

THE EVOLUTION OF CREATIVE REAL ESTATE FINANCING TECHNIQUES:
STRUCTURES AND APPLICATIONS

by

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Bachelor of Science
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Submitted to the Department of Architecture
in Partial Fulfillment of the Requirements of the Degree
of
Master of Science in Real Estate Development

at the

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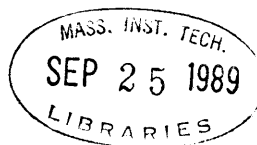
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ABSTRACT

This paper reviews the current state of real estate finance, the types of creative financing structures being used today and their applicability to various deal sizes and finishes with a look at new financial products being tested in the market in response to future trends in the real estate business. The purpose in conducting this research is to, (1) track the evolution of the business in an effort to understand what circumstances led to the creation of these new products, (2) find out how (or if) they are being used by the real estate community and, (3) discuss what may be the upcoming trends in real estate finance.

In assembling this study a total of 28 professionals representing a broad spectrum of real estate participants from both sides of the table (buyers/lenders and sellers/borrowers) were interviewed. Their thoughts are represented herein. The perspective of this study is primarily that of the developer in financing, refinancing or selling a commercial project. As a result, creative secondary market vehicles such as CMO's and REMIC's are not addressed.

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I wish to also thank Professor Marc Louargand for his insightful advice in directing this work. Finally, I would like to acknowledge the many people who provided the information for this report by agreeing to be interviewed and giving of their time to make this a learning experience for me.

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THE EVOLUTION OF CREATIVE REAL ESTATE FINANCING TECHNIQUES:
STRUCTURES AND APPLICATIONS

CHAPTER I. INTRODUCTION

PURPOSE

The commercial real estate finance industry has undergone a period of change during the last twenty years that has transformed it from a relatively straight forward process of acquiring funds for development, sale and refinancing with a limited number of variables to one of increasing complexity and financial variety. According to Tom Klutznick, co-managing partner of Miller, Klutznick, Davis, Gray:

Twenty years ago most commercial real estate financing followed a basic formula established by the large institutional investors. A developer secured his permanent financing with a twenty-five year fixed rate mortgage commitment for 75-80% of value at 5 1/2% interest. With this forward commitment in hand, and more demand than supply in most cases, securing a construction loan was a relatively simple procedure. A "complex" loan meant, instead of financing 75% of value, the developer would finance 100% of the deal and give the lender 25% equity in the project. Today, structuring the financing is the single most complicated and important task facing a developer.

This paper reviews the current state of real estate finance, the types of creative structures being used today and their applicability to various deal sizes and finishes with a look at new financial products being tested in the market in response to future trends in the real estate business. The purpose in conducting this research is to, (1) track the

evolution of the business in an effort to understand what circumstances led to the creation of these new products, (2) find out how (or if) they are being used by the real estate community and, (3) discuss what may be the upcoming trends in real estate finance.

The financing tools discussed herein were created in response to changes in economic forces that impact real estate finance. The industry came from a period of almost monopolistic control of funds by the large insurance companies and banks, a time of stable interest rates, an undersupply of commercial space and a tax favorable environment. Through the effects of changes in the nation's economy, inflation, competition and tax legislation the industry has been forced to respond to today's environment of:

1. Competition to place funds
2. Oversupply of commercial space
3. Increased volatility of interest rates
4. Changing Tax Status

How the finance products created have dealt with these issues is critically evaluated.

In the recent past, the number of financial structures has increased dramatically and there is no "standard formula" for real estate debt from the lending community anymore. Convertible and participating loans allow debt to function as equity. Accrual and zero coupon mortgages defer interest payments. Interest rate swaps convert floating rate loans to

fixed or vice versa. Preferred returns, disproportionate participation in equity, earn-outs, etc. all complicate the standardized lending practices of the past. The options are only limited by the two parties' creativity.

The emergence in the early 1980's of Wall Street into the real estate world and their access to entirely new and untapped capital markets opened the financing arena even further. Commercial paper, mortgage backed bonds and various other securitized financing techniques have now been added to the developer's array of financial tools.

The rules of the game have changed as well. Commercial real estate supply greatly exceeds demand in many areas of the country causing lenders to be more wary of the viability of many projects. However, at the same time, there is seemingly more money chasing real estate investments than ever before. The roles of the players have been reversed in some cases with lenders and corporations becoming developers and developers acting as hired "consultants" working for fees only.

In assembling this study a total of 28 professionals representing a broad spectrum of real estate participants from both sides of the table (buyers/lenders and sellers/borrowers) were interviewed. Their thoughts are represented herein. The perspective of this report is primarily that of the developer in financing, refinancing or selling a commercial project. As a result, creative secondary market vehicles such as CMO's and

REMIC's are not addressed.

REASONS FOR CREATIVE STRUCTURES

The development business, due to the large sums of money involved, has always been a highly leveraged business. Therefore, financing has a significant impact on the viability of any new project. Pre-1970 the financial markets were less volatile and setting up a real estate deal was not as time intensive. As a result, developers could count on substantially the same financing terms at the time a project was conceived as when the loan was secured. Rates were fixed so there was no interest rate risk after loan closing. When the prime rate shot up to 20% in the mid-1970's, reacting to double-digit inflation, the lending institutions were left with a portfolio of long term 5 1/2% loans on the books and no way out for years to come.

This new environment of rate volatility changed the way lenders viewed mortgage loans. The result was floating rate loans, shorter terms and a decrease in lender's willingness to make forward commitments for fixed rate, take-out financing.

The impact of the development surge of the early 1980's is still being felt in the lending community where it seems savings and loans go under weekly from an abundance of non-performing real estate loans. The reaction to this situation has been the demise of both non-recourse financing and the 100% loan for all but the most creditworthy developers.

Equity requirements are much higher (30% or more) for many projects today and additional security is usually a pre-requisite.

The developer's needs throughout this period of fluctuation have remained essentially unchanged. They want the lowest rate available, to finance as much as possible to keep their own money out of the deal, to limit risk with non-recourse debt and, upon completion, they want to get the value they have created out of the project while paying the minimum amount of tax.

New products were created as developers and lenders attempted to resolve their often mutually exclusive goals. Structures were designed in reaction to the demands of the parties to match lenders and investors needs to the ability of the real estate to perform. Benefits were put into the hands of the parties that could use them the most. Therefore, according to Charles Burd II, a Principal with Aldrich, Eastman & Waltch, Inc., "the most efficient way to finance a deal today is to prioritize the developer's objectives for the project (i.e. take cash out, lowest cost of capital, minimize risk, etc.) then design the structure to meet those needs while maintaining the lender's yield on his funds". This is a fundamental departure from the standardized, often dictated approach of the past.

For example, a common problem between developer and lender when the developer is trying to finance out of his property is the value difference each party places on the property. The

developer might capitalize "effective" rental rates to arrive at value while the lender caps face, or nominal, rates. The developer's goal is to maximize up front cash and he is willing to take less cash flow from the property. The solution can be a short term solution such as an earn-out, guarantee, or developer funding of lease concessions. These solutions will "prop up" the property for 3-5 years and help justify a higher value. A more long term solution might be a participating loan that grants a cumulative preferred return of cash-flow to the lender set at some level so that the developer only participates if the property meets his aggressive estimate of value. In both cases, the lender gets his desired yield and, if the developer's estimate of income from the property is correct, he gets his desired amount of up front cash and overall return.

Avoiding or deferring tax, especially since the Tax Reform Act of 1986, is a major reason for using a creative mortgage structure. In this regard, the developer and the lender's goals are closely alligned: characterize all payments as interest whenever possible and take as much money out of the project while deferring payment of tax on the gain as long as possible. Interest on debt is a deductible expense for the developer and if he can characterize more of his loan payment as interest, he can afford to pay the lender a higher rate. Therefore, structures were created that allowed the lender to "participate" in the upside of the property, like an equity owner, while still characterizing the payments as interest ("contingent interest"). The participation component of participating and convertible

mortgages qualifies as interest in the eyes of the IRS as long as certain guidelines are met for percentage of actual equity in the project.

Real Estate today is often re-financed instead of sold because the proceeds from re-financing are not considered a gain, and therefore are not taxable, until the property is actually sold. Participating and convertible mortgages allow an owner to "finance out" of a property (get his equity out in the form of a loan) while giving the lender some of the benefits of equity. The ground lease and the tax free exchange are also ways to minimize or defer tax payments.

New York is the most extreme example of the impact of taxes on the economics of a real estate sale. The addition of a 10% state tax ("Cuomo Tax") on top of the 33% federal tax and various city taxes means that the seller loses almost 50% of his profit to tax! (The 10% state tax even applies to tax exempt entities such as pension funds). As a result, property in New York is much more likely to be financed with a participating structure or sold with a tax free exchange than to be sold outright.

The variety of structures associated with the securitization of commercial real estate were created in reaction to the limited number of financing alternatives available to large scale developments. There are few traditional lenders capable of providing complete mortgage

financing in some of today's mega projects¹ (\$100+ million). So Wall Street created products that could break down a large deal into many smaller pieces thereby opening new options for developers to seek financing and establishing a more competitive market for these large loans. Some securitized structures allow the developer to finance a larger percentage of his property's value and allow him to do it on a non-recourse basis (although some type of guarantee is usually provided by a third party).

Dividing and re-apportioning risk is a primary reason for using creative financing structures. Interest rate risk can be limited or removed entirely by the use of hedges. Market risks that impact equity value can be spread among more parties with the use of a participating feature. Personal financial risk can be mitigated with non-recourse financing and by using the minimum amount of equity to develop the project.

Finally, achieving the lowest possible interest rate makes the additional effort required in structuring a creative deal worthwhile in the minds of many developers, especially ones with large projects. A few basis points can mean hundreds of thousands of dollars in additional cash flow from a property during the life of the loan. Taking advantage of the traditionally lower rates at the "short end of the yield curve" was a major impetus in the creation of commercial paper as a real estate financing tool. Accrual and zero coupon mortgages minimize interest expenses during the early years of the project and, although all of the interest must eventually be paid, the

accrued interest is deferred until the project can more easily support it.

FINANCIAL MARKETS

Real estate lending was traditionally a function of two base rates: the prime rate and the treasury bond rate. Short term construction lending was based on a spread above the prime rate and, according to Adrian Corbiere, Vice President of The New England Insurance Company Mortgage Department, long term (take out) financing from the insurance companies was fixed at about 2 1/2% above the then current treasury rate for credit borrowers. Today, to be fully versed in the state of the real estate financing markets, a developer must be up to date and have a complete understanding of the workings of the London Interbank Offered Rate (LIBOR), commercial paper rates, rated corporate bond yields and the Eurodollar time deposit rate as well as the traditional index rates (prime, treasuries).

The various rates can be broken down into three categories:

1. Base rates
2. Long-term rates
3. Short-term rates.

1. Base Rates

Base rates, or index rates, are used by lenders as an index above (or sometimes below) which an interest rate will be set.

Base rates were traditionally the prime rate and the various terms of treasuries. The new entrant into the field of index rates is the London Interbank Offered Rate (LIBOR), the rate paid between banks in London on 90-day deposits of U.S. dollars.

In the case of treasuries, the rate is based upon the credit of the U.S. government and is therefore considered essentially risk free. As a result, all real estate loans based on treasuries are quoted as a spread above this base. Prime rate is a rate established by the large commercial banks as a base rate for consumers and small companies ("borrowers that come thru the front door"). The traditional definition of prime as the lowest rate offered to the bank's largest customers is not used anymore since many loans to high credit corporations, and even some real estate developers, are set as a fixed number of basis points below prime. LIBOR is the base for international lending and is used by many domestic lenders since it is considered more sensitive to the supply and demand for funds than the prime rate and, therefore, more representative of the actual state of the capital markets.

2. Long Term Rates

Long-term rates, as the name implies, are the rates offered borrowers for loans of 10 years duration or longer. Included in this category are the traditional prime or treasury based permanent mortgage loans and, with the advent of securitization,

rated corporate bond rates.

The spread over treasuries or prime offered by long term lenders for permanent mortgage loans is largely a function of the developer's credit history, the quality of the project, the amount and availability of funds from the lender and the competitiveness of other lenders vying to put out funds. Rates for these loans can run from 125 basis points over treasury bonds (approximately 9.5% today) for secure, good credit deals to 400 basis points above prime (15%) for forward commitments on smaller riskier deals.

Long term bonds had not been used as a real estate financing tool since the 1920's. They were revived in 1985 when a mortgage backed bond was issued for the financing of the American Express headquarters building in Manhattan.² This opened an entirely new avenue for long funds and essentially broke the insurance company and pension fund lock on the \$100 million and up, long term market. Now securities could be issued directly from the owner to the buyer avoiding the bank, much as corporations had done for years. Interest rates for these funds depend largely upon the rating applied to the real estate by one of the rating agencies (Standard & Poors, Moodys, Duff & Phelps) or the credit enhancement acquired if the issue is not rated. Current rates are just under 9% for the highest rating (AAA,Aaa,1) to 10% for lower rated, although still high quality, issues.

3. Short Term Rates

Short term rates in real estate were traditionally defined as a function of what the banks would offer for construction financing pegged at a certain number of basis points above prime. Twenty years ago these loans were often fixed rate loans but more recently bank construction lending has become a variable rate facility fluctuating with the prime rate or LIBOR. Use of short term capital markets were not an option for real estate borrowers until commercial paper was introduced into real estate finance in the early 1980's.

With this innovation, a developer with a sufficiently large project could borrow at short term rates (traditionally lower than long term rates) and, through interest rate hedges, fix or limit the upward movement of the rate for the long term thereby avoiding the two part construction loan/permanent loan format of the past. They had the best of both worlds; low, short term rates that could be fixed for an indefinite period of time (the term of the hedge). Short term rates range from commercial paper rates of 9% up to floating construction loans at 2-3% above prime (13-14%) for less creditworthy borrowers.

FINANCIAL MARKETS: CURRENT THEMES

The current state of the real estate finance markets is not only characterized by a variety of new products and options for

developers as described above, but by the following themes:

1. Increased demand for real estate investments
2. Increased caution by real estate investors
3. Inverted yield curve

The first two trends seem to be in conflict with one another. As more money is pumped into the total supply of funds available to purchase real estate, the expected result should be more funds trickling down to lesser quality investments since there is only a limited supply of class "A" quality projects. The reality is, after the overbuilding of the early 1980's, many investors are extremely cautious in deciding to whom they would lend their money and it may, in fact, be more difficult for small projects to find funding. The dichotomy of too much money thrown into a cautious market causes lending rates for the best projects to be bid down to very low levels while the lesser quality projects either don't get funded or the terms become onerous to the point of making the deal marginally economic.

Most institutional investors interviewed for this report complained about not being able to get the money out fast enough and the larger developers often enthusiastically commented about the high loan-to-value, below prime loans available to them today. At the same time, less creditworthy developers bemoaned the difficulty in finding financing, the high rates, the increased equity required and the resistance from long term lenders towards making forward commitments. The result is a wide disparity in available rates based on creditworthiness.

Although a short term event, the inverted yield curve is having a significant influence on today's finance market. Short term rates have historically been lower than long term fixed rates due to the risk of not being able to adjust long interest rates should the base rates increase over time. In an inverted curve environment, short term rates are equal or greater than long term rates. The result is that long term, traditional non-participating mortgage rates from institutional investors are cheaper than say commercial paper rates after all of the added expenses of credit enhancement, swaps and fees are taken into account.

From the real estate perspective, the bidding down of long term mortgage rates can be attributed to increased competition for deals from a variety of sources:

1. Japanese banks lending and investing at rates below domestic banks and institutions
2. Securitization creating new, competitive markets for developers to use to fund their projects
3. Traditional real estate lenders (insurance companies and pension funds), perceiving a threat to one of their primary investment options (at the same time they are increasing their real estate portfolio percentage of ever larger investment funds), accepting significantly lower spreads (down 100-125 basis points) than their traditional standards.

The primary beneficiary of this situation is the established, creditworthy developer who is developing medium to large scale

projects.

PARTICIPANTS IN REAL ESTATE FINANCE

The number of players in real estate finance has increased dramatically from the limited number of funding sources available 20 years ago. The insurance companies and domestic commercial banks began to lose their monopoly on real estate funding in the 70's when syndicators injected a new source of funds, the small individual investor, into the market. Equipped with "can't lose" tax incentives, the limited partnership investment, both public and private placement, sold extremely well until T.R.A. of 1986.

The securitization and foreign investment trends of the 1980's created more competition and opened entirely new methods of investing in real estate. Securitization through the investment banks, brought money market funds (purchasers of commercial paper) and rated debt security purchasers into a market previously ignored by these investors. Foreign banks and cash rich investors, primarily from Japan, were willing to accept lower yields than their domestic counterparts and found fertile ground in secure U.S. real estate.

The primary participants in real estate finance today are:

SOURCES OF FUNDS

1. Insurance companies

2. Pension funds
3. Domestic commercial banks and savings and loans
4. Foreign commercial banks
5. Individuals

BROKERS OF FUNDS

1. Investment banks
2. Syndicators

The following is a discussion of the roles each of these participants play in real estate finance and the types of loans they are currently making.

SOURCES OF FUNDS

1. Insurance Companies

The insurance companies were, for many years, the only source of long term debt financing for large real estate projects. As noted earlier, the standard formula that worked during this period was the 25 year fixed rate loan at treasuries plus 2 1/2%. The increased volatility of the financial markets and the alternate sources of funds available to developers today has caused the 2 1/2% spread to be reduced to 1-1.25% and the length of the term to be reduced, thru balloon payments, from the 25 year standard of the past.

Although insurance companies have traditionally been categorized as conservative debt investors, hybrid loans and

joint ventures in high quality properties are becoming a more common investment. Some insurance companies have set up a subsidiary to invest in riskier deals, such as the New England Life Insurance Company with Copley Real Estate Advisors. The New England's mortgage department does debt lending and some participating loans while Copley makes equity investments and more creative hybrid loans.

Long term mortgage yields are currently in the 9-10% range and participating IRR's are 10 1/2%-11% for prime property and up to 12 1/2% for less secure investments. Although capable of making very large loans (\$100 million), minimum deal sizes range as low as \$2 million.

2. Pension Funds

Pension funds and insurance companies have traditionally shared very similar investment goals since their source of funds is directed towards the long term (retirement and death). It is not surprising then to find that real estate investment departments of large insurance companies invest a great deal of pension fund money, in an advisory capacity, along with their own funds. In addition to the insurance companies, independent pension fund advisory companies have been set up to assist, for a fee, in identifying and purchasing real estate for the various large government and corporate pension funds.

Pension funds are primarily interested in owning real

estate either thru direct equity investments or participating/convertible structures. Overall yields are 11% (IRR) and up with a preference for the largest component of that return (preferably over 8%) to be annual cash flow, as opposed to high residual value. Minimum investment is typically \$5 million.

3. Domestic Commercial Banks and Savings and Loans

The historic niche of the commercial bank in real estate finance was as a floating rate, short term lender for the construction phase of the project. Upon completion of construction, the bank would be "taken out" by a long term lender.

Banks provide straight debt financing almost exclusively and hybrid loans do not fit into their loan program since most hybrids offer a reduced coupon for a share of the equity. According to Dan Lupiani, Vice President of the First National Bank of Chicago, "banks do not usually offer this type of loan since they must cover their immediate cost of funds with current coupons" (match funds). Creative loan "features" such as interest rate caps, collars and swaps are available from banks but, with a few notable exceptions (i.e. Citicorp), banks are not generally considered to be innovators in creative real estate finance. Many of the new financing instruments are designed to avoid the commercial bank altogether.

Bank and savings & loan originated variable rate construction loans range from a point below prime (10%) to 2-3% above prime (13-14%). Loan amounts are restricted at the top end by bank lending limits. Extremely large loans (over \$100 million) may be allocated among several institutions to avoid too much exposure for one institution.

4. Foreign Commercial Banks

The foreign banks (primarily Japanese) have only recently become a force in U.S. real estate lending. "In Japan, banks do not make real estate loans. They base their lending for development projects on the credit of the company that will be both developing and occupying the property"³ (build-to-suit with the corporation acting as the developer). For example, Sony would build a project for their own use and a Japanese bank would lend the money to Sony, not a developer, based on Sony's credit rating. There are very few large "developers", as we define them, in Japan. Therefore, many Japanese banks are just learning how to do construction loans and how to calculate developer draws, etc. More creative structures are not currently offered but may be in the future.

When the learning process in structuring more complex deals is complete, Japanese banks have the potential to become an increasingly formidable participant in U.S. real estate lending for the following reasons:

1. Higher loan limits

2. Lower interest rates

3. AAA rating

Single source funding for very large projects is difficult to acquire with domestic lenders. The alternative is securitization or Japanese banks. Where securitization can take months to bring to market and, in today's interest rate environment, may not be cost efficient, Japanese banks stand ready to lend extremely large sums at rates below U.S. banks with the added advantage of a quick closing.

Most of the largest banks in the world are Japanese and many carry a AAA credit rating. Developers who decide to utilize securitized financing options and require a AAA credit enhancement to qualify for the lowest rates will increasingly be turning to Japanese banks.

Today, Japanese banks only provide construction lending (debt), interest rate hedges and credit enhancements. Participating, convertible or accrual loans are not done. Minimums can be very high (\$50 million) and loans well over \$100 million are within the lending limits.

5. Individuals

At the lower end of the investment range (\$8-10 million average), private investors play an important role in providing funds to deals that do not meet the institutional minimums or loan criteria. Private investors, either investing directly or

through advisors, provide equity or hybrid funds to higher risk deals in anticipation of IRR's of up to 30%

BROKERS OF FUNDS

1. Investment Banks

The investment bank's entry into the real estate finance arena is not as a direct source of funds for real estate investment, but as a fee compensated broker of outside capital sources to developers in need of funds. As noted earlier, the primary reason for their involvement is to offer a method whereby developers can access alternate sources of funds for very large financings.

Wall Street has explored a variety of methods, in the last five years, designed to break down large deals into smaller increments to provide debt or equity, either through securitization or more typical financing techniques, to these large financings. They will arrange commercial paper programs, mortgage backed securities, private placements, joint ventures, REITs, and various equity and debt structures. The common element is that the deal has to be of sufficient size (\$50 million and up) or the fee will not be large enough to warrant their involvement.

2. Syndicators

The syndication business has fallen on hard times as a

result of the 1986 Tax Reform Act and the elimination of the lucrative tax incentives previously associated with these deals. Similar to the investment banks, syndicators are middlemen who usually do not provide source funding. Their contribution is their ability to market a real estate product to individual investors. Investment in syndicated deals has fallen off dramatically in recent years and, as a result, these groups are not as significant a force in real estate finance as they once were.

NOTES TO CHAPTER I.

1. Kane, Carl, "Still Infant, Securitization is Long-term Development; Commercial Market Benefits by Following Residential", National Real Estate Investor, August 1987, 63-68.
2. Vanderwicken, Peter, "Now Bonds Backed by Buildings", Investment Decisions, 1985, 18.
3. Melvin, Seton, Mitsubishi Bank

CHAPTER II. CREATIVE FINANCING STRUCTURES:
DEFINITION, COSTS AND APPLICATION

There is a broad selection of new financial options available to the developer today. Participating, convertible and accrual mortgages, ground leases, mortgage backed bonds, commercial paper, REITs, limited partnerships, etc., are all finding applications in real estate finance. This section reviews the selection of creative financing instruments available to developers along with a discussion of their costs and applications in various deal situations.

BARRIERS TO ENTRY

Although the list of new structures is impressive, there are restrictions to the implementation of these techniques, that, in reality, serve to limit their applicability to specific sizes and types of transactions. The small project and the less experienced developer are not granted access to the same number of options available to the large project and major development company. In defining and discussing each structure, guidelines for their use are set forth with regard to the following limitations:

1. Knowledge and expertise
2. Lender imposed minimums
3. Creditworthiness
4. Economies of scale - cost
5. Administrative and opportunity cost

1. Knowledge and Expertise

The first problem many developers have is little knowledge and no experience with these new techniques since the real estate finance industry has experienced so many changes in such a short period of time. One pension fund advisor expressed amazement at the lack of knowledge developers, including major players who are borrowing hundreds of millions of dollars, have of the financing alternatives available.

2. Lender Imposed Minimums

Even if a developer is experienced in their use, scale economies lead lenders to impose minimum size requirements that rule out many techniques to all but the very largest financings. Many of the structures have fees associated with them that are based on a percentage of the total funding, so investment banks do not deal in medium or small transactions due to the limited size of the fees. They claim that it takes as much time to do a \$20 million financing as it does a \$200 million financing.

3. Creditworthiness

Probably the biggest obstacle to small and medium sized developers is the credit issue. The techniques that often provide the lowest cost of funds are also the ones that require

the highest credit rating. Most developers typically structure their business entities into limited partnerships on a project-by-project basis and as a result, do not have an entity with a significant number of assets available to rate. Therefore, either the property must stand alone for the rating or a rating must be "purchased" from a highly rated organization such as a major bank or insurance company. Purchasing a rating does not avoid the scrutiny of a developer's creditworthiness since, instead of the rating agency performing the due diligence, the entity that is providing their rating performs it. This also adds a significant layer of cost, as much as 6%, that may make credit enhanced financings uneconomical.

4. Economies of Scale - Cost

To elaborate on the cost issue, acquiring the rating or credit enhancement is far from the only fee that has to be figured into the cost of funds for the various complex structures. Attorney fees for the documentation and investment banker or syndicator fees for issuing and marketing these deals make up a significant portion of the third party expenses. The lender, of course, earns fees for closing, administration and spreads over his base rate for underwriting risk.

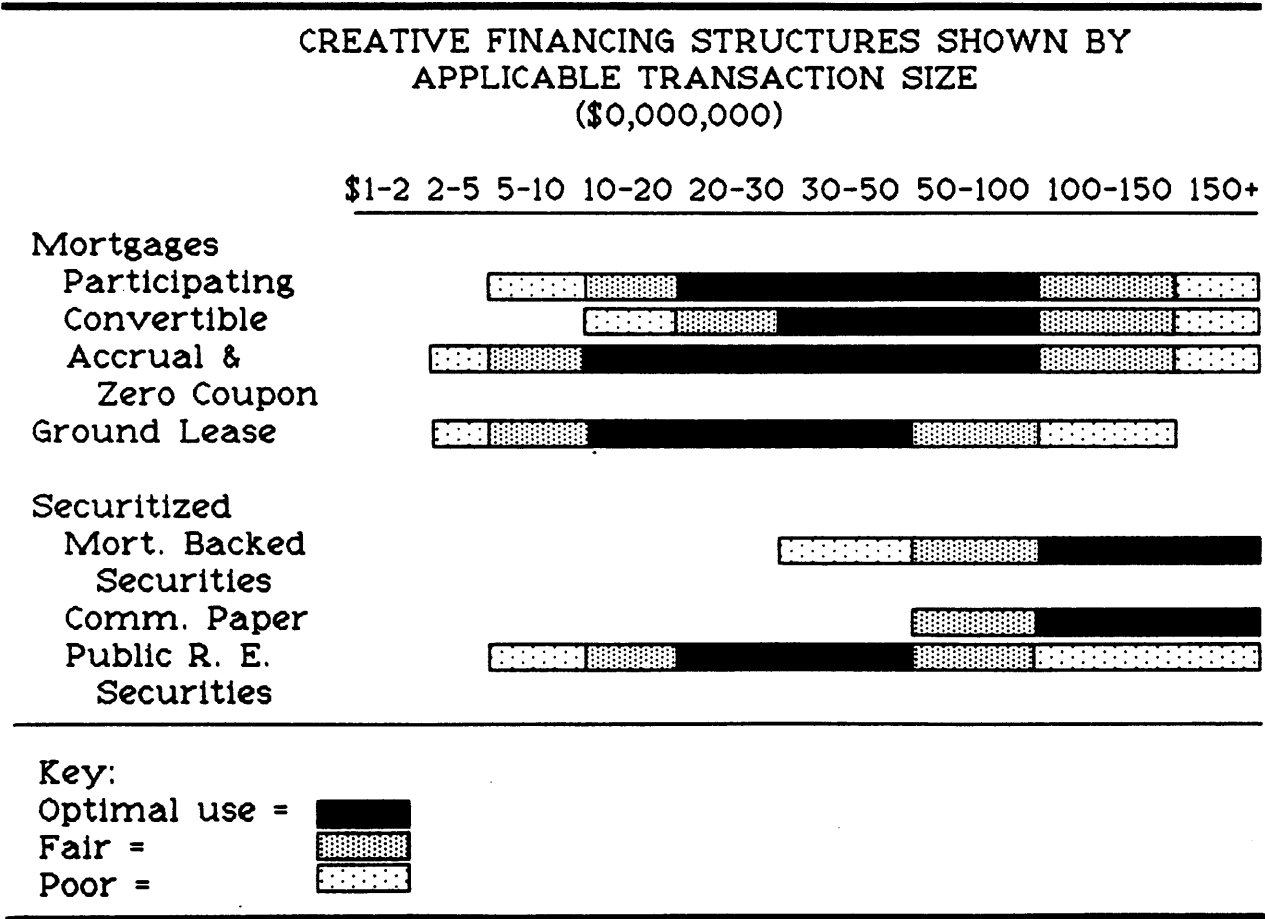
5. Administrative and Opportunity Cost

Finally, if the deal still makes sense after all of these issues are considered, the developer needs to ask himself if the

time commitment and administrative effort are worth it for the savings realized and if he can afford to wait the six months or more it takes to complete a complex funding and get his money. With many of these techniques only providing marginal savings in today's environment, the answer seems to be "no" for an increasing number of potential participants.

Figure 1. shows the deal sizes that most appropriately suit the financing structure indicated.

FIGURE 1.



MORTGAGES

Although not included in our definition of "creative" financing tools, the conventional mortgage loan has gone thru some changes worth noting in the last twenty years. The goal of these modifications has been to reduce the lender's risk in what is generally regarded as an overbuilt real estate environment and to respond to extreme fluctuations in the interest rate markets.

"Equity is king"¹ seems to be the phrase that typifies the lender's attitude towards loan-to-value ratios. Loan amounts on most deals are down in relation to appraised value to give the lender an extra margin of safety in case the deal runs into problems. Debt coverage ratios are higher for the same reason.

Rate fluctuations have fostered a trend among lenders towards shorter term loans and higher penalties for not allowing a loan to run its full course. To protect good loans in a declining rate environment, lenders incorporate severe pre-payment penalties ("yield maintenance") and, to limit long term exposure when rates are moving up, floating rate loans and balloon payments have become the norm for certain types of loans.

The volatility of rates has also caused the forward loan commitment ("take out") to become a more difficult commitment to acquire. The "mini-perm" loan with a term of five years or

less (usually obtained after completion of construction but before a permanent loan is secured)² is an offshoot of this new attitude toward shorter commitments. A mini-perm that serves as both a construction loan with a floating coupon during the construction period and a short term "permanent" loan that automatically fixes the rate at the end of construction, is a new twist to this mortgage product.

PARTICIPATING MORTGAGE - DEFINITION

The participating mortgage is not a particularly new innovation but it seems to be finding broader applications in today's real estate financing environment. The advantages to both borrower and lender are listed below:

BORROWER

1. Fixed rate financing
2. Interest rate of 100-200 basis points below conventional rates
3. Higher loan-to-value ratio (80-100%)
4. Low debt coverage ratio
5. Loan proceeds to the developer are tax free until sale of building
6. Control over the real estate

LENDER

1. Stable monthly coupon
2. Inflation hedge thru participation in cash flow or residual

3. Secure debt position³

This type of loan allows the lender to share in the benefits of equity without being exposed to the equity risk. The borrower benefits by achieving many of the things conventional loans are moving away from, ie. up to 100% financing, low interest rates initially when the project will need this advantage the most, and fixed rates for long term funds. The developer is also reducing his risk since he is essentially "selling the future" by financing out of a larger portion of his value up front and paying less current interest in exchange for the uncertainty of future equity value.

A typical deal today for a credit borrower would involve a cumulative preferred return of 8 1/2% on a 80-100% loan with a 25-50% participation in cash flow and residual (amounting to an additional 2-3% IRR) for a total yield of 10 1/2 - 11 1/2% IRR. Less creditworthy deals will show a higher coupon (9-11%) and the participation component would bring the overall yield to 12-14%. There are many variations to these deals and the particular needs of the parties involved will determine the features of the loan. Some possible options are:

1. Coupon increases at a fixed amount each year up to a predetermined cap
2. Developer or lender get a preference on residual before the 50/50 split
3. Guarantee or sinking fund supports the coupon up to a certain level

4. The coupon may or may not be cumulative or preferred
5. The loan may be fully recourse or non-recourse

In structuring a participating deal, it is important to recognize that the IRS looks at all proceeds above the coupon from a participating loan (cash flow and residual) as "contingent interest" up to a certain point. If the level of participation exceeds this unknown percentage, the IRS can reclassify the debt as equity which means a less favorable tax treatment for the developer. Both borrower and lender wish to avoid this and, as a result, do not structure participating loans with more than a 90% participation percentage for the lender. Often it is much less and a typical deal is 50% participation.

PARTICIPATING MORTGAGE - COSTS AND APPLICATIONS

The participating mortgage structure has been around for a long time and benefits from the standardization of documentation that comes with continuous use. Since there are no real ownership issues to be documented with this structure (participating loans just "act" like equity) the agreement is relatively simple.

Although a variety of "features" can add to the complexity of these deals, the most expensive and time consuming ones such as rating and credit enhancement are not required. Attorney's fees and other fees (exclusive of bank closing costs and

spreads) range from \$30,000 - \$200,000 depending on complexity. The time commitment can be moderately intensive and deals of less than \$5 million are probably not worth the added effort. It is, however, one of the more viable available techniques for the small to medium sized deals. Larger deals benefit from some economies of scale. The maximum size is determined by the lending limit of the institution and a single source loan over \$150 million would probably be difficult to secure.

CONVERTIBLE MORTGAGE - DEFINITION

The convertible mortgage is similar to the participating mortgage with one important difference; the lender has the security of knowing he can turn the loan into actual ownership of the property at some point in the future (convertibles are popular with Japanese investors who like to own real estate). In contrast, the participating loan just "acts" like equity during the term of the loan and has no rights to become equity. When the loan expires the lender gets his principal back and walks away. With a convertible loan the lender still participates in equity benefits during the loan term but at conversion he walks away with a deed. The sacrifice by the lender is an even lower coupon rate on the obligation than the participating loan.

The borrowers advantage in this type of structure, in addition to the same advantages noted in the participating structure, is an even lower pay rate, often 200-400 basis

points below conventional mortgages (7%). The lender's advantage is that he is given a variety of options at loan maturity (usually five years). He can either call the loan, renew at pre-determined terms or assume ownership by converting the unpaid balance into equity and buying out the owners interest at a pre-determined price.⁴ The "pre-determined price" feature gives him a hedge against inflation. He can compare market values to his pre-determined price and choose whichever option is most economically attractive. In this way he has an added measure of control over the real estate.

The reality of the convertible loan is that, contrary to the name, few of them are ever converted because of the tax implications. Conversion is a sale and therefore a taxable event. As noted earlier, both the borrower and the lender want to postpone this occurrence as long as possible.

An example of the terms of a recent convertible loan placed on a recently completed New York office building are as follows:

- * \$185 million appraised value of the building
- * \$100 million first mortgage (existing)
- * \$85 million convertible mortgage placed (100% of value)
- * 7% preferred return (\$10 million sinking fund established to support coupon)
- * 50/50 split of cash flow prior to conversion
- * 50/50 split of equity at conversion

CONVERTIBLE MORTGAGE - COSTS AND APPLICATIONS

The documentation for a convertible mortgage is significantly more complicated than a participating mortgage due to the possibility of a change of ownership if the loan is converted. In addition to the loan documents, a joint venture agreement must be drafted (assuming conversion is only for a percentage of the property and not 100% ownership) that outlines control of the property, division of equity, tax aspects, etc.

Attorney fees are considerably higher than a participating mortgage (\$60,000 - \$250,000) because the cost of the ownership documentation is added to the cost of the participating documentation. If a pension fund is the lender the cost of documenting their ownership in compliance with ERISA laws as much as doubles the attorney's fees. The convertible loan is more time intensive also, thus the minimum deal size to justify its use is higher (\$10 million and up). Scale economies are realized with increased size and lending limits determine the maximum loan amount.

ACCRUAL AND ZERO COUPON MORTGAGE - DEFINITION

The accrual loan, like the participating or convertible mortgage, was designed to reduce a developer's annual interest costs at the expense of future value. Unlike the participating loan, interest is calculated at the market rate for conventional mortgage loans, but a reduced amount is actually paid each

month (pay rate). The difference between the pay rate and the coupon is added to the loan balance and interest is calculated on the entire amount. However, the monthly payment remains fixed. The day of reckoning comes when the term expires and the accumulated interest causes the loan repayment amount to be considerably higher than the original principal.

The zero coupon loan is simply the extreme example of an accrual loan in that no interest is paid monthly and the entire amount is added to the loan total causing the principal to double in slightly over six years and triple in just over ten years (at 10%)⁵.

Besides a lower interest payment, the advantages of the accrual loan are: a) the developer gets the tax benefit of writing off the added interest expense and, b) he is not giving up any of the equity in his project. He is also getting an ever increasing loan without going thru the process of applying for another mortgage. As shown by the doubling and tripling in the above example, this can get out of hand if not closely monitored. Many lenders will have an "equity maintenance requirement"⁶ to guard against the loan exceeding the value of the property. This provision requires the developer to contribute more equity to the project if the loan-to-value surpasses a specified limit.

Lenders will use this type of loan with credit developers as a means of keeping more funds working. They are earning

interest on their interest and, if the project is secure, it is a good way to put out a larger amount of money at favorable rates.

An innovative type of accrual loan is the "bow-tie" loan. This instrument is a floating rate loan with a provision that all interest above a fixed minimum be deferred to loan maturity.⁷ The loan term is typically five to ten years and it may or may not be amortizing. There is usually little or no pre-payment penalty. A loan of this type functions much in the same way as an interest rate cap (see Chapter III. "Interest Rate Cap") with payments floating up to a specified ceiling then, all interest that exceeds that level accrues until loan maturity. The cap is different in that no further interest is paid or accrues after the ceiling is reached.

ACCRUAL & ZERO COUPON MORTGAGE - COSTS AND APPLICATIONS

Accrual loans are the least complicated of the creative structures discussed in this paper. Fees are only marginally more than a straight mortgage loan so their use is open to almost the entire spectrum of deal sizes. There is a credit issue involved since negative amortization will continually increase the loan principal thereby effecting the lender's willingness to extend this type of loan to less than creditworthy customers. There is no significant additional time commitment and the maximum size is determined by the lending limit of the institution.

GROUND LEASE - DEFINITION

The ground lease does not fall into either the category of a mortgage or a securitized facility. It is, however, a frequently used tool in creative real estate finance. The long term ground lease serves to separate ownership of the land from the building. The objective of doing so may be tax, security or income motivated. The ground lease may be a tool used by either the buyer or the seller to accomplish his goals.

To best describe how it can benefit the parties involved, examples of two different approaches to using a ground lease are described below:

Example #1: In this particular deal the owner of the property (land and building) was motivated by providing an annuity for his children (estate planning) and avoiding taxes. He was willing to forgo a market sales price for his project to accomplish these goals. The buyer was looking for an above market return on his funds and was willing to assume some market risk to achieve this goal.

The solution involved the sale of the building component along with a long term lease on the land. The elements of the deal were as follows:

- * 375,000 square foot office building
- * Owner sold building to buyer for \$30 million (\$15 million

equity and assumption of a \$15 million mortgage) which was a significantly reduced price from the then current market value (\$80.00/sq.ft. in an \$180.00/sq.ft. market)

* Buyer signed a 90-year ground lease at a below market rent, but with an escalation feature that annually increases the ground rent by the CPI. Buyer also gets the option to purchase the ground at a fixed price (\$30 million) at the end of the lease.

With this structure, the owner minimizes his taxable gain by accepting a reduced price for the property. In return he gets a ground lease that escalates at the full rate of inflation (typically ground rent is fixed or has a lesser escalation) thus providing the annuity he desires for his children. He is also in a very secure position (first position) as the land owner. His descendants will receive \$30 million at the end of the ground lease in 90 years, but on a present value basis, this figure is an insignificant amount (\$16,939 discounted at 10%).

The buyer puts out \$15 million for the purchase of the building and, after ground rent and interest on existing debt, receives a 12% return on his funds, which is well above what he would receive on a straight mortgage or on a full price purchase of both the building and the land. He also has the option to own the land at the end of the term for virtually nothing (\$16,939 present value). His risk in the deal is that his increase in rent from the building will not exceed the CPI escalation he is paying the land owner, thus potentially eroding

his 12% return.

Example #2. This example turns the parties around and makes the buyer the ground lessor. In this instance ,the buyer is looking for the security of land ownership and an above market return. The seller is still trying to minimize taxes but is motivated to take as much cash out of he transaction as possible. The sequence of events are:

- * Seller sells land to buyer at a below market rate then leases it back
- * Seller takes out a participating mortgage from the buyer on the building

The seller, in this case, accomplishes his goal of getting cash out by both selling the land and financing out of the equity in the building. His "minimize tax" goal is achieved because the re-finance proceeds are not currently taxable and the reduced price for the ground minimizes his gain.

The buyer/lender has the security of knowing he is in the senior position as owner of the land in the event of a default and he receives an above market return on his participating mortgage plus rent on the ground.

GROUND LEASE - COSTS AND APPLICATIONS

The ground lease, especially the unsubordinated ground lease, can be a fairly complex agreement with moderate to

extensive legal fees required for the documentation and negotiation. The problem lies with how to structure the deal to insure that improvements to the land are financeable with the ground lessor remaining in first claim position in the event of a foreclosure (first mortgage lenders typically require an unsubordinated position).

Attorney fees would range from \$20,000 to \$50,000. There are not many other expenses involved and the time commitment is equivalent to negotiating a participating mortgage. However, the ground lease component is usually only a portion of the financing structure so the expense of financing the rest of the project (the building that sits on the ground) should be considered as well. A ground lease could be used in small transactions as well as large ones with the only condition being that very small deals would probably not justify the time commitment and attorneys fees involved.

SECURITIZATION

The securitization of the commercial real estate mortgage market has been heralded, primarily by the people who stand to gain the most from its utilization, as the method by which virtually all commercial real estate will be financed in the years to come. The reality is that, although securitized techniques have made inroads into real estate finance, the total number of transactions actually performed with these techniques has been much lower than originally predicted.

Securitization is a very broad term that encompasses a great variety of specific financial instruments. The basic concept behind securitization, in the real estate context, is the sale of traditional financial securities (bonds, commercial paper, limited partnerships, etc.) that are backed by a non-traditional form of collateral, real estate. The circumstance that motivated their use was the developer's interest in tapping financial markets that could offer him lower cost funds and higher loan amounts. Recognizing a potentially lucrative source of fees, Wall Street created real estate backed products that took large financing requirements and broke them down into smaller amounts within reach of a larger group of investors.

In their effort to promote these products to what is currently a \$1 trillion commercial mortgage market,⁸ Wall Street cites the advantages of greater liquidity, fixed rate financing, non-recourse debt, superior flexibility and low pre-payment provisions, in addition to the aforementioned lower cost of funds and access to larger pools of money.

The concept, in practice, has not taken hold with the level of enthusiasm predicted at its inception. Many of the individuals interviewed for this report, most of which had used securitized techniques in the past, indicated scepticism in their applicability to anything but the very largest transactions and, without some streamlining of the mechanics of

the process, questioned if the more complex techniques would have any significant long term use at all.

Securitization, as it applies to commercial property, suffers from several fundamental problems. The primary ones are the amount of time, effort and money (fees) associated with bringing an offering to market. It is not uncommon for the process to take over six months and, when the alternative for a credit developer is calling his banker and having a loan commitment in a few weeks, the decision over which alternative to use becomes easy. In order to justify the extra effort of these offerings, the developer must be able to show a significant interest savings. However, with mortgage rates at relatively low levels in the inverted yield curve environment the financial markets are currently experiencing, the margins are not there.

Developers cite a variety of other disadvantages:

1. Loan-to-value ratios may be lower to enhance the security's credit rating requiring more equity from the developer
2. Restrictions on the property
3. Scrutiny of the rating agencies
4. Lack of a well established secondary market for some types of securities
5. Required guarantees

Most forms of securitization have been around for less than

ten years so the jury is still out on their eventual position in the marketplace. However, it is safe to assume that in the current interest rate environment their applicability is highly limited. A brief review of the various types of products that have achieved some level of success is given below.

MORTGAGE BACKED SECURITIES - DEFINITION

Mortgage backed securities are a note or a bond that uses only the real estate or a combination of the real estate and some form of credit enhancement as security for the bondholders. The proceeds from the bonds provide the developer with long term, fixed-rate, non-recourse financing at below market rates with no loss of equity. The bondholders receive a yield comparable to a rated corporate bond.

Although not required, a rating from one of the major bond rating agencies (Standard & Poors, Moody's, Duff & Phelps) broadens the marketability of these bonds to investors who can only invest in rated securities. (See Chapter III., "Rating" and "Credit Enhancement"). To take maximum advantage of the low interest rates provided by these bonds, the developer strives for an AAA rating. For lower rated issues, the interest rate rises sharply to the point of quickly becoming an uneconomical financing alternative. Therefore, using a mortgage backed bond is simply a function of the creditworthiness of the borrower, the real estate and/or the tenants who occupy the real estate. This limits the applicability of this tool to only the most well

established developers for buildings with long term leases from high credit tenants in first class locations since this is the only type of project that is able to earn an AAA rating.

An example of the level of quality and security required to take maximum advantage of this type of instrument is the IBM office complex in Sommers, New York. This was the first building to receive the highest rating from both Standard & Poors and Moody's.⁹ A review of the specifics of the project will indicate why:

IBM OFFICE COMPLEX - SOMMERS, NEW YORK

- * 1.1 million sq. ft.
- * 100% leased to IBM
- * Mortgage secures the note
- * Lease term exceeds the term of the notes
- * Joint venture between IBM, Shorenstein & Co., and Bechtel Investments

Landmark projects such as Rockefeller Center, The Chrysler Building, and the American Express Headquarters in the World Financial Center are among the projects that were unable to secure AAA ratings when they issued mortgage backed bonds. It is clear that this is a limited use financial instrument for anything but "blue chip" deals.

COMMERCIAL PAPER - DEFINITION

The use of commercial paper in real estate, like mortgage backed bonds, has its roots in corporate finance. Commercial paper was originally designed as a means by which corporations could avoid using the banks to fund short term cash requirements by issuing unsecured paper directly to other corporations. The corporation's rating is the only security. The term of the paper is typically 30-60 days with a maximum of 270 days (if longer, it can not be called commercial paper and it has to be registered with the Securities Exchange Commission). The paper can be replaced at maturity with a new issue and, when combined with an interest rate swap, can serve as a medium to long term instrument by continually reissuing the paper.

The theory behind commercial paper is that interest rates for short term funds (15-270 days) have historically been significantly lower than long term funds, so if a developer can access this market, while still fulfilling his primary need for a long term fixed rate, he will save interest costs. Other benefits include:

1. FLEXIBILITY - Every 30-60 days (average term of commercial paper offerings) the developer can reassess his position and move into another form of financing if he wishes.
2. LIQUIDITY - The commercial paper market is \$360 billion¹⁰ so finding buyers for a large financing is not difficult under most circumstances.

As with mortgage backed bonds, the system suffers from great complexity in putting these offerings together causing a long lag from inception to issue. The many parties involved include:

1. Trading Bank - The investment bank that sells the issue
2. Trustee Bank - A commercial bank that handles the administrative aspects of the offering
3. Credit Enhancing Entity - A bank or insurance company that guarantees the credit of the issue.
4. Paper Buyer - Corporations or money market funds
5. Attorneys - For all the documentation

Commercial paper is further complicated by the fact that every 30-60 days the paper must be re-issued so the administrative time and effort is on-going, although not as extensive as at the initial offering.

Since commercial paper is a short-term instrument, it is not rated by the rating agencies and since developers do not have high corporate ratings themselves, a rating must be "purchased". Banks, insurance companies and certain corporations with AAA ratings will credit enhance the issue (for a substantial fee) if they feel the deal is secure enough to warrant the risk (see Chapter III. "Credit Enhancement"). The due diligence process is rigorous and only the most secure deals will be good enough to justify a AAA credit enhancement.

MORTGAGE BACKED SECURITIES & COMMERCIAL PAPER - COSTS AND APPLICATIONS

Both mortgage backed securities and commercial paper have a tremendous number of fixed and variable costs associated with their issuance. In summary, these expenses are:

Fixed Expenses

1. Rating fee
2. Appraisal
3. Legal printing
4. Advertising
5. Administration

Variable Expenses

1. Placement fee
2. Credit enhancement fee
3. Legal fee
4. Accounting fee
5. Trustee fee
6. Title insurance

The size and complexity of the issue can cause the total fees to fluctuate over a broad spectrum but, to generalize, adding a 100-200 basis point annual spread over the appropriate bond or commercial paper rate would not be unreasonable for these types of deals. The cost of credit enhancement alone is 50-100 basis points/year which makes up the largest component of

the fee structure. Attorneys fees would exceed \$100,000 for any issue and \$1 million+ fees are possible for very large, complex offerings.

With commercial paper, since it is a variable rate facility, the developer has the added expense of the purchase of an interest rate swap or a cap. This could add anywhere from 50 basis points to several hundred basis points to the annual cost of the program depending on the then current prices and level of protection for these features. Also, commercial paper turns over every 30-60 days and must be re-issued so the ongoing costs associated with marketing this paper must be included in the economic analysis of its use.

The time it takes to bring a mortgage backed bond or commercial paper offering to market is in excess of six months and the developer leaves himself exposed to considerable interest rate risk during that period. Mortgage backed securities become difficult to justify under \$50 million and commercial paper, with greatly diminished base rate spreads in the current inverted yield curve environment, is probably not economic at all today. In a more normal yield curve (rising), a \$75 million minimum would be realistic for commercial paper.

The big advantage comes with the maximum deal size. The market for these securities is large enough that offerings of up to \$1 billion can be absorbed as either bonds or commercial paper. However, real estate backed commercial paper has not

been widely used and only represents less than 1% of all commercial debt outstanding.¹¹

PUBLIC REAL ESTATE SECURITIES - DEFINITION

Publicly issued real estate securities (REITs, public and private limited partnerships) have experienced a roller coaster existence in the last twenty years. The REIT first came on the scene in the 1970's and, after enjoying great initial popularity, fell quickly out of favor losing millions of investor dollars in the process. Only in the last few years have REITs made a minor comeback.

As indicated by Table 1. below, TRA 1986 took a severe toll on the public market, especially private limited partnerships, with the removal of the lucrative tax incentives previously associated with these real estate investments.

TABLE 1.
MONEY RAISING VOLUME (\$BILLION)¹²

	1984	1985	1986	1987	1988
PUBLIC L.P.	5.1	6.9	7.0	6.7	4.4
REIT	2.7	4.3	4.4	2.7	2.8
	-----	-----	-----	-----	-----
TOTAL PUBLIC	7.8	11.2	11.4	9.4	7.2
PRIVATE L.P.	10.0	8.5	3.5	2.0	1.5
	-----	-----	-----	-----	-----
TOTAL	17.8	19.7	14.9	11.4	8.7

The REIT is a structure into which a developer can deposit a property or group of properties then sell "shares" in the form of debt and/or equity to private investors. The primary

advantage of this ownership format is liquidity for the investor. The shares are traded publicly so the investor can easily determine the market value and sell or buy more with the ease of buying or selling a stock. Unlike a typical corporate stock, though, the profit from the performance of the assets (income from real estate properties in the REIT) is only taxed at the individual level if certain distribution criteria are met.

The primary purpose for these public securities is to provide an alternative to bank financing for the smaller developer. Not to say they do not work for large deals, but in comparison to the other securitized structures which completely preclude the small and medium sized projects, the public market is a valuable alternate source of funds for the lower end of the market.

A recent application of these products is to market them to smaller Japanese companies and Japanese investors. The Japanese Ministry of Finance will only allow certain large Japanese companies direct ownership of U.S. real estate so, to avoid this restriction, smaller companies and individuals are buying U.S. REITs and limited partnerships to participate in the investment opportunities U.S. real estate provides. REITs are especially popular because they "look" more like equity than, say, limited partnerships or securitized bonds, so they have a broader appeal to equity oriented Japanese investors.¹³

PUBLIC REAL ESTATE SECURITIES - COSTS AND APPLICATIONS

Limited partnerships and REITs sold to individual investors offer a more reasonable fee structure. The two largest fees, credit enhancement and interest rate hedges, are usually not required. The documentation and compliance requirements will be costly since the offering is a registered security. Legal fees would probably range in the \$40,000 - 100,000 area.

Creating an offering memorandum and a partnership agreement can require a significant up-front time commitment but 3-6 months is probably realistic. The minimum deal size is considerably lower at \$10 million.

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CHAPTER III. FINANCIAL "FEATURES":

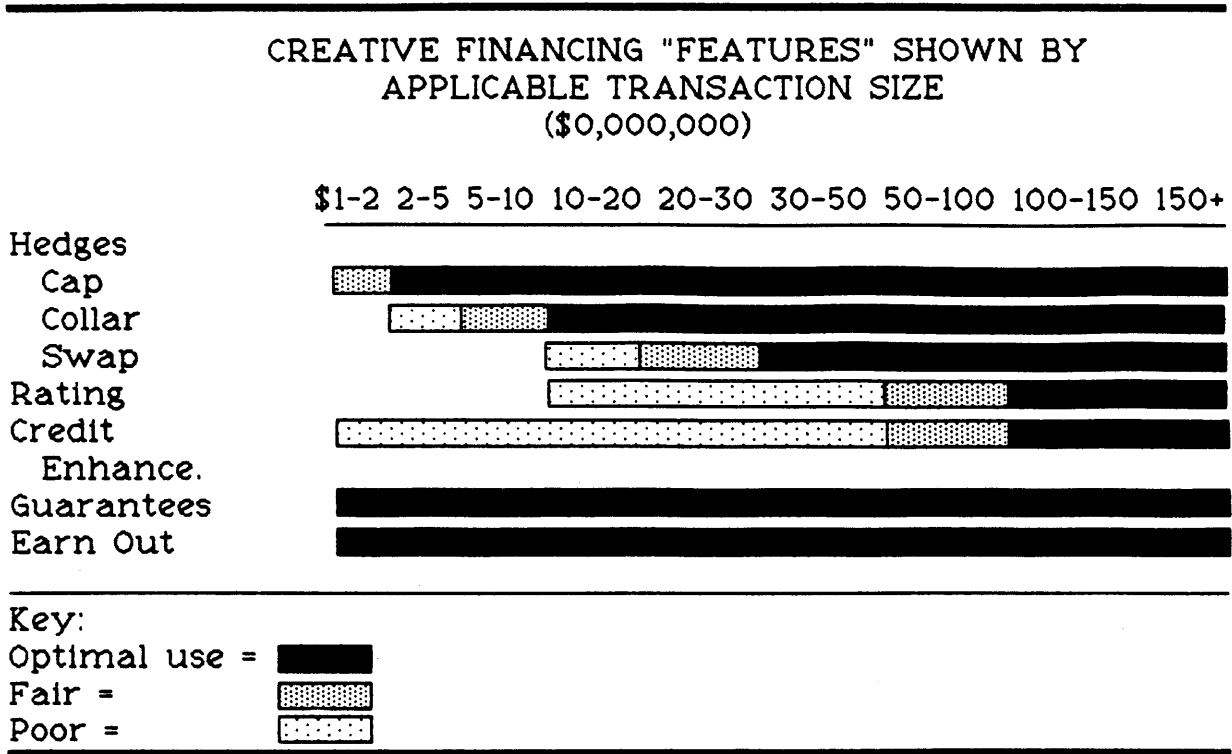
DEFINITION, COSTS AND APPLICATIONS

Many of the financial instruments described above can be made even more useful by incorporating one or more of the following tools: interest rate hedges, earn out, guarantees, etc. These are frequently utilized in real estate finance to minimize risk or modify the terms of creative financing agreements.

As with the mortgages and the securitized products, there are some limits to the use of these features but the restrictions and economies of scale are generally less of a problem. The small and medium sized project does not have as much of a disadvantage since most fees are either based on a percentage of the financing or are negotiated clauses that have no direct fee associated with their use.

Figure 2., below, shows their most appropriate applications as a function of deal size:

FIGURE 2.



HEDGES

Hedging is the process of minimizing interest rate risk by fixing or limiting the developer's exposure to the variability of the financial markets. Hedging products were created in response to the dramatic increase in volatility the financial markets experienced in the 1970's. Moves of 20 basis points or more per day¹ were not uncommon and made the risk of floating rate debt unacceptable to many borrowers, thus a new array of products were created to give the borrower certainty over his interest exposure at the outset.

The major cost issues to consider with interest rate hedges are how much "insurance" do you want to buy and from what interest rate event do you want to be protected. The price is set accordingly. Cost to the developer is a percentage of the total financing with minimal fixed costs. Therefore, scale economies do not necessarily favor the larger deals with these features. There are a myriad of hedging techniques available but only the most frequently used will be discussed herein.

1. Interest Rate Cap

The interest rate cap serves as a ceiling that the developer's variable rate loan will not exceed regardless of the upward movement of the base rate (prime, LIBOR, etc.). For a fee that is usually amortized into the interest rate, the seller of the cap, typically a bank, will reimburse the cap purchaser for any interest cost incurred above the specified level. The buyer picks the base rate, period of coverage, level of the cap and the dollar amount of protection, then the bank quotes a price based on its perceived risk for providing the level of insurance desired by the buyer.

The cap can be modified in a variety of ways. Some of the more creative caps available today are listed below:

1. Participating cap - A cap that shares a percentage of the "benefit" of rates being below the cap level with the seller. Most cost efficient if the buyer expects rates to

fluctuate moderately either up or down.²

2. Stepped-up cap - A cap that increases the maximum protection level over time.
3. Delayed cap - A cap set today for future protection (ie. begins one year out).

The cost of putting an interest rate cap on a financing instrument is based on the length of term of the protection and the ceiling rate selected. Prices are set by the issuer (bank) based upon its perception of interest rate movements. For example, if rates are perceived as moving quickly upward and the developer wants protection for a long period of time, ie. ten years, within 1-2% of the current base rate, the developer will pay a very significant premium for that tight protection (possibly as much as 6% of the loan amount paid as a one time fee up front). However, if the term is shorter, ie. two years, and the ceiling is set 4% above current rates in a falling rate environment, the cap may cost less than 10 basis points.

Caps are generally considered an expensive hedge, especially if the cap level is set close to current interest rates (within 150 basis points). They allow the developer to "have his cake and eat it too" by being able to participate in the full benefit of a downward movement in rates while still being limited in his exposure if rates go up. Its best application is in a situation where the developer does not anticipate a near term increase in rates but, if one should occur, the deal would be severely impacted. Setting a cap 400

basis points above current rates is more economical and provides "disaster insurance" for the project.³ The most commonly used caps currently cost 40-150 basis points/year.

2. Interest Rate Collar

The collar is similar to the cap in that it sets a maximum interest rate exposure for the developer. The difference is that, along with the ceiling provided by the cap, there is a floor under which the developer will no longer receive the benefit of a decrease in interest rates. The floor allows the lender to participate in the benefit normally received by the developer in a decreasing rate environment and, as such, is less expensive than a cap. The lender will typically want to set the floor at or near current rates and, unlike a cap, there is a credit consideration with this feature because, if rates move downward, the developer will be required to reimburse the bank for the difference between the base rate and the collar's floor rate.

The application of a collar is similar to a cap in that it should be viewed as "disaster insurance", ie. the deal will be severely impacted if rates go up. It is simply a less expensive way to provide this insurance.

Like a cap, the price is quoted based on the location of the stops, but most collars trade in the 30-100 basis points/year range. The deal size is not restricted but the less

creditworthy developers may be excluded from using collars due to the credit issue involved.

3. Interest Rate Swap

The purpose for a developer to utilize an interest rate swap is typically to convert a variable rate loan into a fixed rate loan. This is a very valuable tool in the array of financial products in that it can completely remove interest rate risk from the equation.

The mechanics of this process involves the matching of a party interested in securing fixed rate financing (developer) with a party who wants variable rate (bank). The counterparties then agree to fund the impact of interest rate fluctuations with each other to maintain the fixed rate or variable rate coupon of each loan. They do not actually exchange loan liabilities. Each party remains responsible for their original loan. As with the collar, there is a credit risk assumed by the bank in that if rates go down the developer may not fulfill his obligation to cover the difference. Only the most creditworthy developers are afforded the use of this option (unless the swap is performed with the same bank as the original mortgage loan and the real estate secures the payment).

The swap is the least expensive and most appropriate product if the developer believes rates are going up in the near term. It is the least expensive because the developer does not

participate in any of the benefit of a downward movement in rates. Swaps can be customized to meet the exact needs of a developer by having delayed or stepped-up starts or by utilizing a built-in swap that activates automatically if rates should reach a certain level.⁴

Arranging a swap is not that difficult since a well established market exists for both sides of the transaction but, even so, most swap houses won't put the transaction together for a loan of less than \$10 million. Swaps are currently trading at 50-75 basis points/year.

4. Other Hedges

Many of the same benefits provided by caps, collars and swaps can be achieved thru hedging techniques involving the financial futures markets. Trading options on treasuries can fix a rate or cap a rate by providing offsetting gains should the markets turn against you. The way to use these hedges is as follows:

1. To fix a rate (like a swap) = short treasuries; if the developer's financing costs go up, the short position will provide an offsetting gain
2. To cap a rate = purchase a put option
3. To collar a rate = sell a call option and purchase a put option⁵

RATING

The recently established (1984) procedures for rating commercial real estate by Standard & Poors, Moody's and Duff & Phelps is a fundamental component of mortgage backed securities. Without it, the market for these securities would be highly limited since most purchasers do not have the time or ability to individually analyze each securitized offering. Having an independent analysis performed on the property not only gives credibility to the issue but it opens the market to purchasers who by law, investment policy or charter are required to show a rating to purchase the security.⁶

Commercial real estate has proven to be a difficult commodity to rate due to the unique qualities of each piece of real estate. Also, the application of the rating procedure is so new there is no historic data from which to draw. As a result, achieving the highest rating, and the associated low borrowing cost for which the rating qualifies, is an extremely difficult task for a real estate project. Familiarity and track record will eventually begin to ease the scrutiny applied to real estate and open the options for rating to a broader range of properties.⁷ The cost of having a property rated is not particularly high, usually in the 5 basis points range. The rating agencies are not interested in projects of less than \$10 million.

CREDIT ENHANCEMENT

Credit enhancement can mean a variety of things (a complete discussion of which is beyond the scope of this paper) but, for the purpose of this discussion, the bank letter of credit and the surety bond from a major insurance company are the most frequent applications.

Credit enhancement is the process by which a highly rated entity (bank, insurance company or corporation) provides a guarantee of performance that allows a real estate developer to issue some form of capital market security. Instead of having the real estate itself rated, an unrelated party "loans" its rating to secure the debt.

Mortgage backed securities use this product if a high enough rating was not achieved on the property to qualify for the desired interest rate or in lieu of subjecting themselves to the scrutiny of the rating process. However, credit enhancement can be used in conjunction with acquiring a rating on the real estate as well. Enhancing a property to be rated serves to expedite the rating process and adds strength to the case for a high rating. Commercial paper is not rated and requires the use of some type of credit enhancement to make it marketable.

The cost of credit enhancement, in the form of a letter of credit (LC) or surety bond, involves two expenses:

1. Legal fees

2. LC or surety bond issuer fee.

The legal time is not extensive and fees generally run in the \$10,000-30,000 range. The major expense is in the risk premium the credit enhancer receives for guaranteeing the deal. The rate can vary based on banking relationships, conservative debt coverage and leverage ratios or other indemnifications⁸ but 75-100 basis points annually is a typical fee for this service. Recently Japanese bank competition for this business has had the effect of bringing the cost of credit enhancement down.

Since credit enhancement is primarily used for the large securitized deals, its applicability correlates with deal sizes of mortgage backed bonds and commercial paper. Small, less creditworthy deals would have a difficult time finding a highly rated bank to provide the enhancement since the credit enhancer must evaluate the property in much the same way as a rating agency would.

OTHER GUARANTEES

The master lease or a guarantee of cash flow from the property serve as a risk reduction technique for the lender thus allowing the developer to borrow a larger amount of the value of the property. With a master lease, the developer agrees to "lease" all or part of the remaining vacant space in the building for a specified period of time to insure that the lender or buyer receives the pro-forma rent from the property. The master lease is essentially guaranteeing the "top line" of

the income statement and therefore is providing no protection from operating risk on the property. A better guarantee, from the lender's perspective, is a guarantee of net operating income (after operating costs), which maintains the developer's attention on the overall performance of the real estate.

Recourse debt is another type of guarantee that is actively negotiated in virtually every loan agreement. A full recourse loan guarantees repayment of debt with the security being the developer's personal assets. Developers will go to great lengths to avoid putting their "personal signature" on a real estate loan and lenders will be equally adamant in their insistence for that signature to keep the developer focused on the success of the property.

Finally, cross-collateralization pledges a developer's other real estate assets as a guarantee of repayment for the current loan. If the borrower should default the lender could liquidate existing projects in which the developer owned an interest to satisfy the current debt.

All of these guarantees enhance the security of the loan and thus allow the developer the ability to borrow on more favorable terms. The master lease or guarantee of cash flow may have a letter of credit supporting the promise and would, therefore, have a fee associated with their use. However, most guarantees do not involve a fee for the developer since they are simply negotiated clauses between the borrower and the lender in

a loan agreement and do not involve a third party.

EARN OUT

The earn out is a creative feature negotiated into a loan agreement that allows the developer to finance a larger portion of his property if certain performance standards for net operating income (N.O.I.) are met. The earn out is primarily utilized to mitigate perceived differences between the lender's and the developer's different estimates of worth and to maintain an incentive for the developer to achieve maximum performance from the real estate even after he has financed out of the majority of value in the property.

An example of how this tool works is as follows:

1. The developer claims the building is worth \$33 million and is seeking a participating mortgage for that amount based on his estimate of N.O.I.
2. The lender estimates value at \$30 million based on his somewhat less aggressive N.O.I. estimate
3. Instead of not coming to terms, the lender agrees to finance the \$30 million initially, based on his conservative estimate of N.O.I., but with the provision that if a higher number is achieved he will capitalize the additional N.O.I. and fund up to \$3 million over the original \$30 million, thus achieving the developer's original financing goal.

The earn out creates an incentive for the developer to put forth

an extra effort in achieving top performance from the property thus increasing the value of the lender's equity participation. There is no fee involved because, like the various guarantees discussed above, this is a negotiated agreement between the borrower and the lender.

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CHAPTER IV. REAL ESTATE FINANCE: TODAY AND IN THE FUTURE

SUMMARY OF REAL ESTATE FINANCE TODAY

Real estate finance has evolved into a highly sophisticated business with new, increasingly complex products being created on a regular basis in response to changes in both the overall economy and the current state of real estate development in the United States. Chapter I. identified four overarching themes that create the environment for the industry today:

1. Competition to place funds
2. Oversupply of commercial space
3. Increased volatility of interest rates
4. Changing tax status

The final chapter of this report summarizes how creative financial products have responded to these forces and looks ahead at what trends might be on the horizon that would create the need for new financial instruments.

1. COMPETITION TO PLACE FUNDS

The finance industry has moved from the involvement of a relatively small number of participants to a much broader, more diverse group of potential financing sources: regulatory changes brought in the savings and loans, unattractive investment opportunities at home brought in the Japanese banks, syndication brought in the individual investor and Wall Street

brought in the capital markets. The result has been an "oversupply of money" and the corresponding decrease in yields for the traditional real estate lenders. Lenders have reacted by changing their traditional products and offering mortgage loans that achieve a higher overall yield through participation in equity (participating or convertible mortgages) or accrual structures that have a high coupon (to satisfy the loan committee) but a lower pay rate (to satisfy the developer).

They have also responded to the erosion of their spreads by offering fee compensated products. Credit enhancement and interest rate hedges (caps, collars, swaps) are new sources of income that help make up for the lost revenue from increased competition for loans.

The impact of this competition on securitized deals is even more profound. As base rates fall and mortgage lenders reduce their spreads, the savings offered by commercial paper and mortgage backed securities is minimized or even eliminated and the added administrative effort required for these offerings makes them uneconomic alternatives. Since rated bond and commercial paper rates do not necessarily react downward to mortgage lender's lower spreads, one of the parties that originally created the competitive environment (Wall Street's capital markets) gets squeezed out by the products they intended to replace.

The borrower is the beneficiary of this oversupply

situation. Coupon rates for mortgage loans are down and terms are favorable for the credit developer. A movement away from complex structures and back to basic mortgage loans to achieve the lowest rate is the current response of many borrowers. However, these are very dynamic markets and the lowest cost of funds changes regularly. The astute developer should shop a variety of sources and deal structures to achieve the best deal.

2. OVERSUPPLY OF COMMERCIAL SPACE

The financial community's response to overbuilt markets is one of minimizing risk wherever possible. This, unfortunately, is difficult to do while competing to place ever larger amounts of money. These two contradictory goals get resolved by financing secure, class "A" buildings at increasingly favorable terms and less secure properties at considerably less favorable terms ("flight to quality"). The less secure properties require higher debt coverage ratios and receive lower loan-to-value mortgage amounts than class "A" properties.

Secure cash flows, large equity contributions from the developer and an emphasis on current income (vs. residual value) are stressed by lenders today. Lenders may require that developers buy a cap on a variable rate loan to limit their risk, or put up a letter of credit or other guarantee to secure the loan. Using a ground lease, with its secure first position, may be a good strategy.

Securitized deals, in an overbuilt, security oriented environment, become even more difficult to do. High ratings are harder to achieve, credit enhancements are more expensive and selling a deal to the public is a tougher task.

In response to lower loan-to-value ratios and higher debt coverage ratios, participating and convertible structures and earn outs offer ways to finance larger amounts of the project's value without placing increased demands on debt coverage. Accrual loans can help a project through a long leasing period.

3. INCREASED VOLATILITY OF INTEREST RATES

The volatility of interest rates experienced by the financial markets in the 1970's had a profound and lasting effect on real estate finance. Lender's fear of exposure to a recurrence of the broad market fluctuations of the period led to the variable rate loan, much shorter loan terms and the demise of the forward commitment. Real estate developers have spent most of their creative energy trying to devise products that get around these changes ever since.

Participating and convertible loans typically offer a fixed coupon in exchange for equity ownership. Mortgage backed bonds are fixed rate products as well. The purpose for using hedges is to limit or eliminate the risk of variable rate financing. In response to the shorter terms available, securitized offerings have been structured as long term financing

instruments to better compete with mortgages.

4. CHANGING TAX STATUS

Avoiding the payment of tax seems to be a time-honored profession in all areas of the real estate business. Since TRA 1986 this has been much more difficult to do. From the lender's side, the goal is to create as large of a return as possible while still calling it "interest". The developer is most concerned with the taxable gain of a sale.

Achieving these tax deferral goals have led to a variety of creative structures that keep the taxable income down and postpone the taxable gain as long as possible. In the mortgage area, participating loans and convertible loans (if they are not converted) are a means of avoiding a sale while still sharing the benefits of equity ownership with the lender. The ground lease can also be used for tax deferral purposes (as outlined in Chapter II).

Where TRA 1986 increased the necessity of creative mortgage structures, it all but eliminated the market for public real estate securities. Retraction of the very favorable write-offs associated with limited partnerships brought the syndication business to a standstill.

In addition to responding to the economic themes discussed above, there will always be a motivation to create new financial

tools that cater to the basic needs of the borrower. Finding ways to achieve lower interest rates, larger loans, and risk reduction are the reasons for creative products in any economic environment.

FUTURE TRENDS

Where is real estate finance headed? How will lenders and developers respond to the market forces in effect today that will form the groundwork for the future? What new products are being created to meet the needs of the real estate community during the next five years? The final section of this report will speculate as to the changing role of the parties in real estate finance and evaluate how mortgages and securitization may attempt to meet the future demands of the industry.

FUTURE TRENDS: FINANCING SOURCES

As noted earlier, the number of participants in the business has increased dramatically in the last twenty years. Their relative positions and magnitude of their participation will continue to change as some prove more capable of competing in the new environment than others. I see changes in future market share occurring like this:

1. Institutions -increasing
2. Banks and savings and loans - decreasing
3. Capital markets - increasing
4. Foreign investment - increasing

5. Individuals - decreasing

The institutional investors have been in the real estate investment business as long as anyone and have survived the fluctuations of many market cycles. To compete they have had to reduce their fixed mortgage spreads but they have responded to this erosion in profit by coming up with new structures and creative methods of participating in the upside of projects.

Banks and savings and loans have experienced a well publicized period of difficulty during the most recent overbuilding-induced default cycle. The excesses of the savings and loans will cause government regulators to more closely review their lending practices and, after being hurt so badly by real estate, their overly aggressive attitude will change to one of more conservative underwriting. Their primary business, short term construction loans, is being eroded by institutions who are offering construction financing today, securitization that avoids the construction/permanent loan scenario by supplying one financing for both and the Japanese banks who are able to offer construction loans at lower rates.

The predictions that securitization will completely take over the real estate finance world are probably exaggerated. The capital markets will find a niche in supplying funds to certain high credit projects that either must use these sources to finance projects that are too large for the traditional lenders or, as the spreads between mortgage rates and bond or

commercial paper rates increases, deals that didn't make economic sense previously become sufficiently attractive to warrant the additional time and effort involved.

Foreign investment or more specifically, Japanese investment, is a "sleeping giant" in the future of real estate finance. Japanese lenders are currently at the construction loan stage of their evolution into U.S. real estate finance but, as they move up the learning curve and become more accustomed to U.S. real estate lending practices and comfortable with the types of creative deals that are being offered by other lenders, they will begin competing for this business in an aggressive manner. Since they are using a lower cost of funds, their deals should be superior.

The individual investor does not look like a significant force in real estate finance for the next few years. Without tax benefits, public deals have difficulty making economic sense. To be attractive they must offer passive income from cash flow and, not only is it hard to find commercial deals with a significant current return, if they are found, the institutional investors are probably standing in line to finance or buy them.

The overall trend towards more competition for real estate impacts all parties in the lending community. This supply and demand imbalance will have three potential outcomes:

1. A shake-out of the weaker participants
2. Lower yields for all parties
3. A "move down the risk profile"

The first two points are self-explanatory but the third is contrary to what most lenders perceive as occurring within their industry. The finance professionals interviewed for this report talked of higher debt coverage ratios, lower loan-to-value ratios, recourse or other guarantees, etc. These are all signs of a conservative underwriting position which is inconsistent with a competitive, "too much money chasing too few deals" environment. I see the lending industry taking on greater increments of risk in the future to boost their returns and to find ways to put out funds. The result of this increased risk position may be moving into new, unfamiliar real estate products such as land deals or making equity investments in to-be-built development projects. One of the more well respected names in the pension fund advisory business, Aldrich, Eastman and Waltch, Inc., is making pension fund money available to finance development companies. "Venture capital" is a reasonable description of this investment.

Money moving down to smaller, more risky deals will also be the result of this competitive situation. Both the availability of more funds and an easing of conservative underwriting policies will occur thus benefiting a greater number of developers in the future.

FUTURE TRENDS: MORTGAGES

The financial markets are constantly changing in response to inflation, the price of alternate products, foreign currency rates and the overall health of real estate development. As a result, it is difficult to speculate what types of financing instruments will be popular one month to the next. Sophisticated developers move from one type of financing structure to the next as the all-in cost of using them fluctuates with the markets.

The trend in place today could best be described as "back to basics".¹ Straight, long-term mortgage rates with no participation are at very low levels (under 10%) in relation to other more complex and time intensive forms of financing. The attitude among developers towards complex structures is, "Why go through the six month effort of putting a complicated participating deal or a securitized issue together for only a few basis points saved and a lot of headaches?".²

This is a short term situation though and I do not believe that creative deal making will forever be displaced by "solid basic underwriting". As spreads between rates fluctuate, products that fell out of favor will be revived and new products will be created to meet specific needs.

In addition to interest rate fluctuations, other trends will have an impact on the mortgage market.

1. Dividing and re-apportioning risk
2. Tax avoidance
3. Globalization

These overall themes are most likely to impact the way mortgages are structured in the future. A discussion of these trends follows.

1. Dividing and Reapportioning Risk

Dividing and reapportioning risk might also be referred to as the "securitization of mortgages". As noted earlier, the lender will be taking on more risk in the future and getting into new product lines. An example of this is the New England Insurance Company now offers two mortgages that are a departure from their traditional basic mortgage products.

Mortgage #1. "A & B Structure" - This is a mortgage loan that ties a different interest rate to different levels of risk. The "A" portion is equivalent to their standard mortgage deal with a 75% loan to value ratio and a competitive interest rate. The "B" portion comes into play if the borrower wants a higher loan to value (more risk for the lender). The amount borrowed above 75% carries a higher coupon rate. The result is, the lender makes a riskier loan but the borrower pays an increased price for that risk (securitization theory).

Mortgage #2. "Construction/Permanent Loan" - Construction loans are obviously not new. However, in the past, institutions did not make these higher risk loans. The way it works is, the New England makes one fixed rate loan that not only pays for construction of the project but automatically converts into a long term mortgage at the end of construction. The developer, must put up a letter of credit for each dollar he draws on the construction portion of the loan. The letter of credit requirement is removed when the loan converts to a permanent loan at the end of construction. The advantages are, the lender gets security for his construction loan from the letter of credit, thereby mitigating his construction risk, and the developer only has to deal with one loan and one interest rate so he is not exposing himself to interest rate risk either during construction or upon completion of the project when he would normally have to go into the long term mortgage market.

2. Tax Avoidance

The change in tax laws effecting real estate will continue to be a motivator for creative techniques that re-finance properties to avoid a sale or create more "contingent interest" instead of equity benefit. New York is the trend setter in this movement towards financing around taxes. The participating and convertible mortgage and ground lease will find broader applications in the future and the tax free exchange will become

a more common occurrence.

3. Globalization

Eventually, the market for mortgage money will be the world market. Developers will not only shop the institutions, banks and capital markets but Japan, England and other European markets as well. This is just beginning to happen with foreign currency mortgages being arranged by U.S. investment banks. Goldman Sachs offers a mortgage placed in Japan (in yen) with Japanese insurance companies at mortgage rates which can be several hundred basis points below domestic rates.³ Lower debt coverage ratios in Japan give the added advantage of developers being able to borrow larger amounts against the value of their property.

A foreign currency deal brings a new level of risk into real estate; currency risk. Fluctuating values between the yen and the dollar will essentially change a loan written as a fixed rate loan into a variable rate loan based on relative currency movements. Hedging can be used to mitigate this risk.

FUTURE TRENDS: SECURITIZATION

The debate over the future of securitization rages on with both sides making compelling arguments. Those against say:

- * Commercial real estate is too unique to securitize
- * It takes too much time and effort to bring to market

- * The added costs are too high
- * Adverse property conditions today make real estate securities unattractive
- * They are too complex

The supporters cite securitization's many advantages:

- * Divides income and risk among the parties that can use them the most (most efficient)
- * Ability to finance large projects
- * Costs will come down as familiarity increases
- * Low rates, higher loan-to-value, lower debt coverage, no loss of equity

Clearly today, with mortgage rates so low, securitization only makes sense with large issues where economies of scale bring the impact of fixed costs down and other opportunities to borrow very large sums are limited. In the future, a return to a more normal yield curve will bring back the favorable spreads commercial paper rates have historically enjoyed and increased familiarity and standardization of all securitized products will eventually overcome much of the problem of high costs, too complex and too much time and effort involved.

Familiarity is the biggest obstacle to the use of securitized products. At this point in their evolution, virtually every time a real estate backed offering is made something about it is unique and has never been done before. The result is that attorney's fees add up and the process runs

very slowly as each step is negotiated and documented. The rating and credit enhancement components are new also and, with no historical data from which to draw and an untested product (real estate), rating agencies and credit enhancers have chosen to err on the conservative side when evaluating the creditworthiness of real estate. With time, this will change and what was once complex will become routine.

Forest City Capital Corporation is attempting to reduce the complexity and bring commercial paper down to the smaller developer. According to Cynthia Williams, Vice President, they are putting together a program that aggregates many small, multi-family development projects (as small as \$5 million) into one large commercial paper offering. The program works like this:

* Primary parties involved

Forest City = mortgage banker

Insurance company = credit enhancer

Investment bank = seller of the paper

* The commercial paper funds both construction and "permanent" financing (total of a 5 year term)

* 80% loan to value and 1.1 coverage

* Developer buys a cap

* Fees

Credit enhancement = 1%/year

Cap = .5%/year

Forest City fee = 1.5% one time fee

Attorney fees = \$100,000 and up

Total Load = 2.20%/year for a 5 year deal

With commercial paper rates at 9.00% the total cost of funds, 11.20%, is well above mortgage rates for credit developers. However, historically commercial paper has averaged 7.87%⁴ so there is a high probability that rates will decrease as the yield curve moves back to normal.

It is also important to note that small developers may not be able to borrow at the low rates institutions are offering their best customers. Prime plus 1-4% (12-15% plus the cost of any features, such as a cap) with additional interest rate risk at the end of construction when a take out loan must be secured, is a more likely alternative for the small developer. The determining factor becomes the comparison between the credit enhancer's perception of the developer's creditworthiness in allowing him to be included in the commercial paper program under his AAA rating vs. the lender's perception of the developer's creditworthiness and the corresponding interest rate offered for a straight loan.

If programs such as this prove to be successful, the small and medium sized developer will have a useful new financing alternative available to him. The key to success is informing the finance community of the availability and method of implementation of products such as this and streamlining the process to the point of being competitive in time and effort

expended and expenses incurred in comparison to the mortgage alternatives.

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APPENDIX A: TERMINOLOGY

The vocabulary of real estate finance is growing increasingly complex as the influence of Wall Street and the large institutional investors is felt in what was previously a fairly straightforward set of business terms. It seems that as new products are created a technical term or acronym must be attached to it to give it market appeal. To communicate with the major players in real estate lending today, developers must have an understanding of these terms.

Bullet Loan. A loan with a fixed interest rate and a balloon payment due at the end of a three to ten year term.¹

Commercial Paper. An unsecured promissory note, typically with a maturity of six months or less, issued for a specific amount and maturing on a specific date.¹

Convertible Mortgage. A secured debt instrument with an option for the lender to participate in the equity of the mortgaged property.¹

Credit Enhancement. A financial guarantee, such as a letter of credit or a surety bond, that reduces the concerns of investors that lack the time or expertise to evaluate securitized real estate offerings. A credit rating by one of the bond rating

agencies can also achieve this result. (See also Rated commercial mortgage-backed securities.)¹

Equity Kicker. A loan or lease provision that allows a lender or a major tenant to participate in the cash flow or resale proceeds of a real estate project.¹

Employee Retirement Investment Savings Act (ERISA). Federal legislation that governs the investment policies of pension funds.

Eurodollar Offering. A dollar-denominated public offering on the London market, as opposed to a domestic public offering.¹

Going-in Cap Rate. First-year net operating income (NOI) divided by present value (or purchase price); commonly used as a measure of risk in real estate--the higher the cap rate, the higher the perceived risk to the investor or lender.¹

Hybrid Mortgage. A mortgage that combines a debt component with an equity component; ie. a participating mortgage or convertible mortgage.

Interest Rate Swap. A contract between lenders that allows the exchange of a series of fixed interest payments for a series of variable interest payments; a commonly used method of reducing interest rate risk.¹

Internal Rate of Return (IRR). The rate of interest that discounts the total cash flows received or anticipated by the equity investor(s) back to a present value that is exactly equal to the amount of the original equity investment.¹

Letter of Credit (LC). A document issued by a financial institution guaranteeing the payment of its client's debts up to a stated amount for a specified period, thereby substituting the bank's credit for that of the real estate buyer. (See also Credit enhancement.)¹

London Interbank-offered Rate (LIBOR). An average of interbank-offered rates for dollar deposits in the London market. Variable rate loans are often pegged to this rate.¹

Mini-perm. A short term loan (five years or less) taken out after obtaining a construction loan but before securing a permanent loan. Such loans are typically sought when permanent financing cannot be arranged at attractive terms.¹

Negative Amortization. The gradual increase in total mortgage debt that occurs when interest accrues on a mortgage at a faster rate than it is paid.¹

Rated Commercial Mortgage-backed Security (RCMBS). A publicly traded security with a rating by one of the bond rating agencies (Moody's, Standard & Poor's, Duff & Phelps) and backed by one or more commercial mortgages. Under-writing agencies rated

commercial mortgage-backed securities for the first time in 1985, giving issuers an important form of credit enhancement. Securities backed by commercial mortgages have proved to be much more difficult to rate than those backed by residential mortgages because of the non-standard nature of the underlying asset.¹

Securitization. The process whereby mortgages secured by real estate assets are pooled and issued as tradable securities . Purchase of the securities offers investors a passive, low-risk vehicle for investing in real estate.¹

Take-out Financing. A permanent, long-term loan that usually replaces a construction loan when a development is completed.¹

Terminal Rate. A capitalization ("cap") rate used to estimate resale or reversion value at the end of the holding period.¹

Zero Coupon Bond. A debt security that is issued at discount from its face value and matures at face value over a term of more than one year. No coupon (interest) payments are made over the term of the bond.¹

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APPENDIX B: CURRENT MARKET INTEREST RATES (July 1989)¹

SHORT TERM RATES:

Prime Rate.....	11.00%
LIBOR - 90 Day.....	9.18%
Treasury Bills.....	7.72%
Commercial Paper.....	9.05%
Eurodollar Time Deposits.....	9.25%

LONG TERM RATES:

Treasury Bonds.....	8.22%
Aa Utility Bonds.....	9.15%
Mortgage Rates (Credit Borrowers).....	9.50%

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