

**SINGLE PROPERTY COMMERCIAL MORTGAGE-BACKED SECURITIES:
AN ANALYSIS OF THE COVENANTS**

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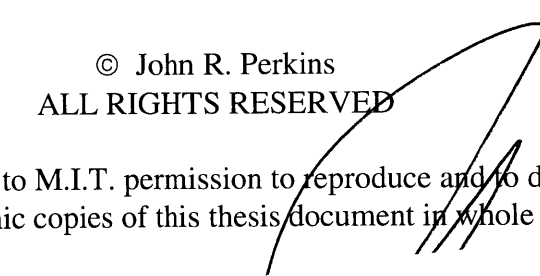
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Submitted to the Department of Architecture at M.I.T. on August 5, 1994 in partial fulfillment of the requirements for the degree of Master of Science in Real Estate Development.

ABSTRACT

This paper examines the covenants of single property commercial mortgage-backed securities (SP CMBS). The analysis of the covenants reveals the degree to which bondholder protection, beyond recourse to the asset, is found in this form of restriction. The thesis first presents a literature review of studies examining the role of bond covenants found in unsecured corporate debt agreements, and then offers a discussion of the factors affecting the issuance of SP CMBS securities. Chapter 5 presents the analysis of the findings.

Prospectuses and memoranda from 17 SP CMBS indentures are examined (14 from 1992-94 and three from 1985-86) and the covenants tabulated. The review of covenants offers a qualitative survey of this aspect of the SP CMBS instrument. A summary of each covenant is entered into the data base, facilitating the sorting and grouping of the covenant types found in each of the documents. The most frequently observed covenants are further tabulated and examined for their role in the agreements generally. They are then compared for variation and similarity of restrictions.

The findings show overall similarities in covenant structure common to both asset and placement type. When variation in the covenants are found, these tend to be concerned with investment in the secured property. Other variations include rights to expand and contract the property and rights of defeasance. In addition, certain SP CMBS issues contain covenants of the indenture which are not found in the majority of documents examined.

Thesis Supervisor: Professor Stewart C. Myers
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INTRODUCTION

This paper examines the role mortgage and indenture covenants play in the performance of single property commercial mortgage-backed securities (SP CMBS). Specifically the investigation focuses on the differences in covenants due to the type of property, the type of security and public vs private placement. The similarities and differences in the forms of covenants are analyzed. In addition, the ratings agencies' criteria for SP CMBS are discussed for their influence on underwriting standards and requirements for covenant-like restrictions in recent deals.

The analysis shows that private placements of SP CMBS securities issues done under SEC Rule 144A and in the European bond market have negligible differences in documentation from SEC registered, publicly placed issues. Though technically categorized as private, 144A placements seem designed to offer levels of marketability and liquidity that are equivalent to those of their public counterparts. By avoiding the registration process these private deals incur lower costs of issuance to the borrower. The relative standardization of documentation observed for public and private deals in the study supports this view.

The research also indicates that frequently occurring SP CMBS mortgage covenants that are most often tailored have to do with rights of expansion and contraction of the property, additional indebtedness and casualty. Less frequently occurring covenants are those pertaining to easements, management, special maintenance, defeasance and financial statements. These less frequent restrictions are included as a means of facilitating greater borrower flexibility.

The thesis is divided into five chapters, plus an introduction and conclusion. **Chapter 1** describes types of mortgage-backed securities and reviews related bond covenant research performed in the area of corporate bonds. This research is discussed for its relevance to SP CMBS covenants. The first paper, Smith and Warner [1990], is a qualitative analysis of the types and functions of corporate bond covenants. The second, Kahan and Tuckman [1993], focuses on the differences between publicly and privately placed debt using a sample of placements from 1986-90. Their findings indicate that private placements tend to have more restrictive, yet more easily renegotiated covenants. In the third paper, Asquith and Wizman [1990], quantify the effect of covenants to bondholders during leveraged buyouts. The chapter ends with a section on related research questions.

Chapter 2 is a general analysis of the development of CMBS market. The research for this section was completed using a review of the literature and through discussions with individuals involved in the origination and purchase of CMBS. It outlines an overview of the economic conditions in the real estate market during the early 1990's and discusses the institutional changes that stimulated the issuance and growth of this security. The last sections of the chapter look at the major participants in the CMBS market.

Chapter 3 begins the specific discussion of the SP CMBS instrument and uses a hypothetical example plus two recent publicly placed issues to develop an understanding of SP CMBS. The deals are examined as to cost of issuance, concerns for property type and non-covenant protective measures found in the indentures. A section on the legal envelope clarifies the features of single-purpose entity and bankruptcy remoteness. The last section is a description of the SP CMBS ratings process.

Chapter 4 gives an overview of additional concerns associated with SP CMBS. These are public vs. private placement, secondary markets, default risk, balloon risk and the process of real estate evaluation. Each is reviewed for the effects on covenants of the mortgage and the indenture.

Chapter 5 details the analysis of the covenants in light of the earlier framework presented in the paper. Frequently occurring covenant types are defined and analyzed for their role in the indenture. The survey of covenants is qualitative in nature and uses a tabulated format to outline the basic features of selected covenant types as they appear in all 17 indentures. The chapter also considers related, non-covenant restrictions that are found in SP CMBS indentures. Their presentation follows the format for the discussion of the covenants.

Finally, the conclusions summarize the findings of the paper and offer related questions for further study.

CHAPTER 1 MORTGAGE-BACKED SECURITIES & RELATED RESEARCH

1.1 Background

Commercial mortgage-backed securities (CMBS) are bonds secured by mortgages on income producing commercial real estate assets, and single-property commercial mortgage-backed securities (SP CMBS) are a "subset" of the CMBS market. Securitization converts one or more mortgage loans secured by real estate assets into marketable notes or bonds that can be sold to a range of investors. Specifically, a SP CMBS is backed by one commercial mortgage (usually in excess of \$40 million) on a single property. Cash flows from the underlying mortgage loan are used to create classes of securities which have different yields and risk profiles.

SP CMBS are becoming a competitive alternative to conventional debt for real estate. In the last five years, economic and regulatory pressures contributed to the decline in participation of life insurance companies and conventional mortgage lenders in providing loans for commercial real estate. Related to this change are risk-based capital requirements for life insurance companies, which took effect at the end of 1993 and have further reduced participation. As a consequence, the SP CMBS market has developed 1) as a means for real estate borrowers to access the capital markets for financing, and 2) in response to institutional investors wanting to hold real estate debt in the form of a security rather than as whole loans.

The concepts for securitization of commercial mortgages grew out of the activity in the residential mortgage-backed securities market. As a result, commercial mortgage

securities are issued in formats mirroring those of the residential market. SP CMBSs have characteristics that make them similar to both traditional commercial mortgages as well as to corporate bonds. As a placement of a single mortgage, SP CMBS require lender(s) to evaluate the risks associated with a single asset. Yet as bonds, SP CMBS facilitate the participation of multiple lenders in the financing of individual properties. The bonds are rated, as are other tradable debt securities, and the developing secondary market for SP CMBS provides liquidity to an asset type that previously had relatively little when compared to other investment classes.

1.2 Types of Mortgage-Backed Securities

As stated above, the bundling and securitizing of commercial mortgages, or pooling, is an outgrowth of similar activity in the residential mortgage market. The growth of this market in the 1980's fostered the creation of a number of mortgaged-backed instruments. The following descriptions of four types of mortgage-backed instruments are meant to give the reader an understanding of the securities currently in use. A matrix of the investment characteristics for each of the following types is found in Appendix A.

Single property securities are not all issued in the same format. As with pooled securitized mortgages, SP CMBS can take several forms. The following discussion sketches the basic characteristics of the mortgage-related securities in use. Most often SP CMBS are issued in the form of mortgage pass-through securities and collateralized mortgage obligations. They are both described below.

1.2.1 Mortgage-Backed Bonds. Mortgage-Backed Bond (MBB) are used primarily by private mortgage originators such as mortgage companies and commercial banks as a means of replenishing funds for the origination of new mortgages. Issuers of MBBs establish a pool of mortgages and in turn issue bonds to investors. This issuer retains ownership of the mortgages, though they are pledged as security and placed in trust with a third party trustee. The trustee guards that the provisions of the bond agreement are followed. Characteristically MBBs are issued as fixed rate coupon notes. Complete and timely payment of interest on the bonds is ensured by "overcollateralizing" the dollar value of the outstanding loan balances relative to the value of the bond issue. As an example, a bond issuance of \$100 million may be backed by a pool of \$175 million in mortgages. The range of overcollateralization is anywhere from 125% to 240%. Additional credit enhancements are sometimes added to ensure full and timely payment.

1.2.2 Mortgage Pass-Through Securities. Mortgage Pass-Through Securities (MPTs) are an outgrowth of the 1968 mortgage-backed guarantee program initiated by "Ginnie Mae" (GNMA).¹ It was enacted to allow mortgage-backed bonds to compete with corporate bonds in the investment markets. Though GNMA could not solve the problem of prepayment risk² inherent in residential mortgage loans, it guaranteed the timely payment of interest on residential mortgages, thereby eliminating default risk on these loans. Thus the securities issued against these mortgages carry the "full faith and credit" of the U.S. government behind them.

¹The Government National Mortgage Association (GNMA) was created in 1968 under the Housing and Urban Development Act. GNMA provides special assistance, management and liquidation functions for dealing with subsidized mortgage purchases for federal housing programs.

²Prepayment risk refers to the risk in mortgage securitization of early payoff by the mortgagor(s) of the underlying mortgage(s). This has the effect of shortening the duration of the security.

The Pass-Through represents a fractional undivided interest in the "corpus" of a trust containing a fixed pool of mortgages backing the security.³ Because of this, the MPT represents an *equity* ownership interest in the mortgage pool as opposed to a debt obligation of the issuer. Using the trust, the cash flow from the mortgages is "passed through" by the trustee to the certificate holders on the payment schedule of the mortgages. The purchasers of the pass-through securities pay taxes as though they hold the mortgage directly. Privately issued pass-throughs began in 1977.⁴

1.2.3 Mortgage Pay-Through Bonds. A third type of mortgage-backed instrument is the Mortgage Pay-Through Bond (MPTBs). This security is described as a hybrid having the characteristics of both the MBBs and the MPTs⁵. These are bonds (debt obligations of the issuer) which are the general obligation of the issuing entity and usually have terms of five to ten years, and most typically are originated by private sector firms. Typically, the issues of MPTBs are overcollateralized. This overcollateralization is favored by institutional fixed-income investors such as pension funds, bank trust departments and general fund managers.⁶

Pay-through bonds supply a cash flow to the issuing entity. Unlike pass-through certificates, the cash flows for MTPBs are not dedicated to the payment of the bonds, but are instead paid directly to the issuer. The issuer, in turn, is obligated to make the payment on the outstanding bonds. In this regard, the MPTB instrument is similar to corporate bonds--they have a stated maturity, semi-annual interest and no agency/government guarantee. One of the significant (cosmetic) benefits of the MPTB to

³Brueggeman, William B., Fisher, Jeffery D., Real Estate Finance and Investments, Ninth Edition, Irwin, Boston, MA, 1993, p.730.

⁴Richards, David Alan, "'Gradable and Tradable': The Securitization of Commercial Real Estate Mortgages," *Real Estate Law Journal* [Vol. 16: 99 1987], p. 105.

⁵Brueggeman and Fisher, [1993], p.757.

⁶Richards, [1987], p. 106.

institutions holding real estate mortgages is the ability to liquidate low-yielding loans without writing off potential capital losses--the issuer keeps the ownership of the mortgage loans that are providing the collateral.

1.2.4 Collateralized Mortgage Obligation. The fourth type of MBS considered here is the collateralized mortgage obligation (CMO). The CMO is in essence a pay-through bond divided into multiple tranches. Typically, a CMO consists of a four tranche structure. The interest is distributed on each payment date to all classes of bonds. The principal, in contrast, is usually paid first to the most senior class of notes until paid off. Then the next class is paid its principal until paid in full, and so on down the line. The last tranche, the "Z" piece receives principal and interest payments only after all other classes have been satisfied.

1.2.5 REMICs. A final note concerning MBS deals with the tax entity known as a real estate mortgage investment conduit (REMIC). Until the adoption of the REMIC category for the holding of real estate mortgages, the demand for CMOs was constrained by tax regulation, which did not allow passive trust status to an entity issuing multiple classes of divided ownership interests in assets such as mortgages or the cash flow from a pool of assets.⁷ This made the CMO vulnerable to taxation both at the issuing entity level and at the investor level. The Internal Revenue Service considered the CMO multiple tranche structure with the issuer's retained equity piece to be too similar to that of a corporation's issuance of debt. This made the CMO's passive investment status questionable.⁸

REMIC legislation was passed as a part of the 1986 Tax Reform Act. Its purpose is to allow the issuer of mortgage-backed securities some flexibility in managing the mortgages

⁷Richards, [1987], p. 109.

⁸Brueggeman and Fisher, [1993], p. 790.

and their income. In essence, the choice of REMIC tax status by the issuing entity enables the trust to have a passive⁹ status relative to the flow of income from the mortgage to the security holders. In addition, REMIC structure allows financing done through this vehicle to be treated as sale of assets for tax purposes. Because of this, the issuer may decide to form a REMIC to offer either a sale of assets or collateralized debt. Further, the REMIC may be organized as a corporation, association, trust or partnership.

⁹Passive here refers to income or loss from a business where the investor does not materially participate in the management or operation of the property.

1.3 Related Research--Corporate Indentures

This section of the chapter briefly presents three relevant studies of corporate bonds and outlines the findings and conclusions associated with each. Much of the existing evidence concerning debt covenants comes from the investigation of corporate bonds. Further, the research done in the area of bond covenants for unsecured corporate debt offers an instructive parallel for the study of covenants in SP CMBS secured debt. They are discussed here specifically to determine a framework for our study of covenants governing SP CMBS.

1.3.1 Unsecured Corporate Bonds. In the unsecured corporate bond, covenants are the mechanism for restricting shareholder and management actions that may conflict with bondholder interests. Shareholders and bondholders each holds a stake in the value of the firm, and the value of those claims are in part dependent upon the actions taken by the firm's management. In addition, the management is charged with maximizing the total value of the firm--debt plus equity--through its decisions. Conflicts arise out of the differences in incentives and expectations associated with each entity, and the existence of bond covenants specifically serve to protect the bondholders' claim against competing actions of the management and shareholders.

An example of this conflict is a firm having outstanding debt, that chooses to liquidate its assets to pay out dividends to the stockholders. The result is a lowering of the firm's value and a subsequent loss to the bondholder claim. Additional sources of the conflict arise from claim dilution, asset substitution and underinvestment. Given these sources of conflict, their effective management through the covenants should increase the total value of the firm.

1.3.2 Smith and Warner [1990]. The analysis of bond covenants as a determinant and predictor of bond performance is addressed by Smith and Warner [1990]. Their paper qualitatively examines the bond covenants for unsecured corporate debt. They find that privately placed debt agreements contain more detailed restrictions on a firm's behavior than do public issues.¹⁰ Their findings also indicate that private corporate issues tend to be done for riskier debt than do the public counterparts. Central to both of these findings is the observation that direct placements and private placements allow the enforcement of these more detailed and restrictive covenants without an intermediary trustee.

They divide corporate bond covenants into four categories:¹¹ These categories, as will be shown later, roughly correspond to those for SP CMBS mortgage covenants.

- Production/investment covenants
- Dividend covenants
- Financing covenants
- Bonding covenants

Finally, Smith and Warner discuss two theories are offered as to the value derived from the covenants and their effect on the total value of a firm. The first is the Irrelevance Hypothesis and the second is the Costly Contracting Hypothesis.¹²

Under the Irrelevance Hypothesis, controlling of the bondholder-stockholder conflict does not change the value of the firm. In contrast, the Costly Contracting Hypothesis states that control of the bondholder-stockholder conflict through restrictive covenants can increase the overall value of the firm. From this point of view, the presence of covenants act to lower the costs associated with monitoring the actions of the stockholders. As an

¹⁰Smith, C.W. Jr., and Warner, J.B., *Analysis of Bond Covenants, The Modern Theory of Corporate Finance*, McGraw-Hill Publishing, New York, 1990, p. 200.

¹¹Smith and Warner, [1990], p. 174.

¹²Smith and Warner, [1990], p.170-1.

example, the presence of covenants reduces the loss to bondholders resulting from the a firm with outstanding debt investing in risky projects. To the detriment of the bondholders, the risky projects may increase the value of the equity while decreasing the value of the debt. Further, financial contracting is assumed to be costly, but these costs are assumed to be outweighed by the benefits of the bond covenants to the noteholders.

1.3.3 Kahan and Tuckman [1993]. Kahan and Tuckman [1993] investigate the differences found in public and private corporate debt covenants. Their paper compares the terms of 63 privately placed debt agreements with those found in public bond indentures. The findings indicated that, "(1) private corporate debt agreements require more monitoring and more frequent re-negotiation. (2) Private agreements provide lenders with the means to monitor borrowers more carefully. (3) Private agreements attempt to control *intra-claim conflicts* (arising between noteholders of the same bond issue). (4) Private agreement payment terms are tailored to suit the asset-liability management needs of lenders by avoiding embedded interest rate options."¹³

Their study is relevant for its investigation of differences in covenant structure due to placement type. As with the other studies cited here from the research of corporate indentures, Kahan and Tuckman look at unsecured debt. The analysis indicates that placement type affects covenant structure. This by extension should be observable in SP CMBS covenants of publicly and privately placed issues.

¹³Kahan, Marcel and Tuckman, Bruce, 1993, "Private vs. Public Lending: Evidence from Covenants," working paper, Batterymarch Finance Seminar, Sloan School of Management, abstract.

The Kahan and Tuckman sample of corporate indentures--from 1986-1990--predates the adoption of SEC Rule 144A.¹⁴ In contrast, 14 of the 17 SP CMBS prospectuses examined in this paper are from the time period following the rule's adoption. Subsequent to the adoption and use of Rule 144A, a type of private placement resembling public transactions has developed in the debt markets. Effects of this difference in time frame are discussed in Chapter 4.

1.3.4 Asquith and Wizman [1990]. Asquith and Wizman [1990], in "Event Risk, Covenants, and Bondholder Returns in Leveraged Buyouts (LBO)"¹⁵ examine the relationship of certain covenants to bondholder/shareholder wealth transfers present in corporate buyouts. Building on the evidence that bondholders suffer significant losses in LBOs, Asquith and Wizman argue that some of the observable shareholders' gains are attributable to bondholder losses. Their findings suggest that on average LBOs decrease pre-buyout bondholders' wealth by 2.8%. Their paper also suggests that bondholder losses are mitigated by covenant protection. Bonds containing certain covenants protecting against increases in leverage or reductions in net worth experience significantly smaller losses than do their unprotected counterparts. Asquith and Wizman further demonstrate that wealth transfers from bondholders to shareholders explain only a small fraction of the total stockholder gains experienced in LBOs.

1.4 Related Questions

The corporate bond parallel to SP CMBS placements is partially instructive. Yet it should be noted that some corporate indentures do have a secured form often found in utilities'

¹⁴Rule 144A refers to a Securities and Exchange Commission (SEC) rule allowing the sale of unregistered securities among qualified institutional buyers. This rule is explained further in the section on Public vs. Private Placements.

¹⁵Asquith, Paul and Wizman, Thierry, 1990, "Event Risk, Covenants, and Bondholder Returns in Leveraged Buyouts," working paper #3173-90-EFA, Sloan School of Management, M.I.T.

debt offerings. These indentures are most often floated for the funding of projects that are backed by a specific asset--usually for the construction of that asset. This paper recognizes the potential for expanding the analysis to include examples of covenants found in this type of secured corporate debt.

How do the covenants in a secured corporate indenture agreements differ in function than those in unsecured agreements? In secured debt, the bondholders have title to the pledged assets until the notes are paid in full. Because of this pledge of assets, the bondholders of secured debt are concerned with limiting the borrowers' rights of transfer and substitution. This is partially confirmed by the detail and length of SP CMBS covenants dealing with these concerns. Smith and Warner [1990] suggest that the "issuance of secured debt lowers the total costs of borrowing by controlling the incentives for stockholders to take projects which reduce the value of the firm; since bondholders hold title to the assets, secured debt limits asset substitution."¹⁶ Further, secured debt seems to be more frequently employed when the firm's assets are not specialized. "The more specialized the assets, the more costly is asset substitution to stockholders, the tighter the implicit constraint on asset sale, and thus the less likely is the use of secured debt."¹⁷

Lastly, how are the debt covenants of large conventional commercial mortgages different from or similar to those of SP CMBS? Conventional commercial mortgage covenants function with similar reasoning and intent to their SP CMBS counterparts. Anecdotal evidence suggests that the differences in SP CMBS covenant form are created to facilitate the multiple number of lenders that participate in a single SP CMBS deal. A single lender tends negotiate very tight and specific covenants that in turn are more easily renegotiated.

¹⁶Smith, C.W. Jr., and Warner, J.B., *Analysis of Bond Covenants, The Modern Theory of Corporate Finance*, McGraw-Hill Publishing, New York, 1990, p. 177.

¹⁷Smith and Warner, [1990], p. 178.

In contrast, SP CMBS covenants leave more room for borrower action, but are less easily renegotiated as the number of lenders involved increases.

1.5 Summary of Research on Corporate Bonds

Bond covenants of corporate indentures can be grouped into four typologies: production/investment, dividend, financing and bonding. The review of bond covenant literature also reveals that corporate bonds show a difference in documentation between public and private placements. The covenants of privately placed debt have more detailed restrictions, and these agreements tend to be more easily and frequently renegotiated. The research also shows that certain covenants can effect bond performance and value during leveraged buyouts. Though this have no direct correlation to SP CMBS, the method of focus on covenant protection for certain event risks is instructive.

CHAPTER 2 DEVELOPMENT OF THE CMBS MARKET

2.1 Overview

To understand the market for single-property commercial mortgage-backed securities (SP CMBS), one must first look at the market for "pooled" commercial mortgage-backed securities. SP CMBS is a specialty in the category of CMBS. This chapter first gives the reader an overview of the economic and institutional constraints affecting the supply of and demand for CMBS. Then, it examines two of the major participants in the issuance and purchase of these securities.

2.2 Commercial Mortgage-Backed Securities

The growth in recent years of the Commercial Mortgage-Backed Securities (CMBS) market is the result of a number of factors. These factors are the 1986 Tax Reform Act (TRA), Resolution Trust Corporation (RTC) bulk sales, regulatory pressures on commercial banks, risk-based capital requirements for life insurance companies and lower interest rates. In concert with the above factors, the distressed real estate market of the early 1990's created a supply of real estate needing new financing, and the liquidity and bond-like characteristics of CMBS created a demand on the part of institutions that hold real estate.

The commercial real estate boom of the 1980's was fueled by a prosperous economy, preferential tax treatment for real estate and a newly deregulated financial services industry that actively underwrote real estate loans in an environment of generally increasing prices. In 1986, with the adoption of the TRA, the market for real estate began

to weaken. The TRA eliminated most of the tax benefits for holding real estate. This, combined with over-building and over-leveraging of commercial properties, set the stage for the collapse of the real estate market three to four years later.

Commercial real estate holdings were traditionally financed primarily through debt. As much as 85% of the capitalization of any given property was in the form of intermediate-term, fixed-rate loans from thrifts, banks or insurance companies. U. S. property markets until the 1990's assumed that these traditional sources of capital were a permanent fixture of real estate financing. This proved not to be the case. The "credit crunch" of the early 1990's was created by the exodus of these lenders from the market.

As real estate prices fell, individuals and institutions attempted to divest. Many investors found that their commercial real estate holdings had become illiquid, and in this environment, obtaining refinancing for commercial properties became difficult. This shock to the market was then followed by regulatory action in 1989 (The Financial Institutions Reform, Recovery, and Enforcement Act--FIRREA). FIRREA set limits on nonresidential commercial property lending and some additional limitations on multifamily lending. CMBSs developed within this context as a means of bringing financing and liquidity to real estate through the direct involvement of the capital markets.

The lion's share of the volume of CMBS issuance in the past three years has come from agency sources¹⁸. The Resolution Trust Corporation, created to liquidate government owned property from failed savings and loans (S&Ls), has in recent years been the biggest single source of commercial mortgages for securitization. In a sense, the RTC related transactions have created the recently strong market for CMBS. In 1991 the RTC

¹⁸Agency refers to governmental sources of mortgage securities--FNMA, GNMA, FHLMC and the RTC.

issuance of \$2.5 billion accounted for 54% of that year's market total of \$4.6 billion. RTC volume in CMBS issuance peaked in 1992 at a total of \$9.1 billion or 55% of the entire CMBS the year's activity, and the volume in 1993 was 16% of a total market dollar volume of \$17.2 billion, or \$2.8 billion.¹⁹

Non-agency borrowers and portfolio sellers have also accessed the capital markets to raise funds through the issuance of CMBS. Efforts by investment banks to securitize large commercial mortgages for single and pooled properties has resulted, in part, from the sheer size of the commercial mortgage market. The current total market of nonresidential commercial mortgages is believed to be about \$700 billion. By the end of the second quarter in 1993, approximately 2.7% of the \$700 billion total had been securitized²⁰, while 10.3% of the \$291 billion in residential commercial mortgages had been securitized.²¹ Nomura's mortgaged-backed securities research estimates that 30% of the existing commercial mortgage debt will be seeking refinancing in the next 24 months.²² Another similar estimate is that of the current \$700 billion in commercial mortgages, approximately \$140 billion must be refinanced in the next three years.²³

A recent Lehman Brothers presentation on CMBS transactions, indicates 40 CMBS deals were completed in 1992, 129 in 1993 and 29 in the first quarter of 1994--with a projection of 120-160 by the year's end. This translates into dollar volumes of approximately \$16

¹⁹Kenneth Leventhal & Company, "Property Securitization Survey 1993," Presented at CMBS Conference in New York, June 27-28, 1994, p.9.

²⁰Federal Reserve Bulletin, "Mortgage Debt Outstanding," Table 1.54.

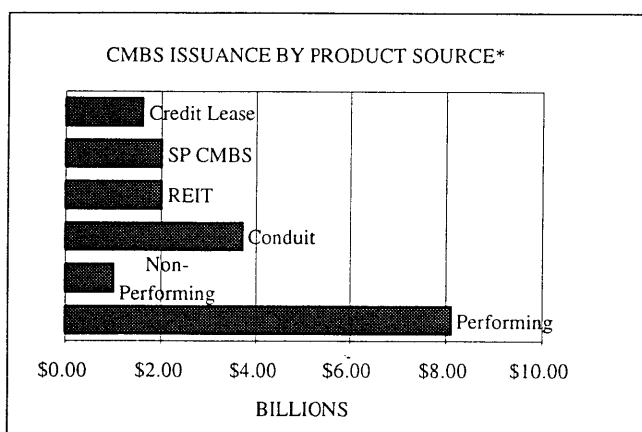
²¹Commercial Mortgages (both non-residential and residential) comprise 8% of \$12 trillion worth of investments in the fixed income universe. The largest sector of the market is U.S. Treasuries which equal 40%, followed by home mortgages at 25%. Corporate bonds account for 17% of the universe, and state & local bonds are 10%. (Federal Reserve, 1993 & JMB Institutional Investment Research, 1994.)

²²Jacob, David P. and Duncan, Kimbell R., Mortgage Securities Research, Nomura Securities International, January 1994, p. 5.

²³An estimate made by Sheridan Schechner, Vice President, Goldman Sachs & Co. in his presentation at the CMBS Conference in New York, June 1994.

billion, \$18 billion and \$23.5 billion (projection) respectively.²⁴ Specifically, in the single asset transactions, \$650 million were issued in 1992 and \$2.0 billion in 1993.²⁵ These single asset transactions are most often used for regional mall financings, while some transactions have been done for major downtown office properties. Exhibit 2.1 shows the break down of total 1993 CMBS deals by product source.

Exhibit 2.1



<u>Product Source</u>	<u>Billions</u>
Performing Existing Mortgages	\$8.1
Non-Performing Existing Mortgages	\$1.0
Conduit/New Origination	\$3.7
REIT Debt	\$2.0
Single Property CMBS	\$2.0
Credit Lease	\$1.6

*Lehman Brothers, 1994.

2.3 Major Participants in the CMBS Market

2.3.1 Insurance Companies. Since the late 1940s life insurance companies have been the largest source of debt and equity capital for commercial real estate investments. The previously mentioned early 1990s correction in the market triggered a high number of

²⁴Commercial Mortgage-Backed Securities, Lehman Brothers, New York, April 1994, p. 2.

²⁵Materials researched for this study indicate the 1993 dollar volume of single asset transactions to be \$2.6 billion.

delinquencies and foreclosures on assets in the real estate portfolios of these companies. At the same time that losses were mounting, regulation changes affecting accounting practices and risk-based capital requirements²⁶ made the holding of commercial real estate loans more difficult.

Insurance companies, which have a mandatory risk-based capital factor of between 1.5%-9% depending on the loan quality, have entered the CMBS market to remove some of their exposure in carrying whole loans. Compared with a capital factor of 0.3% for investment grade securities (AAA to A), the higher risk-based capital requirements for whole mortgages have been a stimulus to securitizing of insurance company real estate assets. The securitized mortgages are treated as bonds on the books of insurers and as a result allow participation in the returns offered in real estate, but with lower capital requirements.

A typical asset allocation for an insurer places approximately 50% of the total holdings into equities, 40% into fixed income and 10% into real estate. Commercial mortgages held in the real estate portion of the portfolio can be moved from the real estate holdings to the fixed income holdings allocation through securitization. The senior classes of the CMBS instrument are investment grade securities and can be characterized as a *credit* risk exposure to the holder. In contrast, the subordinate classes pose a potential *asset* risk and are considered to be more like an equity investment than a debt investment.

Risk-based capital requirements are established by the National Association of Insurance Commissioners (NAIC). Legislation for life and health insurance companies has been enacted into law on a state by state basis and is effective retroactively from January 1,

²⁶Risk-Based Capital Standards are financial standards relating to the risks associated with a particular business. These standards are used to establish the amount of capital to run the business under consideration.

1993²⁷. For life insurance companies, the calculation for risk is based on four categories of exposure:

- Asset default risk (C1), representing the possible loss of interest or principal on loans and the possible decline in price or value of common stocks, property, or other investments;
- Insurance risk (C2), representing the potential that insurance benefit claims will exceed actuarial estimates of claims for policies issued;
- Interest rate risk (C3), representing potential losses from asset liability term structure exposure to interest rate-sensitive investments; and
- General business risk (C4), representing potential losses from such events as litigation or changes in tax policy.

NAIC created the formula used to apply these areas of risk to a total risk-based capital requirement. Different investment types carry varying levels of risks, or Risk Factors (RF) in this formula.²⁸

Exhibit 2.2

NAIC Risk Factors (RF)

<u>Stocks & Bonds</u>	<u>RF</u>	<u>Mortgages</u>	<u>RF</u>
Common Stock	30.0%	Joint Ventures and Limited Partnerships	20.0%
Preferred Stock	5.0%	Company Occupied and Investment Property	10.0%
U S Government Bonds AAA to A Bonds	0.0%	Foreclosed Property	15.0%
BBB to CCC	1-20%	Commercial Mortgages	
Bonds in--Near Default	30.0%	In Good Standing	3.0%
		In Delinquency	15.0%
		In Foreclosure	20.0%
		Non-insured Residential Mortgages	0.5%

*Source: NAIC

²⁷Similar risk-based capital requirements for property and casualty insurers in January 1994.

²⁸Total risk-based capital = $\sqrt{(C1 + C3)^2 + C2^2} + C4$

Because of the asset risk adjustment factors established by NAIC (See appendix) life insurance companies have incentive to move out of higher-risk investments. The set-aside for joint venture and limited partnership mortgages held by life companies is 20%. Likewise, for company-occupied and investment property the set-aside mandated is 10%, and commercial mortgages in good standing require 3%--15% in delinquency. Given that the industry standard for its capital base is generally in close to 10% and that AAA to A rated bonds have an adjustment factor of 0.3%, the trend toward securitization would seem obvious for this sector.²⁹

2.3.2 Real Estate Investment Trusts (REITs). REITs have also been a large player in the CMBS debt market. Like REMICs (discussed earlier), the REIT is a creation of the Internal Revenue Code. It is a company or trust, whose primary business is the owning, management and development of properties. In addition the company has elected to qualify under the tax code as a pass-through entity. A REIT must distribute 95% of its earnings to its shareholders, and in addition the REIT pays no taxes at the corporate level.³⁰

For CMBS investors, REIT CMBS debt offers the most comparable secured debt investment vehicle to corporate bonds. The publicly traded nature of a REIT means that information on the equity component is available through the balance sheet and 10K filing of the REIT. Further, the publicly traded stock of the REIT affords reporting by analysts and research groups. There is speculation that as the REIT industry matures and is able to achieve higher unsecured credit ratings from the agencies, their reliance on securitization of mortgages may decrease in light of the current lower spreads over Treasuries on corporate debt than CMBS. Yet if CMBS securities are being priced efficiently and if the

²⁹Zinngabe, Claude J., "Real Estate Investment by Insurance Companies--How Risk Based Capital Requirements Affect It," *Urban Land*, March 1994, p. 42.

³⁰Brueggeman and Fisher, [1993], p. 696.

ratings agencies properly evaluate the credit quality of individual REITs, then the spread between these two debt securities should eventually converge. An efficient market should recognize the same quality of debt offered in different formats.

In 1993 40 REITs filed Initial Public Offerings (IPOs) for a total of \$8.5 billion. The activity in this area had the effect of creating additional CMBS issuance activity. Two billion dollars of 1993 CMBS debt came from 16 REITs. The spreads for fixed rate AAA CMBSs issued by a REIT ranges from 90-110 basis points (bps), while AA fixed rate offers between 105 and 130 bps.³¹

Typically, REITs have been participating in the CMBS market in conjunction with IPOs of their stock. The combination of debt and equity offering provides an efficient mechanism for the successful placement of each security. This "piggy-backing" allows potential investors to evaluate the debt and equity components together. In addition, the concurrent placements seem to provide an efficient means of marketing both instruments.

In the low interest rate environment of the early 1990's, the securitization of older and higher interest rate commercial mortgages allows the REIT to increase its potential income to shareholders. This makes the equity component of the issuing REIT more attractive than it would be under the larger debt burden of the higher interest rate loans. Thus when the debt payment reduction is accomplished just prior to the IPO, the pricing of the equity offering can reflect the improved cash flow. This maximizes the amount of proceeds to the REIT from the sale of the initial shares. In 1990 REIT transactions of this nature accounted nearly 20% of the commercial mortgage securitizations completed.³²

³¹Commercial Mortgage-Backed Securities, Lehman Brothers, New York, April 1994, p.14.

³²Feinberg, Phyllis, "All Roads Lead to Wall Street," *Real Estate Forum*, May 1994, p. 33.

2.4 Summary

The market for CMBS is the result of a number of confluences in the real estate and capital markets. As this chapter points out, the issuance of CMBS securities resulted from a temporary though severe drop in traditional commercial mortgage lending. This exit from the market by commercial lenders was brought about by a decline in value of commercial real estate in the late 1980's. The decline in value was the result of two primary factors: 1.) changes in federal tax policy relating to real estate investment and 2.) an over-supply of "product" in the market.³³ As losses to institutional investors began to mount, new banking and insurance regulations further reduced investor appetite for commercial real estate.

The issuance of CMBS is the outgrowth of the capital market's intervention. CMBSs permit investors to hold commercial real estate debt in a format that gives liquidity to commercial property investments and that lowers risk-based capital requirements of insurance companies--a major investor in commercial real estate.

We next look at the development of the single-property CMBS instrument. The background contained in this chapter allows us to evaluate the context in which the underwriting of single-property CMBS deals takes place. The severity of the early 1990's recession in real estate made lenders and investors re-think requirements for new investments. As a result, single-property CMBS indentures demonstrate these concerns in their documentation and underwriting standards.

³³These two conditions were exacerbated by the amount of leverage which was being utilized in commercial real estate.

CHAPTER 3 SINGLE PROPERTY TRANSACTIONS

3.1 Overview

Single asset transactions have grown in prominence in the past two years. After having considered the external forces acting on real estate and the market for CMBS, we now turn to an examination of how single-property securitizations work. Individual deals are analyzed to determine costs of financing and the structures created for their issuance. Specifically, two recent public single-property transactions are presented along with a hypothetical deal which outlines the costs of a typical transaction. To provide context, this chapter begins with a brief summary of the volume and type of SP CMBS transactions to date.

3.2 SP CMBS Volume

Dollar volume of SP CMBS issuance peaked in 1990 and again in 1993 (see Exhibit 5.2). The increase in volume of SP CMBS is attributable to the refinancing of projects that were originally financed by thrifts, banks, pension funds and insurance companies. The first SP CMBS were done for signature office properties such as Olympia & York's Maiden Lane Finance Corp. issued in 1985 and American Express' 1985 placement of 11 5/8% Guaranteed Notes secured by a subordinate leasehold mortgage on the American Express Tower at the World Financial Center in New York. More recent issuances of SP CMBS have been for regional mall financings. Securitization of these assets has proven to be efficient as a source of capital for financing large transactions--\$40 plus million in size.

The "technology" of CMBS pooled deals is applied to these single asset transactions. SP CMBS issues use structure of the mortgage-backed securities typologies discussed in chapter 1. The single-property facilitates the review of detailed information concerning the underlying property, making investor analysis and due diligence easier than on large pooled transactions.

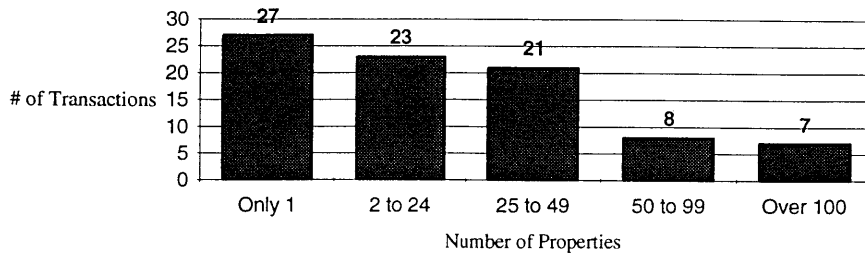
SP CMBS financings also allow risk to be spread across several investors (lenders) rather than be carried by one. Further, each investor is capable of better diversifying the same dollar amount in relation to holding a conventional whole loan. Thus, in part, the capital markets are facilitating the creation and sale of risk segmentation. Equally important to the market's positive view of this instrument is the potential for liquidity provided to investors of real estate. The secondary market for CMBS is developing based on investor preference for a tradable debt security in real estate.

In doing these deals, Wall Street has taken advantage of the traditional lenders' recent absence in real estate lending. The need for single-property financings is driven primarily by the large number of balloon mortgages financed in the late 1980's that now require refinancing. Low interest rates and minimal institutional lending in this area has further reinforced the demand. Also spurring demand are the returns offered to investors in comparison to other investments. For example, AA rated SP CMBSs with fixed rates of interest offer an average of 105-115bps over Treasuries, as opposed to corporates which average 45bps.³⁴ The recent rise in interest rates by the Federal Reserve Bank has created the probability of accelerated demand to refinance while rates are still relatively low. Single-property deals accounted for the largest number of CMBS transactions in both 1992 (15) and 1993 (27).

³⁴Commercial Mortgage-Backed Securities, Lehman Brothers, New York, April 1994, p. 22.

Exhibit 3.1

1993 Non-RTC Deals



*SOURCE: Kenneth Leventhal & Company, 1994

3.3 Hypothetical SP CMBS Issue

A hypothetical example demonstrates the feasibility of single asset transactions. For an existing regional mall mortgage loan of \$100 million³⁵, two classes of bonds are issued--a class A tranche with a rating of AA, and a class B tranche with a BBB rating. Loan-to-Value for the senior class is assumed to be 53% and for the subordinate class 62%. The proposed Debt Service Coverage Ratios are 1.55 and 1.35 respectively. The spread on the senior class ranges from 105-115 basis points (bps) above Treasuries for fixed rate and 75-85bps for floating rate. The equivalent in the subordinate class is a fixed rate of 190-200bps and a floating rate of 170-180bps above treasuries.³⁶

Considerations in the issuance of this type of instrument include fixed vs. floating rate, maturity (term of the mortgage vs. term of the bond--"tail period"³⁷), amortization, prepayment provisions and public versus private placement. Exploring this imagined transaction further one tabulates an all-in financing cost of 7.22% (see Exhibit 3.2). To make this deal fully marketable in the floating rate scenario, the borrower would need to

³⁵Assumes financing for the regional mall based upon the 7-year treasury.

³⁶Commercial Mortgage-Backed Securities, Lehman Brothers, New York, April 1994, p. 22.

³⁷The mortgage securing a SP CMBS bond or note often has a maturity date prior to that of the security. Because of this, investors look for what is called a tail period to be included in the indenture. The tail period requires the borrower to secure refinancing of the mortgage by a certain date or suffer a foreclosure on the property for liquidation. The proceeds of the sale are used to payoff the bonds in a timely manner.

purchase an interest rate cap agreement to protect against interest rate exposure. An additional provision of a "servicer advancing" clause in the servicer's contract is often required by the market and the ratings agencies to insure continued interest payment in the event of borrower default.

Exhibit 3.2

ALL-IN FINANCING COST*

Approximate Financing Costs Per Year	
7-Year Treasury	5.68%
Indicative Spread	1.23%
Amortized Issuance Costs	0.17%
Servicing & Liquidity	0.10%
Trustee & Rating Agency Annual Fee	0.04%
TOTAL ALL-IN COST	7.22%

SOURCE: CMBS, Lehman Brothers, New York, April 1994, p. 25.

The total issuance cost for this hypothetical \$100 million regional mall financing is 92bps, or \$920,000. Added to this cost for the borrower are real estate expenses such as appraisal, survey, title, engineering, environmental, legal and mortgage recording tax. The underwriter also charges a structuring and issuance fee borne by the borrower. The result of these costs is that financing done through securitization generally is competitive to conventional financing above the \$40 million mark mentioned above.

Going further with this hypothetical securitization, we can look at possible structure of characters, relationships and cash flows. Between the borrower and the bond or noteholders³⁸ are usually at least two other parties related to the transaction. The first is the "issuer." The job of the issuer is to 1.) issue the notes and 2.) make and maintain the mortgage loan to the borrower. The issuer is in fact an agent of the borrower who holds all the stock in the issuer. As diagrammed in Exhibit 3.3.1, the mortgage and mortgage

³⁸The term of the security is assumed to be five years--thus the instruments are referred to here as notes rather than bonds.

notes flow through to the issuer to a trustee and then to the noteholders. In reverse, the proceeds of the sale of securities go to the trustee and then flow through the issuer to the borrower.

The trustee is in essence the mortgagee under the agreement. Its job is to hold the mortgage in trust during the life of the securities. Included in the trustee's responsibilities is the maintenance of the collateral and the administration of payments to the noteholders. Some of this oversight is passed on by the trustee to "subcontractors." Yet, the responsibility for these tasks still rests with the trustee.

Interest and principal payment on the notes are made directly to the trustee and then released to the noteholders at the scheduled payment dates. This scenario also imagines a LIBOR³⁹ indexed floating rate on the interest payments. As a consequence, the borrower purchases an interest rate agreement from a counterparty (see Exhibit 3.3.2). When the rate of interest on the notes exceeds the cap, the interest rate counterparty makes payments equaling the difference between the cap and the current rate exceeding the cap to the trustee. The trustee in turn passes these payments and the mortgage payments on to the noteholders.

An additional role provided for in a SP CMBS indenture is the servicer. This job involves the servicing and administering the mortgage loan on behalf of the trustee, and its role is similar to that of the servicer in a conventional commercial mortgage loan. In addition, some agreements direct that the servicer pay "advances" when the borrower does not meet required payments of principal or interest.⁴⁰ The advances are then reimbursed out of

³⁹London Interbank Offered Rate.

⁴⁰The servicer is only required to make advances to the extent that it ascertains reimbursement can be provided.

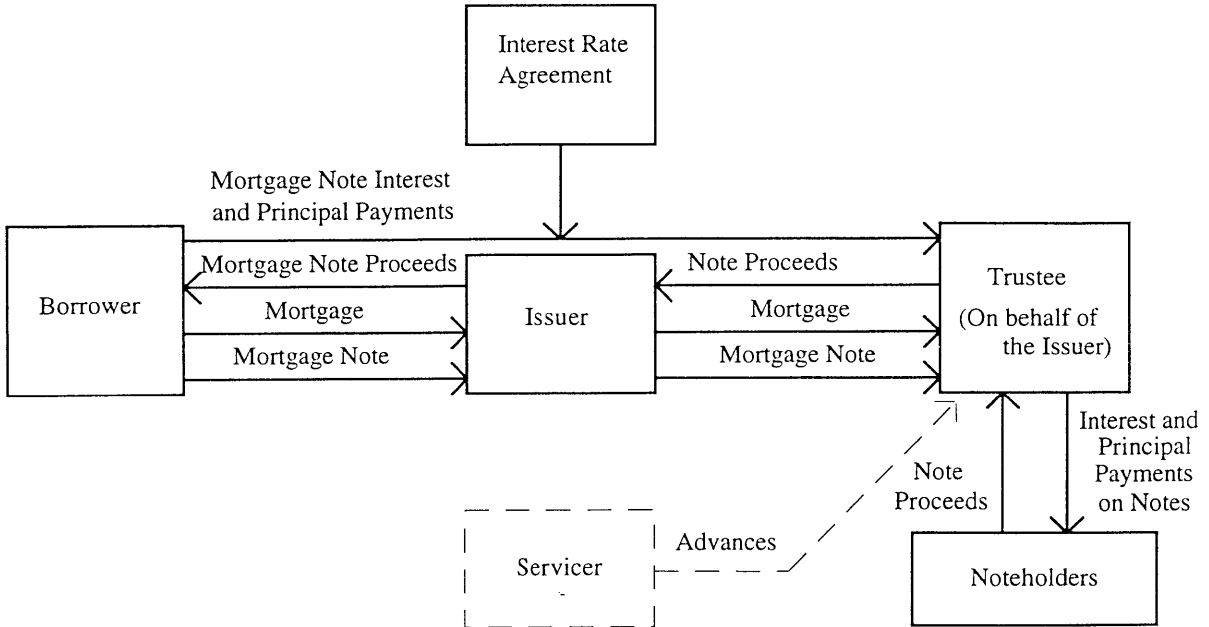
liquidation proceeds from the sale of the property. Most often the advances are coupled with a "tail period" feature.⁴¹

The description of characters and roles is typical of recent SP CMBS indentures and is illustrated to give the reader a picture of a typical set of relationships contained in a single-property securitization. The covenants frequently specify participants in the text, and some covenants apply directly to these entities by limiting their actions. As an example, later references to covenants of the issuer refer to the type of entity described above. With this sketch of SP CMBS structure in mind, we now look briefly at the "Envelope" and then examine two actual SP CMBS deals.

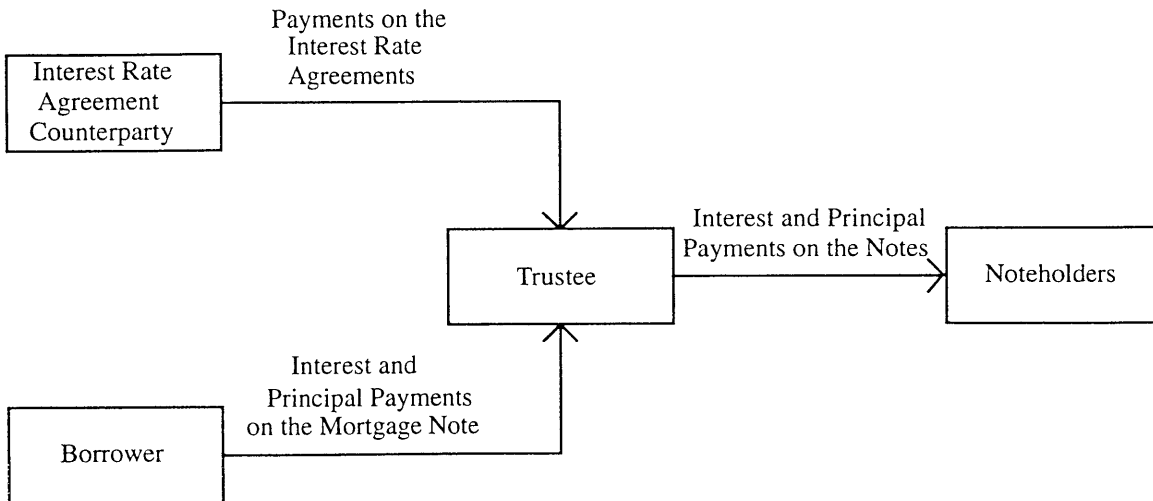
⁴¹Tail periods are covered in section 4.5.

Exhibit 3.3⁴²

3.3.1. Relationships between the noteholders, the trustee, the issuer, the borrower and the interest rate agreement counterparty.



3.3.2. Cash flow from the borrower and/or the interest rate agreement counterparty to the holders of the securities.



⁴²SOURCE: Information Offering, Franklin Park Finance, Inc., Goldman Sachs International Limited, April 30, 1992, p. 5.

3.4 The "Envelope"

For SP CMBS the borrower and its agent, the issuer, is most often a single purpose, bankruptcy remote entity established for the creation of the indenture agreement. These two characteristics--single purpose entity and bankruptcy remoteness--are significant differences from the legal entity structure of the typical unsecured corporate indenture. Also different is limited notion of the stockholder in SP CMBS. The equity in this type of entity is held in the secured asset and by a limited number of individuals.

3.4.1 Single-Purpose Entities. The single purpose--single asset--entity or, "firm," created for SP CMBS agreements must hold no other assets other than the collateral, nor engage in any other business other than the issuance of notes and the holding of the property. This is a significant difference from the structure of a firm selling corporate bonds as mentioned earlier. The vehicle usually employed to meet this requirement is the Special Purpose Corporation (SPC). An example of the requirements of SPC entity is found in the negative covenants of a recent SP CMBS description of the mortgage:

The Issuer will covenant that it will not (i) engage in any business other than entering in to this transaction and owning, developing, managing, leasing, maintaining, and operating the Property..., (ii) partition the property, (iii) voluntarily file or consent to certain events of insolvency or reorganization..., (iv) guarantee any obligations of any other person or make advances or loans to any person, entities or affiliates..., (v) commingle its assets with the assets of its affiliates or any other person, (vi) incur, create or assume any indebtedness for money borrowed other than the Notes or as expressly permitted by the Mortgage...(vii) transfer or lease the Property or any interest therein, except as permitted by the Mortgage⁴³.

The restrictions found in the above passage are intended to limit the issuer to business activities to do with owning and operating this property. Restricting the "firm's" actions in this manner protects the bondholder's claim by focusing the activities of management on the productivity of the individual asset. As discussed earlier, this complete restriction of

⁴³Offering Circular, Pacific Acquisition Corporation, Lehman Brothers, U.S. \$65,000,000, November 1993, p. 32.

activities is not typical of corporate indentures. The legal envelope of SP CMBS is distinct in this regard.

The debt holder--equity holder conflict here is managed by the limited business actions allowed to the "firm" and by the existence of the collateral which is in essence the equity in the SP CMBS "firm". The directors of the single purpose entity, as a consequence, do not face the same potential conflicts experienced by the management of a corporation with outstanding debt and publicly traded equity⁴⁴.

3.4.2 Bankruptcy Remote Entities. The SPC classification allows the issuer to "bankruptcy remote." Bankruptcy remoteness serves to protect the noteholders from problems experienced by the parent or affiliate company of the borrower. Likewise, it seems to also protect in the reverse. The borrower and its affiliate(s) are not liable for any financial trouble experienced by the property. This feature is not typically found in corporate debt agreements. The noteholders of corporate debt are invested in the financial performance of the corporation which has many projects. This claim can be diluted or devalued through actions unrelated to the bond issuance. Thus the covenant structure of a corporate indenture agreement is intended to restrict actions by the firm, which may lower the value of the debt, while still allowing new projects to be developed. The SP CMBS legal envelope forecloses the possibility of new business ventures by the borrower.⁴⁵

⁴⁴The corporation is assumed to have many possible competing projects for investment--some more risky than others and as a consequence more likely to reduce the value of the noteholders' claim.

⁴⁵The only exception to this complete restriction on new business activity is found in the prospectuses allowing (planning for) substantial expansion to the property securing the notes.

3.5 Sawgrass Finance, LLC

An actual example of a publicly placed regional mall financing utilizing SP CMBS is Sawgrass Finance LLC, which issued \$160 million in commercial mortgage pass-through certificates in December 1993. The collateral for the notes is a four-part, non-recourse, seven-year balloon mortgage on the 1.5 million square foot Sawgrass Mills Mall in Sunrise, Florida. The borrower is the developer of the property and the lead manager on the deal is Merrill Lynch in New York.

This SP CMBS issuance is interesting because of a simultaneously planned public offering of stock by the mall's manager, the Mills Corp.--an affiliate of the Sunrise Mills LLP. The Mills Corp. IPO was completed on April 15, 1994 at a price of \$23.50 a share. After the IPO, the company converted to a REIT which included the Sawgrass Mall as one of its properties. The necessary SEC filing for the REIT IPO facilitated public placement of the SP CMBS certificates.

Sawgrass Finance has four Classes of certificates ranging in rating from AAA to BB as determined by S & P. The Class A tranche is \$115 million of fixed rate notes with a coupon rate of 6.45% and an initial dollar price of 101.01 plus. The Classes B, C and D are floating rate notes tied to a spread over LIBOR. Their spreads are +85, +230 and +430 respectively, and they are capped at 14% by an interest rate agreement purchased in conjunction with the placement of the notes. As planned in the CMBS offering, after successful consummation of the REIT transaction, a portion of the proceeds are to be used to repurchase , the Class B, C and D certificates by the "Depositor" on or before March 20, 1995. The repurchase is to happen on any one of the Distribution Dates at a price of par plus any accrued interest.

The Sawgrass deal is also interesting for the multiple class structuring of the notes. The multiple tranches are structured with stepped debt service coverage ratios matching their respective levels of risk. At the date of issue these values were 2.97 for Class A, 2.82 for Class B, 2.47 for Class C and 2.19 for Class D. For the three subordinate classes, these debt service coverage ratios can fall as low as 2.5, 1.9 and 1.61 respectively for the 14% capped interest rate environment. In addition, this deal has a provision for "Advancing" as a part of the Servicer's responsibilities. Servicer Advancing benefits the certificate holders in the case of foreclosure, and has become more prevalent in the past few years for deals with multiple tranches. This feature is discussed further in the section concerning balloon risk.

3.6 1211 Finance Corporation

1211 Finance is a notable example of an office building SP CMBS transaction--publicly placed in November 1993. The total issuance of \$155 million is for two classes of fixed rate, collateralized notes secured by a mortgage loan which is in turn secured by a first mortgage lien on 1211 Avenue of the Americas in New York. The property is a 45 story Class A office building with 1.8 million square feet of leasable area and three major tenants. Class A bonds for this issue carry a rating of AA with an interest rate of 6.736% and a DSCR of 2.24. The Class B bonds are BBB rated and at 7.138%. Loan-to-values for the two Classes are 46.8% and 55.4% respectively. The date of maturity for both classes is November 1, 2003.

One of the strengths of the deal, as evaluated by Duff & Phelps, is the Class A status of the building and its location in the best performing sub market of New York City. Another strength identified is the building's 91% occupancy with 40% of the occupied

spaces under long-term leases to credit tenants.⁴⁶ Combined with these qualitative measures, are the strong DSCR and LTV values stated above and the inclusion of a "Tail"⁴⁷ mechanism in the agreement. Some measure of cash control is offered through the establishment of a collateral account by the issuer in the name of the trustee for the benefit of the noteholders. The borrower then deposits the monthly debt service into the collateral account.

Due to the high percentage of lease turnover in the year 2000, the borrower is required to establish two reserve accounts that are administered by the servicer and assigned to the trustee as collateral for the notes. The first fund is the Capital Expenditure Reserve in the amount of \$20 million that is escrowed out of the proceeds to fund leasing costs and capital improvements through 1995. The second is the Chase Releasing Reserve consisting of \$2.3 million funded annually out of the cash flow beginning in 1997 and continuing for four consecutive years. This reserve is to cover leasing cost associated with the expiration, in the year 2000, of Chase Manhattan's lease of 250,000 square feet in the building.

Similar to Sawgrass Finance LLC, 1211 Finance Corporation is held as a REIT. 1211 Finance is the issuer of the notes under the agreement. These notes are collateralized by the non-recourse mortgage loan secured by the office building. The property is owned by 1211 Acquisition Corporation whose shares are held by U.S. pension funds either directly or through investment partnerships or trusts. This entity has elected to be treated as a REIT for tax purposes. The REIT holds just the single property, and in that regard

⁴⁶1211 Finance Corporation, Duff & Phelps Credit Rating Co., Commercial Real Estate Group, New York, 1994.

⁴⁷The "Tail" provision mention here is explained in further detail under the section pertaining to ballon risk.

different from the structure of the Mills Corp. REIT which holds Sawgrass Mills Mall as one of several properties in the REIT.

3.7 The Ratings Process for SP CMBS

Rating agencies provide a third party independent review of real estate mortgage-backed securities to establish creditworthiness of the issuer and the likelihood of principal repayment. Ideally, a SP CMBS security with a rating of AA should be directly comparable to a corporate or municipal security of the same rating.⁴⁸ The rating agencies have come to demand certain restrictions of CMBS issues for them to receive investment grade ratings. Specifically, the ratings agencies now look for lower loan-to-value (LTV), higher debt service coverage ratios (DSCR), servicer advancing and tail periods. Early CMBS documents, such as Water Street and Maiden Lane Finance, were crafted using less restrictive criteria and as a consequence have been ineffective in safeguarding the bondholder's value. The severe downgrading of these notes recently by the ratings agencies has spurred a re-evaluation of the process.

Standard & Poor's, Fitch, Moody's and Duff & Phelps rate the bulk of single property transactions. The ratings agencies' work with single property transactions mirrors, in many respects, traditional real estate valuation techniques used by property owners. Single property analysis by the rating agencies is divided into three components, real estate quality, payment structure and legal issues.

Within the real estate analysis, the ratings agencies evaluate location, tenancy, leases, history, management, construction quality, ownership position, insurance requirements,

⁴⁸The offered yield spreads for SP CMBS remain higher than those for corporates due to the presence of a perception in the market of a premium for real estate. this premium is the result of investor memories of the recent recession in real estate. the second reason has to do with the relative illiquidity of SP CMBS as compared to corporate bonds.

title insurance, environmental risks and subordinate debt. Not surprisingly these concerns are found in either the representations and warranties or the covenants of SP CMBS prospectuses.

Some recent and notable failures of this type of instrument has focused investor and underwriter attention on these criteria. Two examples as rated by Standard & Poor's serve to illustrate the reconsideration by the agencies. The first, Olympia & York Maiden Lane Finance Corp., was originally issued in December of 1985 as AA rated, fixed rate 10.375% EURO notes secured by the mortgage on 59 Maiden Lane in New York--a one million square foot office tower. The issue size was \$200 million and due in 1995. At the time of issue the appraised value of the property was \$280 million. The notes have since been downgraded several times by S & P. Their current rating is BB-.

The original AA rating was based on an evaluation of the then strong New York real estate market, the perceived strength of the parent company and the existence of two major tenants--Home Insurance and the Federal Reserve Bank of New York. Further credit enhancement was provided by a \$30.38 million credit insurance policy, to supplement the rental cash flow in the early years, from Aetna Life & Casualty.⁴⁹ Through the course of the indenture, the issuer has also had to obtain additional Letters of Credit (LOC) as collateral for the cash flow. Swiss Bank supplied a \$14.8 million irrevocable LOC which serves as collateral under the indenture agreement.

The downgrades have been due to S & P's view that refinancing of the bonds at maturity in 1995 will prove to be difficult. In addition, the downgrade incorporates the concerns for cash flow and liquidity problems experienced by the issuer's parent Olympia & York Developments Ltd. (OYDL). S & P's negative view of refinancing stems from the fact

⁴⁹Richards, [1987], p.137.

that more than 72% of the property's cash flow comes from a single above-market-rate lease. The major tenant, Home Insurance Co., is paying \$55 per square foot for a 15 year lease expiring in 1999. This rent level is double the fair market value for the area. Given the probable dramatic decrease in cash flow after the lease term, uncertainty exists for the refinancing.⁵⁰

The second example, Franklin Park Finance Inc., is a \$30 million (up to \$51 million) collateralized variable rate and floating rate issue of Euronotes. S & P gave these notes a rating of AAA for the original issue in 1992. The notes continue to receive this rating based on the stable cash flow, historically high occupancy levels, and the perceived competence of the management of the mall. The Euronotes are secured by an assignment of a first mortgage and leases covering the non anchor owned portion of the Franklin Park Mall in Toledo, Ohio. Franklin Park Mall Limited Partnership is a partnership, wholly owned subsidiary of the Rouse Corporation.

The offering prospectus for Franklin Park states an initial maximum loan-to-value ratio for the mortgage loan of 37.5%, based on the \$80 million appraised market value of property on the closing date. If the allowed expansion and further indebtedness takes place the estimated appraised property value becomes \$126 million. With the total allowable debt increasing to \$51 million, the projected loan-to-value ratio rises to 40.3%. Also stated is minimum debt service coverage ratio of 1.7 for the initial offering of \$31 million. This ratio must be exceeded during the first three years of the indenture. During the remaining two years this ratio is allowed to drop to 1.65.

⁵⁰"Commercial Mortgage Securities," Credit Review, Standard & Poor's, McGraw Hill, New York, 1993, p. 46.

3.8 Summary

The agency evaluation of Franklin Park is an example of the conservative standards now applied to SP CMBS underwriting and rating. The LTV and DSC ratios are intended to provide a larger margin of safety against economic shocks to the retail property's value. With the lower LTV and higher DSCR, the borrower has had to leave more equity in the property than would have been necessary prior to the re-evaluation. As will be discussed in chapter four, the evaluation of property performance is in large measure the evaluation of default risk. Further, the risk of default for commercial mortgage loans is effected by the standards applied to their underwriting.⁵¹ The early 1990s recession in real estate has made investors and underwriters more cautious, and as a result the criteria for rating recent issues of SP CMBS reflect this caution.

⁵¹This correlation to underwriting standards is discussed in section 4.3.

CHAPTER 4 ADDITIONAL CONCERNS ABOUT SP CMBS

4.1 Overview

The previous chapter discussed some of the financial "engineering" aspects of SP CMBSs. This chapter evaluates additional concerns and risks that must be considered in an examination of the covenants effecting SP CMBS. These include type of placement, expectation of a secondary market, default risk, balloon risk and real estate valuation.

4.2 Public Vs Private Placement

As discussed in Chapter 1, private debt in-corporate indentures is associated with more detailed and restrictive covenants than those in the public counterparts. Contrary to this expectation, the prospectuses examined in this study did not have significant differences between public and private deals. The category of placement defined under Rule 144A of the revised 1934 Securities Exchange Act has created a class of security that, though private, resembles the public standards for documentation.

A traditional private placement is a non-underwritten security offering that is sold directly to a single investor or a small group of investors. These private placements are exempt from SEC registration requirements because they involve no public offering. Purchase of these securities is limited to "sophisticated" well informed investors--usually institutions--that generally disclose very little information about the transactions. The private market

serves the medium-sized corporate borrower. Larger corporations tend to utilize the public markets, while smaller firms secure bank loans for their debt.⁵²

Much of the real estate being securitized is owned by companies and partnerships that are not publicly held and for whom the process of SEC filing is both costly and onerous. The development of REITs in the past few years has placed more real estate into publicly held and publicly traded entities suited to the requirements of public placements. The non-agency CMBS market is nearly equally divided by public and private issuance. In 1993 47% of the CMBS deals were placed through the public market, while 53% were done privately.⁵³ Yet the majority of placements for SP CMBS continue to be sold through the private markets.

In contrast, public offerings are governed by SEC filing requirements for initial sale and subsequent resale. A public filing of securities has costs associated with the SEC registration process and requires disclosure of financial information. With large publicly traded corporations this is usually not a problem. For smaller firms wanting to avoid the expense and firms wishing not to disclose their financial positions, the public filing process is usually avoided.

In April of 1990 the SEC adopted the use of Rule 144A. This set the stage for the development of a new market for private debt that is very similar to the public bond market. Rule 144A of the amended 1934 Securities Exchange Act qualifies the conditions for resale of unregistered securities in the U.S. To be considered under Rule 144A, the securities offered or resold must be done so to a qualified institutional buyer (QIB). The definitions for entities qualifying as QIBs are found in the Rule and relate to the size and

⁵²Carey, Mark S., and Prowse, Stephen D., "Recent Developments in the Market for Privately Placed Debt," *Federal Reserve Bulletin*, February 1993, p. 78.

⁵³Kenneth Leventhal & Company, [1994], p. 10.

type of a qualifying business. Any entity, acting for its own account or the accounts of other QIBs, that in the aggregate owns or invests at least \$100 million in securities of non-affiliated issuers generally qualify under Rule 144A.⁵⁴

Securities that are acquired using Rule 144A are subsequently deemed to be "restricted securities." Termed thus, they are then only able to be traded among other qualified institutional buyers. Anecdotal evidence from individuals working in the CMBS market suggests that most single property CMBS transactions are accomplished using this procedure. This same anecdotal evidence further suggests that these privately placed instruments are, by virtue of their Rule 144A classification, more liquid than true private placements, yet are still purchased by investors looking for long term investments.

The SEC's reasons for adopting Rule 144A were twofold. The first reason was to foster liquidity in the market for private securities. The second was to allow a more integrated participation by foreign investors and issuers in the U.S. debt securities market. Foreign firms had, until Rule 144A, been infrequent users of U.S. public markets because they found the registration process to be expensive and burdensome. The biggest problem in this regard was the reconciliation of foreign accounting principles with those of the U.S. In addition to the higher yields required in this market, overseas firms found that the private market had terms and restrictive covenants that were unattractive.⁵⁵

As is evident in the study Sample, the majority of SP CMBS deals that have been issued in the last three years were done so using Rule 144A. All the post-1990 private deals in the sample are Rule 144A and the three deals from 1985-86 were Euromarket bond placements. Three of the total study sampling were SEC filed public market deals.

⁵⁴Rule 144A, Securities Act Rules, (Bulletin No. 148, 11-15-92), Bowne & Co., Inc.

⁵⁵Carey and Prowse, [1993], p. 88.

Euromarket bond placements and sales done using Rule 144A are exempt from Securities and Exchange Commission (SEC) filing requirements, yet are very closely crafted to traditional public deals. The dominance of private/144A issues seems to be a result of the lower issuance costs and liquidity associated with 144A placements.

Though this paper draws a distinction between private and public placements for SP CMBS, it also recognizes the existence of Rule 144A has minimized the differences between the public and private market. In the corporate bond markets, the existence of Rule 144A has driven the terms and documents of "private" placement close to that of the public market.⁵⁶ The similarity of covenants and documentation in the Sample indicates that this homogenizing of the markets has also occurred for real estate securitization.

4.3 Secondary Markets

There can be no doubt that the early 1990's correction in the real estate market has changed investor expectations for real estate. Renewed confidence in real estate investment requires the ability to assess this investment class using standards of valuation and trading similar to other investment vehicles. That is, like corporate bonds and equities, real estate related debt and equity must be held, traded and sold in formats that can easily be priced and that have liquidity.

The liquidity of a secondary market for CMBS bonds is dependent, in part, on the standardization of underwriting and rating criteria for CMBS. Ratings agencies are looking at the criteria used to evaluate SP CMBS properties to achieve consistent standards from agency to agency. The desired result is for each agency to be able to apply the same values for DCSR and LTV, etc. across deals. As a consequence, an investor

⁵⁶Carey and Prowse, [1993], p. 90.

should be able to evaluate and compare deals with similar ratings and be making an apples to apples judgment of relative value.

The expectation of a secondary market also promotes the standardization of documentation for SP CMBS prospectuses and memoranda. The examples included in this study have high degree of similarity in the covenants of issues dating from the same time period. This seems to support the trend toward development of secondary markets for trading this type of security. One must still perform the due diligence on the individual properties generating the cash flow, but standardization of documents facilitates comparisons between securities.

4.4 Default Risk

Securitization of a mortgage on a single property allows several investors to absorb the risk. Yet, unlike pooled securities which have the benefit of cross collateralization and cross default, the SP CMBS depends on the performance of a single asset--most often an office building or shopping mall. Like a conventional commercial mortgage, a single-property security must take into account the risk of default for the one asset. Thus to fully understand the functioning and intent of the SP CMBS covenants, one must consider characteristics of default as demonstrated by the performance of commercial mortgages.

4.4.1 Commercial Mortgage Default Risk. Much of the research on commercial mortgage lending focuses on default rates, and the source most often consulted for such information is the American Council of Life Insurance (ACLI). The ACLI puts out a quarterly report of commercial mortgage loan delinquencies, in-foreclosures, and foreclosure rates based on records kept by insurance companies.

Utilizing the ACLI data, Snyderman [1994] "Update on Commercial Mortgage Defaults," examines the riskiness of commercial mortgages by tracking the lifetime default and severity of loss for a sample of 10,995 loans. All loans in the sample are in excess of \$1 million and are the product of eight originators. The study found a significant correlation between lifetime default rates of a cohort and the cumulative subsequent five year change in property value. When lifetime default rates are overlaid with five-year cumulative property value changes an inverse relationship is evident. As property values fall, default rates trend upward.⁵⁷

Lifetime default rates range from a low in 1977 of 6.7% to a high in 1982 of 19.6%. The difference in performance is nearly three-fold. One obvious interpretation is that the performance of commercial loans is highly dependent on the strength or weakness of the regional economic outlook from the year-of origination. Also a possible factor is the lending policy in practice when the loan is negotiated. This is likely to be affected by the point in the economic cycle in which the loan is made. The implications of the Snyderman study are that in certain periods commercial mortgage investments appear to present a higher likelihood of loan default.

In a previous article, (Snyderman [1991]), he observes that the loans made just after the 1974-75 recession evidence lower rates of default than do their pre-recession cohorts. In addition, this earlier study noted the tendency for loans originated in the early 70's and '80's experience larger default rates in the first five years, while those originated in the late 70's have fewer defaults early and higher rates in their later years.⁵⁸ This study tracks 7,205 mortgages between 1972 and 1984.⁵⁹

⁵⁷Snyderman, Mark P., "Update on Commercial Mortgage Defaults," *The Real Estate Finance Journal*, Summer 1994, p. 29.

⁵⁸Snyderman, Mark P., "Commercial Mortgages: Default Occurance and Estimated Yield Impact," *Journal of Portfolio Management*, Fall 1991, p.85.

⁵⁹This set of mortgages are included in the data base for the later [1994] study.

Snyderman's research is important to the investigation of covenants for two reasons. The first is that default rates can be expected to increase as property values fall in a declining market. For SP CMBS these findings are significant relative to the test requirement of loan-to-value. Single property deals generally now require LTV ratios of 60% or less for the senior class of notes. As an example, 1211 Finance had a LTV for the Class A notes of 46.8% at the time of issue and a LTV of 55.4% in the subordinate tranche. This seems intended to insure that the equity position in the collateral is sufficiently large to withstand losses in value through cyclical downturns.

The second point that should be considered from this study is that the economic climate and underwriting standards at the time of loan origination seem to effect rates of default. By similar logic then, the same consideration may be true for single-property securities. SP CMBS that have been issued since the down turn in the real estate market can be expected to perform better with respect to default than those originated prior to and several years after the market correction.

4.5 Balloon Risk

Securities backed by single property commercial mortgage balloon loans pose a unique risk due to the potential inability of the borrower to obtain new financing. The risk that refinancing will not be possible is known as "extension risk."⁶⁰ This concern has received renewed scrutiny recently in light of the credit crunch. Ratings for CMBS deals now routinely take into account a projection of whether or not refinancing can be achieved prior to the maturity date of the indenture.

⁶⁰The risk of extension refers to the maturity date of the bonds. If refinancing cannot be achieved on the correct time table, the investor suffers an extension of the time to maturity for the bonds.

As evidenced in the downgrades experienced by the Maiden Lane Finance deal, significant revaluation of the transaction occurs in the absence of a commitment for "take-out" loans. Mitigation of the risk of extension has been somewhat offset by the inclusion in CMBS transactions of "tail periods" and "servicer advancing" provisions. During the tail period (a negotiable provision generally occurring six months to one year prior to the mortgage maturity date) the borrower must demonstrate progress toward refinancing. Under this scenario a refinancing commitment must be put in place by some date (typically six months) before the date of maturity. If no commitment is found, the tail period allows time for liquidation of the collateral to pay off bondholders.

Fitch Investors Service describes three scenarios for transaction structures where refinancing is at issue. These are given in Exhibit 4.1.

Exhibit 4.1

SINGLE-TRANCHE STRUCTURE Simultaneous Mortgage and CMBS Maturity	
Provide appraisal, phase I study, engineering report	Nine Months Prior to Maturity
Provide Commitment from Lender or Contract for Sale	Six Months Prior to Maturity
TAIL PERIOD WITH SERVICER ADVANCING	
Mortgage maturity and "expected final" CMBS maturity	Tail Period Begins
Servicer advancing allows workout or foreclosure and liquidation without default on CMBS	During Tail Period
CMBS maturity	Tail Period

*SOURCE: Fitch Investors Service, Inc. 1993

Multiple tranche structures require a modified solution to counter the problem of higher rated tranches having the same risk of refinancing as their lower rated counterparts in the same deal. The example that Fitch gives is of a deal with "AA" and "BBB" tranches that

are backed by a single balloon mortgage. When refinancing cannot be obtained, an unacceptable situation is created. The "AA" tranche has the refinanceability level of the "BBB."⁶¹ Without servicer advancing both tranches suffer the loss of interest during the foreclosure and liquidation. Servicer advancing combined with a tail period ensures that the AA rated tranche receives continued interest payments during foreclosure and liquidation of the tail period. Principal repayment is then provided out of the liquidation proceeds.

In the above situation the inclusion of a tail period does provide some benefit to the note holders, but the tail period is best coupled with payment advances from an entity with highly rated senior debt--in most cases the servicer. This advancing feature becomes necessary in the event that the borrower, nearing foreclosure, stops payment or begins bankruptcy filing. Though probably useful in the single tranche scenario, the measure is critical to the rating of multiple tranche deals. The senior tranches in this case are then insulated from the refinancing risks associated with the subordinate tranches.

4.6 Real Estate Valuation

The valuation of real estate assets is commonly determined by an appraisal method. Methods of appraisal include the market approach, the cost approach and the income approach. The market approach seeks to establish an asset value based on comparisons to others having similar attributes and have recently sold. When using the cost approach, the appraiser establishes a value for the site on which the improvement is located, then determines the cost of reproducing the asset and adds the two together. The income approach establishes a property value by determining how much an investor is willing to pay for the income stream generated by the property.

⁶¹"Commercial Mortgage Balloon Risk," 1993, Fitch Research--Special Report, Fitch Investors Service, Inc., NY, p. 2.

An established income method of determining the value of commercial properties is Derived Investment Value (DIV). DIV mirrors valuation principles used in corporate investment. It is an income-based methodology used by the RTC to determine value,⁶² though it should be noted this method does not comply with the Appraisal Standards Board guidelines, and therefore is not considered an appraisal. The method calculates the net present value of cash flows generated by a property. The discount rates are dictated by the classification of the asset into one of three categories. DIV classifies the asset as real estate owned (ER), performing, or nonperforming. Based on these, the discounting assumptions are then defined by one of three methodologies for DIV appraisal corresponding to the classification.⁶³

Choice of appraisal method clearly effects the determination of a property's value. SP CMBS mortgage covenants sometimes call for yearly appraisals of property value as a check on the condition of the collateral. In addition, since covenants frequently require the satisfaction of LTV ratios as a condition of additional financing or expansion, the borrower and lender must agree on the method to be employed.

4.7 Summary

Each section in this chapter has focused on an aspect of SP CMBS which may affect the structure of the indenture. If type placement of can effect the structure of covenants in corporate bonds, (Kahan and Tuckman, [1993]), does the prevalence of Rule 144A affect the covenants in SP CMBS? Further, is the expectation for secondary market trading of

⁶²Value is distinct from price which can be affected by forces external to the property and its cash flow.

⁶³Quigg, Laura, "Commercial Mortgage-Backed Securities," Lehman Brother Fixed Income Research, December 1993, p. 41.

SP CMBS having an impact on standardization of indenture documents? Lastly, how do the risks of default and extension impact the SP CMBS covenants?

CHAPTER 5 AN EXAMINATION OF THE COVENANTS

5.1 Overview

This chapter presents the function of covenants in SP CMBS indentures and then examines the covenants exhibiting the greatest variation. The variations are compared against attributes of the indenture which may affect the covenant under consideration. These are placement type, date of issue, property type and the form of the security. The chapter begins with a general discussion of the role covenants play in the mortgage-backed securities. As a part of this presentation, the "option value" of covenants is proposed for consideration in light of the limited variation encountered in the sample prospectuses. The remainder of the chapter then looks in detail at the covenants.

5.2 The Function of SP CMBS Covenants

As demonstrated earlier, debt covenants in unsecured indenture agreements serve to prevent the firm--which is not a single purpose entity--from taking actions which decrease the value of the bondholder's position. In effect, in the absence of any collateral they balance the potential conflicts between debt and equity investors. These conflicts focus on the potential for wealth transfer between the two. Covenants in this type of indenture agreement are restrictive with respect to the actions of both the management of the firm and the collective group of shareholders. We now compare these functions to that of covenants found in SP CMBS indentures.

Covenants in the SP CMBS documentation are intended to protect the bondholders from improper actions by the borrower with respect to the operations and further financing of

the property. In a SP CMBS indenture, the equity holder (stockholders) and the borrower are the same. Further, the equity is not held in the form of stock, but is instead present as a portion of the total value of the property. The property's value is the sum of the principal amount of the bonds and the equity interest⁶⁴. Thus covenants in the indenture function to protect the value of the principal while influencing the operations of the property securing the mortgage. Their influence on the operation of the security is meant to ensure sufficient cash flow to meet the obligation of the coupon payments.

The covenants restricting dividend payout and production/investment in corporate unsecured debt are present in a modified form in SP CMBS issues. In SP CMBS indentures restrictions on dividend payout take the form of covenants concerning casualty and condemnation. In the event of a casualty resulting in payment of insurance claims, the covenants specify how the proceeds of the claim must be applied either to restoration of the property or prepayment of the outstanding principal balance. If the borrower were allowed to retain the proceeds without restriction, the result would be equivalent to the firm liquidating assets to pay dividends.

Production and investment covenants take the form of "negative" covenants in mortgages securing SP CMBS indentures. These negatives restrict the borrowing entity from engaging in business other than the securitization transaction and operation of the property⁶⁵, guaranteeing other obligations, commingling of its assets with that of others and voluntary filing for insolvency or reorganization.

Other negative covenants found in SP CMBS indentures are those of the issuer. These restrictions include ones found above in the mortgage as well as limitations of the issuer in

⁶⁴Described by the relationship-- $\text{Value of Property} = \text{Principal} + \text{Equity}$

⁶⁵This is the function of the single purpose entity described in Chapter 3.

the purchase of stock or other investments and the issuance of additional securities--unless the proceeds are applied to the repayment of the already outstanding bonds. The only exception to the investment restrictions seems to be the allowable purchase by the issuer of its own stock and U.S. Treasury securities.

Similar to corporate bonds, some SP CMBS indentures require either the borrower or the issuer to provide the trustee with yearly audited financial reports. The purpose of this type of covenant follows the bondholder's interest in minimizing the costs associated with monitoring the borrower. Smith and Warner [1990] refer to these as covenants specifying bonding activities of the firm.⁶⁶

The last consideration before examining the function of SP CMBS covenants is how do either the irrelevance hypothesis or the costly contracting hypothesis affect the consideration of value of the SP CMBS firm. Because the SP CMBS firm is a single-purpose entity with stockholders who are in fact one and the same with the borrower, the conflicts between debt and equity holders are minimized. Further, the value of the firm in this case is really the value of the property. If one values the property by a DIV method, as mentioned in the previous chapter, that value is a function of the discounted cash flow as it exists. As we saw, the application of a discount rate is determined by the property's DIV classification.

Extending the logic of DIV valuation, two conditions can be delineated. The first is that the overall value of the firm/property is unaffected by concerns for management of the asset.⁶⁷ That is, the property is worth what it is worth and changing the management does

⁶⁶Smith and Warner, [1990], p. 193.

⁶⁷Management here is distinct from concerns of maintenance. The manner in which a property is managed may not increase the value of the asset, but can in fact decrease it through neglect.

not increase nor decrease the value. Like the irrelevance hypothesis, this line of thought implies that value of the firm/property is independent of the existence of covenants.

The second condition says that value is derived from the effective management of the property and its cash flow. As will be seen in the discussion of the covenants, certain provisions of the indenture are aimed at controlling the management of the property. This suggests that SP CMBS bondholders attribute a portion of the property's value to the effective management of the secured asset. Moreover, as with the costly contracting hypothesis, this view of SP CMBS covenants says that the value of the property is increased by the presence of the covenants.

5.2.1 Three Functions. With these two conditions in mind, we next examining the functions of SP CMBS covenants. Three essential functions can be identified. They are stated in the following three points and then summarized below in Exhibit 5.1:

Exhibit 5.1

<u>Function of SP CMBS Covenants</u>
1. Maintenance of the secured collateral value of the property to offer bondholders assurance of principal repayment.
2. Control of the operating value of the collateral to facilitate the timely and complete payment of coupons to the bondholders.
3. Prevention of competing claims on the collateral.

1. **Principal Repayment.** The investor in SP CMBS bonds is concerned with the ability of the borrower to repay the principal on the certificates at the date of maturity. This principal repayment is achieved either by borrower refinancing or through the forced sale of the property by the trustee. Ability to repay principal can be affected by overall market forces or through borrower neglect of the asset. The covenants seek most directly to control the latter by requiring proper management, maintenance and leasing of the property. Market forces are accounted for in two ways. a) The loan-to-value ratio is established at a conservative level so that in the case of liquidation the total principal amount of the notes can be recovered--even during a difficult market for real estate. b) The presence of a tail period forces the borrower to obtain refinancing commitments six months to one year prior to the loan maturity date. If this cannot be accomplished the servicer or trustee then has the right to foreclose and sell the property to repay the bonds.

2. **Operating Value.** The SP CMBS bondholder has recourse to the mortgage on the asset (building/property) in case of default. Covenants for this type of debt instrument exist partially to protect bondholders interest in decisions affecting the *operating* value of the collateral. The SP CMBS corporation has by design no assets or business function other than that of the owning and operation of the collateral⁶⁸. This value is greatly diminished when its income producing capacity is not effectively managed. Since there are no other income activities of the SP CMBS entity its ability to make payments on the bonds derives directly from the successful management of the property.

⁶⁸As such, the SP CMBS "firm" is a single-asset, single-purpose entity. This is discussed in the section on the "Envelope."

3. **Competing Claims.** Lastly, the SP CMBS covenants require that additional financing be restricted and that no liens should exist that are senior to the outstanding notes. This third function of the covenants is meant to ensure the senior position of the bonds to any competing claims. To this end, the covenants further require that no subordinate liens can remain unresolved longer than a stipulated time period. Cure of additional liens is important to insure that in the case of bankruptcy the bondholder's lien on the mortgage will not be diluted by unsecured liens of creditors.

5.2.3 Option Value. Each covenant can be thought of as an option purchased or sold by either party--borrower or lender. Both parties must "price" the particular covenant into the documentation in terms of opportunities provided or restricted. While the thesis does not suggest a model for quantifying these potential factors of pricing, it does outline the crucial covenants affecting the performance of the notes. In as much as the SP CMBS documentation has increased in its standardization, any variation in the boilerplate must be considered for its option value, and the option value of the altered covenant either accrues to the borrower or the bondholder.

Exhibit 5.2

BORROWER VS LENDER PAYOFF

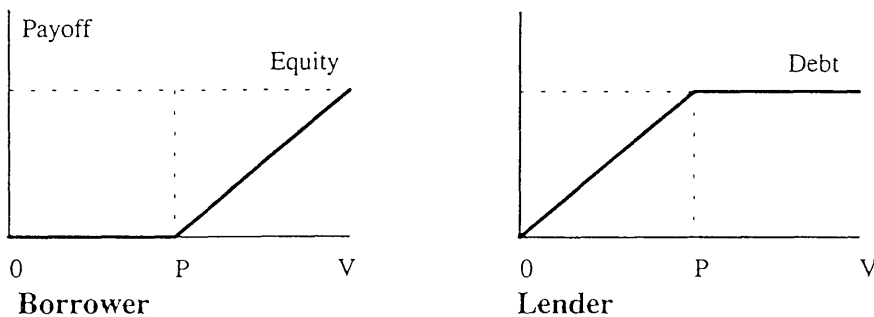


Exhibit 5.2 (continued)

Property Value		Three Conditions of the Security	
Prop.	D	V < P = Principal	
	E	D < P	
V	V	E > 0	

The two diagrams and the T-account in Exhibit 5.2 above serve to demonstrate the stakes at hand in the evaluation of the role of covenants in a SP CMBS indenture. The borrower's payoff exists while the equity component of the property remains positive. Below the Principal (P) the value to the borrower becomes zero. From the lender or investor point of view, retention of the full value of the debt position depends on the relationship of $V > P$. When $V < P$, the lender loses while the borrower becomes indifferent at the value of P and below. The diagrams also demonstrate that in SP CMBS the equity in the asset serves as the primary credit support for the bonds.

Associated with One State. The covenants are present to protect the lender's claim relative to these possible states of value for the property securing the notes. By assigning each covenant a role relative to these two conditions, one can make a determination of which state of the property's value the covenant serves to protect. As an example, covenants requiring the insurance of the property while the notes are outstanding are clearly guarding the value of the borrower's claim to the principal. Specific covenants to on the management of the property seem designed to ensure sufficient cash flow to afford timely and complete payment of interest on the notes. As such they are protecting the operating value of the property and by extension the equity. As the operating value decreases, the first loss is usually to the equity component.

Debt service coverage ratio (DSCR)⁶⁹ and loan-to-value (LTV)⁷⁰ ratios correspond roughly to two concerns of the investor--interest payment and principal repayment. The operating value of the property is a cash flow concern and as such uses the DSCR as a measure of sufficiency income for servicing the debt. While the liquidation value (or ability to refinance) is concerned with the principal repayment at maturity of the bonds. Principal repayment is accomplished either by refinancing of the mortgage loan or liquidation of the asset. In either scenario the property must have a LTV which allows recovery of the principal plus transaction costs associated with the recovery.

Associated with Two States. If a covenant can be associated with both of the two conditions above it has a greater likelihood of employing more specific and restrictive language than when it applies to just one. Covenants of transfer, casualty/condemnation, additional indebtedness and expansion are examples that protect both measures. Because of this, the covenants are detailed in their provisions for all possible scenarios. The analysis of individual covenants addresses this observation further.

The considerations of covenant function and value are now applied to an evaluation of the actual SP CMBS documents. To do this, we first look at the characteristics of the "sample."

⁶⁹DSCR is defined as the ratio of Net Operating Income to the mortgage (debt) payment.

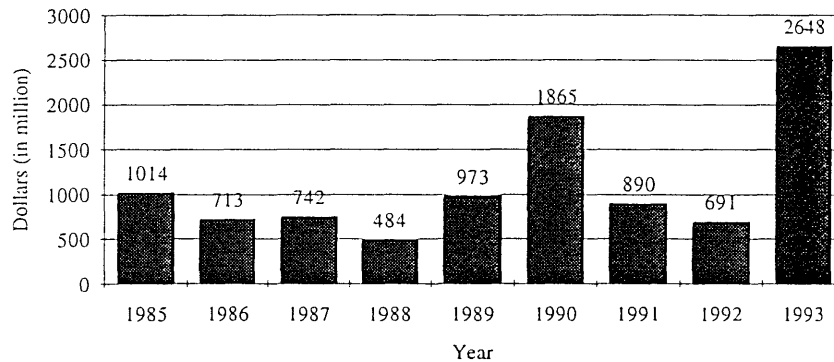
⁷⁰LTV is the ratio of the principal amount of the bonds (or loan) to the value of the property. Valuation of the property is discussed in section 4.6.

5.3 The Study Sample

The conclusions in the study are based on a sampling of 17 SP CMBS prospectuses and memoranda from 1985 to mid-1994 (the "Sample"). The total issuance of single-property securitizations to date consists of 73 placements (see Appendix B). Prospectuses and memoranda used for this study were obtained from the investment banks underwriting the deals as well as from advisory firms involved in the management of the securitized properties. The Sample contains 14 deals from 1992 to 1994 and three deals from 1985. It is interesting to note that the 1985 sample contains 80% of the total dollar volume for that year.

Exhibit 5.3

Volume of SP CMBS Issuance

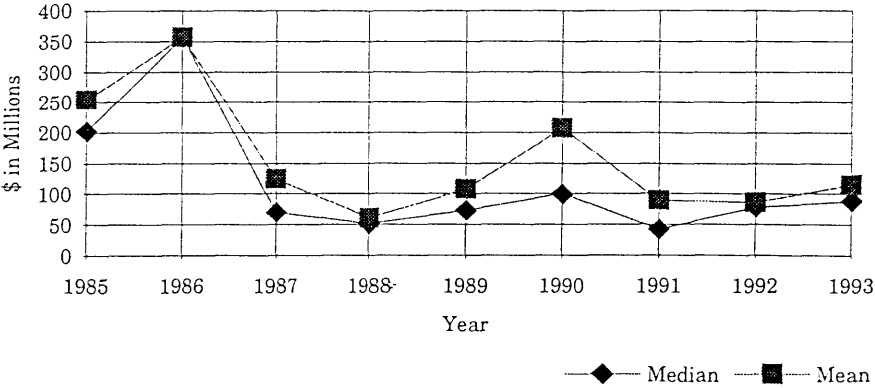


The dollar volume of issuance for SP CMBS fluctuates during the period under consideration, with the 1993 volume peaking at \$2.6 billion. (See Exhibit 5.3). A previous peak in dollar volume issuance occurs in 1990--with \$1.8 billion. The interim years average a total issuance of \$790 million. Median and mean dollar volume values for

1985 and 1986 transactions are the highest and consist of a few large deals (Exhibit 5.4). In contrast, 1992 and 1993 median and mean values are less than half and are characterized by a larger number of smaller transactions. Excluding the dollar size of deals in 1985 and 1986, the average size of SP CMBS deals done since 1986 is \$113 million.

Exhibit 5.4

Median and Mean Values Per Year



5.4 Method of Analysis

The analysis of the covenants is a two-fold exercise--first is a quantitative break-down of the type and frequency of occurrence for individual covenants, second is a qualitative review of the relative strengths and weaknesses of the covenant's permutations. The passages describing the individual covenants have been entered into a data base which allows comparisons of the same type of covenant across many deals. To facilitate the comparisons, the most frequently observed covenants are "outlined." For example, covenants of additional indebtedness are formatted into a single spread sheet containing attributes of the issue as well as specific restrictions and conditions of the covenant. This allows direct comparisons between the 17 indentures. Exhibit 5.5 on the following page shows some of the attributes of the Sample.

Exhibit 5.5

SP CMBS Sample Characteristics

#	Prop.	Amount	Issued	Placement	Security	Comments
1	Office	\$151,679,000	05/85	EURO	Guaranteed Notes	Pre-Rule 144A
2	Office	\$200,000,000	12/85	EURO	Secured Notes	Pre-Rule 144A
3	Office	\$160,000,000	12/85	EURO	Secured Notes	Pre-Rule 144A
4	Mall	\$51,000,000	04/92	EURO/144A	Collateralized VRNs & FRNs	
5	Mall	\$90,000,000	07/92	EURO/144A	Collateralized VRNs & FRNs	
6	Mall	\$62,000,000	12/92	144A	Collateralized FRNs	
7	Mall	\$41,000,000	02/93	EURO/144A	Collateralized FRNs	
8	Mall	\$57,500,000	03/93	EURO/144A	Collateralized FRNs	
9	Casino	\$330,000,000	06/93	Public	Guaranteed Mortgage Notes	
10	Mall	\$118,000,000	08/93	EURO/144A	Collateralized FRNs	REIT
11	Mall	\$140,000,000	10/93	EURO/144A	Collateralized FRNs	REIT
12	Mall	\$65,000,000	11/93	EURO/144A	Mortgage Collateralized Notes	REIT
13	Office	\$155,000,000	11/93	Public	Mortgage Collateralized Notes	REIT/REMIC
14	Mall	\$160,000,000	12/93	Public	Pass-Through Certificates	REIT/REMIC
15	Mall	\$51,500,000	02/94	144A	Mortgage Notes	
16	Mall	\$58,000,000	04/94	144A	Pass-Through Certificates	REMIC
17	Mall	\$152,000,000	03/94	EURO/144A	Pass-Through Certificates	REMIC

DEFINITION OF TERMS:

#	Prospectus/Memorandum
Property	Type of real estate asset securing the mortgage.
Amount	Total dollar amount of the offering.
Issued	Date of prospectus or issue of securities.
Placement	Means by which the notes were sold to the public.
Security	Type of mortgage-backed instrument involved.
Comments	Other defining characteristics of the issue.

The first analysis performed is the creation of a simple matrix of covenant types and deals. Each type of covenant has been assigned a "1" or "0" as being either present or not present respectively in the documentation of the prospectus (see Appendix C). The deals have been arranged chronologically and denoted by public, Eurobond (EURO) or 144A⁷¹ designations. The resulting tabulation of this exercise is then used to determine which of the covenant types should be examined in detail using the outline format. Where test restrictions appear as ratios or dollar amounts, these have been included to aid in the comparisons. The function of less frequently occurring covenants are also discussed. The last component of the analysis looks at covenant-like restrictions in the documents such as provisions for "lockedboxes" and reserve accounts.

5.2.2. Frequently Occurring Covenants. A first pass at the Sample shows the covenants that appear most often in the seventeen indentures. Three categories of covenants have been identified: 1.) those relating to the issuer, 2.) covenants contained in the mortgage and 3.) in one prospectus, covenants of the indenture itself. Covenants that appear most frequently are listed below in Exhibit 5.6.

Exhibit 5.6

Frequently Occurring SP CMBS Covenants	#/Sample
Covenants of the Issuer	
Restrictions on Guarantees	10/17
Restrictions on Engaging in Other Business	10/17
Restrictions on Further Indebtedness	10/17
Covenants of the Mortgage	
Maintenance of Insurance	17/17
Restrictions on Additional Indebtedness	14/17
Restrictions on Alterations	16/17

⁷¹Public refers to any issue that is registered with the Securities and Exchange Commission (SEC) as required by the Securities Act of 1933. Eurobond is the designation used for securities offered in the European market, and 144A is a reference to a method of bond placement and trading done in the private market between Qualified Institutional Buyers, as allowed under the SEC rule of the same name.

Exhibit: 5.6 (continued)

Maintenance of the Property	16/17
Restrictions on Transfers	15/17
Condemnation Provisions	17/17
Events of Default	16/17
Non-Recourse	16/17
Restrictions on Engaging in Other Business	11/17
Restrictions on the Commingling of Assets	11/17

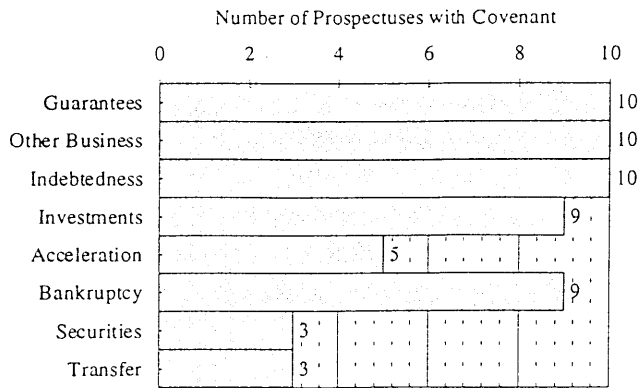
Less frequently occurring covenants are discussed later in the paper. These include covenants on the right to expand and contract the property, permitted additional financing⁷², substitution and defeasance and escrow accounts for capital expenditures.

The covenants showing the greatest variation are the provisions for expansion and alteration, condemnation, and special maintenance. While the most generic and least varied are those dealing with insurance, discharge of liens, leases, and title insurance. Covenants naming specific property management firms are also found. The frequency of occurrence for all the covenants is shown in Exhibit 5.7.

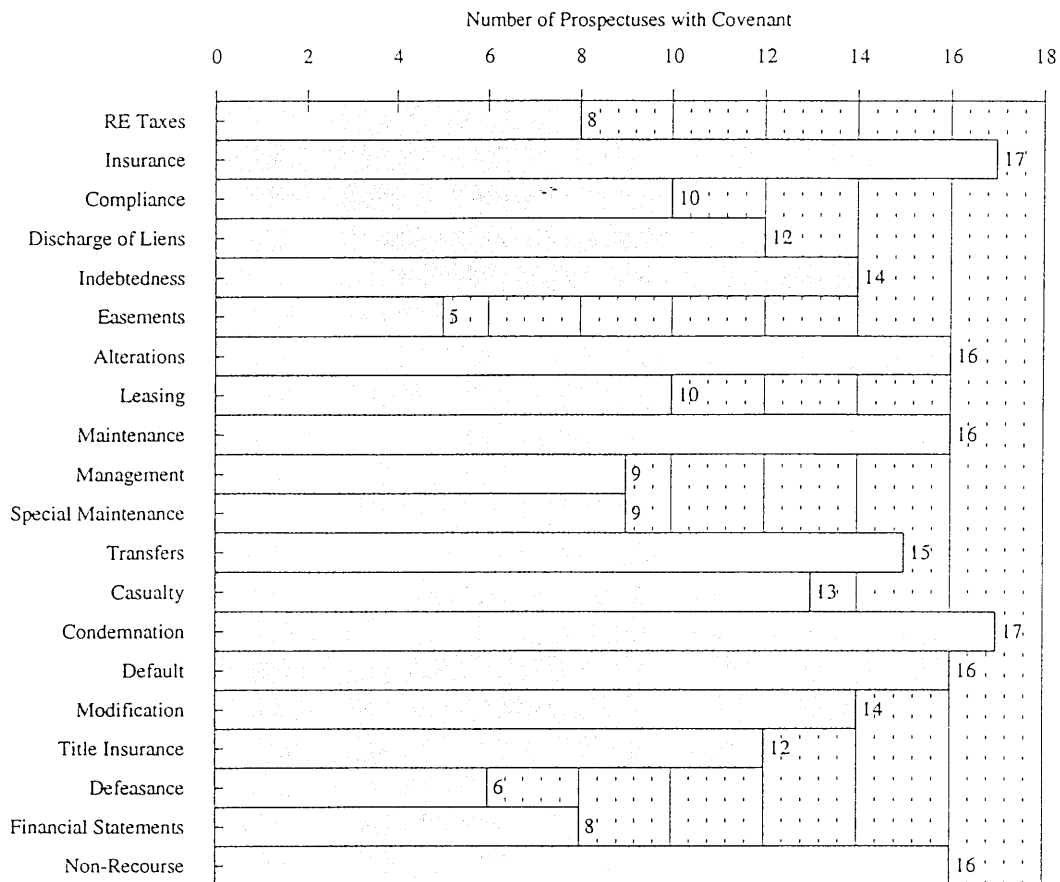
⁷²This is distinct from covenants concerning Additional Indebtedness.

Exhibit 5.7⁷³

Covenants of the Issuer



Covenants of the Mortgage



⁷³The tabulation of covenants is found in Appendix D. Not shown in these two graphs are negative covenants of the mortgage and covenants of the indenture.

5.5 A Detailed look at the Covenants

We now focus our attention to the examination of the individual covenants for their roles in the indenture and in the course of the bond's issuance. Each covenant is defined, its role in the document is discussed and comparisons are made across the various prospectuses in the Sample. In addition, some covenants are compared to those in unsecured corporate indentures. Exhibit 5.7 on the preceding page gives the reader an overview of the frequency and range of covenants in the SP CMBS indentures.

5.5.1 Transfers. Transfer is a critical covenant for investors in SP CMBS. An investor wants to have the confidence that a change in ownership of the collateral will not have a material adverse effect on the property and the rating of the indenture. Because of this concern, both the rating agencies and potential investors look very closely at the restrictions for transfer of ownership and control. For most SP CMBS agreements, the borrowers are only allowed to transfer their interests in the property between themselves or a related party. Sale to a third party is restricted to entities which, through their ownership of the property, would not cause a downgrading of the notes. Tests such as net worth, aggregate total assets and asset management credentials are applied to requirements for transfer.

Analysis. The entity to which transfer is to be made must have the same legal envelope as the current borrower. This requires a single purpose entity that is bankruptcy remote from any affiliates. Affiliates are meant to have a current net worth of at least \$100 million and total assets of at least \$200 million. This net worth test can also be established by an

entity with a current debt rating of the highest rating of the current outstanding notes. These conditions of transfer seem to be modeled on the Rule 144A qualifications for institutional buyers (QIBs). The reasoning for this similarity is to ensure a depth of resources and investing knowledge on the part of any new owner. An investor in the mortgage notes then has the assurance that a transfer will not result in a loss of value in the property through ownership by a less substantial entity.

Most of the indentures provide for permitted owners which are allowed to assume control or ownership of the property without the mortgagee's consent. These provisions are highly specific and frequently name affiliates of the borrower or the management company, or its affiliates. Though the intent is similar, the conditions of this portion of the transfer covenant is tailored by the circumstances of the borrower and real estate advisor/manager. This specificity does not seem to show a correlation to either placement type or asset type.

Transfer provisions represent a significant restriction to the borrower. Yet informal evidence indicates that SP CMBS provisions for transfer are actually less restrictive than those of conventional commercial mortgage lending agreements. Commercial mortgages usually require the borrower to negotiate any planned transfer and often include penalties associated with transfer or prepayment. The SP CMBS borrower has, in this sense, purchased a valuable option.

5.5.2 Additional Indebtedness. Indebtedness of the borrower is limited in all of the Sample SP CMBS agreements dating from 1992 to 1994. In contrast, the 1985 American Express Company indenture contains no provisions against further indebtedness (see Appendix D, Exhibit 3). The notes of this indenture are secured by a subordinate mortgage. As stated in the documents, "The Subordinate Mortgage will not contain any restriction on the Mortgagors' right to sell, assign, convey, transfer, mortgage or

otherwise dispose of any of their respective interests in the Property."⁷⁴ In the majority of the documents, borrowers are restricted in both using the property to secure other loan commitments or in adding more debt to the collateral. To the extent that the borrower is allowed to finance projects of benefit to the maintenance and marketing of the asset, the covenants usually stipulate a maximum dollar amount permitted without the consent of the bondholders. This number is shown most often to be 5% of the total issuance of debt in the offering. If the borrower wishes to exceed this threshold amount, consent must be given by either the bondholders or the trustee.

Some specific exceptions to this standard are observed in prospectuses providing for planned expansions to the property. The study found examples of both anticipated subordinate and *pari passu* financing arrangements. These agreements required test ratios be met as a condition of the supplemental financing. Without a specific expansion/alteration plan included in the indenture, the borrower gives up an ability to easily respond to changes in the market place. This covenant would seem to most severely restrict retail property borrowers to react to charges in the market.

Analysis. The bondholders' claim in the secured indenture can be diluted in several ways. The most obvious is the issuance of additional notes with a claim senior to the original amount. In this instance, the bondholder's priority in the security is lost to the new group of bondholders who also have first priority over the cash flow. This scenario is excluded from the borrower's possible actions in all but one of the documents.

Subordinated secured and unsecured debt is tightly restricted in all the documents with covenants concerning additional indebtedness. In most examples, the borrower covenants

⁷⁴Offering Memorandum, American Express Company, U.S. \$151,679,000, May 30, 1985, p.28.

that it will not incur additional debt without the trustee's or mortgagee's permission. After this blanket statement of required approval, the covenant then elaborates the allowable exceptions. The boilerplate test for allowance of additional unsecured debt is that it be incurred during the normal course of business in managing the property. This includes the financing of capital improvements and tenant fit-out. The dollar amount generally allowed is the 5% of the principal amount of the mortgage notes.

Other tests of the additional debt include evidence through written agreement that the terms of supplemental financing are not more favorable than can be negotiated at an arm's length transaction; the additional debt amount together with principal balance of the mortgage notes does not exceed 80% of the property value; and the debt is evidenced by a written agreement that provides additional debt be allowed only to the extent that net operating income (NOI) is available after paying amounts due on all other indebtedness of the borrower. Test DSCRs and LTVs are also required in some cases.

"Threshold Amounts" for SP CMBS operate as a part of the additional indebtedness restrictions. The reasoning behind the establishment of thresholds would seem to be a function a maximum DSCR and LTV acceptable to the ratings agencies for the class of notes offered. The pattern to the establishment of threshold amount indicates a convergence toward the standard of 5% mentioned above. Most directly, the existence of threshold permitted additional indebtedness indicates the design of "slack" in the LTV and DSCR values applied to the performance criteria. In a concept similar to that for free cash flow in corporations, SP CMBS entities are set up to give the borrower a limited (though judged sufficient) means for reacting to changes in the retail/office market.

The Sample contains one indenture with a separate provision for permitted supplemental financing to be created *pari passu* to mortgage notes. The issue is a four tranche structure

with an original dollar amount of \$152 million. The B, C and D tranches of this deal become subordinate to the additional financing once it has been put in place. "Permitted Supplemental Financing" is included in the mortgage as a separate covenant. Constraints to this additional financing are a DSCR greater than 1.3 to 1 and no continuing mortgage event of default. Satisfying these conditions, the mortgagor may then issue additional mortgage indebtedness of up to \$15 million which is designed to rank pari passu relative to the Class A notes.

Concern in over inappropriate actions by management requires corporate indenture agreements to limit debt by the borrower thereby encumbering some of management's freedom to make decisions concerning the firm's actions. Likewise, by limiting further encumbrances of the property, SP CMBS covenants on additional indebtedness are designed to ensure that sufficient cash flow remain available to service the payments on the notes, and to protect the first lien position held by the mortgage notes.

Though covenants for additional indebtedness are detailed in their conditions of restriction and allowance, this study finds negligible observable difference between public and private placements or between the two principal asset types in the Sample--regional malls and office buildings. The variance of restriction seems to be a function of when the indenture agreements were completed. Indentures issued recently exhibit the most restrictive and specific language concerning indebtedness. In addition, these agreements differ from earlier ones by requiring within the covenant that no mortgage event of default can be occurring when additional indebtedness is sought. This apparent change in underwriting standards, occurring late in 1993, is most likely an outgrowth of the losses that occurred in real estate markets in the early 1990s.

5.5.3 Casualty and Condemnation. Casualty, condemnation and partial condemnation are concerned with the principal repayment to the bondholders in case of damage to the property securing the mortgage. Recalling the earlier debt and equity payoff diagrams, the provisions for casualty are meant to ensure that the order of payment requires payoff first of the debt component before the borrower receives any of its equity interest. This provision has no precise counterpart in unsecured corporate debt indentures. The closest analogy to corporate indenture covenants is found in the restrictions on the payment of dividends. Under these restrictions, the distribution of payments to the equity holders of a corporation are limited through covenants. Since the receipt of insurance from a casualty claim represents funds necessary for reinvestment in the productivity of the asset, proper application of the proceeds becomes equivalent to reinvestment in the firm. If those funds are not reinvested, the SP CMBS "firm" is essentially making a dividend payment of the assets of the firm. As a result, decreases the equity component of the property's value and making the bondholder's claim more susceptible to loss.

Analysis. The covenants of casualty and condemnation found in the Sample reveal some differences in provisions for trustee⁷⁵ control of insurance proceeds and in the stated dollar amount of the threshold (see Appendix D, Exhibit 4). Trustee control of funds from insurance claims focuses on the size of the claim. Four of the 17 indentures give the trustee control of any insurance proceeds from casualty or condemnation. They are the most restrictive of the borrower's actions. Seven indentures require trustee control of any proceeds greater than the stated threshold amount. Similarly to thresholds for additional indebtedness, thresholds for trustee control in cases of casualty converge on the 5% figure. Some exceptions to this number exist, and in all but one these differing deals, the thresholds are a lower percentage of the outstanding principal balance.

⁷⁵Trustee here is meant as a general term for the intermediary between borrower and noteholders. In some cases the indenture name the mortgagee as the entity in charge of insurance proceeds.

All of the agreements allow the prepayment of principal without penalty or premium through the application of the insurance proceeds.⁷⁶ In the event that the borrower is obligated or chooses to restore the property and there is an excess of proceeds after restoration, all but one of the indentures requires the borrower to apply the remainder to the repayment of the notes. The exception is a recent issue giving the borrower, in certain circumstances, the right to retain excess proceeds after restoring the property to its original condition, or to repay the mortgage note in full, with a prepayment premium.

....If the nature of the casualty is such that (a) the Mortgagor is excused under all leases and the Reciprocal Easement Agreement from restoration responsibility, and the schedule for restoration of the Property indicates that work having a cost in excess of the Threshold Amount cannot be completed prior to the date on which business interruption or rental loss insurance would be exhausted, then the Mortgagor must prepay the Mortgage Note in full at a price of par plus accrued interest, without Prepayment Premium, and all other amounts due under the Mortgage. If the Mortgagor is not required to repay the Mortgage Note as provided in the preceding sentence, it may elect either to (i) restore the affected premises as nearly as practical to at least its fair market value, utility and character immediately prior to such damage (and in the case of it doing so, retain any excess Proceeds, if such restoration can be completed for less than the total Proceeds) or (ii) prepay the Mortgage Note in full, with Prepayment Premium, and all other amounts due under the Mortgage.⁷⁷

The permission to retain excess restoration proceeds constitutes a negative incentive to the borrower relative to the bondholder's claim.

⁷⁶This is conditional on the borrower not being required by any lease or obligation to restore or any provision of the covenant which may impose the general obligation of restoration. Some of the examples allow the borrower latitude below the threshold amount.

⁷⁷Offering Memorandum, Freemall Finance, Inc., Morgan Stanley & Co., U.S. \$152,000,000, March 1994, p. 61.

As with the covenants for additional indebtedness, the covenants for casualty and condemnation have begun to include a provision that no event of default shall have occurred or be occurring when insurance proceeds are given to the borrower. This correlates to recent indentures in both instances.

5.5.4 Alterations. Covenants restricting the borrower's rights to alter or make improvement to the property are primarily concerned with the changes in the property to do with normal up-keep and tenant fit-out. All of the indentures limit rights in this area. The most frequently employed provision is capping the permitted total cost of alterations plus any outstanding liens at 5% of the current principal value of the notes outstanding--referred to as a threshold amount. Other means of restricting alterations are through placement of a cap on allowable square footage for alteration, test ratios and rated collateral for renovations in excess of the threshold amount (see Appendix D, Exhibit: 1)

Analysis. Covenant concerns over alterations to the property securing the mortgage are focused on the preservation of market value and limitation of additional debt. In this sense, they are limitations on the borrower's ability to make investments (therefore changes) in the secured asset. Eleven of sixteen indentures with provisions for alterations, provide for a 5% cap, or threshold amount, on the estimated cost of constructing alterations. There is no evident correlation to property type or to placement method. Varying from this benchmark is one mall allowing a threshold amount of 8%, while three other mall properties had thresholds at or below 2.5%. The Trump casino mortgage notes had no covenant restrictions on alterations, though this indenture highly restricts the partnership as to additional indebtedness, dividend payouts and limitations on liens.

All of the 16 indentures limiting alterations required verification that the planned alterations will have no "material adverse" effect on the "fair market value." Six of the 16

had the stipulation that no mortgage event of default could be occurring at the time of the alterations or their planning. This default provision trend occurs in more recent indentures. Other provisions of alterations covenants include requirements for security above the threshold amount, a proscribed rating for this security and the supervision by an independent architect for changes which exceed the threshold.

5.5.5 Maintenance/ Management. The bondholders are interested in the maintenance and management of the property securing the notes to the extent that its condition affects the cash flow. Provisions specifically for the maintenance of the property show little variation across the Sample. Separate covenants proscribing terms for management are found in 11 of the 17 indentures, and statements requiring a specific firm be in charge of the property management are found in 10 of the 11. Other permitted managers are then qualified either in the covenant or "as described in the Mortgage" under restrictions on transfer. Conditions for other management firms are provided in 4 of the 10 indentures specifying firms within the covenant. The language of qualification generally requires another "reputable and experienced" professional management company which manages at least four to six regional shopping centers comprising at least four million square feet (see Appendix D, Exhibit: 2).

Analysis. Bondholder influence over the property management attempts to control inappropriate actions by the borrower through reliance on the experience and size of the retained management firm. Covenants for the property's management are intended to foreclose the possibility of a type of substitution. The management expertise is viewed as an integral, though intangible, asset of the "firms" operation. The management covenant seems to operate as a partial equivalent to a corporate bond restriction on the disposition of assets, Smith and Warner [1990]. If management can be thought of as an asset in the

case of SP CMBS, the covenant specifying a firm for this function also is a restriction on a type of expertise transfer.

Management covenants are also clearly related to corporate covenants requiring the maintenance of assets. Where not provided for in a separate covenant, the qualifications for management of the property are usually then found in a provision of the transfer covenant. In as much as the management expertise of a particular firm can effect the consistency and health of the cash flow from the asset, the covenants of management are present primarily to protect the *operating* value of the asset.

5.5.6 Test Ratios. Test ratios are not common in the mortgage covenants. While the documents may indicate the DSCR and LTV (the most frequently used real estate test ratios) at the time of issuance, seldom are they included within the mortgage covenants themselves. When included in the covenants, test ratios appear as a provision of alterations, expansion or supplemental financing. As discussed earlier, DSCR and LTV are measures of the cash flow relative to the debt service, and the principal amount of the notes relative to the value of the property.

An example of an indenture which mandates test ratios is a recent private placement using Rule 144A and offered simultaneously on the Luxembourg Stock Exchange. This multi-tranche issue has as a part of the covenants a provision for supplemental financing. The condition affecting the borrower's right to add more debt is a supplemental financing DSCR of 1.3 to 1. It is interesting to note that this same indenture also is highly tailored in terms of a covenant providing for the "Release of Future Anchor Sites and Peripheral Parcels" and mandating a test ratio for DSCR as a condition for this action.

Analysis. Covenant specified test ratios are similar to the bonding covenants of corporate bond as identified by Smith and Warner [1990]. They are found in only four of the 17 indentures examined and seem to correlate to three separate attributes. The first is that all three issues of notes are secured by regional malls, though others in the Sample do not contain provisions for test ratios. The second attribute in common is the fact that all three are issuances of commercial mortgage pass-through certificates and not collateralized mortgage obligations. The investor's undivided interest in the underlying mortgage, as is typical of a pass-through structure, may influence this provision. Lastly, all three indentures are multiple tranche investment vehicles. The performance based restrictions would seem to be intended to protect the subordinate classes of bondholders. In the case of the permitted supplemental financing, the test ratio of DSCR becomes more stringent when the provision for financing is used. This "ratcheting-up" of the DSCR protects the other tranches. Also interesting is the implied monitoring of the borrower by the lender inherent with test ratios. The provisions for release of peripheral parcels and permitted supplemental financing indicate an willingness by the lender to closely monitor the property's financial condition.

5.6 Non-Covenant Restrictions

5.6.1 Locked-Boxes. Locked-boxes, or cash control established through the indenture agreement, require that the issuer create a third party account in the name of the trustee for the benefit of the bondholders. The borrower deposits debt service and or total cash receipts depending on the agreement, into the locked-box. From this account, payments are then made to the bondholders and to obligations such as collateral and reserve accounts. Only after all expenses are paid does the borrower receive proceeds out of the locked-box. As a consequence, this feature provides a strong incentive for the efficient management of the property. Though not a covenant of the mortgage, the locked-box restriction is a major feature looked for by investors and limiting to borrowers.

Analysis. Locked-box provisions of the indenture occur in 8 of the 17 issues (see Appendix D, Exhibit 5), and tend to be a feature of the more recent agreements. There seems to be no close analogy in corporate bonds for this restriction. The locked-box feature is likely to become more prevalent in bank lending and securitization for commercial real estate in the future. Its use in commercial mortgages has been an outgrowth of losses experienced by traditional lenders. Lenders learned during the real estate failures of the early 1990's that borrowers can control rental income to use funds before the lender is able to enforce the letter of the loan documents. This results in significant losses to the lender and in the event of bankruptcy, often gives the borrower the resources to fend off the lender for an extended period.

5.6.2 Reserve Accounts. Reserve accounts act as a form of credit enhancement in a SP CMBS issuance. The accounts are usually established by the issuer at the time of the placement and are invested in fairly liquid instruments such as short term treasuries or highly rated corporate securities. Given the low yields associated with these investments, reserve accounts are costly to the borrower.

Analysis. An example of the reserve account requirement is illustrated by the 1211 Finance Corporation indenture--issued 11/93. In this agreement, the borrower establishes two separate reserve accounts. The first is an initial reserve fund established out of the proceeds of the offering and totals 13% of the amount raised. The second is an account funded by the borrower on the first business day of each of four consecutive years beginning in 1997. This account is in anticipation of the costs associated with re-leasing the space currently occupied by the major tenant whose lease expires in the year 2000. The total amount of this reserve equals approximately 6% of the original principal balance.

5.6.3 Interest Rate Agreements. Commercial mortgage-backed securities issued with floating rate interest structures are required by the rating agencies to have interest rate agreements as a part of the indenture. Purchase of an interest rate cap is accomplished through a contract with an interest rate counterparty having sufficient credit quality to ensure the payment of interest overage. This expense is a part of the cost of the transaction and tends to be a part of shorter maturity issues which utilize floating rate obligations.

Analysis. Of the 17 indentures examined, 9 have variable or floating rate coupons (see Appendix D, Exhibit 5), all of these are offered in the U.S. and in the eurobond market. The rates are tied to a stated spread above the London Interbank Offered Rate (LIBOR). It is interesting to note that all but one of the floating and variable rate issues appear in the 1992 and 1993 indentures. Four issues from November 1993 through the first quarter of 1994 are fixed rate agreements. The last indenture, from April 1994, has a fixed rate of interest for the first year and then is indexed to LIBOR thereafter. The four fixed rate indentures may reflect a change in the perceived direction of rates at the end of 1993. From the borrower's point of view, the 1992 and 1993 interest rate environment favored floating and variable rates due to the continued decline in rates. In contrast, the upward direction in interest rates would correspond to a probable borrower preference for fixed rate agreements.

CONCLUSIONS

This paper examines the mortgage and indenture covenants of recent SP CMBS prospectuses to determine the degree of variation and the attributes affecting that variation. The 14 prospectuses from 1992 to the present show that covenant restrictions contain similar language and content during this period. In addition, the results of this analysis indicate that SP CMBS underwriting standards have 1.) converged toward a standardization of indenture covenant restrictions and 2.) reflect the conservative criteria of the post-recession real estate recovery. Where significant variation of the indentures is found, it is in reference to borrowers' rights to expand and contract the property, provisions for additional financing and casualty. Less frequently occurring covenants such as specified management, special maintenance, defeasance and financial statements must also be considered as variations.

In addition, no significant correlation between placement type and covenant structure is evident. To the contrary, the relative agreement found in the format of the documents indicates a strong preference for standardization of this instrument. This standardization serves the development of secondary market trading. Yet as a consequence, any observed variations in covenant restrictions must gain greater value due to the standardization. The convergence in language and content of covenants should contribute to their efficient evaluation of SP CMBS issues for secondary market activity. Where differences are apparent, these can be considered for their option value relative to the borrower or the investor. Valuation of these differences is proposed for additional research in this area.

Further study of single-property securities should also address the performance of SP CMBS in comparison to conventional commercial mortgages originated in similar amounts and time periods. Does one format or the other offer significantly lower rates of default? Are Default rates for SP CMBS responsive to the same factors observed in default rates of commercial mortgages? Further, using the Asquith and Wizman [1990] methodology, can one ascribe the success or failure of SP CMBS issues to the structure of the covenants? As pricing information becomes available through the development of secondary markets for CMBS and SP CMBS, research should be done to determine the effects of certain covenants relative to a given security's performance over time.

As discussed in chapter 4, SP CMBS instruments resemble conventional mortgages in terms of investor concerns over default risk. The Snyderman study (Snyderman, [1994]), indicates that the performance of commercial mortgage loans are effected by both the standards of underwriting and the economic conditions at the time of origination. Extending the argument to SP CMBS, securitized debt obligations should reflect the performance of their commercial counterparts. Furthermore, the performance of the properties that have been securitized in recent years should conform to the performance of commercial mortgages underwritten in the mid to late-1970's.

Finally, the function and the structure of the SP CMBS covenants have parallels to corporate indentures. Comparisons between the two serve a useful purpose in understanding the hybrid quality of single-property mortgage-backed securities. Effective evaluation of these instruments depends on the transfer of concepts derived from the study of corporate indentures.

APPENDICES

Appendix A

Investment Characteristics of Mortgage-Related Securities

	MBB	MPT	MPTB	CMO
Type of security interest acquired	Debt	Equity	Debt	Debt
Number of security classes	One	One	One	Multiple
Pass-through of principal	None	Direct	Direct	Prioritized
Party bearing prepayment risk	Issuer	Investor	Investor	Investor
Overcollateralization	Yes	NA	No	No
Overcollateral marked to market?	Yes	No	Yes	No
Credit enhancements used?	Yes	No	No	No
Maturity period known?	Yes	No	No	No
Call provisions?	Possibly	Cleanup	Possibly	Calamity & nuisance
Off-balance-sheet financing possible?	No	Yes	No	Yes

SOURCE: Brueggeman and Fisher, *Real Estate Finance Investments*, Irwin Inc., Boston, MA, 1993, p.784.

Appendix B

Total Issuance--Single Property CMBS

	1985	1986	1987	1988	1989	1990	1991	1992	1993
Dollars (Millions)	1,014.0	713.3	742.0	484.3	972.5	1,864.6	889.7	690.5	2,647.5
Study Sample	810.0	0.0	0.0	0.0	0.0	0.0	0.0	203.0	1,069.0
Number	4	2	6	8	9	9	10	8	23

Name

O & Y Development	\$450.0								
Fluor Corp.	204.0								
Fsiher Brothers	160.0								
O & Y Maiden Lane	200.0								
O & Y Water Street		548.3							
Parklabrea		165.0							
Southbury			279.0						
75 State Street			286.5						
One United Bank			107.0						
560 Lexco			26.0						
Sonesta			33.0						
Penn South			10.5						
Casa Arroyo				13.5					
Somers Associates				206.0					
Corte Madera				40.0					
Westvaco				13.9					
O & Y Gulf Canada				160.0					
El Senorial Mall				4.6					
Trujillo Alto				6.3					
Hahn JMC				40.0					
Marsh & McLennan					200.0				
National Archives					300.7				
Marriott Hotel					14.8				
Sheraton Centre					12.7				
Federal Judiciary					159.8				
Headquarters Corp					40.0				
1185 Ave Americas					57.0				
100 First Finance					115.0				
Two Rector					72.5				
Unidentified						55.0			
Unidentified						100.0			
Menlo Park						175.0			
Sears, Roebuck						850.0			
Postal Square						193.0			
Sheraton Winnipeg						16.8			
Caesars World						9.8			
Stoneridge						75.0			
1999 Star Finance						390.0			
Messe Finance							564.0		
600 Community							32.3		
Roberts Mill							9.5		

Appendix B.(Continued)

Name	1985	1986	1987	1988	1989	1990	1991	1992	1993
US West Commun.							10.8		
Caribbean Isles							4.7		
Lake Highlander							4.7		
Sports Club/LA							25.7		
May Centers II							75.0		
Walden Apartments							5.5		
Apple Computer Inc.							157.5		
Nassif Bldg Financ'g								145.0	
Franklin Park								51.0	
Water Tower								170.0	
Willowbrook								90.0	
Blue Bell Funding								65.0	
Crossroads								23.5	
Sunrise Mall								56.0	
Lakewood Mall								90.0	
US Realty									65.0
Plaza Juana Diaz									15.5
Princeton Circle									2.6
Fashion Show									36.0
Regency Square									57.5
Edison Mall									41.0
Northside Parkway									31.2
FNBC 1993									240.3
Park Avenue Assoc.									32.5
Trump Plaza									330.0
Ross Park Mall									60.0
EQ Green Acres									118.0
Veritas									121.0
Woodfield									172.0
Santa Anna Venture									80.0
USC Oakbrook									140.0
Pacific Acquisition									65.0
Vornado									227.0
SSMC III & IV LP									127.0
RE First Inc.									187.9
Seven World Trade									250.0
Lakeside									88.0
Sawgrass									160.0

SOURCE: Commercial Mortgage Alert

Appendix C

Exhibit 1

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	
	May-85	Dec-85	Dec-85	April-92	July-92	Dec-92	
	Office	Office	Office	Mall	Mall	Mall	
	Shearson	Salomon	Salomon	GS	GS	GS	
COVENANTS OF ISSUER							
Restrictions on guarantees of other obligations	0	1	1	1	1	1	5
Restrictions on engaging in other business	0	1	1	1	1	1	5
Restrictions on further indebtedness	0	1	1	1	1	1	5
Restrictions on investments	0	1	1	1	1	1	5
Restrictions on the acceleration of subordinated debt	0	0	0	1	1	1	3
Restrictions on the filing for bankruptcy	0	0	0	1	1	1	3
Restrictions on the issuance of securities	0	0	0	1	1	1	3
Restrictions on dissolving or liquidating, consolidating, merging or transferring	0	1	1	0	0	0	2
Modifications to Indenture	0	1	1	1	1	1	5
COVENANTS OF MORTGAGE							
Payment of real estate taxes	0	1	1	0	0	0	2
Maintenance of insurance	1	1	1	1	1	1	6
Compliance with applicable laws and private agreements affecting the Property	1	1	1	1	1	1	6
Discharge of liens	1	1	1	1	1	1	6
Restrictions on additional indebtedness	0	0	1	1	1	1	4
Modifications to Easements	0	0	0	1	1	1	3
Borrower's rights to make alterations to property (below prescribed dollar amount)	1	1	1	1	1	1	6
Requirement that leases executed by Borrower be at fair market value	0	0	0	1	1	1	3
Borrower's rights for expansion or contraction of the property	1	1	1	0	0	1	4
Maintenance of property	1	1	1	1	1	1	6
Management Requirement	0	0	1	0	0	1	2
Special provisions for maintenance	0	1	1	0	0	1	3

Exhibit 1 (continued)

MORTGAGE (continued)	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	
Restrictions on transfers	0	0	1	1	1	1	4
Casualty provisions	0	1	1	1	1	1	5
Partial Condemnation provisions	1	1	1	0	0	1	4
Condemnation provisions	1	1	1	1	1	1	6
Events of Default	1	1	1	1	1	1	6
Modification	1	1	1	1	1	1	6
Title Insurance	1	0	0	1	1	1	4
Defeasance; substitute collateral	0	1	1	0	0	1	3
Financial Statements	1	0	0	1	1	0	3
Non-Recourse	0	1	1	1	1	1	5
NEGATIVE COVENANTS							
Restrictions on Borrower's engaging in business other than the transaction	0	0	0	1	1	1	3
Restrictions on commingling of its assets	0	0	0	1	1	1	3
Restrictions on additional indebtedness	0	0	0	1	1	1	3
Restriction against partitioning the property	0	0	0	0	0	0	0
Restriction against Bankruptcy filings	0	0	0	0	0	0	0
Restriction against transfer or lease of the property	0	0	0	0	0	0	0
Restrictions against the guarantee of other obligations	0	0	0	0	0	0	0
COVENANTS OF THE INDENTURE							
Limitation of Issuer's right to liquidate, dissolve or issue any equity securities	0	1	1	0	0	0	2
Limitation of Issuer's right to consolidate, merge or transfer its assets	0	1	1	0	0	0	2
Provisions for modification of Indenture agreement	0	1	1	0	0	0	2

Exhibit 2

	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	
	Feb-93	March-93	June-93	August-92	Oct-93	Nov-93	
	Mall	Mall	Casino	Mall	Mall	Mall	
	JPM	Merrill	Merrill	GS	GS	Lehman	
COVENANTS OF ISSUER							
Restrictions on guarantees of other obligations	1	1	0	1	1	0	4
Restrictions on engaging in other business	1	1	0	1	1	0	4
Restrictions on further indebtedness	1	1	0	1	1	0	4
Restrictions on investments	1	1	0	1	1	0	4
Restrictions on the acceleration of subordinated debt	0	0	0	1	1	0	2
Restrictions on the filing for bankruptcy	1	1	0	0	1	1	4
Restrictions on the issuance of securities	0	0	0	0	0	0	0
Restrictions on dissolving or liquidating, consolidating, merging or transferring	0	0	0	0	0	0	0
Modification of Indenture	1	1	1	1	1	1	6
COVENANTS OF MORTGAGE							
Payment of real estate taxes	1	1	0	0	1	1	4
Maintenance of insurance	1	1	1	1	1	1	6
Compliance with applicable laws and private agreements affecting the Property	0	0	1	1	1	0	3
Discharge of liens	0	0	1	1	1	0	3
Restrictions on additional Indebtedness	0	1	1	1	1	1	5
Modifications to Easements	0	0	0	1	1	0	2
Borrower's rights to make alterations to property (below prescribed dollar amount)	1	1	0	1	1	1	5
Borrower's rights for expansion or contraction of the property	1	1	0	1	1	1	5
Requirement that leases executed by Borrower be at fair market value	1	0	0	0	1	1	3
Maintenance of property	0	1	1	1	1	1	5
Management requirements	1	1	0	0	1	1	4
Special provisions for maintenance	0	1	1	1	0	0	3

Exhibit 2 (continued)

MORTGAGE (continued)	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	
Restrictions on transfers	1	1	1	1	1	1	6
Casualty provisions	1	0	0	0	1	1	3
Partial Condemnation provisions	0	0	1	1	1	1	4
Condemnation provisions	1	1	1	1	1	1	6
Events of Default	1	1	1	1	1	1	6
Modification	0	1	0	1	1	0	3
Title Insurance	1	0	1	0	1	1	4
Defeasance; substitute collateral	0	0	1	1	0	0	2
Financial Statements	0	0	1	0	1	0	2
Non-Recourse	1	1	1	1	1	1	6
NEGATIVE COVENANTS							
Restrictions on Borrower's engaging in business other than the transaction	1	1	0	1	1	1	5
Restrictions on commingling of its assets	1	1	0	1	1	1	5
Restrictions on additional indebtedness	1	1	0	1	1	1	5
Restriction against partitioning the property	0	0	0	0	1	1	2
Restriction against Bankruptcy filings	0	0	0	0	0	1	1
Restriction against transfer or lease of the property	0	0	0	0	0	1	1
Restrictions against the guarantee of other obligations	0	0	0	0	1	1	2
COVENANTS OF THE INDENTURE							
Limitation of Issuer's right to liquidate, dissolve or issue any equity securities	0	0	0	0	0	0	0
Limitation of Issuer's right to consolidate, merge or transfer its assets	0	0	0	0	0	0	0
Provisions for modification of Indenture agreement	0	0	0	0	0	0	0

Exhibit 3

	<u>13</u> Nov-93 Office	<u>14</u> Dec-93 Mall	<u>15</u> Feb-94 Mall	<u>16</u> April-94 Mall	<u>17</u> March-94 Mall		
COVENANTS OF ISSUER							
Restrictions on guarantees of other obligations	1	0	0	0	0	1	10
Restrictions on engaging in other business	1	0	0	0	0	1	10
Restrictions on further indebtedness	1	0	0	0	0	1	10
Restrictions on investments	0	0	0	0	0	0	9
Restrictions on the acceleration of subordinated debt	0	0	0	0	0	0	5
Restrictions on the filing for bankruptcy	1	0	1	0	0	2	9
Restrictions on the issuance of securities	0	0	0	0	0	0	3
Restrictions on dissolving or liquidating, consolidating, merging or transferring	1	0	0	0	0	1	3
Modification of Indenture	1	1	1	0	1	3	14
COVENANTS OF MORTGAGE							
Payment of real estate taxes	1	0	1	0	0	2	8
Maintenance of insurance	1	1	1	1	1	5	17
Compliance with applicable laws and private agreements affecting the Property	0	0	0	1	0	1	10
Discharge of liens	0	1	0	1	1	3	12
Restrictions on additional Indebtedness	1	1	1	1	1	5	14
Modifications to Easements	0	0	0	0	0	0	5
Borrower's rights to make alterations to property (below prescribed dollar amount)	1	1	1	1	1	5	16
Borrower's rights for expansion or contraction of the property	1	1	1	1	1	5	13
Requirement that leases executed by Borrower be at fair market value	0	1	1	1	1	4	10
Maintenance of property	1	1	1	1	1	5	16
Management requirements	0	0	1	1	1	3	9
Special provisions for maintenance	1	1	0	1	0	3	9

Exhibit 3 (continued)

MORTGAGE (Continued)	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	
Restrictions on transfers	1	1	1	1	1	5 15
Casualty provisions	1	1	1	1	1	5 13
Partial Condemnation provisions	1	1	1	1	0	4 12
Condemnation provisions	1	1	1	1	1	5 17
Events of Default	0	1	1	1	1	4 16
Modification of Mortgage	1	1	1	1	1	5 14
Title Insurance	0	1	1	1	1	4 12
Defeasance; substitute collateral	0	0	0	1	0	1 6
Financial Statements		1	0	1	1	3 8
Non-Recourse	1	1	1	1	1	5 16
NEGATIVE COVENANTS						
Restrictions on Borrower's engaging in business other than the transaction	1	0	1	1	0	3 11
Restrictions on commingling of its assets	1	0	1	1	0	3 11
Restrictions on additional indebtedness	1	0	1	1	0	3 11
Restriction against partitioning the property	1	0	1	1	0	3 5
Restriction against Bankruptcy filings	1	0	1	1	1	4 5
Restriction against transfer or lease of the property	1	0	1	1	1	4 5
Restrictions against the guarantee of other obligations	0	0	1	1	0	2 4
COVENANTS OF THE INDENTURE						
Limitation of Issuer's right to liquidate, dissolve or issue any equity securities	1	0	0	0	0	1 3
Limitation of Issuer's right to consolidate, merge or transfer its assets	1	0	0	0	0	1 3
Provisions for modification of Indenture agreement	1	0	0	0	0	1 3

Appendix D

Exhibit: 1

Covenants of Alterations

#	Property	Issued	Placement	No Adverse	No Default	Thrshld	Arch.	Rating	Security
1	Office	05/85	EURO	Yes	No	5%	Yes	No	No
2	Office	12/85	EURO	Yes	No	2.5%	Yes	No	Yes
3	Office	12/85	EURO/144A	Yes	Yes	1.25%	Yes	No	Yes
4	Mall	04/92	EURO/144A	Yes	No	5%	No	Yes	Yes
5	Mall	07/92	EURO/144A	Yes	No	5%	No	Yes	Yes
6	Mall	12/92	EURO/144A	Yes	No	8%	No	Yes	Yes
7	Mall	02/93	144A	Yes	No	5%	No	No	Yes
8	Mall	03/93	EURO/144A	Yes	No	5%	No	Yes	Yes
9	Casino	06/93	Public	NA	NA	NA	NA	NA	NA
10	Mall	07/93	EURO/144A	Yes	No	5%	No	Yes	Yes
11	Mall	10/93	EURO/144A	Yes	No	5%	No	Yes	Yes
12	Mall	11/93	EURO/144A	Yes	Yes	5%	No	Yes	Yes
13	Office	11/93	Public	Yes	Yes	5%	Yes	Yes	Yes
14	Mall	12/93	Public	Yes	No	sqft	No	No	Yes
15	Mall	02/94	144A	Yes	Yes	5%	Yes	No	Yes
16	Mall	03/94	144A	Yes	Yes	5%	Yes	Yes	Yes
17	Mall	03/94	EURO/144A	Yes	Yes	0.7%	No	Yes	Yes

DEFINITION OF TERMS:

#	Prospectus/Memorandum
Property	Type of real estate asset securing the mortgage.
Issued	Date of prospectus or issue of securities.
Placement	Means by which the notes were sold to the public.
No Adverse	Covenant requires confirmation that alteration will not have a "material adverse effect of the fair market value of the property."
No Default	No mortgage event of default can have occurred or be occurring for alterations to commence.
Threshold	Percentage of original principal balance of the notes under which borrower needs no consent for performing alterations.
Arch.	Provision that an independent architect (or engineer) be retained for any alteration exceeding Threshold Amount.
Rating	If additional collateral is required, does it need to have a minimum rating by a specified agency.
Security	If cost of alteration exceeds Threshold Amount is the borrower required to post additional collateral.

Exhibit: 2

Covenants of Management

#	Property	Issued	Placement	"First-Class"	Firm	Number	SqFt
1	Office	05/85	EURO	NA	NA	NA	NA
2	Office	12/85	EURO	No	Owner	No	No
3	Office	12/85	EURO/144A	No	Yes	No	No
4	Mall	04/92	EURO/144A	NA	NA	NA	NA
5	Mall	07/92	EURO/144A	NA	NA	NA	NA
6	Mall	12/92	EURO/144A	No	Yes	6 Malls	4 million
7	Mall	02/93	144A	Yes	Yes	6 Mall	4 Million
8	Mall	03/93	EURO/144A	Yes	Yes	No	No
9	Casino	06/93	Public	NA	NA	NA	NA
10	Mall	07/93	EURO/144A	No	Yes	6 Malls	4 Million
11	Mall	10/93	EURO/144A	No	Yes	6 Malls	5 Million
12	Mall	11/93	EURO/144A	Yes	Yes	No	No
13	Office	11/93	Public	Yes	Yes	No	No
14	Mall	12/93	Public	NA	NA	NA	NA
15	Mall	02/94	144A	Yes	Yes	No	No
16	Mall	03/94	144A	No	Yes	No	No
17	Mall	03/94	EURO/144A	NA	NA	NA	NA

DEFINITION OF TERMS:

#	Prospectus/Memorandum
Property	Type of real estate asset securing the mortgage.
Issued	Date of prospectus or issue of securities.
Placement	Means by which the notes were sold to the public.
"First-Class"	A reference to the language used to describe standard of property management.
Firm	Whether or not the covenant requires a specific management firm.
Number	Qualifications for alternate management firm measured by the number of regional shopping malls managed by such firm.
SqFt	Qualifications for alternate management firm measured by total amount of regional shopping square footage under such firm's management.

Exhibit: 3

Covenants of Additional Indebtedness

#	Prop.	Issued	Placement	All	Pari Passu	Sub. Mortg.	Unsec'	Tenant Fitout	Affiliates	Threshold	Test Ratios	% of Value	No Default	Cash Flow
1	Office	05//85	EURO	Yes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Office	12/85	EURO	No	Yes	Yes	Yes	Yes	Yes	No	DSCR/LTV	85%	No	Yes
3	Office	12/85	EURO	No	Yes	Yes	Yes	Yes	Yes	No	DSCR/LTV	100%	NO	Yes
4	Mall	04/92	EURO/144A	No	No	Yes	Yes	Yes	Yes	5%	No	80%	No	Yes
5	Mall	07/92	EURO/144A	No	No	Yes	Yes	Yes	Yes	5%	No	80%	No	Yes
6	Mall	12/92	EURO/144A	No	No	Yes	Yes	Yes	Yes	8%	No	80%	No	Yes
7	Mall	02/93	144A	No	No	Yes	Yes	Yes	Yes	6%	No	80%	No	Yes
8	Mall	03/93	EURO/144A	No	No	Yes	Yes	Yes	Yes	5%	DSCR	80%	No	Yes
9	Casino	06/93	Public	No	Yes	Yes	Yes	NA	NA	No	DSCR	No	No	No
10	Mall	07/93	EURO/144A	No	No	Yes	Yes	Yes	Yes	5%	No	80%	No	Yes
11	Mall	10/93	EURO/144A	No	No	Yes	Yes	Yes	Yes	5%	No	80%	No	Yes
12	Mall	11/93	EURO/144A	No	No	Yes	Yes	Yes	NA	5%	No	80%	Yes	Yes
13	Office	11/93	Public	No	No	Yes	Yes	Yes	Yes	5%	No	70%	Yes	Yes
14	Mall	12/93	Public	No	No	Yes	Yes	Yes	No	5%	No	NO	Yes	Yes
15	Mall	02/94	144A	No	No	Yes	Yes	Yes	NA	5%	No	80%	Yes	Yes
16	Mall	03/94	144A	No	No	Yes	Yes	Yes	NA	5%	No	No	Yes	No
17	Mall	03/94	EURO/144A	No	Yes*	Yes	Yes	Yes	Yes	5%	DSCR	80%	Yes	Yes

*Indicates additional covenant for permitted supplemental financing.

DEFINITION OF TERMS:

#	Prospectus/Memorandum
Property	Type of real estate asset securing the mortgage.
Issued	Date of Prospectus or issue of securities.
Placement	Means by which the notes were sold to the Public.

Exhibit: 3 (continued)

Continued

All	Borrower allowed to add any debt without consent of trustee.
Pari Passu	Borrower Allowed to add <i>pari passu</i> debt without consent of trustee.
Sub. Mortg.	Borrower may place a subordinate mortgage on the property without the consent of the trustee.
Unsec'd	Borrower may assume indebtedness not secured by the property, incurred in the ordinary course of business, without the consent of the trustee.
Tenant Fitout	Borrower may incur indebtedness, not secured by the property, to tenants to pay or reimburse for tenant fit out work.
Affiliates	Indebtednes either secured or unsecured to affiliates (with restrictions).
Threshold	Percentage of principal value of notes below which the borrower is free to incur indebtedness without the consent of the trustee.
Test Ratios	Performance based measures <i>included in the covenant</i> for establishing borrower's right to incur additional debt--usually for any amount above the threshold.
% of Value	Maximum percentage of the property's current value that is permissible as debt. Determined by adding new financing to the outstanding principal value of the notes as a percentage of appraised value of property.
No Default	A requirement that no mortgage event of default can be existing at the time of request for consent to additional financing.
Cash Flow	Provision stating that payments on additional financing shall be made only to the extent of available cash flow from the property.

Exhibit: 4

Covenants of Casualty and Condemnation

#	Property	Issued	Placement	Casualty	Part. Cond.	Condemn.	Threshold	Trustee	Obligation to Restore	No Default	Repay @ Par	Penalty or Premium	Excess \$
1	Office	05/85	EURO	NA	NA	Yes*	No	No	No	No	No	No	NA
2	Office	12/85	EURO	Yes	Yes	Yes	40%**	No	Yes	No	Yes	No	NA
3	Office	12/85	EURO	Yes	Yes	Yes	3.75%	Yes	Yes	Yes	Yes	No	Repay
4	Mall	04/92	EURO/144A	Yes	No	Yes	5%	Yes	Yes	No	Yes	No	Repay
5	Mall	07/92	EURO/144A	Yes	No	Yes	5%	Yes	Yes	No	Yes	No	Repay
6	Mall	12/16	EURO/144A	Yes	Yes	Yes	4%	> T	Yes	No	Yes	No	Repay
7	Mall	02/93	144A	Yes	Yes	Yes	5%	No	Yes, > T	No	Yes	No	Repay
8	Mall	03/93	EURO/144A	Yes	Yes	Yes	5%	No	Yes, > T	No	Yes	No	Repay
9	Casino	06/93	Public	NA	NA	Yes	No	NA	No	No	Yes	No	NA
10	Mall	07/93	EURO/144A	Yes	No	Yes	No	Yes	Yes	No	Yes	No	Repay
11	Mall	10/93	EURO/144A	Yes	Yes	Yes	3.2 - 5%	Yes, > T	No	No	Yes	No	Repay
12	Mall	11/93	EURO/144A	Yes	Yes	Yes	5%	Yes, > T	Yes	Yes	Yes	No	Repay
13	Office	11/93	Public	Yes	Yes	Yes	5%	No	Yes	Yes	Yes	No	Repay
14	Mall	12/93	Public	Yes	Yes	Yes	5%	Yes, > T	Yes	Yes	Yes	No	Repay
15	Mall	02/94	144A	Yes	Yes	Yes	5%	Yes, > T	Yes	Yes	Yes	No	Repay
16	Mall	03/94	144A	Yes	Yes	Yes***	5%	Yes, > T	Yes	Yes	Yes	No	Repay
17	Mall	03/93	EURO/144A	Yes	Yes	Yes	2%	Yes, > T	Yes	Yes	Yes	No****	Repay****

*The notes are guaranteed by the mortgagor.

**Above this % constitutes a "Total Taking." Borrower has the right to Prepay without premium.

***In the event of "Total Taking" borrower has the right to retain \$250,000 of proceeds. The remainder is given to trustee to apply to prepayment of notes.

****Borrower is permitted to retain proceeds in excess of cost of restoration (see text--Casualty, Partial Condemnation and Condemnation).

Exhibit: 4 (continued)

DEFINITION OF TERMS: (Covenants of Casualty and Condemnation)

#	Prospectus/Memorandum
Property	Type of real estate asset securing the mortgage.
Issued	Date of Prospectus or issue of securities.
Placement	Means by which the notes were sold to the Public.
Casualty	Whether or not the indenture has a covenant for Casualty.
Part. Cond.	Whether or not the indenture has a covenant for Partial Condemnation.
Condemnation	Whether or not the indenture has a provision for Condemnation.
Threshold	Percentage of principal balance of the notes used to establish the Threshold.
Trustee	Does the trustee have control over insurance proceeds--conditions--(>T indicates trustee control of insurance proceeds in excess of the Threshold Amount.)
Obligation	Is the Borrower under a general obligation to restore the property in the event of casualty.
No Default	Does the covenant require that no mortgage event of default can be occurring for disbursement of insurance proceeds to go directly to the borrower.
Repay @ par	Is the borrower allowed to repay (prepay) the notes at par if not required to restore the property.
Penalty or Premium	Penalty or premium associated with prepayment under provisions of casualty or default.
Excess \$	Is the borrower permitted to retain proceeds in excess of the cost of restoration.

Exhibit 5

Non-Covenant Restrictions

Advances/Locked-boxes/Interest Rate Agreements

#	Property	Security	Issued	Advances	Locked-box	Interest Rate Agreement
1	Office	Guaranteed Notes	05/85	No	No	No
2	Office	Secured Notes	12/85	No	No	No
3	Office	Secured Notes	12/85	No	No	No
4	Mall	Collateralized VRNs & FRNs	04/92	No	No	Yes
5	Mall	Collateralized VRNs & FRNs	07/92	No	No	Yes
6	Mall	Collateralized FRNs	12/92	No	No	Yes
7	Mall	Collateralized FRNs	02/93	No	Collateral Account	Yes
8	Mall	Collateralized FRNs	03/93	No	Operating Account	Yes
9	Casino	Guaranteed Mortgage Notes	06/93	No	No	No
10	Mall	Collateralized FRNs	08/93	No	Yes	Yes
11	Mall	Collateralized FRNs	10/93	No	Yes	Yes
12	Mall	Mortgage Collateralized Notes	11/93	No	Lease Assignment	Yes
13	Office	Mortgage Collateralized Notes	11/93	Yes	Yes	No
14	Mall	Pass-Through Certificates	12/93	Yes	No	No
15	Mall	Mortgage Notes	02/94	No	Lease Assignment	No
16	Mall	Pass-Through Certificates	03/94	Yes	Yes	No
17	Mall	Pass-Through Certificates	03/94	Yes	Yes	Yes

DEFINITION OF TERMS:

#	Prospectus/ Memorandum
Property	Type of real estate asset securing the mortgage.
Security	Type of mortgage-backed instrument involved
Issued	Date of prospectus or issue of securities
Advances	Whether or not the servicer will make interest and or principal advances when borrower does not.
Locked-box	Does the trustee or servicer have direct control over the cash flow from the property.
Interest Rate Agreement	Has the borrower purchased an interest rate agreement.

REFERENCES

Asquith, Paul, and Wizman, Thierry A., "Event Risk, Covenants and Bondholder Returns in Leveraged Buyouts," Working Paper, M. I. T. Sloan School of Management, 1990.

Ames, Chris, "Introduction to Collateralized Mortgage Obligations," *Lehman Brothers Fixed Income Research*, Market Introduction Series: No. 3, August 1993.

Books, Roberta Paula, and Najafi, Jamshid Jahm, "Elements of Design for a Commercial Mortgage Security: An Issuers Primer," Real Estate Finance, Salomon Brothers Inc, Dec. 1987.

Brealey, R., and Myers, S. C., Principles of Corporate Finance, McGraw-Hill, Inc. New York, 1991.

Brook, R. [1990], "Debt Covenants and Event Risk: The Practitioner as a Source of Evidence," working paper.

Brueggeman, William B., and Fisher, Jeffery D., Real Estate Finance and Investments, Ninth Edition, Irwin, Boston, MA, 1993

Carey, M., Prowse, S., Rea, J., and Udell, G., "Recent Developments in the Market for Privately Placed Debt," *Federal Reserve Bulletin*, February 1993, pp. 77-92.

Carey, M., Prowse, S., Rea, J., and Udell, G. [1993], "The Economics of Private Placements: A New Look," Financial Markets, Institutions, and Instruments, 2(3), New York University Salomon Center.

Chen, K., and Wei, K., "The economic Consequences of Violating Accounting-Based Debt Covenants and Creditors' Waiver Decisions," working paper, October 1993.

Childs, Paul D., Ott, Steven H., and Riddiough, Timothy J., "The Value of Recourse and Cross-Default Clauses in Commercial Mortgage Contracting," working paper, February 1994.

"Commercial Mortgage Balloon Risk," [1993], Fitch Research--Special Report, Fitch Investors Service, Inc., New York.

Duff & Phelps, "1211 Finance Corporation," Duff & Phelps Credit Rating Co., New York, 1994.

El-Gazzar, S., and Pastena, V., "Negotiated Accounting Rules in Private Financial Contracts," *Journal of Accounting and Economics*, 12--1990, pp. 381-396.

Emerick, D., and White, W., "The Case for Private Placements: How Sophisticated Investors Add Value to Corporate Debt Issuers," *Journal of Applied Corporate Finance*, Fall 1992, pp. 83-91.

Fabozzi, Frank J., Handbook of Mortgage-Backed Securities, Third Edition, Probus Publishing Company, Chicago, 1992.

Iskandar-Datta, Mai E., Douglas, Emery R., [1992], "An Empirical Investigation of the Role of Indenture Provisions in Determining Bond Ratings," *Journal of Banking and Finance*, 18 (1994) pp. 93-111.

Kahan, M., and Tuckman, B. [1993], "Private vs. Public Lending: Evidence from Covenants," working paper.

Kalay, A., "Stockholder-Bondholder Conflict and Dividend Constraints," *Journal of Financial Economics*, 10--1982, pp. 211-233.

Laber, G. [1992], "Bond Covenants and Financial Management: Some Comparisons of Public and Private Debt," working paper, January, 1993.

Malitz, I., "On Financial Contracting: The Determinants of Bond Covenants," *Financial Management*, Summer 1986, pp. 18-25.

Quigg, Laura, "Commercial Mortgage-Backed Securities," Fixed Income Research, Mortgage Strategies, Lehman Brothers, New York, NY, 1993.

Richards, David Alan, "'Gradable and Tradable': The Securitization of Commercial Real Estate Mortgages," *Real Estate Law Journal*, [Vol. 16: 99 1987], pp. 99-145.

Roulac, Stephen E., "Surf's Up: Investors Ride the Fifth Wave of Securitization," *Real Estate Capital Markets*, Volume III, Number 4, Spring 1994.

Smith, C., The Modern Theory of Corporate Finance, McGraw-Hill Publishing Co., New York, NY, 1990.

Smith, C., and Warner, J. [1979], "On Financial Contracting: An Analysis of Bond Covenants," *Journal of Financial Economics*, 7, pp. 117-161.

Snyderman, Mark P., "Commercial Mortgages: Default Occurance and Estimated Yield Impact," *The Journal of Portfolio Management*, Fall 1991, pp. 82-7.

Snyderman, Mark P., "A Commercial Mortgage Performance Index," *The Journal of Portfolio Management*, Spring 1990, pp. 70-3.

Stein, Joshua, "Mortgage Loan Structures for the 1990's," *Real Estate Review*, Spring 1994, pp. 15-20.

Zinbarg, E. [1975], "The Private Placement Loan Agreement," *Financial Analysts Journal*, July-August, pp. 33-52.

Zinngade, Claude J., "Real Estate Investment by Insurance Companies--How Risk-based Capital Requirements Affect It," *Urban Land*, March 1994, pp.12-14 & 49.