdings in each type of investment.

The current structure of REITs appeared in the late 1960's primarily in the form of equity REITs. According to the REIT Fact Book published by NARIET (1989), there

are seven primary characteristics of REITs that make them such a successful mode for real estate ownership.

1. Indefinite Life, like a corporation - unless otherwise specified.
2. Asset Flexibility - 3 types of REITs, Mortgage, Equity, Hybrid.
3. Limited Liability to investors.
4. Transferable Ownership in small denominations ($10-30/share).
5. Centralized Management under the supervision of board of directors or trustees, elected by shareholders.
6. Distribution of virtually all income as dividend.
7. Almost all of its capital invested in real estate assets.

The REIT market began in 1968 with $1 billion in total assets. The market continued to grow until 1974 when it peaked at $20 billion in total assets, comprised almost completely of commercial real estate mortgages. During this period, many of the REITs financed their growth with large amounts of debt, reaching common debt/equity ratios of 3.4 to 1 in 1974. That same year there was a real estate recession, which caused many developers, and other professionals the REITs had provided with financing, to default on their obligations. These defaults decreased the REIT cashflow to a point where they themselves defaulted on their loans and were unable to payout dividends to their shareholders. This sequence of events led to a crash in the REIT market, which stabilized at about $8 billion in total assets and debt equity ratios back at 1 to 1 in 1983, but did not experience significant growth again until the early 1990's when a new generation of REITs took Wall Street by storm. This new generation is different from its predecessor in that the REITs are "equity based with limited debt and provide a continual dividend stream and the potential for equity appreciation (Scherrer & Mathison, 1995, p38)."

During the early 1990's there was another real estate recession which lead to the disappearance of virtually all of the traditional capital sources to the market. At the same time many of the large holders of real estate assets were forced, by regulators and/or the market, to sell their portfolios in an attempt to avoid further losses. The state of the market required them to do this at a great discount to the replacement cost of the properties. This provided enormous opportunity for anyone who was able to raise capital to purchase these discounted real estate assets. Wall Street saw this opportunity and encouraged real estate owners and operators to take their companies public, in the form of a REIT, to tap the only significant capital source available and seize the opportunities in the market. This drove the sizable growth the REIT market experienced during that time. The considerable success of those REITs is the force behind the market's continued growth.

CMBS History

According to the Handbook of Mortgage-Backed Securities (1988), in 1989, 90% of all non-construction financing was to be provided by commercial banks, savings institutions and life insurance companies. After the real estate crash of the early 1990's, all of these institutions reduced their real estate lending to a near halt, either by choice or increased regulation. This capital crunch created the perfect opportunity for the growth of the CMBS market. However, to successfully exploit this opportunity there was still a significant learning curve that had to be overcome. At the same time the capital disappeared, the RTC appeared with volumes of loans that had to be sold quickly and could be sold at a significant discount. This opportunity allowed Wall Street to learn how to profitably securitize commercial loans, while being informally subsidized by the RTC.

Thomas Wratten (1996) defines three stages of development that have occurred in the CMBS market. The first was an eight year Design phase, during which the concept and basic format of commercial real estate securities was developed. The primary participants in this stage were life insurance companies, who worked with several of the top Wall Street firms. Approximately sixty five deals were conceived during this time. The next phase is defined as a three year Engineering phase which was devoted to the RTC loan pool dispositions. There were what could easily have appeared to be insurmountable obstacles (listed in Exhibit 1) facing the RTC when it turned to the capital markets for assistance in solving the mammoth task it faced. However, the timing and price was right for the RTC to receive the assistance it needed. By the conclusion of this phase there was a functional secondary market for commercial real estate mortgages, with some standards and support available to its participants. Wratten (1996) defines the present state of the market as the Manufacturing stage where the focus is on creating product and a more systematic approach to the process. During this time trade associations have begun to develop and the industry participants have become more of a community that is now focused on sharing ideas and creating standards.

The concept of mortgage backed securities (MBS) was originated with the securitization of residential loans and has developed into a thriving secondary market. The growth of the Commercial MBS market can be compared to that of the Residential market. In the first five years of their existence, both securities represented only 3.7% of the mortgages outstanding. With a twenty year head start, 50% of the loans in the $1.5 trillion residential mortgage market now end up in securitized pools. The commercial counterpart is catching up fast with 10% of the commercial loans already being securitized (CSSA Homepage, 1997). The implied guarantee provided by the government to the agencies securitizing residential loans has contributed a great deal to the success of the product. The commercial MBS

product doesn't have a payment guarantee like RMBS, therefore, the creation of an active secondary market has been slow. One solution to the lack of payment guarantee was the derivative pass through structure, CMO, which splits the cashflow of a mortgage pool into different "tranches" allowing the underwriter to assign different types of risk to the various tranches (Fabozzi, 1988). For example, the higher rated tranches receive their principal and interest payments as a first priority and additionally they receive all of the principal returned early, until their investment has been repaid. In this tranche the only risk investors face is prepayment risk, meaning their investment will be repaid before they earn their expected interest yield. Alternatively, the lowest tranches face significant default risk in that they are the first ones to lose their principal investment when any borrower in the pool defaults.

In accepting CMBS as a market that is here to stay, the Public Securities Association (PSA), a bond market group, has initiated discussions with the Securities and Exchange Commission (SEC) about revising the disclosure laws related to mortgage backed securities. In a letter sent to the SEC, the group expressed the opinion that the current disclosure regulations were created in the 1930's to protect investors who were purchasing a different type of investment. The group pointed out two major distinctions between Mortgage Backed Securities (MBS) and those which the regulations were designed for. The first is that MBS focuses on the security's structure and the underlying mortgages and collateral "rather than on the financial prospects of an issuer with an ongoing business (Staples, 1997, p6)." The second is the importance of the potential for and timing of future cashflows in the valuation process. The group also expressed the belief that "existing rules actually stand in the way of disseminating useful information to investors, both at the time of issuance and in the secondary market (Staples, 1997, p6)." The current law is unclear about the ability of servicers and originators to give investors access to the third party

information they require for their analysis, such as appraisals and environmental reports. This lack of clarity creates a great deal of potential liability which discourages the release of this information. The Mortgage Bankers Association also sent a letter to the SEC, supporting the sentiments of the PSA and recommending the creation of a Transaction Summary Report outlining the major details of the deal which would be released before the prospectus. This report is intended to be more user friendly and provide more timely information to investors. This could be of considerable value to investors, especially with the recent 30% decrease in the amount of time investors have to perform their due diligence prior to the issuance (Miles, Fidelity, 1997).

Information Sharing Framework

This section describes the framework developed to analyze the data collected during this research. This framework was developed through a combination of research that has been completed in many different industries related to the sharing of information. There are three primary areas that are explored, the forces for and against information sharing, the continuums of sharing and information and whether or not there is room for sharing within the industry.

Forces For and Against Information Sharing

Procedural justice is a theory exploring the reaction of individuals to a decision making process where they have a vested interest in the outcome, but no direct control over the decisions. Shareholders of REIT stocks, as well as, CMBS certificate holders are in this situation. Once they purchase the security, their investment is dependent on decisions made by operators, over which they have no direct influence. Procedural justice focuses on the effects of the decision making process on

the relationship between the parties. "The theory suggests individuals value just procedures because they provide a means of indirect control over a decision when direct control is not possible (Sapienza and Korsgaard, 1996, p547) ." Several previous studies have shown that procedural justice is positively related to "trust in a decision maker, commitment to a decision, cooperative behaviors and intention to remain in a relationship (Sapienza and Korsgaard, 1996, p547)."

Sapienza and Korsgaard (1996) found that in Entrepreneur-Investor relations it is vital for the entrepreneur to secure the investors' trust and support. A strong relationship with a well known and respected investor lends credibility to the venture. With the relatively small size of the REIT market it can be argued that this is an important factor in this market as well. The entrepreneur's primary concerns relate to the investors' degree of monitoring and their desire to contribute additional financing. Extensive detailed monitoring can be "oppressive" and costly to the entrepreneur, eventually leading to slower decision making and distractions from the primary business. Venture capitalists and entrepreneurs indicate problems can arise from the fact that operators provide less information than investors desire. However, sharing information can be detrimental to management because it diminishes the advantage that superior internal information can give them over the board of directors. The following Force Field Model (Figure 2) was adapted from the work of Sapienza and Korsgaard (1996). They identified the primary issues facing an entrepreneur in determining how much information to share with the investor:

	FRAMEWORK
Forces For Sharing	- Trust/Support - Avoid Excess Monitoring - Timely Access to Funds
Forces Against Sharing	- Cost - Sacrifice Info Leverage - Shake Investor Confidence

Figure 2: Forces For and Against Sharing Framework

In addition to the forces described above, there are other incentives for operators to share information. Firms have a great deal of flexibility in choosing the amount of detailed information they wish to disclose to investors, even within specified SEC reporting requirements. The study performed by Lang and Lundholm (1996) concluded that "firms can attract analysts, improve the accuracy of market expectations, reduce information asymmetries and limit market surprises by adopting forthcoming disclosure practices...theory indicates that such results may be associated with a lower cost of capital for firms adopting those strategies (p468) ." This could be a great incentive for firms to improve their disclosure to investors and analysts.

In this research the forces affecting information disclosure are explored through interviews with parties on both sides of the debate. Investors and analysts were asked about the effects of information sharing on their trust in management and how this trust affects their investment decisions. Operators were queried about their opinions on the importance of earning investors trust, as well as other forces that effect their information sharing decisions.

Continuums of Sharing and Information

There are two different continuums which are explored. The first is the sharing continuum which looks at who information is distributed to and how it is disseminated. To understand this continuum Vives (1990) framework of disclosure within trade associations is used. The second is the information continuum which explores how much information is disclosed. This discussion is based on the perceived need for asset level information for valuation decisions. In addition, it includes a comparison between the current philosophy that the valuation of the underlying real estate is not important to determine the value of a REIT's stock and Scherrer and Mathison's (1995) views outlined below.

There are two types of disclosure within trade associations identified by Vives (1990) which could be applicable to determining who to disclose information to in any environment. Associations practice either exclusionary disclosure, which limits disclosure only to members, non-exclusionary disclosure which provides anyone interested with access to its publications, or some combination of the two. In the trade association environment the type of disclosure chosen has a direct relationship with member participation. If an association practices non-exclusionary disclosure they often have a "free-rider" problem, where companies don't volunteer their information because they can get the benefits without having to sacrifice anything. REIT and CMBS operators also need to make a decision about who they are willing to make what information available to. Because REITs are publicly traded securities this is determined primarily by the SEC regulations regarding insider trading. CMBS servicers have more latitude in this area that brings with it opportunities and potential liability.

There is a significant debate within the REIT industry about investors' need for property level information as noted in the general disclosure issues in Chapter I. Many argue that proper valuation of a REIT can be completed simply through an evaluation of management and the company's earnings. However, others argue that to understand management's strategy and evaluate its validity, it is important to understand their individual investments. Scherrer and Mathison (1995) take this another step further by stating that all investors must be aware of the "fundamental economic base of the REIT, its management, management's strategies, cap rates, current space market, space market prognosis, and the value of the real estate owned by the REIT (p39) " to accurately assess the value of the stock.

There is not much debate about the importance of asset level information within CMBS pools, however, there is some question about the need for detailed property level information on the underlying collateral. This has lead to variances in what is provided and some disagreement regarding how much should be provided, and how often.

To understand this issue better various opinions about the level of information investors need and the added value they receive from any increases were explored through discussions with various parties in both markets. The sharing continuum is explored by understanding how regulatory restrictions and potential liability affect operators' decisions about whom they share information with.

Room for Sharing?

The real estate industry is known for the importance firms place on proprietary information. Historically there has been limited sharing of information within the industry. The only association able to create this type sharing in the private market

was NCREIF. This association faced many of the same challenges and triumphs as similar groups in other industries. Here the costs and benefits of information sharing between competitors on the industry as a whole are explored to determine if there is room within the real estate industry for the sharing of information.

"A large body of literature on credit markets has shown that asymmetric information may prevent the efficient allocation of lending, leading to credit rationing… (Pagano & Jappelli, 1993, p1693) According to Pagano and Jappelli (1993), the sharing of proprietary information between competitors within a market can *increase competitiveness, make the market more efficient, increase the number of transactions* in the market and have *policy implications*. An interpretation of how these effects could be graphically depicted is shown in Figure 3 below. In the residential mortgage market, they found that information was more likely to be shared when there was a heterogeneous pool of mobile borrowers in a large market where the cost of exchanging information was small. When a lack of information decreases the efficiency of the market, therefore increasing the cost of borrowing, only risky borrowers are willing to pay the premium and safe borrowers are priced out of the market. This is detrimental to all participants in the market and can be a strong motivation for sharing information.

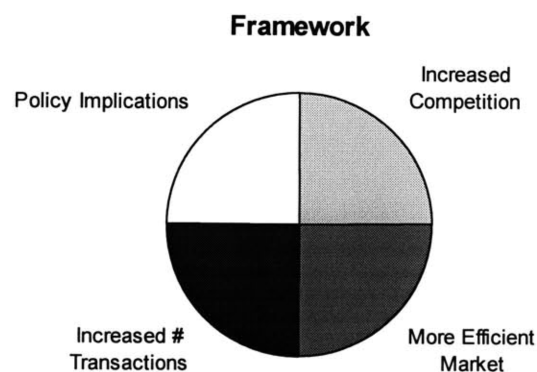


Figure 3: Room for Sharing Framework

There are positive and negative consequences to firms who participate in information sharing. Participating members receive more detailed and accurate information to make decisions with, however, at the same time they give that same information to their competitors jeopardizing their competitive position. "When a bank supplies information about its own customers to a competitor, in effect it is helping the latter compete more aggressively...This effect reduces the expected gain from information sharing and may deter banks from sharing information (Pagano & Jappelli, 1993, p1701) ." It is important to determine what industry players think about information sharing within the real estate industry. Their perception of the need for improved efficiency and the reality of the resulting decrease in the cost of capital is pitted against the affects of increased competition.

Prior to the explosion of the public markets into real estate, there was a single index used to gage the performance of real estate investments, this was the NCREIF Index. This index was developed in the 1970s due significantly to the efforts of Blake Eagle, who was with the Frank Russell Company at the time. During negotiations with a large pension fund to have them place 10% of their assets in real estate investments, the lack of an industry performance history and benchmark was brought to Eagle's attention as a deterrent for the investment. The managers of the pension fund were in a difficult position in submitting this plan to their investment committee because of their inability to present any type of performance history, or risk and return profiles, to the committee so they could compare the opportunity to others available. As stated by Eagle, this became the driving force in his quest to create such an index and "NCREIF evolved into the organization that deals with the standards of performance in the private market (Eagle, 1997)." Currently, "NCREIF has created all the standards that exist, from valuation to accounting. It has had a tremendous

impact on improving the technical and educational sides of the business (Miles, Fidelity, 1997)."

"Prior to the creation of NCREIF, nobody ever gave anybody anything (Miles, Fidelity, 1997)." This freedom allowed them to keep all of their information away from their competitors and prevented investors from holding them to any benchmark. This freedom was not only thoroughly enjoyed, but treasured. At this point, the only incentive these companies had to change the status quo was the need for the index to attract the billions of dollars from pension funds into the real estate market. This was enough of an incentive for fourteen institutional investment managers to agree to provide the data (Eagle, 1997). All of the information published by the index is done so on an aggregated basis providing anonymity to the individual managers and their assets.

NCREIF practices non-exclusionary disclosure because as a non-profit entity it must make all of its research public. This type of disclosure often discourages members from participating due to the belief that others will provide the information necessary, and that they can receive the benefits without disclosing their information. Eagle believes that this is avoided with the NCREIF index because the managers who do provide the information will make sure the public knows if someone who qualifies to be involved is not participating. "More aggressive companies would plant seeds of doubt in the marketplace, 'what do those guys have to hide' (Eagle, 1997)." The combination of these actions could be devastating for an advisor in their client relations and therefore deters the "free rider" philosophy.

It is clear that the sharing of information through NCREIF and the index had the effects on the industry described by Pagano & Jappelli (1993). The index has *increase competitiveness* by establishing a benchmark for real estate practitioners to compare

their performance against. A *more efficient market* was established, where standards for calculating returns became commonplace. There was an *increased number of transactions* due to the new capital flowing into the market from the pension funds. And the real estate industry avoided government *policy implications*, which were feared by many if the industry didn't initiate its own standards (Eagle, 1997). "However, you still can't get individual property data, unless you are buying a building from somebody and they are forced to release it (Miles, Fidelity, 1997)."

In understanding information sharing in the public real estate market one must explore the forces that affect the amount of sharing, the continuums that control the dissemination of the information and whether or not there is room within the structure of an industry for the sharing of information. The popularity of the public real estate markets is so new that many of these issues have yet to be explored and understood. There is documentation relating to some of these issues such as the need for changes in SEC regulations affecting CMBS and the past affects of insufficient disclosure within REIT public offerings. However, most of the information necessary to explore information sharing within the public real estate markets must be collected by discussing these concepts with people currently participating in the industry. They are the ones who will be responsible for shaping the standards of the future.

Chapter III: Data Collection/Methodology

This chapter will review the methodology implemented in gathering the data which is discussed later in the chapter. The methodology includes details regarding the number and types of interviews conducted and with whom, as well as the rationale for choosing the interview subjects. The data collected is presented, by security, within the framework described in Chapter II.

Methodology

In order to appreciate the complexity of this issue, it was important to gather most of the data for this research from interviews with people who are immersed in the process and have participated in trying to find solutions to many of these questions. Sixteen interviews were conducted in person and two were conducted over the phone due to scheduling requirements. All interviews lasted between one half hour and one hour, except for the phone interviews which were slightly shorter. Almost all face to face interviews were tape recorded and based on a specific set of questions that were used as a starting point (see Exhibits 4-7 for initial questions for the primary participants, investors and operators). Copies of direct references to interview conversations within this document were sent to the interview participants for verification.

There are many different positions involved in the public securities markets. In understanding the issues related to REITs, two *investors* who purchase REIT stocks and two *operators* who work for the companies that manage REITs were interviewed. There are also independent *analysts* who provide opinions of value for the REITs that they monitor. This includes private companies who sell this information and Wall Street firms who provide it as a service to their clients and as an in-house resource.

One private analyst was interviewed. Also interviewed was one *underwriter* who works with the REITs in preparing their public issuances. The CMBS market has even more roles as seen in Exhibit 2. There are two types of servicing roles, sometimes performed by the same company. The *master servicer* is responsible for "collecting payments and interacting directly with the borrowers" while the "*special servicers* manage defaulted mortgage loans and real estate assets that have been foreclosed on or otherwise taken back by the mortgage-holder (Fitch, 1996, p2)." One servicer, who works for a company that performs both servicing roles, was interviewed. In addition to the servicers, there are the *issuers/underwriters* and *rating agencies* who also play an important role in the structure of the security and the information to be collected and disclosed. Three people involved with the issuance and underwriting phase of CMBS were interviewed. Finally, there were two *investors* who purchase low and non-rated certificates who were interviewed. With both securities there are significant legal issues related to what information can/must be disclosed, as well as to whom and how it can be disclosed. Therefore, three *attorneys*, two specializing in CMBS and one specializing in REITs, were consulted. Finally there are industry groups for both of these markets, NAREIT and CSSA who have performed significant research in the area of disclosure, and will play an important role in setting standards in the future. Publications released by both of these groups have been purchased and reviewed, along with their web pages on the Internet. Additionally, annual reports, SEC filings, and prospectuses were reviewed for each of the REITs who participated in the research, as well as random samples from others in the industry. Prospectuses and private placement offerings were reviewed for four CMBS transactions, in addition to on-going reporting on current transactions. There were also three interviews conducted that did not fit into any of the roles discussed above. These people were chosen to provide insight into the development of information sharing in the private market. During the interviews it

was discovered that their vast experiences and expertise provided valuable information for other areas of the paper.

	REIT	CMBS
Investor	Jay Willoughby - AEW Robert Barringer - AEW	Mark Snyderman - Fidelity John Baczewski - AMRESCO
Analyst	Fred Carr - Penobscot	
Operator	Randy Parker - Beacon Kevin Mahoney - Cornerstone	Stacey Berger - Midland
Underwriter	Paul Davey - Lehman	MaryAnne Merola & Ian McColough - Salomon Tricia Hall - Lehman
Attorney	Donald Quinn - Goodwin, Proctor & Hoar	Brian Krisberg & Kevin Blauch - Latham & Watkins
General	Blake Eagle - MIT G. Daniel Prigmore - Brattle	Mike Miles - Fidelity

Figure 4: Interview List

The main focus of the interviewing process was to capture the viewpoint of industry participants on the issues related to asset level information disclosure. These interviews were intended to provide opinions and insights in various areas, versus conclusions in any one segment. Operators for REITs that focus on different property types will express considerable differences in opinion about what the most important issues are related to property level disclosure. Some property types, such as shopping centers, have very specific and proprietary leases which differ significantly between tenants, whereas multifamily operators are not as concerned about the privacy of their tenant leases because they are so standard. REITs investing in office buildings have been chosen because their concerns seem to lie somewhere in between. Similarly, CMBS investors within the various tranches have different concerns and information needs because of the different risk profiles of each type of investment. Low rated investors must focus on default risk, and therefore

need more property level and borrower information for each loan in the pool than those purchasing investment grade securities.

In choosing interview subjects there were many things taken into consideration. Proximity to the interviewer was a primary factor because of the desire for face to face interviews. Investors were chosen who manage large portfolios, therefore having significant influence on the operators. Operators were chosen who manage similar assets. The Servicer chosen is viewed by members of the industry as being on the forefront of disclosure practices.

CMBS

This section contains a review of industry trends and issues gathered from a literature review, as well as, interviews conducted by the author, presented in three parts. The *forces for and against sharing* opens with a description of the disclosure process, then moves to the forces for sharing that are similar to and different from the framework. The restricting forces are then discussed and identified as similar to the framework or different from it. The type of sharing and the reasons for it, are identified in the *continuums of sharing and information.* As is the position of the CMBS market on the information continuum which includes the issues that affect the disclosure of information and looks at all of the parties who are in need of this information. This section concludes with the issues surrounding the *room for sharing* of information within the CMBS market. This begins with a review of the market within the Pagano & Jappelli (1993) framework and ends with a discussion of the current standardization issues within the market.

Forces For and Against Sharing

The disclosure process is different in the CMBS market than the others referenced in this paper. There is no single company who determines what information will be disclosed to investors. Underwriters and servicers jointly determine what information will be collected and reported to the trustee, and investors, when they negotiate the Pooling and Servicing Agreement, the contract that binds the two together for each deal. This document identifies the information disclosure requirements from the borrowers to the servicer, as well as, from the servicer to the trustee (Merola, Salomon, 1997). It is also important to note that the servicer is indemnified in this agreement, meaning they are not responsible for litigation resulting from the disclosure of information required by this document. This agreement is re-negotiated for each CMBS transaction. Underwriters are directly influenced by the investors who purchase the certificates from them, which gives investors indirect influence on the disclosure decisions. The amount of this influence is dependent on the conditions of the market. If there is high investor demand for the product, regardless of the disclosure, investors who desire the additional information lose their influence.

Though the relationship between parties is very different in the CMBS market than that of the framework, some of the forces and results remain the same. All of the investors and underwriters interviewed indicated they have a higher level of trust for servicers who are forthcoming with the disclosure of information they possess. Servicers who volunteer detailed accurate information also appear to avoid excessive monitoring more than those who do not volunteer the information. However, trust is not expressed as a driving force in CMBS investment decision making (Snyderman, Fidelity, 1997). Of course investors feel more comfortable if they know the people involved in a deal, however, it rarely discourages them from investing. There is always a price at which people are willing to invest.

There was a recent blunder in the industry by Nomura who has been one of the largest originators of CMBS on Wall Street. Nomura included a loan in the pool which had already defaulted on a payment, which is against the rules of issuance. When the error was discovered, Nomura was forced to purchase the loan back, removing it from the pool. This action wiped out the interest-only tranche investors because their investment is dependent on the loans in the pool paying interest through the full term of the loan (Krisberg, Latham, 1997). If situations like this continue, it is likely trust in the underwriter will begin to play a more important role.

Both issuers and servicers agree the driving force in the servicers decision about what information to provide is the competition to satisfy the issuers requests, because the issuers are responsible for choosing the servicers for each of their deals. In determining which servicer to use "it is a combination of who you have a relationship with and the pricing, pricing will drive more than the relationship (Merola, Salomon, 1997)." The driving force for the disclosure of information in the CMBS market is monetary, compared to the relationship driven forces in the framework.

Another significant difference in the forces regarding information sharing between the CMBS market and the framework is the fact that the information servicers release is not proprietary to their business. Stacey Berger at Midland Loan Services described information disclosure as the primary responsibility of the servicing position. The servicer is the only one who has contact with the borrower and trustee, and therefore, is capable of transferring the information between the two. Thus, the primary force encouraging improved disclosure is competition. Disclosure practices can become a competitive advantage, helping servicers win more contracts. Midland views disclosure practices as the "single most important way to distinguish themselves (Berger, Midland, 1997)." Berger (Midland) also points out that investors

can be assured that if a servicer is spending a significant amount of time collecting, manipulating and distributing the information, they are likely to be using this information themselves, to improve their day to day decisions. As issuers and servicers jointly determine how and what information will be disclosed, Snyderman (Fidelity) expressed the opinion that issuers also have the opportunity to create a "brand name" for themselves by developing an "investor friendly" format that decreases the amount of time an investor must spend in order to determine a credit opinion. He currently tracks about seventy investments with an average of 150 loans in each, which adds up to an enormous amount of asset level information to collect and analyze.

The only restricting force that is similar is the cost of collecting and disseminating the information. Servicers absorb the costs to develop and maintain the systems necessary to providing the desired data at an acceptable speed. Most servicers have come to accept the fact that extensive on-line or Internet services have become a fundamental cost for them to do business (Berger, Midland, 1997). There is no disincentive for servicers to share information in relation to their competitive position, the information they are revealing belongs to the borrowers, not themselves. This removes the fear of sacrificing an informational advantage, as well as, concerns about shaking investors confidence, which are primary restricting forces in the framework. However, improvement in the presentation and organization of the information to investors could significantly decrease the amount of time necessary to value an investment opportunity. Midland has been a leader in setting the standards in their competitive environment. It was the first to adopt the CSSA-100 standard, as well as, the first to set up an on-line system for investors to have access to the data they require.

Another restricting force in the disclosure of information is the legal liability servicers face from borrowers. Due to the increase in disclosure by servicers over the past few years, there is the appearance that "most servicers have generally overcome the hurdle of any legal and liability ramifications in disclosing certain borrower- or property-level information to investors (Fitch, 1996, p6)." Though an initial deterrent to providing borrower information was the related legal liability, Berger (Midland) says that the competitive pressures have shifted the focus from possible litigation to obtaining a competitive advantage. The liabilities have not disappeared, however each servicer has to perform its own risk and reward comparison to determine what level of disclosure it will provide. Servicers have avoided many of the liability issues by not disclosing any identifying information with the loan and property information. For example, borrowers names are not included in the loan information and property addresses are not associated with any of the property operating information.

The forces responsible for making disclosure decisions in the CMBS market are represented in Figure 5. These forces are compared to those in the Information Sharing Framework discussed in Chapter II. As shown is Figure 5, many of the forces are the same. However, competition is a strong force in the CMBS market that was not recognized in the Framework. In the forces against sharing, only a concern for cost is common between the Framework and this industry. Due to the fact that the information being disclosed by servicers in the CMBS market is not proprietary to their business, there is little concern for sacrificing informational leverage or shaking investors confidence in their ability. Instead the most important force restricting the disclosure of information within this market is the legal liability.

	FRAMEWORK	CMBS
Forces For Sharing	- Trust/Support - Avoid Excess Monitoring - Timely Access to Funds	- Trust - Avoid Excess Monitoring - Competition
Forces Against Sharing	- Cost - Sacrifice Info Leverage - Shake Investor Confidence	- Cost - Legal Issues

Figure 5: Forces in the CMBS Market

Continuums of Sharing and Information

CMBS servicers practice exclusionary disclosure in that only current participants in a deal or legitimate potential investors have access to the information they provide. This information is available to all investors, though many never receive it because they don't know that it exists and/or how to get access to it (Hall, Lehman, 1997). The only thing affecting a servicers decision to disclose specific information is its legal and technical ability to do so.

The investors interviewed feel that the amount of information currently disclosed is sufficient and much more detail would be burdensome. They also expressed that this is a significant improvement from a few years ago. Snyderman (Fidelity) indicated that different types of securities require different levels of detail in the property information disclosed. Securities with cross-collateralized loans with a single borrower and multiple properties, as well as, deals where the loan is collateralized by a single property are those in which he looks for the most detail in the property level disclosure. A private offering circular was reviewed in which the securities being offered were collateralized by two mid-town New York office buildings. This offering circular provided a great deal more real estate property and market information than pooled loan securities, yet did not specify the on-going reporting requirements in the same fashion as the others. Property level data

provided by borrowers on non-performing pool deals, offers little useful information. It requires too much time to make any sense out of the data. Therefore, it is more important to rely on independent property analysis (Snyderman, Fidelity). However, access to the information when a need arises can be vital for an investor. This is far more important than having the information sent to them on a regular basis. In the larger pooled loan offerings, with over 100 properties a disk is often attached to the prospectus providing all of the loan level information presented in a spreadsheet format for the investor to analyze. Though property level information is often disseminated on a quarterly basis, both investors interviewed believe that an semi or annual review is adequate.

In determining what information is considered material for disclosure, Midland takes cues from the underwriters who have to follow the more demanding SEC disclosure requirements (Berger, Midland, 1997). For example, because the property addresses of the collateral securing the loans are not disclosed by the underwriter, Midland feels it is not responsible to disclose this information. The underwriter is responsible to the SEC which is much more demanding than the requirements governing the servicers..

Information disclosure is not only important to investors, but also to underwriters when they need to re-purchase or re-trade a deal and to the rating agencies. "On the 1993 deal that we did we have actually gone out, when we are trying re-trade things to facilitate the deal, and had a quick market study done. I can't get the information directly from the borrower, but I could have a third party go out and tell me how the property compares in the market. This makes investors more comfortable, because it is coming from a third party (Merola, Salomon, 1997)." As Tricia Hall (Lehman) recounts when she first began at Lehman Brothers, she was trying to get information as the underwriter on specific deals that were not doing well, in order to assist

investors who were frustrated and angry, and she couldn't even get people to return her phone calls because of a fear of insider trading. Both agree that these problems have decreased over the past few years with more detailed requirements in the documents with the borrowers and servicers.

The rating agencies play an important role in the securitization process for CMBS. The rating agencies determine the level of subordination required in the creation of the different classes. This is an important role because the subordination level determines the percentage of the pool which can be allocated to the investment grade classes, which sell at a much higher spread to the issuer than the lower levels. Many variables affect the subordination decision, primarily risks related to the make-up of the pool determined during the underwriting process. However, a new variable which is becoming more important is the rating of the servicers who will be responsible for managing the issuance. "The higher the special servicer's rating, the greater the reduction made to subordination levels (Fitch, 1996, p4)." There are many aspects the rating agency takes into account in determining the appropriate rating for each servicer. For example, Fitch looks at "the servicer's management team and overall organizational structure; operating history; loan servicing or asset management and disposition capabilities and methodologies, as appropriate; internal controls, policies, and procedures; information systems and reporting capabilities; and financial resources (Fitch, 1996, p3)."

CMBS servicers practice exclusionary disclosure, by providing access to the information only to current participants or legitimate potential investors. This information is important not only to investors, but also to the issuers and rating agencies. Investors need information to make buy and sell decisions as well as to determine the expected value of their investment. Issuers need the information to determine the value of certificates in order to re-purchase them from investors, who

have decided to sell their holdings, and to re-trade them. Rating agencies are responsible for determining the default risk of the offering in order to set the appropriate subordination levels for each of the tranches. Rating agencies also need the information to give ratings to the various servicers. CMBS servicers have moved a vast distance down the information continuum. Servicers provide all of the standardized information they receive from the borrower. There is no incentive for them to keep any of this information to themselves. However, details regarding the identity of a borrower or a property can give insights into particular circumstances, and this is information the servicers alone possesses. As the information received from borrowers has improved, the disclosure from the servicers has as well. However, there is some distance on the continuum left to be traveled.

Room for Sharing?

Information sharing in the CMBS market displays some of the effects described by Pagano & Jappelli (1993). Based on the interview data, these effects may be graphically depicted as in Figure 6. Information sharing does *make the market more efficient* by giving investors enough information to make decisions, and therefore *increasing the number of transactions* in the market. Information disclosure has *increased the competitiveness* between servicers in their quest for more business, because it has provided them with an additional means to differentiate themselves. Though information sharing has not had real policy implications on the CMBS market, the desire to improve disclosure has been a force driving industry groups, like the PSA, to request policy changes from the SEC.

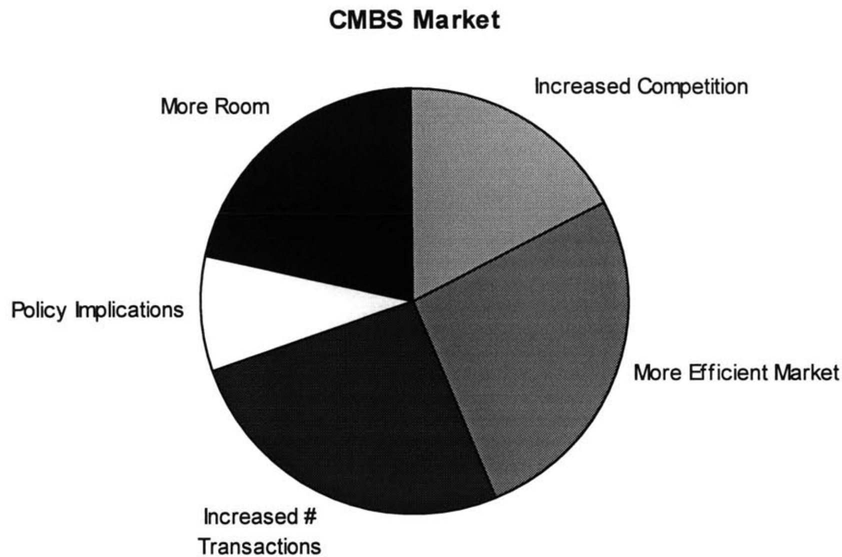


Figure 6: Room for Sharing in the CMBS Market

The continued acceptance and development of industry associations, such as the newly formed Commercial Real Estate Secondary Market and Securitization Association (CSSA), in which Snyderman (Fidelity), Hall (Lehman) and Berger (Midland) are all active participants, will create more room for sharing within the CMBS market. The association has focused much of its efforts on standardization throughout the industry, because of the belief that "standardization will lead to easier access and more dependable data, which in turn, will increase the liquidity of CMBS investments (CSSA, 1996)." The association has developed a computer file format referred to as the "CSSA-100" which is expected to become the standard for all CMBS reporting (Shown in Exhibit 8).

Some issuers are taking a proactive stance to create what Snyderman (Fidelity) referred to as a "brand name". For example, Hall (Lehman) has successfully organized an enormous amount of information in what she calls the Monthly Performance Report which is available for investors in Lehman Brothers CMBS deals.

This report provides a summary of the performance of each deal, with some historical references. There is no asset specific information in the book, likely due to the shear size it has already achieved. Hall (Lehman) begins each publication with a brief summary of specific events related to any of the deals and market updates. The June 1997 update is focused on helping investors locate the information they desire. "The educated investors can end up with more information than others (Lehman Brothers, July, 1997, p1)." In an attempt to level the playing field Hall (Lehman) maps out who has what information for each of the Lehman Brothers deals and how investors can access that information within each company. Additionally she lists all of the reports available, the information they contain and their intended purpose. Even with this level of assistance it is still difficult to access exactly what you are looking for and there is a significant learning curve in knowing how to identify the correct report from the right company to get the piece of information you need.

There is definitely room within this market for information sharing. There is no competitive deterrence and great deal of value to be gained. Through improved collection, presentation and distribution of asset level information the CMBS market has achieved many benefits and can move even closer to an efficient market. There is no reason for this market not to achieve all of the opportunities available through fully sharing information.

REITs

This section begins with highlights of the prominent issues discovered in a literature search of the REIT industry and interviews conducted by the author. The *forces for and against information sharing* starts with a review of how information is disclosed and what information investors use. After that, the principal forces for and then against the sharing of information are identified. The *continuums of sharing and*

information consider where REITs are on the sharing continuum and why, as well as, the primary issues surrounding where they stand on the information continuum. In *room for sharing*, the REIT market is reviewed within the Pagano & Jappelli (1993) framework, and major components of these results are discussed.

Literature reviews paint a heated battle between REIT operators and their investors fighting over what information should be disclosed. Beacon Office Properties, a Boston based REIT, was attacked by analysts and investors for a lack of information disclosure during its 1994 initial public offering. The lack of information lead some buy-side analysts to discourage clients from purchasing the stock (Vicour, 1994). Most REIT operators argued that the property specific level of detailed information investors are requesting is inappropriate and hinders the REIT's ability to successfully compete. However, many analysts argued that the information requested is so basic that it could be obtained by any knowledgeable commercial broker. From the interviews conducted it seems this battle has quieted considerably. The investors and analyst agree that since that time Beacon and many other REITs have significantly improved their information disclosure policies.

Forces For and Against Information Sharing

Investors are primarily concerned with whether or not they can get access to the information they need, far more than how it is given to them. There is significant variation in the level of disclosure by individual REITs, as well as, their procedures for disclosing the information. There is no standard format for what information should be given to investors, only that all relevant and material information must be made available. This information is disseminated through annual reports, press releases, standard SEC filings and often supplementary SEC filings. Though standard procedures aren't as important, the resulting trust is vital to the investment

decision. All parties, investors, analysts and operators agree that the amount of disclosure by a REIT has a definite affect on investors/analysts level of trust. "In the end you have to trust management (Barringer, AEW, 1997)." AEW views investing as partnering with management for at least some period of time. Fred Carr, of the Penobscot Group, agrees with the importance of trust in the investment decision. Investors expect REITs to provide information to analysts, if a REIT even appears to have "stonewalled" the analyst by refusing to give him information that he expected to receive, it can create a real public relations problem for that REIT (Carr, Penobscot, 1997).

The avoidance of excessive monitoring is a driving force for REITs to improve their disclosure policies. Much of the information gathered in the valuation process is done so in face to face meetings with the management of the REIT. Investors and analysts go to management with their own views and projections and ask management what they think. Management theoretically knows more about the markets than they do. To invest in REITs one needs the ability to evaluate people. This can be accomplished by asking questions about what has happened in the past, evaluating the management's history, and checking their reputation within the real estate community (Barringer, AEW, 1997). REIT investors who work in traditional real estate companies have a competitive advantage in that they can usually find someone who has worked with these people in the past. Barringer (AEW) also emphasized the value of asking people in the market who know what is going on about whether or not an acquisition was a good deal. "This business is an art that everyone applies as much science to as they can (Willoughby, AEW, 1997)." Investors and analysts will not hesitate to contact a REIT directly looking for information. Direct contact can be interpreted as monitoring for the purposes of this framework. The less a REIT discloses in its official publications the more it will be exposed to this type of monitoring. Additionally, if a REIT has inadequate disclosure

to the point of loosing the trust of the investment community, it is likely to be exposed to a greater degree of inquiry, by a larger number of investors, which could be seen as excessive monitoring. Being exposed to excessive monitoring could take an enormous amount of management's time, distracting them from their primary business, as noted by Lang & Lundholm (1996).

The final force for sharing information identified in the framework is the ability of a REIT to have timely access to funds (Sapienza & Korsgaard, 1996) and a lower cost of capital (Lang & Lundholm, 1996). Randy Parker at Beacon expressed how important it is to attract analysts because of the exposure they give the REIT to investors. It appears that a united front of investors and analysts demanding the same information would sway either of the REITs interviewed to disclose particular information. Lang & Lundolm (1996) identified *attracting analysts, improving the accuracy of market expectations, reducing information asymmetries* and *limiting market surprises* as benefits of forthcoming disclosure practices that can lead to a lower cost of capital. The REIT market has experienced all of these benefits with its improved disclosure practices over the past few years, and the access REITs have to various sources of capital has given them access to a lower cost of capital than other real estate organizations. There are examples of the relationship between disclosure and access to funds in public offerings that are held up because of a lack of disclosure. Westfield America, a retail REIT, recently had to revise its disclosure practices, delaying its public offering, because of investor demands for more information (Associate in the REIT Department at SNL, 1997).

There are two restricting forces identified by Parker (Beacon) and others, fear of shaking investor confidence and informational leverage. The first is the concern that information formally disclosed could be considered misleading to investors and, therefore, shake investor confidence. One example is capital expenditures, because

they tend to be "very lumpy" in that they occur unevenly over time, they are not released by Beacon on the property level and are only released for the portfolio on an annual basis. The other concern is competitive positioning which is a form of informational leverage. This shows up primarily in the lack of disclosure of property rent rolls. As Parker explains "in the real estate industry rent rolls have always been, probably, the most guarded thing for competitive reasons." This is leverage that the operator has not been willing to give up, and will not without some form of compensation, like a higher earnings multiple or lower cost of capital. Currently, the market is not willing to provide a high enough compensation. One operator expressed the belief that the market never will provide this compensation, because investors don't have enough of a need for that level of information to pay the price necessary to make that information available to competitors (Parker, Beacon, 1997).

Though not directly identified by the operators, the cost of providing property level information on big portfolios was noted as being significant by Donald Quinn (Goodwin). The time that would be required to prepare all of the information relating to the properties, in a fashion that includes all of the footnotes and disclaimers necessary to insure the information is not misleading, is enormous and time taken away from the management of the portfolio. This level of disclosure could be viewed as "excessive monitoring" and therefore, avoided by REITs which investors and analysts trust. However, what seems to be more important in the industry is the cost to the investors and analysts to sift through and analyze all of this information.

The forces responsible for making disclosure decisions in the REIT market are represented in Figure 7. These forces are compared to those in the Information Sharing Framework discussed in Chapter II. As shown is Figure 7, these forces are identical. The only difference, which is not displayed, is the importance of legal

compliance issues in the REIT market that are not present in the private venture capital markets. This concern for shaking investor confidence has been shifted from a concern based on the direct information presented, to a fear of providing information deemed as misleading by the SEC. The underlying concern is the same, a fear that investors will misunderstand information and develop concerns about the position of the company that are unwarranted.

	FRAMEWORK	REIT
Forces For Sharing	- Trust/Support - Avoid Excess Monitoring - Timely Access to Funds	- Trust/Support - Avoid Excess Monitoring - Timely Access to Funds
Forces Against Sharing	- Cost - Sacrifice Info Leverage - Shake Investor Confidence	- Cost - Sacrifice Info Leverage - Shake Investor Confidence

Figure 7: Forces in the REIT Market

Continuums of Sharing and Information

Using Vives (1990) framework to determine who information is disclosed to, and in what medium, is not as straight forward as one would expect with regard to the REIT industry. According to SEC regulations REITs must disclose all material information in a public form that would give everyone equal access to it. By all appearances, and all accounts, REITs fill this requirement by practicing non-exclusionary disclosure. However, there seems to be some point along the continuum where information is disclosed only to those people who specifically ask for it. If this information is determined material to the investor's ability to determine value, it will be publicly disclosed in a supplementary filing. If it is not, only that investor/analyst has that small piece of the puzzle. The importance of access to management seems to create a significant barrier to entry to investing in the REIT market.

REITs currently disclose very different amounts of information. Some REITs will only tell the public that they bought a certain number of buildings for certain price, while others give details of the cost of the purchase and the projected performance of the acquisition. Both REIT operators expressed the desire to stay at least at par if not ahead of their competition with their disclosure practices. Kevin Mahoney at Cornerstone expressed their desire to stay ahead of the competition in their disclosure, due in part to the nature of their portfolio. Cornerstone is a smaller REIT with eight very large assets. The impact of each asset to the overall performance of the company becomes much more significant than for a company like Beacon, with over one hundred assets. There is much more detailed information disclosed in the prospectus prepared for each public offering. Both REITs interviewed have recently released a prospectus, Beacon has gone to the public markets on a fairly regular basis over the past few years, and Cornerstone had its initial public offering in the US in March of 1997. Neither operator could comment regarding the continuation of this level of detail once they were in their normal business pattern and a prospectus is not regularly available.

A consensus opinion of the industry participants interviewed is that REITs are getting too big, with too many properties, for investors to determine their value on a property by property basis. There are over 10,000 properties in the 111 REITs that AEW follows. The marginal value received is not worth the extra time necessary to evaluate property level information (Barringer, AEW, 1997). REITs were designed to be the mutual funds for real estate. When evaluating a mutual fund investors don't underwrite each of the stocks in the fund (Willoughby, AEW, 1997). However, this assumes that REITs act as they were designed. Mutual fund investors don't need to underwrite each of the stocks because they are valued in the markets daily. Real estate investments don't have the same valuation and liquidity in the underlying

assets. Additionally, mutual fund managers do not manage the companies that they own, as REIT managers do (Prigmore, Brattle, 1997).

There doesn't seem to be any concrete answer as to where REITs are on either the sharing or information continuums. Due to the amount of personal interaction between major investors and analysts with the operators, the actual position of REITs on the continuum between non-exclusionary and exclusionary disclosure is not clear. The variation of disclosure between REITs, and the differences in detail between regular disclosure and that which occurs during public offerings, makes the location of the industry on the information continuum also unclear. The only consistent findings are that operators will tell everyone who asks the same information, therefore making it non-exclusionary, and that REITs are improving the quality and detail of their disclosure in the public offering documents. Both of these findings indicate that the REIT market is moving in the right direction and is influenced by demands from investors.

Room for Sharing?

The private market in the real estate industry has found that convincing owners to share detailed property level information is impossible. Though many benefits have occurred in that market through the sharing of aggregated information, there is still a reluctance of property owners to disclose details (Miles, Fidelity, 1997). It is not surprising to find the same reluctance by property owners in the public markets. However, the fear of releasing information that might be available to competitors is lessening, "REITs have found as they are disclosing things that it hasn't hurt them in the competitive environment and it has helped them in the capital environment (Willoughby, AEW, 1997)." This is creating more room in the industry for the sharing of information. "With the growing REIT industry there is a lot more

information available, people are starting to realize its not so bad to have this information available (Parker, Beacon, 1997)." "Status quo doesn't exist, the industry is constantly changing (Willoughby, AEW, 1997)." This means there are likely to be many more changes in the policies of REITs and the demands of investors.

Information sharing in the REIT market resulted in many of the effects described in the Pagano & Jappelli (1993) framework. These effects determined by the information gathered during the interviews conducted may be graphically depicted as in Figure 8 below. As information disclosure has improved there has been an *increased competitiveness* between REITs in their quest for investors' money. REITs have used better disclosure as a tool in fighting this battle. The *market is more efficient* with an *increased number of transactions*, meaning the REITs have accessed the public markets more often and there are more investors participating in the market. Their improved disclosure has made that access possible.

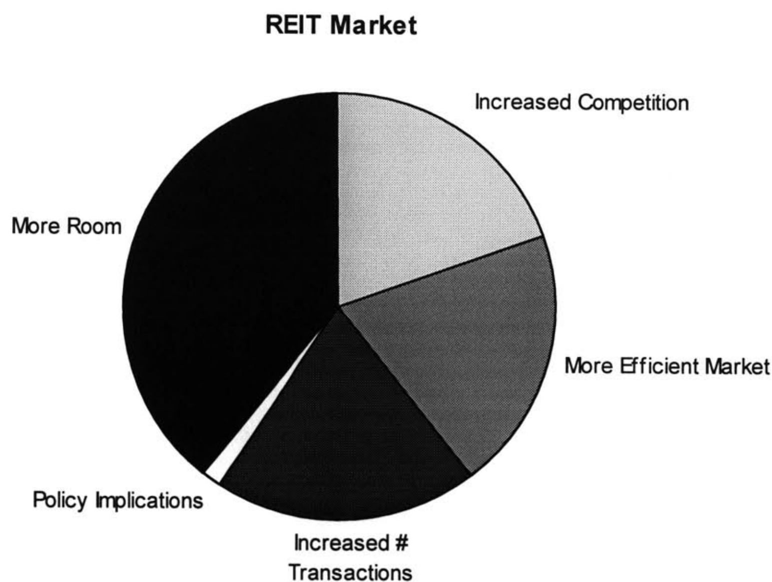


Figure 8: Room for Sharing in the REIT Market

There are still more benefits to be gained. The market is still very inefficient. This could be improved by continued advancements in the amount of information disclosed by REIT operators. These improvements could increase the number of transactions of stockholders trading REIT stocks, which would provide more liquidity to the market, again improving the efficiency. More disclosure would provide an increase in the competitiveness between REITs in their acquisitions and management of properties. If accurate, detailed information was available on a property level basis, not only could investors use it to determine the value of the REIT, but a potential buyer of the property could use it to determine a purchase price. This type of efficiency has never been seen in the real estate market and probably never will be. Most real estate practitioners enjoy the challenges and opportunities that arise from this inefficiency, therefore would never provide this type of information to the market, and they are the only ones who can.

Summary of Public Market Securities

Forces For and Against Information Sharing

The primary forces affecting information disclosure decisions in the public real estate markets (shown in Figure 9) are quite similar considering all of the differences between the securities. REITs are dominated by relationship forces. Investors and analysts make decisions based on the relationship and trust they have in the management of a REIT. As noted by AEW, investing in a REIT is like going into a partnership with them, "in the end you have to trust management (Barringer, AEW, 1997)." The CMBS market is driven far more by monetary forces. Issuers are encouraged to push servicers to release more information, because investors are willing to pay more for securities they feel confident they can value. Servicers are

willing to disclose more information because they need to in order to win contracts from the issuers.

	FRAMEWORK	CMBS	REIT
Forces For Sharing	Trust/Support Avoid Excess Monitoring Timely Access to Funds	Trust Avoid Excess Monitoring Competition	Trust/Support Avoid Excess Monitoring Timely Access to Funds
Forces Against Sharing	Cost Sacrifice Info Leverage Shake Investor Confidence	Cost Legal Issues	Cost Sacrifice Info Leverage Shake Investor Confidence

Figure 9: Comparison of Forces in the Public Markets

Though Figure 9 shows the restricting forces for REITs and CMBS as different, they are both affected by a strong legal force. This force is disguised as a fear of shaking investor confidence for REITs, but that fear is associated with legal responsibilities to make sure investors are not mislead by information disclosed.

Continuums of Sharing and Information

There is a significant difference between REITs and CMBS on the sharing continuum. CMBS servicers practice exclusionary disclosure, by providing access to the information only to current participants or legitimate potential investors. Where as with REITs, the considerable amount of personal interaction between major investors and analysts with the operators makes their actual position on the continuum between non-exclusionary and exclusionary disclosure unclear.

CMBS asset level information is not only important to investors, but also to the issuers and rating agencies, for this reason, servicers have been pushed harder down the information continuum than REIT operators have. Servicers provide all of the standardized information they receive from the borrowers. There is no incentive for

them to keep any of this information to themselves, whereas REIT operators are very concerned about making detailed information available to their competition. The variation of disclosure between REITs, and the differences in detail between regular disclosure and that which occurs during public offerings, makes the location of the industry on the information continuum unclear. There is some distance on the continuum still left to be traveled by both of the markets, though CMBS seems to be further down the path.

Room for Sharing?

There are significant differences between the two markets studied in this area. These differences are created by the competitive positions of the companies sharing the information. In the CMBS market there is definitely room for information sharing, because there is no competitive deterrence and great deal of value to be gained. The REIT market has a considerable competitive deterrence to sharing information, therefore there is less room. Both markets have the opportunities to receive the benefits outlined by Pagano & Jappelli (1993). There is no reason for the CMBS market not to achieve all of these benefits discussed in the framework which are available through full information sharing. However, the REIT market has significant barriers which are likely to deter it from achieving many the opportunities available from a more efficient market.

What Information Do Investors Want?

In addition to the data collected within the framework outlined in Chapter II interviewees shed light on another important topic, *what information investors want.* The following is intended to highlight specific examples of asset level information

investors desire, that they do not receive, that were identified during the interviews for this research.

Trying to satisfy investors' information desires is a formidable task. This is a difficult question because there are many different types of investors, with various backgrounds and goals for their portfolios. All of this leads to different information demands. In the CMBS market, "where one person may be satisfied with a certificate holder report, someone else may want the CSSA 100 file and additional reports that are available (Lehman Brothers, July, 1997, p1)." With REITs, some complain that "there is no sharing of detailed information (Miles, Fidelity, 1997)." Other REIT investors feel that the market is leading towards too much property level disclosure of property level information.

Robert Barringer, an investor at AEW, states that he doesn't want property level information, he feels that some REITs provide too much as far as building by building lease expirations. This is too much information to analyze, and it becomes overwhelming. The investors and analyst interviewed want consolidated property information, usually grouped by property type within each geographic market. Barringer (AEW) was very specific about the additional information he would like to see REITs disclose. He wants to be able to take net rent per square foot and multiply it by the total square feet in the portfolio, multiply it by the occupancy rate and come out with the net rent shown on the income statement. This will allow him to tie the cash from the income statement to the assets on the balance sheet and "calculate the net rent per square foot of the portfolio to determine if the company is in the ball park (Barringer, AEW, 1997)." Once rents per square foot have been determined investors are able to manipulate that number through internal and external market factors. In addition investors want the actual net rent at the time of expiration, not a straight line or gross rent. Miles (Fidelity), on the other hand, does want to see the

cashflow for every property. Miles (Fidelity) contends this information is available because REITs have audited financial statements for each property that provides the accounting income and cashflow, admittedly there are still a lot of top down expense allocations (Miles, Fidelity). This information would allow him to understand how each property relates to the portfolio and where the capital expenses are coming from. Miles (Fidelity) believes there is no incentive for REITs to release this information. "They don't do it, because most of the buyers out there don't want it, because they couldn't process it. If 80% of the buyers can't process the information, the last things they want is to give it to the 20% that could, because we would out-trade them." Another issue brought up by an investor is the format in which information is provided. In order to deal with the mass of information, if it were disclosed on a property level basis, files that could be downloaded, such as spreadsheets on the companies' web page, would assist the investors in their valuation process.

In the CMBS market servicers are working frantically to provide more information, but they seem to be providing the wrong information. Investors who were interviewed did not focus on what information is available, but on how to make it standard and easier for investors to find and analyze. Prospectuses provide good information, a valuable form of continuing information would be an update of the prospectus, such as tenant and lease information (Snyderman, Fidelity, 1997). Trade Associations in both markets are working to create standards for information disclosed to investors. They are focusing primarily on how the information is collected, manipulated and presented, more than what information should be made available. Servicers are working hard to provide property level operating statement to investors (Berger, Midland, 1997). According to Miles (Fidelity) these statements are often a year old and not much good without lease expirations. At Fidelity, "we usually value the properties at market rent, through lease comparables, and ignore

the operating statements (Miles, Fidelity, 1997)." This is done on a random sampling of properties, normally the top ten in value, then depending on the deal, they use different stratification methods to chose the other properties. Prigmore (Brattle), on the other hand, does want the most recent statement available so he can use it as a point of reference for comparison to how he feels the property is performing against its market potential.

Chapter IV: Conclusion

There are some broad trends that were discovered throughout this research which have interesting implications for the disclosure of information and the development of the real estate markets in general. There is a continued debate about the validity of valuing a REIT as an operating company versus a real estate fund. This valuation debate continues with the disagreement about whether or not REITs truly act as mutual funds, as they were intended, or if they are more like sector funds. This debate has strong implications for the survival of REITs during a declining real estate market. The CMBS issues appear to be far more clear cut. The industry is in the process of standardizing its information and the means for making it available. In both markets there are still important pieces of information that are being withheld to avoid possible liability issues. This withholding of information leaves the fears of selective disclosure alive and well. In order to maintain its growth, the real estate public markets may have to revisit current disclosure policies to attract new investors. Some of the means to explore this issue are discussed in the recommendations for future research.

Although, REITs are now accepted as operating companies by most professionals in the public real estate markets, other real estate professionals, not currently participating, in the market heed warnings to those supporting this trend. The continued growth in size of individual REITs is leading many to view property level information not only less important, but too labor intensive to report and evaluate without the proper tools, which are only in formative stages and still very expensive. Investors are currently valuing management and growth potential just like they would with any other public company. There is some hesitation from the real estate community to accept this trend. Contrarians argue that the value of management in other public companies is their ability to create a market for their product. For

example, Coca Cola trades at a much higher multiple than Pepsi, because the management is able to create a demand for its product that did not previously exist. There is no precedence in the real estate industry that anyone has ever been able to generate a demand for office space or any other type of real estate that does not already exist (Prigmore, Brattle, 1997). For this reason, there are practitioners who are unwilling to value REITs primarily on the ability of their management team and the corresponding expected growth of the company.

Though REITs were developed to provide an opportunity for small investors to invest in real estate, by "serving as a mutual fund for real estate (NAREIT, 1989, p7)", evidence suggests that this goal has not been achieved. Recent indications are that they are being used more by institutional investors seeking to make real estate investments without having to deal with property level issues, such as the inability of the market to value assets in falling markets There are two primary reasons this goal has not been achieved. The first reason is the barriers to investing in REITs that have been discussed earlier in this research. The amount of personal interaction necessary to reach a valuation decision about a REIT stock, makes it almost impossible for a small investor to participate in this market. Secondly, is the fact that individual REITs are not diversified. With almost 200 of these "mutual funds" in the market, virtually none of them are diversified enough to be a safe investment for an uneducated consumer. In this case, and many others, REITs are more like sector funds than mutual funds. Mutual funds contain publicly traded stocks which are each valued by the public market daily. REITs, on the other hand, contain illiquid assets which are very difficult to value. Sector funds invest in particular industries, such as technology stocks or gold. These investments are dependent on the health of the industry. If there is a crash in the technology industry, sector funds are going to feel the consequences quite differently than a mutual fund that holds technology

stocks. This perspective argues for the need to have the ability to get access to whatever information may be necessary at any point in time.

All of the conclusions determined from the interviews are reasonable assuming the real estate market remains strong. There are many other issues that are likely to arise should there be another real estate recession. When there is a question about the future, which creates additional risk, there is a need for more detailed information. Though REITs are getting bigger and the day to day need for detailed property analysis is not significant, a shock in any market or property type would create the need for access to detailed information about particular properties held by any individual REIT. If the need for office space declines significantly, reducing market rents, in a particular region or city, suddenly access to detailed lease expirations and other specific property information becomes vital. The REITs of the 1970's were unwilling, or unable given the technology of the time, to disclose the information necessary for investors to value their portfolios, which led to a crash that took the market more than a decade to recover. In situations such as this, perfect information should not be the priority. Any information that helps to put a piece in the puzzle adds value to a struggling investor. Having the systems and procedures in place to provide investors with detailed property information could be a saving grace for REITs if, or as some say, when, there is a downturn in the real estate market.

There is additional information in the CMBS market that could be made available to investors, such as property addresses, if servicers didn't have to worry about potential liability issues. As more information is being made easily available there is a lingering question regarding who has liability to the borrowers who have not approved the public disclosure of their operating statements. This question may be past us because the borrowers in the new issuances are aware that their loan will be securitized and that the disclosure requirements they have with the lender will be

passed through to investors. Additionally, servicers are now indemnified from these issues in the Pooling & Servicing Agreement. Currently, the borrower liability issue has been avoided because the information provided to investors doesn't have any type of identification, like a borrower's name or property address, attached to the data. However, this is information that many investors would consider valuable.

There are reasonable indications that the fear of selective disclosure within the public real estate markets is not unfounded. Inadequate disclosure has "led some industry veterans to focus attention on the potential for selective disclosure (Vicour, 1994, p50)." Even with the improved disclosure, many investors and analysts get most of the information they use to determine value from direct contact with REIT management, therefore, this is still a reasonable concern. Additionally, in the CMBS market, the information that is not made available to everyone, such as property addresses, is available to the special servicer, who often invests in the non-rated securities it services. Special servicers are often forced by the rating agencies to purchase these securities in order to align their interests in their servicing responsibilities, yet they are then working with information that other investors do not have. This has become an even more sensitive topic than borrower liability. These are further indications that the public real estate markets are still inefficient, due to the lack of free flowing information, "but that's not bad, because more people get to work in real estate because it is an inefficient market (Miles, Fidelity, 1997)."

In order to attract new investors and new capital to the REIT market, the operators may have to give in, as those first fourteen advisors did in the private market to create NCREIF, and disclose information they never dreamed of making public. By the time operators are faced with this decision it is likely the REIT market will have fewer REITs each with too many properties to make this viable. That change and an increase in the magnitude of the market may be enough to convince the investors

who are still on the side lines of the validity of the current valuation techniques. "What it comes down to, is evaluating the risks of any given company (Parker, Beacon, 1997)." In the end, operators say they will disclose whatever information investors need to do this.

There are several important concepts that would help in understanding the issues surrounding asset level information disclosure. The most important of which is the ability to determine what information investors want and when they want it. Technology will likely play an important role in this area, as it has in the past. A strong determinant of what information investors want is their ability to analyze it. There are several third party vendors developing products to assist investors in this process. If operators were able to give investors the information they desire in a format that would allow them to use some of these systems, their ability to productively use the information would improve significantly.

There are two additional types of people who could be interviewed to extend the breadth to this research. The first is potential investors to determine the reasons they do not currently invest in public real estate securities. The second is the rating agencies. Although, written publications by one rating agency were reviewed, additional perspectives could be discovered in face to face interviews. Another area of research that could help shed light on this issue would be to compare real estate public market disclosure to other public markets. For example, there are some similarities between CMBS securities and corporate bonds, yet "it takes probably three times longer to determine the value of CMBS offering than a corporate bond (Snyderman, 1997)." It would be interesting to determine what the differences are and if there is anything the real estate markets can learn from other public markets.

The Information Sharing Framework developed in Chapter II is a useful tool for analyzing the issues surrounding asset level information disclosure. Determining the primary forces supporting further disclosure, as well as those restricting it, is vital for understanding what industry changes can effect information sharing decisions. It is especially interesting to see how forces can effect the two securities differently. For example, competition is a primary driving force in the CMBS market and a strong restricting force in the REIT market. Ultimately, there are far more similarities than differences. The continuums provided a medium for discussing important issues, though it was less useful in offering conclusions. The variety of policies and practices within both securities markets created significant distortion when trying to determine the actual location of the markets on the continuums. The issues moderated in the room for sharing framework shed an interesting light on the discussion. In looking at both markets in this manner, it became apparent that there is simply more room for sharing in the CMBS market because of the lack of competitive pressures that are felt in the REIT market. This is likely a representation of the larger quadrants of investment each security belongs to. Companies in the equity quadrants have a more personal attachment to the information they are disclosing then do those in the debt quadrants. In the end, it appears that 20% of investors will always be looking for more information. These investors are convinced that the uniqueness of commercial real estate prevents the valuation of anything secured by it, without detailed asset level information. The relative youth of the real estate public markets leaves us without a definitive response, but many issues to ponder regarding the future stability of these securities.

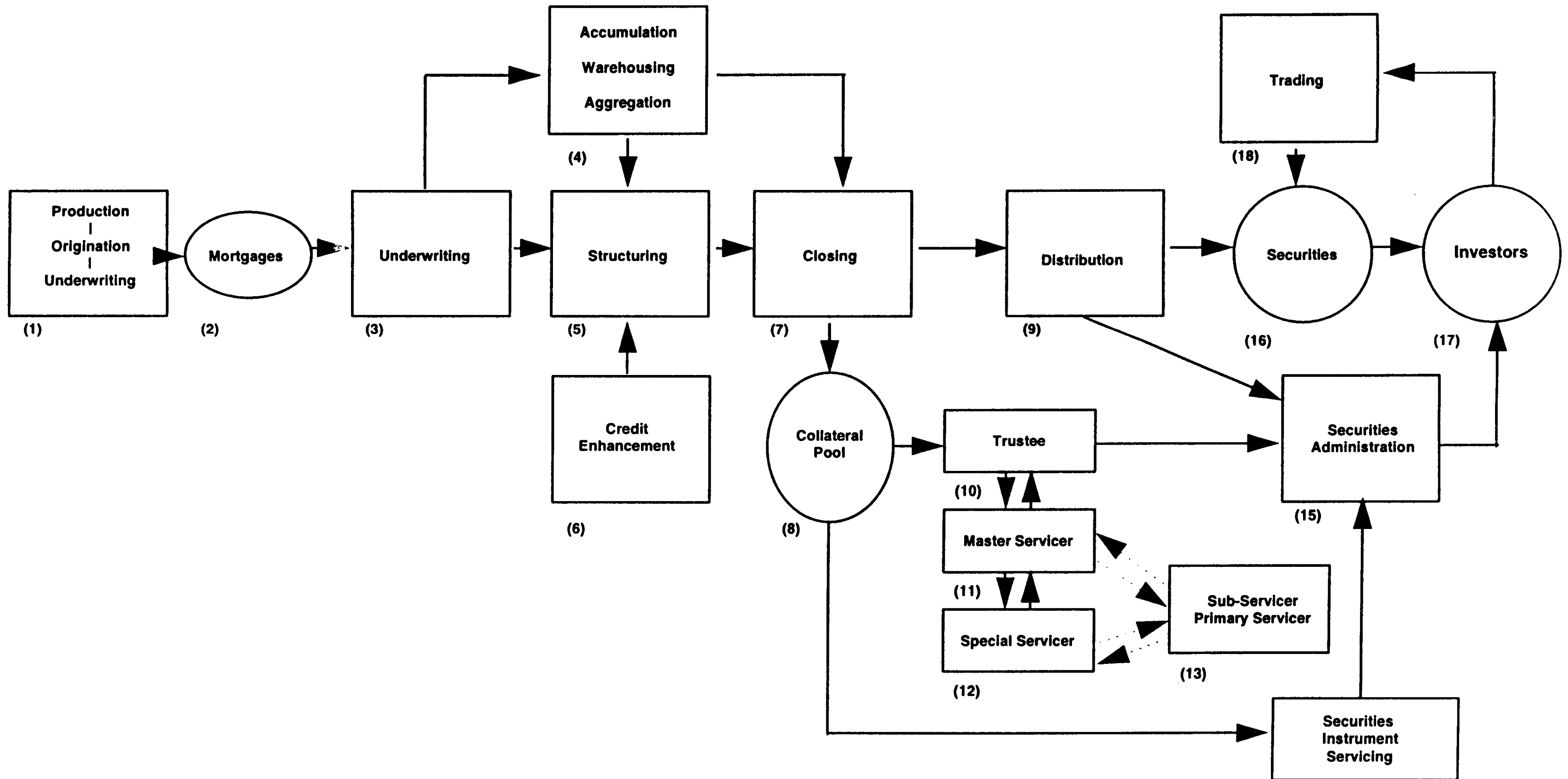
Exhibit 1
Obstacles Facing the RTC Liquidation

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 leadership, training, education, information and lobbying in the secondary markets for commercial real estate
- No information on costs, timing and expertise on any of the processes in commercial mortgage lending or 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

Source: "Introduction to Commercial Real Estate Secondary and Securitization Market" by Thomas Wratten October 1996

Exhibit 2
The Securitization Process



Source: Thomas F. Wr ıtten, "Introduction to Commercial Real Estate Secondary and Securitization Market" October 1996, Attachment 1, p22

Exhibit 3
Biographies of Professionals Interviewed

John J. Baczewski is the Managing Director of Business Development at AMRESCO Advisors in Boston, MA. He is a voting member of the investment committee which makes investment decisions on non-investment grade CMBS securities.

Robert C. Barringer is a Real Estate Securities Vice President responsible for covering the office, industrial and self-storage sectors of AEW's real estate investment trust stock universe.

Stacey M. Berger is a Vice President at Midland Loan Services in Washington, D.C. Mr. Berger has devoted a great deal of his time over the last few years, leading Midland in determining what information they should disclose and how it should be made available. He has also been a prominent member of the CSSA and instrumental in developing the CSSA 100 format.

Kevin C. Blauch is a Finance Partner at Latham & Watkins in New York, NY. Mr. Blauch advises issuers with their CMBS transactions.

Fredrick S. Carr, Jr. is a Principal of the Penobscot Group, Inc. which provides research on publicly traded real estate companies to institutional investors. Mr. Carr was previously with Aldrich Eastman and Waltch, LP where he held widely varied responsibilities.

Paul M. Davey is in the Investment Banking division of Lehman Brothers. There he advises and underwrites real estate clients hoping to become REITs. In addition, he advises current REITs interested in accessing the public capital markets for additional funding.

Blake Eagle is currently the chairman of the MIT Center for Real Estate in Cambridge, MA. Mr. Eagle was the founder of the Russell-NCREIF Index and is a Counselor Real Estate (CRE).

Tricia Brady Hall was hired by Lehman Brothers in New York, NY in 1994 to collect information on on-going CMBS portfolios which were experiencing very high default rates at the time. She is currently responsible for tracking and organizing information on all of Lehman Brother's CMBS deals. Ms. Hall has also been a prominent member of the CSSA and instrumental in developing the CSSA 100 format.

Brian C. Krisberg is a Finance Partner at Latham & Watkins in New York, NY. Mr. Krisberg has worked within many different areas of the real estate industry,

giving him a well-rounded view of the industry. Mr. Krisberg currently advises clients, like Salomon Brothers, on their real estate transactions.

MaryAnne Merola has been with Salomon Brothers in New York, NY for 14 years. She started in the Real Estate Finance Division, then moved to the Commercial Mortgage Finance Division in 1991 where she currently presides. Ms. Merola works primarily with large single asset real estate loans, many of which are later securitized.

Ian McColough works in the Commercial Mortgage Finance Division at Salomon Brothers in New York, NY were he deals primarily with the smaller conduit loans which are originated for securitization.

Kevin P. Mahoney, CFA, is a Vice President and the Treasurer of Cornerstone Properties in New York, NY. He is responsible for all treasury, finance, tax and budgeting functions within the company.

Dr. Mike E. Miles is the Director of Research for Fidelity's Real Estate Group. Dr. Miles has held teaching positions at four United States universities. He served as the immediate past president of the National Council of Real Estate Fiduciaries (NCREIF). Dr. Miles is currently the Editor of Institutional Investors' Real Estate Finance.

Donald Quinn is a Partner in the real estate department of Goodwin, Proctor and Hoar, a Boston, MA law firm.

G. Daniel Prigmore is a managing Partner at Brattle Advisors, LP in Cambridge, MA. He was the founder of FMR Properties, a joint venture between himself and Fidelity Investments which was later absorbed into Fidelity. Mr. Prigmore is a Counselor of Real Estate (CRE).

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Jay L. Willoughby, CFA, is the director of AEW's equity securities program, where he is responsible for managing portfolios of real estate equity securities on behalf

of the firm's clients. Mr. Willoughby has over 13 years of securities and portfolio management experience.

Exhibit 4
Interview Questions for REIT Investor

1. What is the size of your portfolio?

2. What asset specific information is currently given to investors?

3. How is it disseminated?

4. What additional asset specific information do you want? Why?

5. Is there any information that you get that you don't want or understand?

6. What asset specific information do you believe operators have that they do not release?

7. What do think are the driving/restraining forces affecting operators decisions about what information to disclose?

8. Who pays for the collection and distribution of information?

9. How important is information disclosure to you in determining your judgment about a REIT's management?

10. Have you sold, or chosen not to invest, in a REITs stock because of a lack of disclosure?

11. Do you feel REITs have improved their level of property specific disclosure?

12. If, so do you think this trend will continue? If not, do you think it will happen in the future?

13. Would you be willing to pay for additional information?

Exhibit 5
Interview Questions for CMBS Investor

1. What is the size of your portfolio?

2. What asset specific information is currently given to investors?

3. How is it disseminated? When?

4. What additional asset specific information do you want? Why?

5. Is there any information that you get that you don't want or understand?

6. What asset specific information do you believe operators have that they do not release?

7. What do think are the driving/restraining forces affecting operators decisions about what information to disclose?

8. Who pays for the collection and distribution of information?

9. How important is information disclosure to you in determining your judgment about a servicers ability?

10. Is a servicers ability a deciding factor in your investment decisions?

11. Have you chosen not to invest in a CMBS offering because of a lack of disclosure?

12. Do you feel there has been an improvement in asset specific information disclosure?

13. If, so do you think this trend will continue? If not, do you think it will happen in the future?

14. Would you be willing to pay for additional information?

Exhibit 6
Interview Questions for REIT Operator

1. What asset specific information is currently given to investors?

2. How is it disseminated?

3. What additional asset specific information do investors want? Why?

4. What information do they get that they don't want/understand?

5. What asset specific information do operators have that is not released?

6. What are the driving/restricting forces affecting operators decisions to disclose asset specific information?

7. Who pays for the collection and distribution of the information?

8. Under what conditions would you disclose additional property level information?

Exhibit 7
Interview Questions for CMBS Operator

1. What benefit do you receive from improving information disclosure to investors?

2. Who's information needs are most demanding? Investor/Underwriter/Rating agency

3. What asset specific information is currently given to investors?

4. How is it disseminated?

5. What additional asset specific information do investors want? Why?

6. What information do they get that they don't want/understand?

7. What asset specific information do operators have that is not released?

8. What are the driving/restricting forces affecting operators decisions to disclose asset specific information?

9. Who pays for the collection and distribution of the information?

10. What are the legal ramifications for disclosing borrower information to investors? Do borrowers know this is happening?

11. The amount of information servicers are willing to disclose has changed, is this due to a change in your legal position or competitive pressure?

Exhibit 8

Commercial Real Estate Secondary Market And Securitization Association

CSSA 100.1 Periodic Data Record Layout - Loan Level Only - Reflects Distribution Statements

Specification	Description/Comments
Acceptable Media Types	Magnetic Tape, Diskette, Electronic Transfer
Character Set	ASCII
Field Delineation	Comma
Density (Bytes-Per-Inch)	1600 or 6250
Magnetic Tape Label	None - unlabeled
Magnetic Tape Blocking Factor	10285 (17 records per block)
Physical Media Label	Servicer Name; Data Type (Collection Period Data); Density (Bytes-Per-Inch); Blocking Factor; Record Length
Return Address Label	Required for return of physical media (magnetic tape or diskette)

Field Name	Field Number	Type	Format Example	Description/Comments
Transaction Id	1	AN	XXX97001	Unique Issue Identification Mnemonic
Group Id	2	AN	XXX9701A	Unique Identification Number Assigned To Each Loan Group Within An Issue
Loan Id	3	AN	00000000012345	Unique Identification Number Assigned To Each Collateral Item In A Pool
Prospectus Id	4	AN	123	Unique Identification Number Assigned To Each Collateral Item In The Prospectus
Distribution Date	5	AN	YYYYMMDD	Date Payments Made To Certificateholders
Current Beginning Scheduled Balance	6	Numeric	100000.00	Outstanding Scheduled Principal Balance At The Beginning Of The Current Period
Current Ending Scheduled Balance	7	Numeric	100000.00	Outstanding Scheduled Principal Balance At The End Of The Current Period
Paid To Date	8	AN	YYYYMMDD	Due Date Of The Last Interest Payment Received
Current Index Rate	9	Numeric	0.09	Index Rate Used In The Determination Of The Current Period Gross Interest Rate
Current Note Rate	10	Numeric	0.09	Annualized Gross Rate Applicable To The Calculation Of The Current Period Scheduled Interest
Maturity Date	11	AN	YYYYMMDD	Date Collateral Is Scheduled To Make Its Final Payment
Servicer and Trustee Fee Rate	12	Numeric	0.00025	Annualized Fee Paid To The Servicer And Trustee
Fee Rate/Strip Rate 1	13	Numeric	0.00001	Annualized Fee/Strip Netted Against Current Note Rate To Determine Net Pass-Through Rate
Fee Rate/Strip Rate 2	14	Numeric	0.00001	Annualized Fee/Strip Netted Against Current Note Rate To Determine Net Pass-Through Rate
Fee Rate/Strip Rate 3	15	Numeric	0.00001	Annualized Fee/Strip Netted Against Current Note Rate To Determine Net Pass-Through Rate
Fee Rate/Strip Rate 4	16	Numeric	0.00001	Annualized Fee/Strip Netted Against Current Note Rate To Determine Net Pass-Through Rate
Fee Rate/Strip Rate 5	17	Numeric	0.00001	Annualized Fee/Strip Netted Against Current Note Rate To Determine Net Pass-Through Rate
Net Pass-Through Rate	18	Numeric	0.0897	Annualized Interest Rate Applicable To The Calculation Of The Current Period Remittance Interest
Next Index Rate	19	Numeric	0.09	Index Rate Used In The Determination Of The Next Period Gross Interest Rate
Next Note Rate	20	Numeric	0.09	Annualized Gross Interest Rate Applicable To The Calculation Of The Next Period Scheduled Int.
Next Rate Adjustment Date	21	AN	YYYYMMDD	Date Note Rate Is Next Scheduled To Change
Next Payment Adjustment Date	22	AN	YYYYMMDD	Date Scheduled P&I Amount Is Next Scheduled To Change

Field Name	Field Number	Type	Format Example	Description/Comments
Scheduled Interest Amount	23	Numeric	1000.00	Scheduled Gross Interest Payment Due For The Current Period
Scheduled Principal Amount	24	Numeric	1000.00	Scheduled Principal Payment Due For The Current Period
Total Scheduled P&I Due	25	Numeric	1000.00	Scheduled Principal And Interest Payment Due For The Current Period
Neg am/Deferred Interest Amount	26	Numeric	1000.00	Negative Amortization/Deferred Interest Amount Due For The Current Period
Unscheduled Principal Collections	27	Numeric	1000.00	Unscheduled Payments Of Principal Received During The Related Collection Period
Other Principal Adjustments	28	Numeric	1000.00	Unscheduled Principal Adjustments For The Related Collection Period
Liquidation/Prepayment Date	29	AN	YYYYMMDD	Date Unscheduled Payment Of Principal Received
Prepayment Penalty/Yield Maint Received	30	Numeric	1000.00	Additional Payment Required From Borrower Due To Prepayment Of Loan Prior To Maturity
Prepayment Interest Excess (Shortfall)	31	Numeric	1000.00	Scheduled Gross Interest Applicable To The Prepayment Amount
Liquidation/Prepayment Code	32	Numeric	1	See Liquidation/Prepayment Codes Legend
Most Recent ASER $	33	Numeric	1000.00	Excess Of The Principal Balance Over The Defined Appraisal Percentage
Most Recent ASER Date	34	AN	YYYYMMDD	Date ASER Amount Applied To Loan
Cumulative ASER $	35	Numeric	1000.00	Cumulative ASER Amount
Actual Balance	36	Numeric	100000.00	Outstanding Actual Principal Balance At The End Of The Current Period
Total P&I Advance Outstanding	37	Numeric	1000.00	Outstanding P&I Advances At The End Of The Current Period
Total T&I Advance Outstanding	38	Numeric	1000.00	Outstanding Taxes & Insurance Advances At The End Of The Current Period
Other Expense Advance Outstanding	39	Numeric	1000.00	Other Outstanding Advances At The End Of The Current Period
Status of Loan	40	AN	1	See Status Of Loan Legend
In Bankruptcy	41	AN	Y	Bankruptcy Status Of Loan (If In Bankruptcy "Y", Else "N")
Foreclosure Date	42	AN	YYYYMMDD	Date Of Foreclosure
REO Date	43	AN	YYYYMMDD	Date Of REO
Bankruptcy Date	44	AN	YYYYMMDD	Date Of Bankruptcy
Net Proceeds Received on Liquidation	45	Numeric	100000.00	Net Proceeds Received On Liquidation To Be Remitted To The Trust Per The Trust Documentation
Liquidation Expense	46	Numeric	100000.00	Expenses Associated With The Liquidation To Be Netted From The Trust Per The Trust Documentation
Realized Loss to Trust	47	Numeric	10000.00	Liquidation Balance Less Net Liquidation Proceeds Received
Date of Last Modification	48	AN	YYYYMMDD	Date Loan Was Modified
Modification Code	49	Numeric	1	See Modification Codes Legend
Modified Note Rate	50	Numeric	0.09	Note Rate Loan Modified To
Modified Payment Rate	51	Numeric	0.09	Payment Rate Loan Modified To
Preceding Fiscal Year Revenue	52	Numeric	1000.00	Preceding Fiscal Year Revenue
Preceding Fiscal Year Expenses	53	Numeric	1000.00	Preceding Fiscal Year Expenses
Preceding Fiscal Year NOI	54	Numeric	1000.00	Preceding Fiscal Year Net Operating Income
Preceding Fiscal Year Debt Service Amt.	55	Numeric	1000.00	Preceding Fiscal Year Debt Service Amount
Preceding Fiscal Year DSCR	56	Numeric	2.55	Preceding Fiscal Year Debt Service Coverage Ratio

Field Name	Field Number	Type	Format Example	Description/Comments
Preceding Fiscal Year Physical Occupancy	57	Numeric	0.85	Preceding Fiscal Year Physical Occupancy
Preceding FY Financial As of Date	58	AN	YYYYMMDD	Preceding Fiscal Year Financial As Of Date
Second Preceding FY Revenue	59	Numeric	1000.00	Second Preceding Fiscal Year Revenue
Second Preceding FY Expenses	60	Numeric	1000.00	Second Preceding Fiscal Year Expenses
Second Preceding FY NOI	61	Numeric	1000.00	Second Preceding Fiscal Year Net Operating Income
Second Preceding FY Debt Service	62	Numeric	1000.00	Second Preceding Fiscal Year Debt Service
Second Preceding FY DSCR	63	Numeric	2.55	Second Preceding Fiscal Year Debt Service Coverage Ratio
Sec Preceding FY Physical Occupancy	64	Numeric	0.85	Second Preceding Fiscal Year Physical Occupancy
Sec Preceding FY Financial As of Date	65	AN	YYYYMMDD	Second Preceding Fiscal Year Financial As Of Date
Most Recent Fiscal YTD Revenue	66	Numeric	1000.00	Most Recent Fiscal Year To Date Revenue
Most Recent Fiscal YTD Expenses	67	Numeric	1000.00	Most Recent Fiscal Year To Date Expenses
Most Recent Fiscal YTD NOI	68	Numeric	1000.00	Most Recent Fiscal Year To Date Net Operating Income
Most Recent Fiscal YTD Debt Service	69	Numeric	1000.00	Most Recent Fiscal Year To Date Debt Service
Most Recent Fiscal YTD DSCR	70	Numeric	2.55	Most Recent Fiscal Year To Date Debt Service Coverage Ratio
Most Recent Fiscal YTD Phys. Occ.	71	Numeric	0.85	Most Recent Fiscal Year To Date Physical Occupancy
Most Recent Fiscal YTD Start Date	72	AN	YYYYMMDD	Most Recent Fiscal Year To Date Start Date
Most Recent Fiscal YTD End Date	73	AN	YYYYMMDD	Most Recent Fiscal Year To Date End Date
Most Recent Appraisal Date	74	AN	YYYYMMDD	The Date Of The Latest Available Appraisal For The Property
Most Recent Appraisal Value	75	Numeric	100000.00	The Latest Available Appraisal Value For The Property
Workout Strategy Code	76	Numeric	1	See Workout Strategy Codes Legend
Most Recent Spec Service Transfer Date	77	AN	YYYYMMDD	Date Transferred To The Special Servicer
Most Recent Master Service Return Date	78	AN	YYYYMMDD	Date Returned To The Master Servicer
Date Asset is Expected to Be Resolved	79	AN	YYYYMMDD	Date Asset Is Expected To Be Resolved
Year Last Renovated	80	AN	1997	Year Property Last Renovated

Commercial Real Estate Secondary Market And Securitization Association
(CSSA 100.1 Periodic Data Record Layout)
Legend

Liquidation/Prepayment Code Legend	
1	Partial Liquidation (Curtailment)
2	Payoff Prior To Maturity
3	Disposition
4	Repurchase
5	Full Payoff At Maturity
6	DPO
7	Liquidation

Status of Mortgage Loan Legend	
A	Payment Not Received But Still In Grace Period
B	Late Payment But Less Than 1 Month Delinquent
0	Current
1	One Month Delinquent
2	Two Months Delinquent
3	Three Or More Months Delinquent
4	Assumed Scheduled Payment (Performing Matured Balloon)
7	Foreclosure
9	REO

Modification Code Legend	
1	Maturity Date Extension
2	Amortization Change
3	Principal Write-Off
4	Combination

Resolution Strategy Code Legend	
1	Modification
2	Foreclosure
3	Bankruptcy
4	Extension
5	Note Sale
6	DPO
7	REO
8	Resolved
9	Pending Return to Master Servicer
10	Deed In Lieu Of Foreclosure

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