

REAL ESTATE FINANCING ALTERNATIVES
IN A HIGH RISK ECONOMY

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Submitted to the Alfred P.
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in Partial Fulfillment of the
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ABSTRACT

The goal of our thesis is to provide an understanding of three real estate financing alternatives being used today for the leveraged acquisition of income-producing property. The selected alternatives would be used more frequently with an increase in interest rates. By looking at a hypothetical deal, in a high interest rate environment, we will present an analysis of these financing alternatives from the perspective of the lender, developer, and investor.

A secondary goal of this thesis is to highlight an excellent investment opportunity for the developer and his investors. The opportunity involves the acquisition of mismanaged, under-utilized, income-producing properties that can be purchased at a reasonable price and have value-added through better management, a rehabilitation program and creative financing. We feel that success for real estate investors can be achieved by the identification of investment opportunities in which property value can be enhanced through increasing emphasis on "value creation" using asset management and financial structuring.

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CHAPTER 1

INTRODUCTION

In this chapter we will provide a brief description of the goal of our thesis, a description of the hypothetical real estate deal we will analyze, an explanation of the economic scenario we have assumed for the discussion, and a preview of the structure of this thesis.

THESIS GOAL

The goal of our thesis is to provide an understanding of three real estate financing alternatives being used today for the leveraged acquisition of income-producing property. The selected alternatives would be used more frequently with an increase in interest rates. By looking at a hypothetical deal, in a high interest rate environment, we will present an analysis of these financing alternatives from the perspective of the lender, developer, and investor.

A secondary goal of this thesis is to highlight an excellent investment opportunity for the developer and his investors. The opportunity involves the acquisition of mismanaged, under-utilized, income-producing properties that can be purchased at a reasonable price and have value-added through better management, a rehabilitation program and creative financing. We feel that success for real estate

investors can be achieved by the identification of investment opportunities in which property value can be enhanced through increasing emphasis on "value creation" using asset management and financial structuring.

HYPOTHETICAL DEAL

We propose the acquisition of a 165,904-square-foot community shopping center which is thirteen years old. We plan a rehabilitation program that will allow us to add value to the center and re-write leases to market rent levels in the future. The center has been mismanaged and underutilized and therefore offers great potential as an investment. The focus of the thesis is to select the optimal financing alternative for this venture. All analyses of this deal have been done on a pre-tax basis and assume that all tax benefits are allocated to the developer.

ECONOMIC SCENARIO

We propose a "high risk" economic scenario to be present at the time of acquisition. Interest rates are high and the developer must use creative financing to make the deal work. Our scenario is not a "worst case" scenario; however, our goal is to present some lessons that were learned by real estate participants during the 1980-1982 high interest rate period, as well as expose the reader to some of the

investment banking techniques that are being used today in the real estate industry.

STRUCTURE OF THE THESIS

We will first present a brief overview of the 1980-82 period and focus on the relevant legislative banking issues that changed real estate finance. Next, we will present our "high risk" economic scenario. Then we will present an explanation of how the structure of real estate deals has changed since the early 1980s. Chapter 5 will present the details of our hypothetical deal. Chapter 6 will present an overview of the financial strategy of the developer. Chapters 7-10 will present the three financing alternatives to be analyzed. Finally, we will conclude our thesis with a discussion of the financing alternatives and closing remarks.

CHAPTER 2

BRIEF OVERVIEW OF LENDER'S INVOLVEMENT IN REAL
ESTATE DEALS DURING THE EARLY 1980s

In this chapter we will examine the changes that occurred in the banking industry during the late 1970s and early 1980s, and the effect these events had on the activity of real estate lenders. We will also review the effect deregulation had on these lenders, focusing on how this precipitated their involvement in real estate ventures. At the conclusion of this chapter we will review the changes which have taken place since the early 1980s in real estate loan underwriting criteria.

BANKING IN THE EARLY 1980s

The early 1980s saw the emergence of large scale lender equity participation in real estate ventures. Banking deregulation provided the institutions the ability to compete with the money market for investor capital. These institutions had to provide high nominal rates of interest if they were to remain competitive. One avenue the lenders turned to, both for high returns as well as a hedge against inflation, was real estate.

DEREGULATION ENHANCES LENDER'S COMPETITIVENESS

The legislation which brought competitiveness back to the lenders was the Depository Institutions Deregulation and Monetary Control Act of 1980. The Act was passed through Congress as interest rates on three-month U.S. Treasury bills reached a previously unheard of high of 11.506%^{1/} in that year. It provided the following:

The Act supercedes the authority of the individual federal and state regulatory bodies in many respects. It permits thrift institutions to expand their asset powers by writing consumer loans, issuing credit cards, holding corporate debt, and becoming more involved with service corporations. All depository institutions may now offer interest-bearing transaction accounts (often called NOW accounts).^{2/}

This Act increased deposits not only to savings and loans but to all depository institutions. These institutions were now allowed to compete with money market funds, the same money market accounts which had produced a major migration of passbook deposits from the thrifts with the rising interest rates of the late 1970s. While the Act permitted these institutions to compete in the marketplace, it also significantly raised their cost of funds.

BANKS BECOME MORE ACTIVE REAL ESTATE PARTICIPANTS

The Act precipitated the massive emergence of lender participation into many types of real estate ventures. Until the mid-1970s, real estate investment capital was supplied in the form of long-term fixed rate mortgages. The developer or investor typically supplied up to

25% of the purchase price or cost of construction in a commercial project. It was not uncommon through this period for the lender to provide all the capital required as long as the project satisfied its underwriting requirements. These long-term fixed rate loans proved detrimental to the institution's profit and loss statements with the sustained period of high inflation through the late 1970s.

The lenders were not the only group negatively impacted by these economic conditions. The real estate developer found himself with many economically non-viable projects due to the high debt service dictated by the high interest rates. The prime rate averaged 12.67% in 1979 and hovered at 15.70% in July of 1982, with a peak of 21.50% in January of 1981.^{3/} The financial institutions' high cost of capital necessitated these high rates to maintain profitability and to prevent the migration of deposited funds back to the money markets.

Partnerships were formed between lenders and developers to mitigate the effects of high interest rates. With the use of joint ventures and participating mortgages, the lender was able to increase his yields, while the developer was able to decrease his risk of default and foreclosure. These deals required the lender to assume much more risk than he was used to, while the developer sacrificed a portion of his upside potential. The net result was a greater return on the debt portion and a smaller return on the equity portion of a given venture. Anthony Downs, in The Revolution in Real Estate Finance, described the situation as follows:

Capital suppliers are now capturing a higher share of the total yield from each property, and developers or other traditional transaction initiators a lower share. Moreover, a greater percentage of the total capital supplied now takes the form of equity, or some type of 'quasi equity,' and a smaller share is pure debt.^{4/}

The availability of funds on deposit in these institutions necessitated their placement into loans and ventures which would guarantee high yields. Real estate ventures provided the main avenue for the placement of those funds. Many loan underwriting criteria were relaxed. Highly speculative ventures were entered into on a non-pre-leased or non-pre-sold basis. The funds available for these ventures in conjunction with the enhanced real estate tax shelter benefits generated by the Tax Recovery Act of 1981 brought about the undesirable side effect of driving up real estate prices. The pressure to place capital in potentially high yielding loans, in combination with escalating real estate prices, brought about the investment of funds into less than prudent speculative ventures.

Another significant event during this period was the government's indirect support of this highly speculative lending activity by banks and S&Ls. The Federal government, through the Federal Deposit Insurance Corporation and the Federal Savings and Loan Insurance Corporation, indirectly supported many of the risks taken by these institutions. Those institutions which participated in the riskier ventures had that risk underwritten by the F.D.I.C. and the F.S.L.I.C. Downs captures the essence of this risk taking by the lenders and its underwriting by the Federal Government:

Partial deregulation has created a serious imbalance between the potential rewards and costs of certain kinds of risk taking behavior by financial institutions, especially those oriented towards real estate. Federal deposit insurance removes most of the threat to banks and thrifts of losing deposits if they grow rapidly or make risky investments. But financial deregulation has increased the potential rewards for such behavior. The result has been much greater net incentives for banks and thrifts to make highly risky investments, and many have done so.

These institutions can now offer as high interests rates as they wish; they can therefore grow rapidly by bidding above market levels to attract deposits. With massively increased total funds, they can leverage their initial equity capital tremendously. It is true that regulatory agencies recently have begun pressuring banks and thrifts to increase their capital. But those institutions can earn much larger fees in relation to that capital by financing many more transactions. Moreover, they can gamble on risky investments that promise high returns if successful. For example, in 1983 some large thrift institutions used highly transient short-term deposits to make many long-term fixed rate mortgages. They were hoping that interest rates would fall and they would receive windfall gains plus large profits from greater spreads. But interest rates rose in 1984, causing some of these institutions to come close to bankruptcy.^{5/}

Many of the real estate ventures undertaken were failures.

Numerous lenders did not have the in-house expertise to underwrite speculative real estate endeavors. In areas where overbuilding occurred, sales did not materialize as projected, leases on commercial or retail properties were not written at pro forma levels, or major tenant concessions had to be made. The net effect was to produce many projects which were negatively leveraged or generating a negative cash flow.

BENEFIT OF EXPERIENCE

Through a series of interviews with institutions active in joint ventures, participating mortgages, and straight debt lending, we confirmed that the most successful deals during the early 1980s were those that had been underwritten conservatively. Market analyses, demographics, valuation of leases, engineering and environmental surveys, as well as developers' experience, were all necessary ingredients when underwriting a deal. It appeared to us that both lenders' and developers' attitudes towards risk, uncertainty, and inflationary expectations have taken on a more sophisticated and hard-line perspective because of their experience during the early 1980s.

A major lesson learned from this period was the need for the developer and lender to pool their resources and develop parallel incentives to meet both their objectives. During this high interest rate environment, it became necessary for the developer to give up some of the upside potential to the lender, and it further required the lender structuring his loan to offer a below-market interest rate and/or requiring a lesser amount of cash into the deal by the developer. The attitudes of today's top real estate people seem to reflect the lessons learned through that period.

In the next chapter we will define the high risk economic scenario to be assumed for our analysis.

FOOTNOTES

1. Economic Report of the President, January 1987, Washington, DC: United States Government Printing Office, 1987, pp. 324-325.
2. A.S. Caron, The Plight of Thrift Institutions, Washington, DC: The Brookings Institution, 1982, p. 10.
3. Economic Report of the President, op. cit., p. 324.
4. A. Downs, The Revolution in Real Estate Finance, Washington, DC: The Brookings Institution, 1985, p. 9.
5. Ibid., pp. 19-20.

CHAPTER 3

HIGH-RISK ECONOMIC SCENARIO

In this chapter we will define the high-risk economic scenario which will be assumed to exist at the time of our acquisition. We are not attempting to predict the future; however, we are making an educated guess as to one possible economic scenario which may exist in a few years.

DEFINITION OF "HIGH-RISK" ECONOMIC SCENARIO

Today, the U.S. is faced with a delicate economic balancing task. We have become the largest debtor nation in the world and are faced with a situation where we need to attract foreign capital with attractive investment opportunities (i.e., high interest rates) as well as keep interest rates below the record levels of 1982--levels which could push America into a deep recession. For the purposes of our analysis, we have defined a high-risk scenario as a prime rate of 11% and an inflation rate of 5%.

A March 1988 National Real Estate Investor article referred to a scenario that is very similar to the one we are proposing.

Consider this scenario: Last October's crash has a sobering effect on the economy. The country slips into a recession. At the same time, the government's failure to significantly reduce the deficit, the lingering trade

imbalance, and a weaker dollar combine to prevent interest rates from declining further. In fact, a rise in rates may become inevitable as part of an effort to keep foreigners enthusiastic buyers of US debt. At the same time, if the Federal Reserve Board tightens credit, interest rates would move up, squeezing developer's cash flow.1/

We have made these assumptions in an attempt to define a scenario that would not stop all real estate investment activity, but would require the developer to utilize the more innovative financing alternatives available in today's marketplace. These assumptions of a prime rate of 11% and inflation rate of 5% will be held constant for the remainder of our thesis.

In the next chapter, we will describe how the demand for retail real estate has changed since 1982.

FOOTNOTES

1. Sadoff, Amy and Lisa Cashin, "Hedging tools provide developers with flexibility in preparing for a worse-case economic scenario," National Real Estate Investor, March, 1988, p. 80.

Chapter 4

CHANGES IN COMMERCIAL REAL ESTATE INVESTING
SINCE EARLY 1980s

In this chapter we will examine how the demand for income-producing property has changed since the early 1980s. We will specifically examine how the Tax Reform Act of 1986 has shifted demand to more economically sound projects. Second, we will consider the factors and conditions which have brought about the recent increase in demand for retail properties. Finally, we will explore those circumstances which are creating new interest and demand for community and neighborhood shopping centers.

REAL ESTATE AS A TAX SHELTER

For many years real estate has been used as a tax shelter vehicle. Use of limited partnerships was prolific as high-income investors looked for the tax shelter these entities could offer. Limited partnerships and syndications were easily formed and capitalized. Generally, the common objective was sheltering income. The possibility of generating some long-term capital gain on the disposition of the property was of secondary interest. The greater the property losses the larger the tax write-off generated for the participants.

Interest in limited partnerships and syndications greatly increased with the Tax Recovery Act of 1981. Downs, in 1985,

described the reasons for this increased interest in the following way:

In the case of real estate syndication, the benefit is shelter from federal income taxes. Investors who buy syndication shares receive this benefit at no cost to the syndicators. Hence they get higher returns per dollar of cost to the syndicators than in other investments. Tax-law changes in 1981, plus dramatic developments in stock and bond markets in 1982, greatly increased the allure of syndication shares for investors in 1983 and 1984.^{1/}

THE TAX REFORM ACT OF 1986

The Tax Reform Act of 1986 reduced much of the tax-driven incentives for investing in real estate. Accelerated depreciation was eliminated. The depreciation period on commercial properties was increased to 31.5 years. No longer can the passive losses generated by properties be used to offset regular income. While tax benefits of ownership do still exist, they have been radically diminished. What has evolved now in the marketplace are deals driven more by economics (i.e., positive returns rather than by tax write-offs).

The three propositions for investing in income-producing real estate versus stocks, bonds, or other alternative investments are aptly described by Arnold, in Real Estate Investments After the Tax Reform Act of 1986:

1. The economic benefits of well-located real estate (i.e., annual cash flows plus gradual appreciation in market value) compare favorably with alternative investments.
2. Real estate investments offer the most favorable tax benefits (i.e., the deferral of income taxes to the future or the conversion of ordinary income into long-term capital gain).

3. Real estate can be financed with borrowed capital to a much greater extent than can alternative investments, and this financial leverage acts to magnify the economic and tax benefits to the real estate investor.^{2/}

While these propositions are still valid, with the changes brought about by the Tax Reform Act of 1986, the cash flows generated by the tax shield portion of the investment have been greatly diminished.

There can be no question that the Tax Reform Act of 1986 (TRA '86) severely limits (but by no means eliminates) the tax benefits of real estate. Other types of investments, most notably common stocks and non-real estate partnerships, also have lost tax benefits, but real estate certainly has been hurt the most. Consequently, the case for real estate investing now rests much more heavily on economic benefits and financial leverage. Real estate offerings generating 'deep shelter,' (i.e., large tax losses that formerly could be used against other income of the investor), have largely disappeared from the scene. However, seasoned and well-maintained income properties in good locations are likely to hold more appeal than ever before in view of their ability to generate secure cash flow that, to some degree, is sheltered by depreciation deductions. Such a real estate investment has qualities akin to that of a high-quality corporate bond, with the additional attractions that (1) tax on a portion of the return is deferred until the property is sold, and (2) moderate appreciation in market value is likely.^{3/}

The bottom line regarding the effects of the Tax Reform Act of 1986 are that the well located, seasoned, and properly managed properties are, and will continue to be, good sound economic investments. Prudent real estate investments should provide a solid hedge against inflation, generate tax shields, allow for deferral of gains on a portion of the returns, as well as provide solid current returns on capital invested. Income-producing properties will be

valued for the returns they can provide rather than artificially inflated values due to the tax losses which could be generated prior to the Tax Reform Act of 1986.

FACTORS CONTRIBUTING TO THE INCREASED DEMAND FOR RETAIL PROPERTIES

The increasing availability of pension fund dollars in combination with foreign investment into properties in the United States has increased the demand for commercial and retail real estate. It is estimated that the domestic funds available for investment in real estate will double between 1986 and 1989 to some \$105 billion.^{4/} Offshore investment in U.S. real properties is expected to exceed \$320 billion by 1990.^{5/} Many of the gains made in the stock market prior to the "Crash" on October 19, 1987, also found their way into real estate properties.

FACTORS CONTRIBUTING TO THE DECREASED SUPPLY OF REGIONAL MALLS AND REGIONAL SHOPPING CENTERS

Regional shopping malls have been one of the principal targets of the institutional investor. They provide a stable cash flow and their tenants are mainly credit-rated national chains. These properties further offer the potential for moderate to significant capital growth. As demand for these properties increased, capitalization rates have been driven to the 5-7% range, and once a group acquired these properties they are reluctant to sell.

Zoning and environmental constraints have decreased the feasibility of new construction, further driving up prices of existing malls. Also contributing to fewer new malls is the low growth in retail sales in many parts of the country. Because the demand for malls, and retail space in general, is a function of retailer's sales, it is easy to see that without the growth in sales new construction is not warranted.

INCREASE IN DEMAND FOR COMMUNITY AND NEIGHBORHOOD CENTERS

As the available funds cannot be placed into acquisition of regional malls, the next retail alternatives for these investors are the community and neighborhood shopping centers. Equitable Real Estate's Emerging Trends in Real Estate 1987 pointed out this situation but also warned about the possibility of overbuilding for this market:

Shopping centers are the preferred investment target for many institutional investors, so competitive bidding on relatively scarce regional centers has kept prices high through 1986. They will stay up in '87. However, most of the retail purchase activity is now directed toward neighborhood and community centers with credit tenants. As a result these properties are also maintaining value. By 1987, though, overbuilding of strip and small centers will depress prices for much of this kind of product.^{6/}

The article goes on to say that in areas where there is good economic growth, opportunities for sound investment do exist. "The Northeast, which is benefiting from population, household, and income growth, as well as very good residential sales, will offer the best overall opportunities in '87."^{7/} The 1987 prognosis in this article did

come true, as evidenced by the continued strong demand for these types of centers in the Northeast.

OPPORTUNITY FOR VALUE CREATION WITH UNDERVALUED CENTERS

As the demand for the seasoned, stable, income-producing community and neighborhood centers increases, one can expect escalating acquisition prices. Capitalization rates in some instances have been driven to the 5%-7% level by institutions and private investors anxious to place their funds. For the developer with the ability to add value to existing properties, the opportunity does not lie with the seasoned properties acquired at low capitalization rates. Mismanaged properties, which are subsequently generating less than market rate rents, may present the best opportunity for capital growth.

These under-utilized centers present opportunities for the savvy developer to transform them into stable, high revenue producers. These properties should be purchased at capitalization rates in the 10.5% to 11.0% range. Value can be added by capital improvements and proper asset and property management. As leases are rewritten, base rents will approach or equal market rates. With enhanced center appeal, tenant's sales revenue will increase and rental overages as a percentage of sales will also experience incremental growth. Finally, upon disposition lower capitalization rates will reflect the added value to these centers.

In the next chapter we present the reader with our hypothetical deal which involves the acquisition and rehabilitation of a mismanaged, under-utilized community shopping center.

FOOTNOTES

1. A. Downs, The Revolution in Real Estate Finance, Washington DC: The Brookings Institution, 1985, p. 11.
2. A.L. Arnold, Real Estate Investments After the Tax Reform Act of 1986, Boston: Warren, Gorham & Lamont, Inc., 1987, p. 7.
3. Ibid., p. 11.
4. Business Week, "Meet Real Estate's New Czars: The Middlemen," October 5, 1987, p. 98.
5. B.W. Mahoney, "New RELPs For Old: Strategies for a Changing Real Estate Marketplace," The Real Estate Finance Journal, Spring 1988, p. 12.
6. Real Estate Research Corporation, "Markets in Perspective," Emerging Trends in Real Estate: 1987, Chicago, 1986, p. 29.
7. Ibid.

CHAPTER 5

DESCRIPTION OF HYPOTHETICAL COMMUNITY CENTER ACQUISITION

The purpose of this chapter is to provide a description of the hypothetical community shopping center we have targeted for acquisition. We will discuss our rationale for determining the acquisition price. We will further provide a description of rehabilitation work to be done and discuss how this rehabilitation in conjunction with improved property management will add value to the center. We will further outline the assumptions used regarding: demographics, competition, lease terms and conditions as well as operating revenues and expenses. We will conclude this chapter with an explanation of our unleveraged spread sheet model, and how we addressed tax considerations.

DESCRIPTION OF CENTER

We have targeted for acquisition a community shopping center located in the northeastern United States. We assume that this center is in a suburban area as opposed to an urban location. The center contains 165,904 square feet with gross leasable area of 155,950 square feet. It is configured as a typical "strip center."

The center is thirteen years old at the time of acquisition. Ongoing property management up until this point has been less than ideal. Furthermore, continuing capital improvements have been less than adequate, and this is reflected in the poor street appearance of the center. This lack of proper management has inhibited growth of the net operating income and hence its value.

DETERMINATION OF THE PURCHASE PRICE

One of the main topics of discussion with the various lenders we interviewed was ascertaining an appropriate capitalization rate for determining the acquisition price. While there were many variations in rationale for determining a cap rate in our proposed high risk economy the conclusions were similar. There would be upward pressure on capitalization rates in a high interest rate environment.

Many deals are presently financed with short money, and as the term on these loans expire in this type environment, we will see further upward pressure applied to the cap rates. The assumption is that a particular project which is viable at one rate may not be when refinanced at the higher interest rate. Some projects may actually generate a negative cash flow at 150-300 basis points above the previous financing rate. It then becomes quite costly for the developer or owner to hold the property in his portfolio. These economic conditions will bring about an abundance of available projects. This oversupply will then drive cap rates up. This was

evidenced during the early 1980s when the prime lending rate was in the 15%-19% range. A Boston real estate investment advisor who was active during this period had the following observations:

What happened in 1981 and 1982 when everything hit the fan, was that you'd have many deals cross your desk every day. Cap rates which were really trading at a very narrow band of 9-10% for a long period of time, all of a sudden ran up to 11-12% cash on cash yields. There was so much property and so little money that people were very anxious to move them. And when rates did come down, all of a sudden the deals dried up.^{1/}

The second major issue in choosing an appropriate cap rate for determination of the acquisition price was the present physical condition and net operating income of the center. Once acquired we address both these negative issues with capital improvements and better center management, although, it does little for first and second year's net operating income (NOI) and cash on cash return to the equity investor.

A developer may be willing to receive no current return on investment in lieu of future higher yields, but he cannot assume the same for his equity investors. It was therefore important to choose a cap rate which would allow for some minimum current cash on cash return to our equity investors.

The acquisition cap rate we chose was 10.56%. The purchase price arrived at with this cap rate satisfied the returns required by the lender and the equity investors as well as providing an attractive net present value (NPV) for the developer. This cap rate is also deemed

appropriate given the specifics of the project as well as the economic conditions under which the acquisition is taking place.

A terminal cap rate of 9.5% was applied to year 6's NOI for the 5 year holding period and year 11's NOI for the 10 year holding period. This terminal cap rate was used to calculate the sales price of the center at the end of our holding period. We felt this to be a conservative cap rate given the value being added to the center as well as the uncertainty with interest rates in the year of disposition. In all of our alternative financing scenarios we calculated the effect on both NPV and internal rate of return (IRR) for terminal cap rates of 9.0% and 10.0% as well as the 9.5%. In our calculations on NPV, we used a discount rate of 13% on the lender's cash flows and an 18% discount rate on the developer's and investor's cash flows. Exhibit 1 displays the project assumptions.

PROPOSED CENTER REHABILITATION

We have assumed a \$3.00 per square foot budget for capital improvements to the center. This \$3.00 per square foot equates to a total price of \$497,712. Given that the center is 13 years old at the time of acquisition, major structural and mechanical improvements do not need to be done at this point. The monies will be spent on resurfacing the parking lot, upgrading landscaping, signs, and lighting as well as improving the appearance of the building's

Exhibit 1

PROJECT ASSUMPTIONS:

Center Size (gross sf)	165,904.00	
Percentage center leasable	94.00%	
Gross Leasable area	155,949.76	
Vacancy rate (w/ smaller tenants)	10.00%	
Aquisition price per sf	\$58	
Acquisition Price	\$9,622,432	
Capital Improvements per sf	\$3	
Capital Improvements in \$	\$497,712	
Total Purchase Price & Improvements	\$10,120,144	
Common area Maintenance (\$ per sf)	\$0.75	% recovered 100.00%
Real Estate Taxes (\$ per sf)	\$0.75	100.00%
Insurance (\$ per sf)	\$0.24	100.00%
Administration (15% of CAM)	15.00%	100.00%
Property Mgmt (5% of Gross Rent)	5.00%	0.00%
Reserve for Replacement (2.5% gross rent)	2.50%	0.00%
Renewal Lease Commission	1.50%	
New Lease Commission(see schedule)		
Percentage renewal subject to commission	40.00%	
Expense Growth Rate (annual)	4.00%	
Developer's Discount rate	18.00%	
Lender's Discount Rate	13.00%	
Terminal Capitalization rate	9.50%	
Sales expense	4.00%	

facade. These improvements will take place in and be completed during the first year of ownership.

Furthermore, 2.5% of the gross rental revenues have been allocated to ongoing capital improvements. This figure is higher than is typically budgeted on projects of similar age. We have chosen this figure to reflect the possible necessity of doing some tenant improvements as an inducement to renewal of expiring leases or to entice new tenants into the center as spaces become vacant. This figure is not adequate to do a complete tenant space preparation. It is merely to offer, should it become necessary, some cost saving to tenants.

PROPERTY MANAGEMENT

Property management is a critical feature in our overall plan to add value to this shopping center. We assume day-to-day property management is contracted out to a third party, professional management company. This management company's fee will be tied to the center's performance, as opposed to a straight fee that is fixed regardless of the center's profitability. This type of performance fee structure will encourage efficient managerial performance.

The developer in our scenario also has strong economic incentives to maintain a high degree of control both over the project as well as the property manager. His returns are closely tied to the project's

overall increase in value. This will only be accomplished by adding value both through capital improvements as well as excellent property and asset management.

DESCRIPTION OF ASSUMPTIONS MADE

As this is a hypothetical shopping center created for pedagogic purposes, we made certain assumptions regarding location, demographics, competition, etc. As stated above this center is located in the northeastern United States. It is located in a suburban area which has, until recently (due to the economic conditions described in Chapter 3) experienced moderate positive growth in residential development, disposable family income, and retail sales.

We further assumed that due to restrictions on zoning, as well as prohibitive environmental issues, there is no new retail space planned within the immediate geographic area. Moreover, due to the economic scenario we have proposed, small growth in retail sales has diminished demand for additional new retail space.

DESCRIPTION OF TENANTS AND THEIR LEASE TERMS

The center is anchored by a discount clothing store, a supermarket, and a drugstore. All three are credit rated. Additional credit-rated tenants occupy 20,000 square feet. The balance of the space, 30,000 square feet, is occupied by non-credit rated local tenants. A vacancy

reserve of 10% has been calculated in our analysis for both the credit-rated smaller tenants and the non-credit rated local tenants. Due to the center's previous mismanagement, rents per square foot are below market prices.

BREAKDOWN BY TENANT

Included in Exhibit 2-6 are the lease terms and projections for growth in future rental income.

Discount Clothing Store

- 15 year lease with 4, 5 year options to renew.
- total lease term with options is 35 years
- percentage overage on sales revenues is 2.85%
- breakpoint on sales revenue is \$122.81/sf
- annual base rent at year of acquisition is \$3.50/sf
- overage on sales at year of acquisition is \$1.87/sf
- effective rent at year of acquisition is \$5.37/sf
- new base rent at lease renewal, year 16, \$4.90/sf
- overage on sales in year of lease renewal \$2.42/sf
- effective Rent at lease renewal \$7.32/sf
- new base rent at second renewal, year 21, \$6.13/sf
- overage on sales in year of lease renewal \$4.06/sf
- effective rent at second renewal \$10.19/sf

Supermarket

- 20 year lease with 4, 5 year options to renew.
- total lease term with options is 40 years
- percentage overage on sales revenues is 1.5%
- break point on sales revenues is \$233.33/sf
- annual base rent at year of acquisition is \$3.50/sf
- overage on sales at year of acquisition is \$2.72/sf
- effective rent at year of acquisition is \$6.22/sf

- new base rent at lease renewal, year 21, \$4.73/sf
- overage on sales in year of lease renewal \$5.25/sf
- effective rent at lease renewal \$9.98/sf

Drug Store

- 15 year lease with 4, 5 year options to renew.
- total lease terms with options is 35 years
- percentage overage on sales revenues is 2.85%
- break point on sales revenues is \$157.89/sf
- annual base rent at year of acquisition is \$4.50/sf
- overage on sales at year of acquisition is \$2.49/sf
- effective rent at year of acquisition is \$6.99/sf
- new base rent at lease renewal, year 16, \$6.30/sf
- overage on sales in year of lease renewal \$3.20/sf
- effective base rent at lease renewal \$9.50/sf
- base rent at second renewal, year 21, \$8.19/sf
- overage on sales in year of lease renewal \$5.33/sf
- effective Rent at second renewal \$13.52/sf

Credit Rated Smaller Tenants

- 5 year leases with 3, 4 year options to renew
- total lease term with options to renew is 17 years
- 16% Rent increase every 4 years
- annual rent at year of acquisition \$10.93/sf
- new rent when leases rewritten, year 18, \$15.30/sf
- rent on renewal of new lease, year 20, \$18.36/sf

Non-Credit Rated Local Tenants

- 3 year lease with 4, 3 year options to renew
- total lease term with options to renew is 15 years
- 5% rent increase every year through end of lease term
- annual rent at year of acquisition \$13.67/sf
- new rent when leases rewritten, year 16, \$18.66/sf
- 5% rent increase every year for balance of lease term

Exhibit 2
Lease Terms and Rental Revenues

DISCOUNT CLOTHING STORE

15 YEAR LEASE W/ 4, 5 YEAR OPTIONS = 35 YEARS

Annual Base Rent	\$3.50
Renewal Base Rent	\$4.90
Second Renewal Base Rent	\$6.13
Percentage overage	2.85%
Breakpoint	\$122.81
Growth rate	5.00%
Square Feet (SF)	50,000.00

YEAR	SALES/SF	OVERAGE/SF	TOTAL REVENUE	REV/SF	% INCREASE
1	100.00	0.00	175,000.00	3.50	0.00%
2	105.00	0.00	175,000.00	3.50	0.00%
3	110.25	0.00	175,000.00	3.50	0.00%
4	115.76	0.00	175,000.00	3.50	0.00%
5	121.55	0.00	175,000.00	3.50	0.00%
6	127.63	0.14	181,870.12	3.64	3.93%
7	134.01	0.32	190,963.63	3.82	5.00%
8	140.71	0.51	200,511.81	4.01	5.00%
9	147.75	0.71	210,537.40	4.21	5.00%
10	155.13	0.92	221,064.27	4.42	5.00%
11	162.89	1.14	232,117.48	4.64	5.00%
12	171.03	1.37	243,723.36	4.87	5.00%
13	179.59	1.62	255,909.53	5.12	5.00%
ACQUISITION YEAR					
14	188.56	1.87	268,705.00	5.37	5.00%
15	197.99	2.14	282,140.25	5.64	5.00%
16	207.89	2.42	366,247.27	7.32	29.81%
17	218.29	2.72	381,059.63	7.62	4.04%
18	229.20	3.03	396,612.61	7.93	4.08%
19	240.66	3.36	412,943.24	8.26	4.12%
20	252.70	3.70	430,090.40	8.60	4.15%
21	265.33	4.06	509,344.92	10.19	18.43%
22	278.60	4.44	528,249.67	10.56	3.71%
23	292.53	4.84	548,099.65	10.96	3.76%
24	307.15	5.25	568,942.14	11.38	3.80%

Exhibit 3

Lease Terms and Rental Revenues

SUPERMARKET

20 YEAR LEASE W/ 4, 5 YEAR OPTIONS = 40 YEARS

Annual Base Rent	\$3.50
Renewal Base Rent	\$4.73
Percentage overage	1.50%
Breakpoint	\$233.33
Growth rate	5.00%
Square Feet (SF)	40,000.00

YEAR	SALES/SF	OVERAGE/SF	TOTAL REVENUE	REV/SF	% INCREASE
1	220.00	0.00	140,000.00	3.50	0.00%
2	231.00	0.00	140,000.00	3.50	0.00%
3	242.55	0.14	145,530.00	3.64	3.95%
4	254.68	0.32	152,806.50	3.82	5.00%
5	267.41	0.51	160,446.83	4.01	5.00%
6	280.78	0.71	168,469.17	4.21	5.00%
7	294.82	0.92	176,892.62	4.42	5.00%
8	309.56	1.14	185,737.26	4.64	5.00%
9	325.04	1.38	195,024.12	4.88	5.00%
10	341.29	1.62	204,775.32	5.12	5.00%
11	358.36	1.88	215,014.09	5.38	5.00%
12	376.27	2.14	225,764.80	5.64	5.00%
13	395.09	2.43	237,053.04	5.93	5.00%
ACQUISITION YEAR					
14	414.84	2.72	248,905.69	6.22	5.00%
15	435.58	3.03	261,350.97	6.53	5.00%
16	457.36	3.36	274,418.52	6.86	5.00%
17	480.23	3.70	288,139.45	7.20	5.00%
18	504.24	4.06	302,546.42	7.56	5.00%
19	529.46	4.44	317,673.74	7.94	5.00%
20	555.93	4.84	333,557.43	8.34	5.00%
21	583.73	5.26	399,235.30	9.98	19.69%
22	612.91	5.69	416,747.06	10.42	4.39%
23	643.56	6.15	435,134.42	10.88	4.41%
24	675.74	6.64	454,441.14	11.36	4.44%

Exhibit 4
Lease Terms and Rental Revenues

DRUG STORE

15 YEAR LEASE W/ 4, 5 YEAR OPTIONS = 35 YEARS

Annual Base Rent	\$4.50
Renewal Base Rent	\$6.30
Second Renewal Base Rent	\$8.19
Percentage overage	2.85%
Breakpoint	\$157.89
Growth rate	5.00%
Square Feet (SF)	10,950.00

YEAR	SALES/SF	OVERAGE/SF	TOTAL REVENUE	REV/SF	% INCREASE
1	130.00	0.00	49,275.00	4.50	0.00%
2	136.50	0.00	49,275.00	4.50	0.00%
3	143.33	0.00	49,275.00	4.50	0.00%
4	150.49	0.00	49,275.00	4.50	0.00%
5	158.02	0.00	49,312.78	4.50	0.08%
6	165.92	0.23	51,778.42	4.73	5.00%
7	174.21	0.47	54,367.35	4.97	5.00%
8	182.92	0.71	57,085.71	5.21	5.00%
9	192.07	0.97	59,940.00	5.47	5.00%
10	201.67	1.25	62,937.00	5.75	5.00%
11	211.76	1.54	66,083.85	6.04	5.00%
12	222.34	1.84	69,388.04	6.34	5.00%
13	233.46	2.15	72,857.44	6.65	5.00%
ACQUISITION YEAR					
14	245.13	2.49	76,500.31	6.99	5.00%
15	257.39	2.84	80,325.33	7.34	5.00%
16	270.26	3.20	104,051.60	9.50	29.54%
17	283.77	3.59	108,268.68	9.89	4.05%
18	297.96	3.99	112,696.61	10.29	4.09%
19	312.86	4.42	117,345.94	10.72	4.13%
20	328.50	4.86	122,227.74	11.16	4.16%
21	344.93	5.33	148,049.12	13.52	21.13%
22	362.18	5.82	153,431.31	14.01	3.64%
23	380.28	6.34	159,082.60	14.53	3.68%
24	399.30	6.88	165,016.45	15.07	3.73%

Exhibit 5
Lease Terms and Rental Revenues

CREDIT RATED SMALLER TENANTS

5 YEAR LEASE W/ 3, 4 YEAR OPTIONS = 17 YEARS
16% RENT INCREASE EVERY FOUR YEARS
YEAR 18: LEASES ADJUST TO MARKET RENTS

Annual Base Rent \$7.00
Rent increase 16.00%
Renewal Increase At Year 16 40.00%
Square Feet (SF) 20,000.00

YEAR	TOTAL REVENUE	RENT/SF	% INCREASE
1	140,000.00	7.00	0.00%
2	140,000.00	7.00	0.00%
3	140,000.00	7.00	0.00%
4	140,000.00	7.00	0.00%
5	140,000.00	7.00	0.00%
6	162,400.00	8.12	16.00%
7	162,400.00	8.12	0.00%
8	162,400.00	8.12	0.00%
9	162,400.00	8.12	0.00%
10	188,384.00	9.42	16.00%
11	188,384.00	9.42	0.00%
12	188,384.00	9.42	0.00%
13	188,384.00	9.42	0.00%
ACQUISITION YEAR			
14	218,525.44	10.93	16.00%
15	218,525.44	10.93	0.00%
16	218,525.44	10.93	0.00%
17	218,525.44	10.93	0.00%
18	305,935.62	15.30	40.00%
19	305,935.62	15.30	0.00%
20	305,935.62	15.30	0.00%
21	305,935.62	15.30	0.00%
22	305,935.62	15.30	0.00%
23	367,122.74	18.36	20.00%
24	367,122.74	18.36	0.00%

OPERATING REVENUES AND EXPENSES

Revenue

Revenues consist of base rents as well as the overages generated by tenants' sales volume above a predetermined natural breakpoint, where the natural breakpoint is defined as the initial base rent per square foot divided by the percentage overage. Overages are applicable to the three anchor tenants only. Calculated into the rental revenues is a vacancy reserve of 10% based on the credit-rated smaller tenants as well as the non-credit-rated local tenants. These smaller tenants are much more susceptible to a recessionary economy than the large credit-rated tenants. Therefore, we have calculated the vacancy reserve at 10%, but have limited the application of this reserve to just the smaller tenants.

The sum of all the tenants rent less the vacancy reserve is labeled as 'TOTAL RENT' in our unleveraged spreadsheet model. Exhibit 7 displays the unleveraged spread sheet.

Expenses Recoveries

The following expenses are 100% passed through to the tenants:

- common area maintenance at \$.75/sf of leased area
- real estate taxes at \$.75/sf of leased area
- insurance at \$.24/sf of leased space
- administration fee: 15% of the common area maintenance charge.

	0	1	2	3	4	5	6	7	8	9	10
thing Store)		268,705.00	282,140.25	366,247.27	381,056.63	396,612.61	412,943.24	430,090.40	509,344.92	528,249.67	548,099.65
		248,905.69	261,350.97	274,418.52	288,139.45	302,546.42	317,673.74	333,557.43	399,235.30	416,747.06	435,134.42
		76,500.31	80,325.33	104,051.60	108,268.68	112,686.61	117,345.94	122,227.74	148,049.12	153,431.31	159,082.60
		218,525.44	218,525.44	218,525.44	218,525.44	305,935.62	305,935.62	305,935.62	305,935.62	305,935.62	367,122.74
		410,128.69	430,635.12	559,825.66	587,816.94	617,207.79	648,068.18	680,471.59	714,495.17	750,219.93	787,730.92
)		(62,865.41)	(64,916.06)	(77,835.11)	(80,634.24)	(92,314.34)	(95,400.38)	(98,640.72)	(102,043.08)	(105,615.55)	(115,485.37)
ue)		1,159,899.72	1,208,061.06	1,445,233.37	1,503,175.90	1,642,684.70	1,706,566.34	1,773,642.05	1,875,017.05	2,048,968.02	2,181,684.96
)		116,962.32	121,640.81	126,506.45	131,566.70	136,829.37	142,302.55	147,994.65	153,914.43	160,071.01	166,473.85
		116,962.32	121,640.81	126,506.45	131,566.70	136,829.37	142,302.55	147,994.65	153,914.43	160,071.01	166,473.85
		37,427.94	38,925.06	40,482.06	42,101.34	43,785.40	45,536.81	47,358.29	49,252.62	51,222.72	53,271.63
		23,392.46	24,328.16	25,301.29	26,313.34	27,365.87	28,460.51	29,598.93	30,782.89	32,014.20	33,294.77
		57,994.99	60,403.05	72,261.67	75,158.79	82,134.24	85,328.32	88,682.10	98,750.85	102,448.40	109,084.25
		3,771.92	3,771.92	10,268.36	8,029.06	12,836.62	8,253.92	8,253.92	7,030.18	5,806.44	5,194.57
		28,997.49	30,157.39	31,363.69	32,618.24	33,922.97	35,279.88	36,691.08	38,158.72	39,685.07	41,272.47
rossRent)		385,509.45	400,867.22	432,689.96	447,354.18	473,703.84	487,464.54	506,573.62	531,804.13	551,318.86	575,065.40
		1,069,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,069,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
IRR	18.40%										
		(10,120,144.00)									
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
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		1,089,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67
		1,									

The sum of the recoverable expenses is labeled 'TOTAL RECOVERIES' on our spreadsheet. Total rent plus total recoveries is labeled 'TOTAL INCOME'.

OPERATING EXPENSES

All expenses listed in "EXPENSE RECOVERIES" are listed under the category of "OPERATING EXPENSES." Three operating expenses which are not recoverable to the owner are Property Management, Leasing Commissions and Reserve for Replacement.

The property management fee is 5% of the total rent and will be paid to a third party management company. Leasing commissions are calculated on the credit-rated smaller tenants as well as the non-credit-rated local tenants. These two types of tenants together occupy 50,000 square feet of the center. We assume that the developer will handle 60% of these leases as they renew or are rewritten. The other 40% we assume will be handled by a leasing agent. The commissions on these leases are as follows: new leases will pay the leasing agent 5% of the first years base rent, 4% on the second and third year's base rent, 3% on the fourth year's base rent and 2% on the fifth year's base rent. On leases which are simply being renewed, and which have been secured by the leasing agent, a 1.5% commission will be paid for each year of the tenant's occupancy under the renewed lease. It should be noted that these commissions were not paid up front in our spreadsheet analysis. Rather, they are

paid in the year in which the rent revenue is received by the developer. Whether commissions were paid in full at time of executing the lease or over the term of the lease was a very controversial topic among many of the developers we interviewed. For the sake of simplicity in our model we have assumed that the commissions are paid when the revenues are received. Whether they are paid in full up front or over the lease period does not have a significant effect on the results of our analyses.

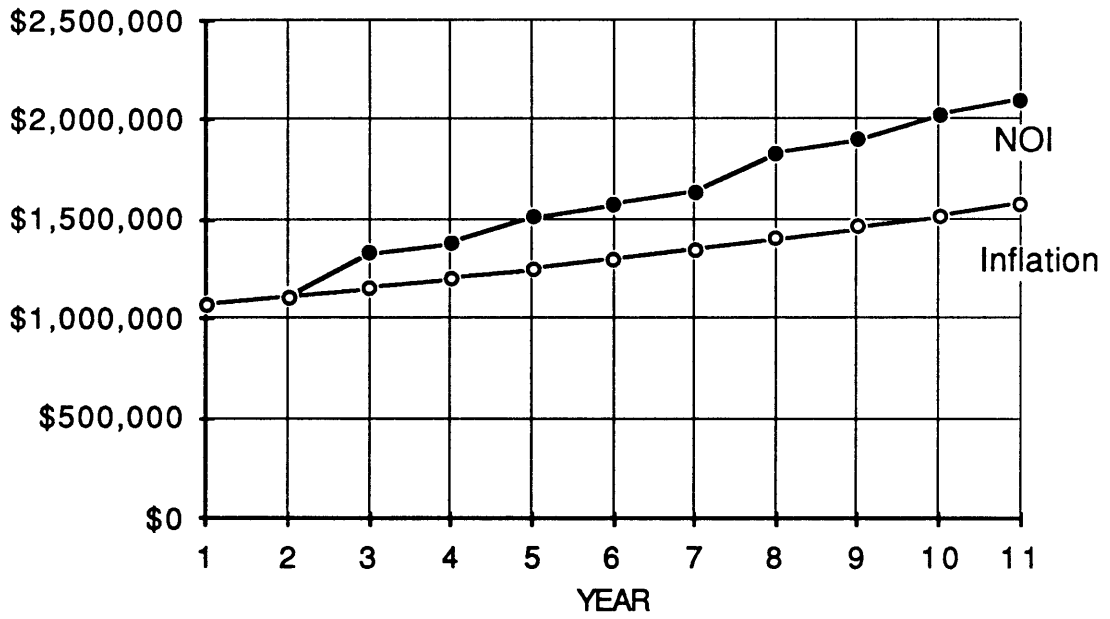
Reserve for replacement is 2.5% of the gross rent. These funds are used for capital replacement on an ongoing basis. The 2.5% figure is higher than traditionally allocated on centers of this size and age. The reason for this higher reserve is explained in the section "Proposed Center Improvements" above.

NET OPERATING INCOME

The net operating income (NOI) figure is the difference between total income and total operating expenses. This figure indicates the earning capacity of the shopping center, before any debt service and cash flow from the tax shield. Exhibit 8 shows our projection of NOI growth over the proposed 10-year holding period. It can be seen that the rehabilitation, as well as improved asset and property management enables NOI to grow more rapidly than it would if dependent on inflation only. The gap between NOI and inflation can also be viewed as the increase in value we are adding over time.

Exhibit 8

Net Operating Income (NOI) Growth



BEFORE DEBT CASH FLOW

These figures represent the cash flows out of the project as a result of its operation. The (\$10,120,144) is the amount invested into the project for both acquisition and capital improvements.

A capitalization rate of 9.5% is applied to produce a gross sales price of \$22,125,654.42. A 4% sales expense is deducted from this amount to produce a net sales price of \$21,240,628.24. This net sales price is added to year 10's NOI to generate a total cash flow in year 10 of \$23,266,761.91. The original investment of \$10,120,144 along with year 1 through year 10's NOI plus the net sales proceeds added to year 10's NOI are discounted back to generate an unleveraged IRR of 18.40%.

This same methodology was used to calculate residual proceeds in all our financing alternative spread sheets.

TAX CONSIDERATIONS

For the purpose of this thesis all analyses are done on a pre-tax basis. We have assumed all cash flows generated by tax shields are allocated to the developer and his investors. We have further assumed that two of the three lenders are tax-exempt institutions and cannot utilize the tax benefits. In these cases, the tax-exempt institutions price the return on their money accordingly. The third institution is

a commercial bank which prices their money based on a spread over the prime rate and again all tax benefits flow to the developer and his investors.

FOOTNOTES

1. Interview with Joe O'Connor, President, Copley Real Estate Advisors, February 19, 1988.

CHAPTER 6

DEVELOPER'S FINANCIAL STRATEGY

In this chapter we will explore the financial strategy of the developer. As stated earlier, we feel that an attractive opportunity exists for the developer in the acquisition of a mismanaged under-utilized property and with the creative financing of this property. We will introduce three financing alternatives available to the developer.

- o A straight debt deal where he obtains a mortgage for 75% of the acquisition price and capital improvements (referred to as initial value) and must contribute his own cash or a guarantee amounting to 25%;
- o A participating mortgage with a pension fund advisor where he obtains 85% financing with a below-market coupon rate and provides the lender with 30% participation;
- o A joint venture with a life insurance company where he obtains 100% financing and does not contribute any cash.

Obviously there are many other options and variations of these options but we have decided to focus our attention on these three popular financing alternatives.

We will analyze these options from a risk/reward framework. The more capital the developer has at risk, the greater the return he

requires. The financial strategy question becomes a risk preference question where the developer must choose between sharing the risk and reward with an aggressive lender (i.e., pension fund advisor) or maintaining all of the upside potential and accepting much greater risk.

FINANCING ALTERNATIVES

We will analyze three financing alternatives for our hypothetical deal . They are (1) a participating mortgage with a real estate pension fund advisor, (2) a joint venture with a life insurance company (managed by the life insurance company's subsidiary which serves as a real estate investment advisor), and (3) a straight debt deal with a commercial bank. In an attempt to keep all variables and return measurements consistent, we have assumed that the developer must raise the required equity for each financing alternative. His cost of equity is the required return of the equity investor. In the participating mortgage and straight debt deals, we have simulated the arrangements that the developer would have with his equity investors. Therefore the cash flows to the developer are after-debt service and return to equity investors. In the joint venture the life insurance company contributes 100% of the required cash. These three financing alternatives will be discussed in detail in Chapters 7, 8, and 9. In the remainder of this chapter we will qualitatively discuss the advantages and disadvantages of each alternative and we will focus our attention on the risk/reward tradeoff of each alternative.

6.1 Participating Mortgage

In the high interest rate scenario we have posed, the developer must reduce his debt service payments if his project is to be successful. Our first financing alternative is a participating mortgage with a pension fund advisor. Participating mortgages historically have been more popular during periods of high interest rates.

At such a time, a market-rate mortgage frequently calls for debt service that exceeds the free and clear return from the property. The result is either downside leverage or, worse, a negative cash flow for the borrower. So the borrower is willing to give up a share of future increases in cash flow (and/or a share of refinancing or sale proceeds) in order to get a below-market rate initially that permits a satisfactory cash flow.^{1/}

Participating mortgages and other "hybrid debt" instruments have become increasingly popular as a means of funding acquisitions of income-producing property.

Traditionally, institutional lenders have been the source of participating mortgages. Recent trends, however, particularly the 'deinstitutionalization' and 'securitization' of real estate finance, have created a number of alternative lenders and have made possible new financing arrangements that involve some form of lender participation in the profits generated by the property.^{2/}

Many real estate investment advisors prefer "hybrid debt" investments to outright ownership as the hybrid debt investment is considered less risky. The two most common hybrid debt structures are the participating and convertible mortgages. They offer the lender a

guaranteed minimum return and allow the lender to participate in the upside potential of the property. As stated in the October 1987 Real Estate Financing Update,

....institutional real estate investors have shown a distinct preference over the last several years for making mortgage loans that are 'participating' or 'equity orientated.' Such loan structures allow the lender a base or contract interest rate, plus the ability to participate in increases in gross or net income and/or in proceeds derived from future refinancing or sale and/or the right to convert at a future date to a full or partial ownership position.^{3/}

In our risk/reward analysis, we recognize that by receiving a below-market interest rate and a higher loan-to-value ratio with a participating mortgage, the developer must share some of the upside potential with the lender. By receiving 85% financing (as opposed to 75% in the straight debt deal) the developer is reducing his capital risk as well as conserving capital. Therefore he will be rewarded with a lower return. This is accomplished by allowing the lender to share in the annual cash flow after-debt service and in the residual proceeds. The participating mortgage deal we will analyze represents our intermediate financing alternative. The developer must raise 15% of the initial value from equity investors. The results in Exhibit 9 show that the developer will achieve an NPV of \$1,143,889. Exhibit 10 shows that the lender would receive a 14.54% IRR over the assumed 10 year holding period. (These results will be discussed in detail in Chapter 8.)

Exhibit 9

Developer's Net Present Value (NPV)

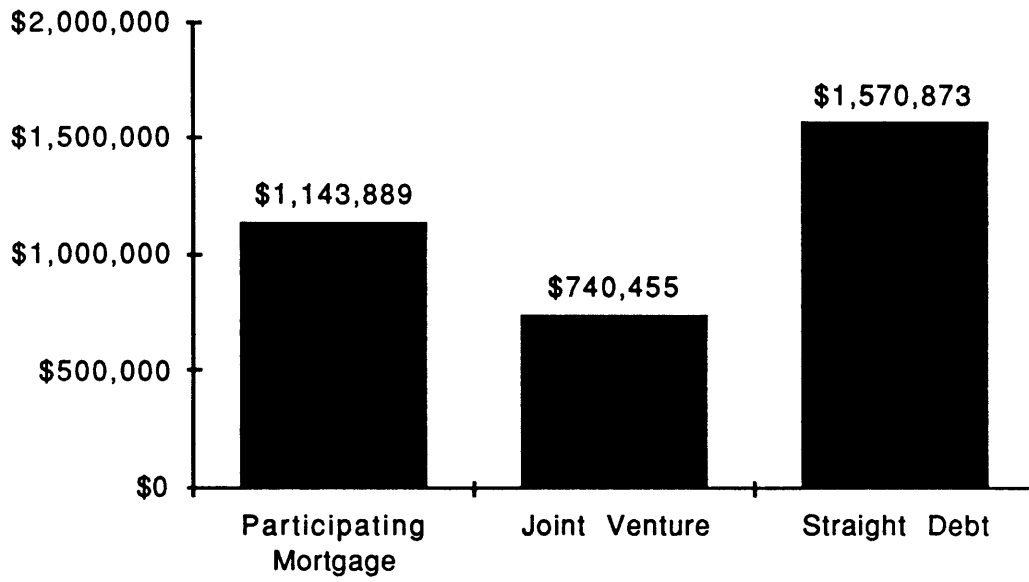
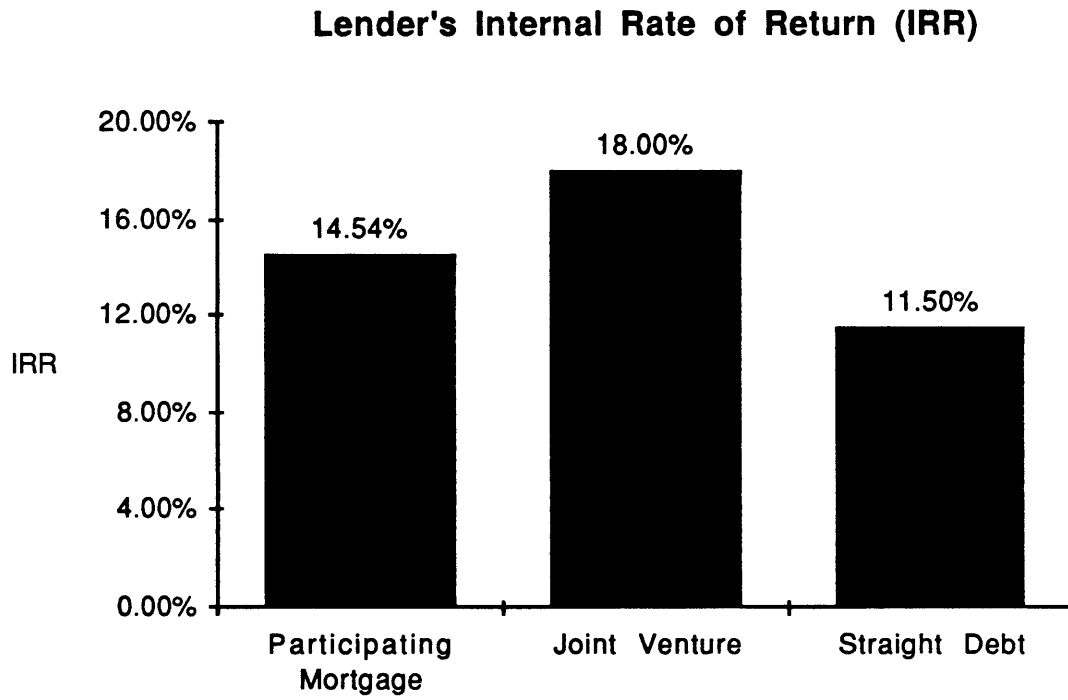


Exhibit 10



6.2 Joint Venture

The minimum risk alternative for the developer is the joint venture. In this case the developer achieves 100% financing and is not required to contribute any cash. He contributes only his development expertise. The joint venture is also a preferred investment vehicle of the institutional investor. The joint venture satisfies both parties' objectives: the developer achieves 100% non-recourse financing, and the joint venture partner participates in the upside potential of the project and benefits by the expertise of the developer. As stated in the Spring 1988 WG&L Real Estate Outlook,

...several pension fund managers have found the high returns of development to be attractive enough to outweigh the risks. They try to mitigate the risk by selecting one or two capable developers per market and endowing them with an exclusive franchise for their funds. This system can work exceedingly well because it allows the developer to capitalize on critical site acquisition and tenant courting opportunities instead of the endless search for debtor equity. The institutional investor benefits from being able to participate in high-yielding development projects whose risks are reduced by consistent, participative management.^{4/}

The joint venture ranks on the low spectrum of our risk/reward matrix. The developer reduces his downside risk by contributing zero cash and therefore will have a reduced reward. Exhibits 9 and 10 (previous) show the Developer's NPV and Lender's IRR. The developer would receive a NPV of \$740,456. This deal provides the joint venture partner with an IRR = 18.00%.

6.3 Straight Debt

Our straight debt deal has the greatest risk for the developer as he must raise equity or provide a guarantee amounting to 25% of the initial value. He is exposed to a higher debt service payment than the other two alternatives and therefore his capital risk is greater. In return for assuming a higher risk, he maintains the entire upside potential. In our analysis we assume that the developer finances 100% of the purchase price with a commercial bank and he provides the bank with a guarantee for 25% of the total debt amount. The developer must raise this guarantee by involving investors who obtain a letter of credit (LOC) for the 25% equity/guarantee amount. The LOC must come from a third-party financial institution with a credit rating acceptable to the underwriting commercial bank. In return for this "credit" investment, the developer will share the cash flow available for distribution in a 50/50 proportion with the LOC investor. Thus the developer shares the upside potential with the LOC investor, not the lender, resulting in a higher NPV for the developer.

Before concluding our discussion of the straight debt deal, we would like to clarify the use of the LOC in this deal. The LOC serves as the guarantee provided to the lender for 25% of total debt. LOC is defined in the Encyclopedia of Real Estate as follows,

An agreement in writing by a bank or other lender (the issuer), made at the request of a customer (account party), that the lender will honor drafts or other demands for payment by third parties (the beneficiaries), in accordance with the conditions set forth in the agreement. In essence, letters of credit are instruments

by which a bank substitutes its own credit for that of an individual or business firm. The obvious advantage of a letter of credit is that the borrower need not use his own assets; nor need he pay interest on borrowed funds. His only cost is a relatively small fee paid to the issuer. The account party should have a very high credit rating or else provide acceptable collateral in order to obtain the letter of credit.5/

In this deal, we have assumed that the LOC investor pays the relatively small fee to the issuer. Our discussions with lenders confirmed that the annual fee for a LOC would be approximately one percentage point.

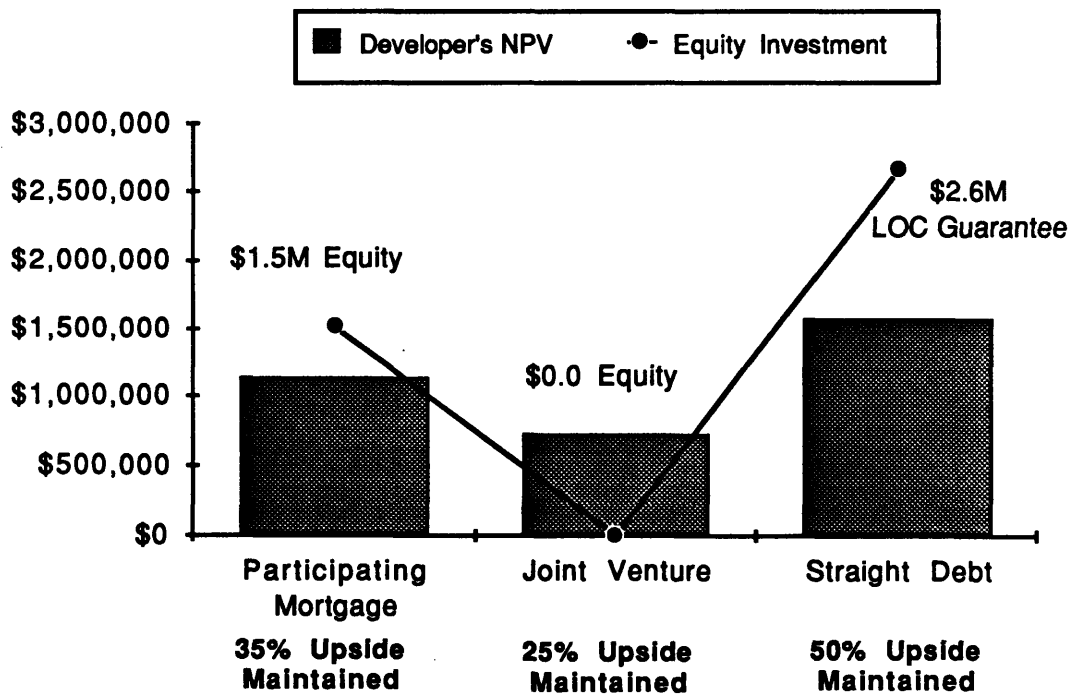
The lender does not participate in the upside potential of the straight debt deal but rather is paid a debt service payment and initial loan fee. In a high interest rate environment a straight debt deal can be very profitable for the lender.

Although the lender has no upside potential, the double-digit contract interest rate (and internal rate of return) over a 10-year holding period is quite competitive on an absolute basis with returns achievable from outright ownership investments as well as from participating mortgage loans. Additionally, risk adjusted returns from straight debt investments can be superior to those of participating debt or ownership positions.6/

Exhibit 11 displays the equity investment and NPV for the three alternatives. In the participating mortgage, the developer pays a below-market interest rate and distributes 30% of the upside potential to the lender. In addition, he provides his equity investors with a 10% cumulative preferred return plus 50% of the remaining cash flow and residual value. The developer maintains an effective upside

Exhibit 11

Developer's NPV and Equity Investment



participation of 35%. In the joint venture, the developer pays the joint venture partner an 11% cumulative preferred return plus 75% of remaining cash flow and residual value. The developer maintains an effective upside participation of 25%. While the participating mortgage only requires 15% equity, and the joint venture is 100% financed by the joint venture partner, both of these deals require giving away a significant portion of the upside potential. The straight debt deal, with a LOC, allows the developer to maintain 50% of the upside potential.

In the next three chapters we will analyze the three financing alternatives in detail.

FOOTNOTES

1. Mortgage and Real Estate Executives Report (MER), "Overview of Participating Mortgages." Volume 19, No. 11, August 1, 1986, p. 3.
2. Kelley, Peter C.. "Advantages of Participating Mortgages," Real Estate Review, Vol. 17, No. 1, Spring 1987, pp. 54-55.
3. Real Estate Financing Update, "Increasing Acceptance of Straight Debt." Vol. 4, No. 2, October 1987, p. 1.
4. WG&L Real Estate Outlook, "1988: The Year of The Niche Dweller," Vol. 11, No. 1, Spring 1988, p. 28.
5. Arnold, Alvin A. and Jack Kusnet, The Arnold Encyclopedia of Real Estate. Boston: Warren, Gorham & Lamont, 1978, p. 463.
6. Real Estate Financing Update, op. cit., p. 2.

CHAPTER 7

PARTICIPATING MORTGAGE

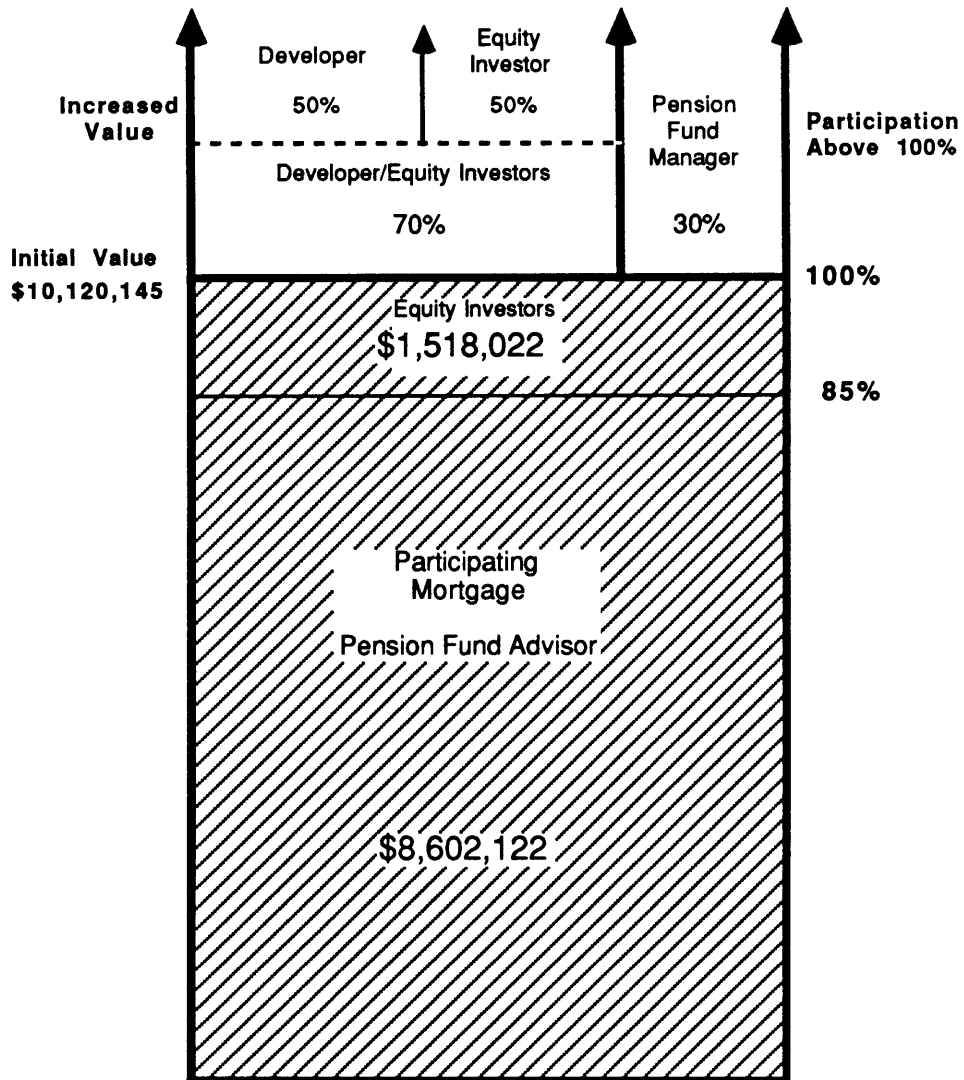
In this chapter we will present the terms of the participating mortgage. We will review the results of this financing alternative from all three perspectives: lender, equity investor and developer.

TERMS OF THE DEAL

The funding and payoff positions of the deal are displayed graphically in Exhibit 12. This capitalization chart displays the positions of the lender, developer and equity investor on a priority basis. The pension fund advisor provides 85% of the initial value in a participating mortgage with a principal amount of \$8,602,122. He is in the most secure position which is often referred to as the "first position." The developer must raise equity through equity investors contributing the remaining \$1,518,022. The two parties contribute the initial value of \$10,120,145 which is used to purchase the property and to fund the capital improvements program discussed in Chapter 5. The non-shaded area of the chart depicts the priority payment schedule for available annual cash flows to be distributed after the payment of debt service and preferred return to the equity investor. This priority payment schedule is also used to distribute residual proceeds after repayment of the outstanding mortgage balance and equity

Exhibit 12

PARTICIPATING MORTGAGE CAPITALIZATION CHART



investors contributed capital. (The relationship between the developer and equity investor will be discussed later in this chapter.)

The lender receives annual participation equal to 30% of available cash flow after debt service. The lender also receives 30% participation in net sales proceeds after repayment of the outstanding mortgage balance. The developer and equity investor receive 70% of annual cash flow after debt service and 70% of net sales proceeds after repayment of outstanding mortgage balance. The equity investor receives a cumulative preferred return of 10% on their invested capital. After the preferred return the developer and equity investor split remaining cash flows 50/50.

EXPLANATION OF PARTICIPATING MORTGAGE SPREADSHEET MODEL

Exhibit 13 displays the participating mortgage spreadsheet. The participating mortgage has an accrual feature that can be useful during periods of high interest rates. Exhibit 14 shows the accrual table. In earlier years when NOI does not exceed debt service ("coupon rate") the developer can calculate debt service using the "pay rate" and accrue the difference between the "coupon rate" and "pay rate." In our scenario the accrual feature was not utilized as NOI exceeded the coupon rate in year one. This accrual feature could be quite attractive to the developer in our assumed high risk economy, as it would help to reduce his cash and liquidity risk. The lender receives annual debt service of \$903,222 plus annual participation

	1	2	3	4	5	6	7	8	9	10
1,069,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67	
903,222.85	903,222.85	903,222.85	903,222.85	903,222.85	903,222.85	903,222.85	903,222.85	903,222.85	903,222.85	
165,912.46	210,505.84	428,116.80	484,146.95	610,568.03	674,481.36	736,792.09	927,854.44	997,805.26	1,122,910.82	
48,773.74	63,151.75	128,435.04	145,244.09	183,170.41	202,344.41	221,037.63	278,356.33	299,341.58	336,873.25	
116,138.72	147,354.09	299,681.76	338,902.87	427,397.62	472,136.95	515,754.46	649,498.11	698,463.68	786,037.57	
151,802.16	155,368.50	156,169.95	151,802.16	151,802.16	151,802.16	151,802.16	151,802.16	151,802.16	151,802.16	
(35,663.44)	(8,014.42)	143,511.81	187,100.71	275,595.46	320,334.79	363,952.30	497,695.95	546,661.52	634,235.41	
35,663.44	43,677.85	43,677.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	43,677.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
35,663.44	43,677.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	99,833.96	187,100.71	275,595.46	320,334.79	363,952.30	497,695.95	546,661.52	634,235.41	
116,138.72	147,354.09	199,847.80	151,802.16	151,802.16	151,802.16	151,802.16	151,802.16	151,802.16	151,802.16	
0.00	0.00	49,916.98	93,550.35	137,797.73	160,167.40	181,976.15	248,847.97	273,330.76	317,117.71	
116,138.72	147,354.09	249,764.78	245,352.51	289,599.89	311,969.56	333,778.31	400,650.13	425,132.92	468,919.87	
7.65%	9.71%	16.45%	16.16%	19.08%	20.55%	21.99%	26.39%	28.01%	30.89%	
0.00	0.00	49,916.98	93,550.35	137,797.73	160,167.40	181,976.15	248,847.97	273,330.76	317,117.71	

Lender's Returns

Investor's Returns

Developer's Returns

ASSUMPTIONS:

- 10.50%
- 9.50%
- 85.00%
- 30.00%
- 30.00%
- 10.00%
- 50.00%
- 50.00%

RESIDUAL CALCULATION:

Sales cap rate	9.00%	9.50%	10.00%
Sales price	23,354,857.47	22,125,654.45	21,019,371.73
Sales expense	(934,194.30)	(885,026.18)	(840,774.87)
Net sales price	22,420,663.17	21,240,628.27	20,178,596.86
Mortgage balance	(8,602,122.40)	(8,602,122.40)	(8,602,122.40)
Net sales proceeds	13,818,540.77	12,638,505.87	11,576,474.46
RESIDUAL PARTICIPATIONS			
Lender's participati	4,145,562.23	3,791,551.76	3,472,942.34
Residual Available	9,672,978.54	8,846,954.11	8,103,532.12
Investor's Equity	(1,518,021.60)	(1,518,021.60)	(1,518,021.60)
To Dev. & Investor	8,154,956.94	7,328,932.51	6,585,510.52
Investor's particip.	4,077,478.47	3,664,466.25	3,292,755.26
Developer's particip.	4,077,478.47	3,664,466.25	3,292,755.26

equaling 30% of cash flow after debt service. The equity investor receives a preferred return equal to 10% of his invested capital or \$151,802. In the first two years, cash flow available for distribution does not satisfy the equity investors preferred return. The shortfall is accrued until year 3 where the accrual is paid off and the investor receives an annualized return in this year of 16.45% (16.45% in year 3 is made up of 10% preferred return and a 50/50 participation in year 3 cash flow available for distribution.) The remaining cash flow after preferred return to equity investor is split 50/50 between the equity investor and the developer.

In the remainder of this chapter we will describe the deal participants' position and a discussion of this financing alternative from their perspective.

LENDER'S PERSPECTIVE

The participating mortgage we have described is a typical structure of a pension fund manager. Pension fund managers are fiduciaries and as such they must be prudent in underwriting deals as well as aggressive in their attempt to maximize their client's return on capital. An interview with a Boston-based pension fund manager confirmed their responsibility as a fiduciary as well as their commitment to developing parallel incentives with the developer.

We want to make a lot of money for our clients and we're fiduciaries. So we have to exercise every opportunity possible to not only recover the capital of our client,

but to make money for them. So we're aggressive. Typically, if things work out the way we expect them to, everyone is happy. But if they don't, we want to make the developer motivated to stay in the deal. And we accomplish this by having his equity first at risk.1/

In our hypothetical market the lender (pension fund manager) would require a total IRR of 14.54%. This IRR is composed of three components: 1) annual interest payment, 2) annual participation, and 3) residual participation. In our deal, we provided the lender with his required return of 14.5% composed of a coupon rate of 10.5%, 30% of annual cash flow participation, and 30% residual participation. The NPV to the lender is \$815,768. As can be seen from Exhibit 13 (previous), we have run a sensitivity analysis on the terminal capitalization rates ranging from 9.0% to 10.0%. The intermediate level is 9.5% and this has been used as our most probable figure.

The lender acts as a fiduciary and will confirm that the developer's project assumptions and demographic information is conservative. They typically fund a higher loan to value amount than a commercial bank; however, they will ensure that the developer has cash in the deal. Pension fund managers structuring this type of deal will work hard to develop parallel incentives so that the developer views the lender as his partner. An interview with a Boston-based lender addressed the issue of the developer's guarantee. This quote is typical of the lender's attitude toward the repayment of its loan.

When we loan money, we loan it on real estate, principally. And of course, as I indicated, in addition to location we consider management, competition, demographics, and timing. But we do require signatures in most instances, it depends on the amount of equity in the property. If you came in with a 60% loan to value and you say you don't want to sign, chances are I wouldn't have a problem with that. 75%, 80% I would have a problem. I think if people want to borrow money, they have to be prepared to pay it back. Why should they be concerned about signing for it personally, if they are going to pay it back anyway?^{2/}

In addition to personal guarantees, the lender will want to approve all leases and major capital expenditures. They would also want the right that if the property value decreases to a certain level, as measured by net operating income, they could cause a foreclosure, step in, and take over the property. They will also protect themselves by restricting prepayment. Prepayment may be possible with lender approval in which case there will be a significant penalty to compensate for their reinvestment risk. A Boston-based pension fund manager responded to the prepayment question as follows:

We would have to right to call but I don't think we would give you the right to pre-pay. Again, it just depends on the deal and the value creation. If it looked like returns were going to be increasing slowly, we probably wouldn't allow you to pre-pay. If it looks like you're going to provide us with dramatic returns early on and then performance was going to flatten out again, we would allow you to repay at that point because you're increasing our IRR by pre-paying.^{3/}

When asked about the actual terms he responded with this discussion.

You might be locked out for 36 months and thereafter you could pre-pay at a penalty of 5% a year, declining 1% a year every year. So that if you prepaid, we would be a little dissappointed we didn't have our money at work, but we'd get 5% extra that year anyhow. So it's worth it. But also we would get to recognize all that increase in value quickly.^{4/}

He explained the reinvestment issue with an analogy to investing in a bond.

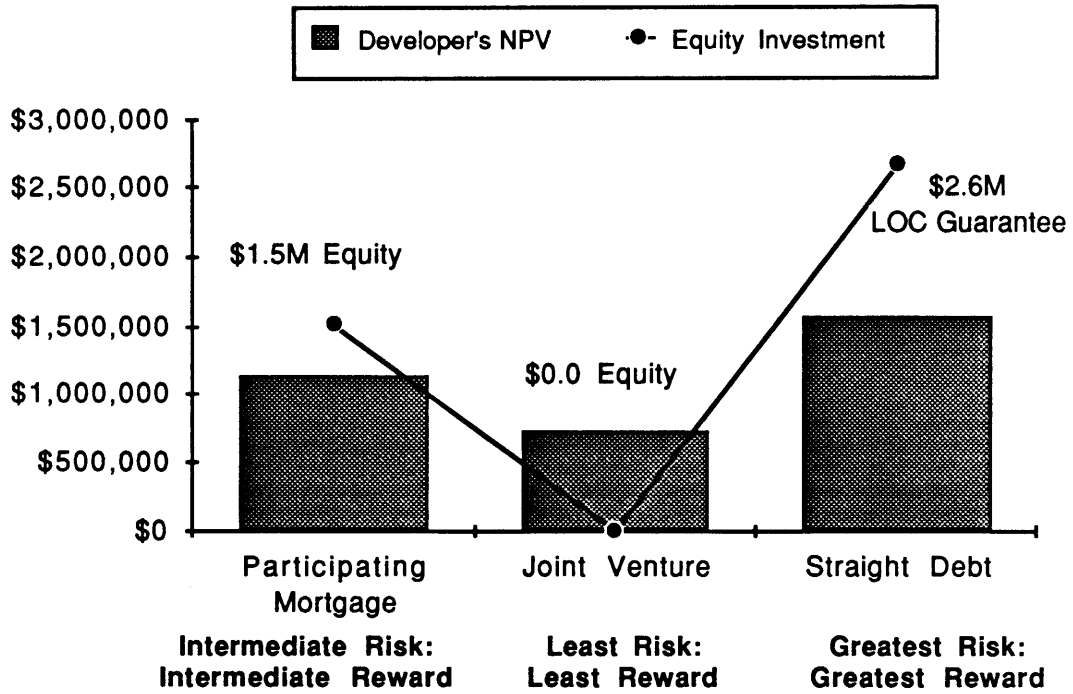
We have reinvestment issues. In essence, part of the investment is like buying a bond and you're locking in a coupon rate of 10%. If rates go down, and you get prepaid at par, then you've got to reinvest at a lower return. That is the same as selling the bond at a haircut. So in those kinds of situations allowing you to prepay may work against us. But if it's a volatile market and we think there's value creation, it might be worth it for us to take the capital appreciation and let the bond go, in which case we'd also be trading off a lower coupon. If we were in at 9.5% and the market was at 9%, we might not be doing that bad on the reinvestment issue. But if we were in at 10.75%, with 35% of the deal and the market was now at 9%, then we would be trading a high yielding bond for a low yielding bond.^{5/}

DEVELOPER'S PERSPECTIVE

The participating mortgage alternative is our intermediate case for the developer in terms of the risk/reward tradeoff. Exhibit 15 displays the risk/reward analysis of the three alternatives. The developer must raise equity of \$1.5 million and his NPV totals \$1,143,889. The developer's IRR is irrelevant because of his zero capital investment. There are several advantages of this structure from his perspective. He locks in a below-market coupon rate which allows him to achieve positive leverage and provide current return to

Exhibit 15

Risk: Reward Analysis



equity investors. The lender provides an accrual feature which could be quite useful during the first few years of operation. He can use the "pay rate" of 9.5% in the early years if the property does not generate enough cash flow to meet the "coupon rate" payments. He achieves 85% financing which provides him with added capital preservation. These features reduce his capital risk and make the participating mortgage very attractive to the developer.

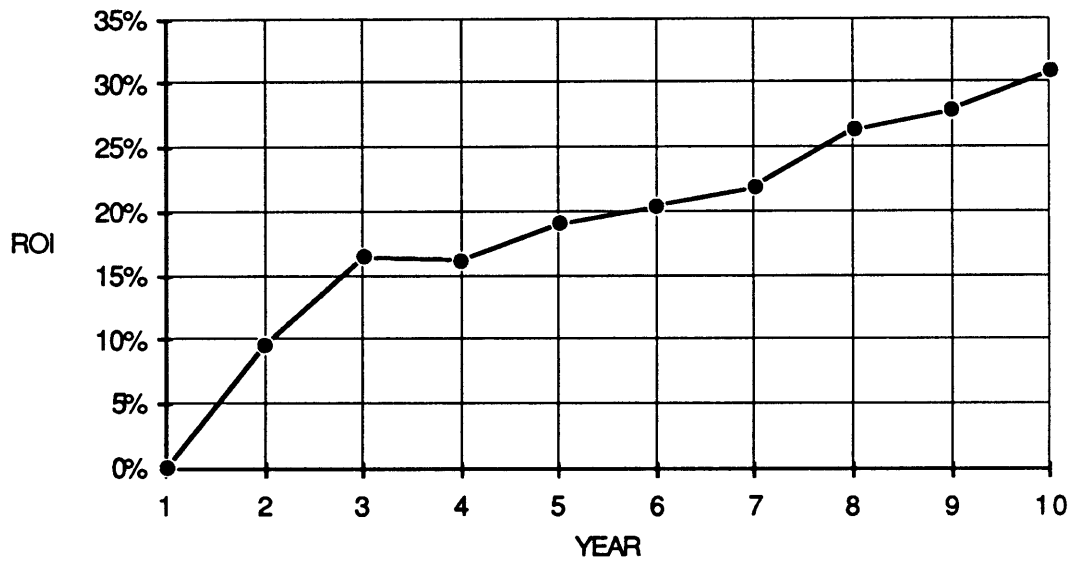
EQUITY INVESTORS

This financing alternative is also attractive to the developer's equity investors as it provides them a current return. This is a very critical component as it will assist the developer in marketing this deal and in raising equity. Exhibit 16 displays the growth in annual return to the equity investors. As can be seen, first year return on investment (ROI) is 7.65% and tenth year ROI is 30.89%. The investor receives a preferred return of 10% and a 50/50 split with the developer on annual cash flows and residual cash flows. This deal provides the investor with a 23.48% IRR and a \$593,945 NPV over the 10 year assumed holding period. This deal is not tax-driven but it can be assumed that the developer would pass some tax benefits to the investors.

In the next chapter, we will examine the joint venture alternative.

Exhibit 16

**Participating Mortgage
Investor's Annual Return on Investment (ROI)**



FOOTNOTES

1. Interview with Michael Ervolini, Vice President, Aldrich, Eastman & Waltch. (2/26/88).
2. Interview with Oscar Wasserman, President, Mutual Realty Financial Corporation. (2/16/88).
3. Ervolini, op.cit.
4. Ervolini, op. cit.
5. Ervolini, op. cit.

CHAPTER 8

JOINT VENTURE

In this chapter we will present the terms of the joint venture deal. We will review the results of this financing alternative from the developer and joint venture partner's perspectives.

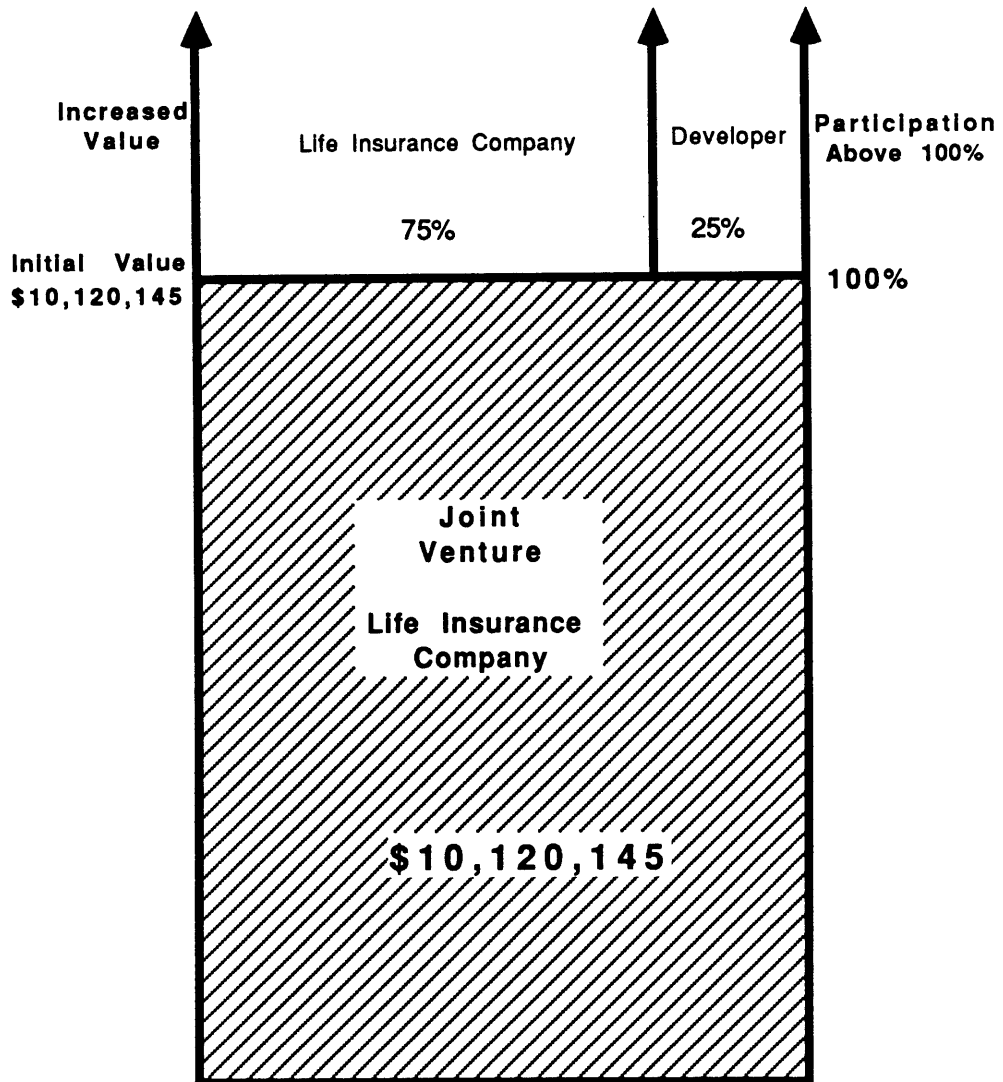
TERMS OF THE DEAL

The funding and payoff positions of this deal are displayed graphically in Exhibit 17. This capitalization chart shows that the life insurance company (joint venture partner) provides 100% financing equal to the initial value of \$10,120,145. The non-shaded area of the chart depicts the priority payment schedule for distribution of annual cash flows to be distributed after the payment of a preferred return to the joint venture partner. This schedule is also used to distribute residual proceeds after repayment of the joint venture partner's contributed capital.

In this deal the relationship between the two parties is fairly straightforward. The joint venture partner receives a cumulative preferred return of 11%, which is accrued in the early years until the property can support it, and then the joint venture partner and developer split the remaining cash flows 75/25. At the sale of the property, the joint venture partner's investment is repaid and then

Exhibit 17

JOINT VENTURE CAPITALIZATION CHART



net sales proceeds are also split 75/25. An interview with the President of a Boston real estate investment advisory firm which is a subsidiary of a life insurance company revealed that they would look at this deal from a profit-maximizing perspective and therefore hold it for five years.

When we do this type of business, we consider it in-fill, rehabilitation, rework, sell it to someone else, the main amount of money you're going to make is by buying it as an under-valued, under-managed asset, rehabing it, putting on new paint, the paper on the walls, new signage, and everything else and selling it to a new investor. So we normally look at a deal like this as being a 3-to-5 year deal—to maximize return.^{1/}

EXPLANATION OF THE JOINT VENTURE SPREADSHEET MODEL

Exhibit 18 displays the joint venture cash flows over the five year holding period. The joint venture partner receives an annual cumulative preferred return of \$1,113,216. As one can see, the project's NOI does not satisfy the preferred return during the first two years and the shortfall is accrued and compounded until year 3 when NOI is large enough to pay the joint venture partner his preferred return plus the net accrual. The annual cash flow after preferred return is distributed to the joint venture partner and developer in the ratio of 75/25. The residual calculation is handled by the same formula. The joint venture partner is repaid his original investment and then the net sales proceeds are split 75/25.

In the remainder of this chapter we will describe the joint venture partner and developer's perspectives on this deal.

	1	2	3	4	5	6
	1,069,135.32	1,113,728.69	1,331,399.65	1,387,969.80	1,513,790.88	1,577,704.21
	1,113,215.84	1,118,064.70	1,118,541.66	1,113,215.84	1,113,215.84	
	(44,080.52)	(4,336.01)	212,797.99	274,153.96	400,575.04	
	44,080.52	48,416.53	48,416.53	0.00	0.00	
	0.00	0.00	48,416.53	0.00	0.00	
	44,080.52	48,416.53	0.00	0.00	0.00	
	0.00	0.00	164,381.46	274,153.96	400,575.04	
	0.00	0.00	123,286.10	205,615.47	300,431.28	
	0.00	0.00	41,095.37	68,538.49	100,143.76	

RESIDUAL CALCULATION:

Sales cap rate	9.00%	9.50%
Sales price	17,530,046.79	16,607,412.75
Sales expense	(701,201.87)	(664,296.51)
Net sales proceeds	16,828,844.92	15,943,116.24
JV Partner Invest.	(10,120,144.00)	(10,120,144.00)
Net Sales proceeds	6,708,700.92	5,822,972.24
RESIDUAL PARTICIPATIONS		
JV Partner Particip.	5,031,525.69	4,367,229.18
Developer Particip.	1,677,175.23	1,455,743.06

JOINT VENTURE ASSUMPTIONS:

JV Investment	\$10,120,144.00
Developer's Equity	\$0.00
Cumulative preferred return	11.00%
Lender's participation	75.00%
Developer's participation	25.00%
Holding Period (years)	5

Developer's Returns

	10.00%	sales cap rate	9.00%	9.50%	10.00%
9.50%	1,069,135.32	1,113,728.69	1,166,958.19	1,113,215.84	1,113,215.84
n/a	0.00	0.00	123,286.10	205,615.47	300,431.28
740,455.77	653,344.73	NPV	2,392,264.63	2,031,711.09	1,707,212.92

Lender's Returns

1,069,135.32	1,113,728.69	1,290,244.29	1,318,831.31	5,780,876.30
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JOINT VENTURE PARTNER

Our interviews revealed that life insurance companies have become more popular to developers as joint venture partners because of their surplus of funds to invest, as well as their knowledge of the real estate investment process. A quote from Business Week, October 5, 1987, by George Peacock, Chairman of Equitable Real Estate Investment Management, clarifies the life insurance company perspective of joint venturing with a developer. "While Prudential and Equitable have tried their hands at solo development, their best success has been in partnership with a good, local developer."^{2/} Institutions are willing to do joint ventures with experienced developers if the project meets their investment criteria. In the high risk economic scenario we have assumed, the deal would have to be very attractive. An interview with a Boston real estate investment advisor helped us quantify the criteria for making this project a joint venture candidate.

When you get into that economic environment, a lot of money dries up. It's got to be a heck of a good property. If most of your return is generated by high leverage, you're going to find out that makes for a really tough deal. You're going to have to see an unleveraged internal rate of return in the mid-teens before you're going to find it financeable.^{3/}

In this deal, the joint venture partner receives an IRR of 18.0%. His NPV is an attractive \$2,031,712. In this deal the joint venture partner is financing 100% of the initial value and requires a preferred return and 75% of the cash flows. Since the joint venture

partner's returns are tied to the performance of the property, he is careful in selecting developers to work with. Although the joint venture partner is providing all of the cash, the developer's expertise and hands-on involvement are critical to the success of the project. As with the participating mortgage deal, parallel incentives are developed to maintain both parties' commitment to the project. An interview with a past pension fund advisor and current real estate investment banker described this point very accurately.

Because the developer is adding value over time, the lender wants to get his share of the benefits. Chances are, the lender or joint venture partner--especially if its a passive pension fund--doesn't want to go in and do those things that you're saying can be done to the property. The lender needs a developer to stay in, to do those things. The developer's return must be based on his success in accomplishing a set of goals that he tells the lender he can accomplish. From the lender's point of view, they shouldn't have a deal where the developer never gets to see any return, because developers tend to get discouraged and go off to another project. So, it's a question of building up parallel incentives so that both lender and developer are going for the same objectives.^{4/}

As we stated earlier, this structure is the least risky alternative for the developer. Therefore it poses the greatest risk to the lender (joint venture partner). This justifies the high percentage of cash flows that the joint venture partner requires in this environment. The lender will minimize his risk by carefully underwriting the deal as well as scrutinizing the developer's track record and reputation. A joint venture such as this one requires a close working relationship between the two parties. The joint venture partner must take an active role in the management of the deal to

ensure that objectives are achieved and the "parallel" incentives remain in place. A quote by Paul Sack from the RREEF funds described the fact that the joint venture partner cannot be a silent partner but must be involved in all major decisions.

It's not enough that the joint venture developer has the necessary expertise on his staff. The pension fund manager who goes into development must ensure that he or his manager also have enough high-quality people with enough time committed to do the job right.^{5/}

DEVELOPER'S PERSPECTIVE

The joint venture is the least risky of the financing alternatives in terms of capital at risk. Exhibit 15 (previous) shows the fact that the developer does not contribute any cash and receives a NPV of \$740,455. The developer's IRR is irrelevant because of his zero capital investment. The greatest advantage of the joint venture from the developer's perspective is the fact that he achieves 100% financing in a period of high interest rates. He has eliminated all interest rate risk and has preserved his capital. When you look at this deal you must also consider the value associated with the fact that the developer did not have to raise any equity.

The greatest disadvantage of this alternative is the fact that he must pay the joint venture partner an 11% cumulative preferred return as well as 75% of all cash proceeds. By achieving 100% financing, the developer can participate in more projects and limit his portfolio risk through diversification of both property type and geographic

location. As stated in a 1984 Institutional Investor article, "High interest rates have forced developers to scramble for cash. Desperate for funds to keep their crews working, many have been willing to give up big pieces of equity in exchange for guaranteed sources of capital."^{6/} Thus, during periods of high interest rates, developers may turn to the joint venture as an available source of financing.

In the next chapter, we will examine the straight debt deal.

FOOTNOTES

1. Interview with Joe O'Connor, President, Copley Real Estate Advisors. (2/19/88).
2. Business Week, "Meet Real Estate's New Czars: The Middlemen," October 5, 1987, p. 101.
3. O'Connor, op cit.
4. Interview with Mark J. Waltch, Partner, Artel Associates. (2/29/88).
5. Pension World, "Real estate development: How much risk can you take?", January, 1985, p. 38.
6. Joe Kolman, "The boom in real estate development funds," Institutional Investor, November, 1984, p. 168.

CHAPTER 9

STRAIGHT DEBT DEAL

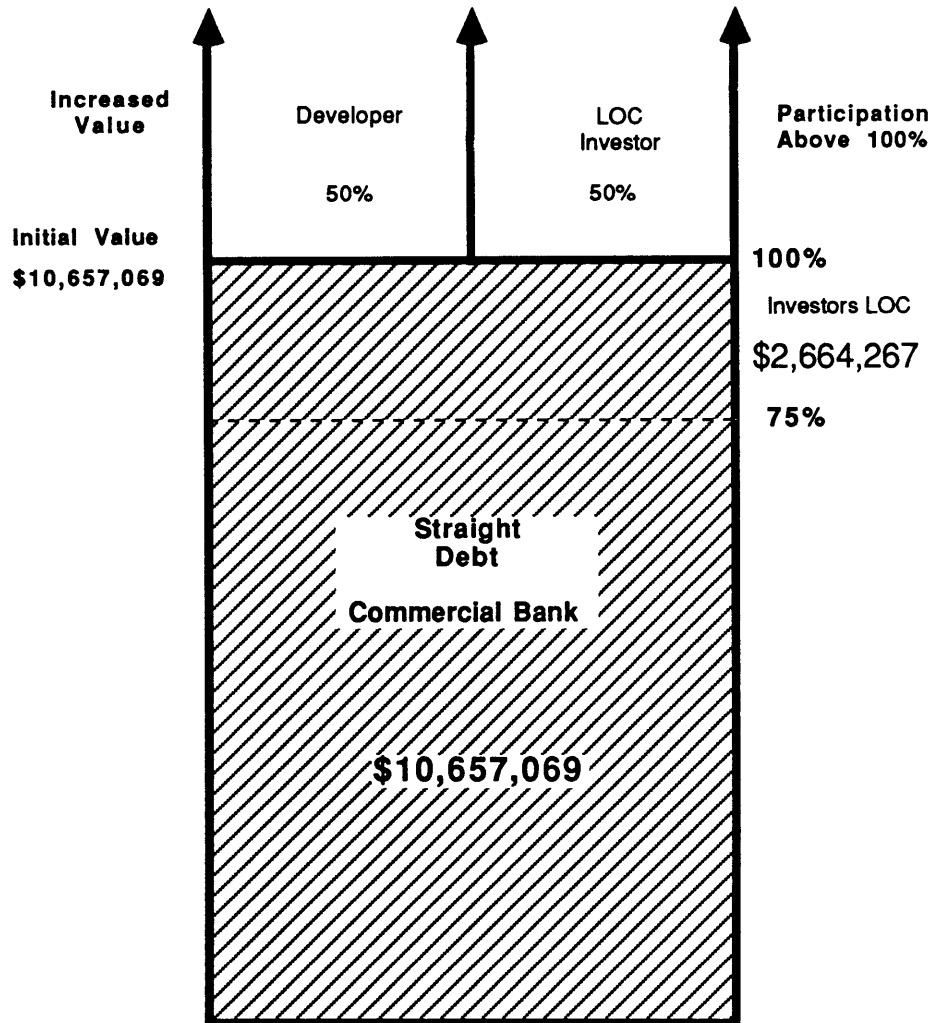
In this chapter we will present the terms of the straight debt deal. We will review the results of this financing alternative from all three perspectives: lender, Letter of Credit (LOC) investor, and the developer.

TERMS OF THE DEAL

The funding and payoff positions of this deal are displayed graphically in Exhibit 19. This capitalization chart displays the positions of the lender, LOC investor, and developer on a priority basis. The commercial bank funds 100% of the initial value with a floating rate 10-year mortgage. It is a rather complicated structure that will be described in detail in the lender section of this chapter. The lender is in the most secure or "first" position. The developer provides the bank with a guarantee for 25% of the total debt amount. He accomplishes this by involving investors who obtain a Letter of Credit (LOC) for \$2,664,267. The LOC comes from a third-party financial institution with a credit rating acceptable to the underwriting commercial bank.

Exhibit 19

STRAIGHT DEBT CAPITALIZATION CHART



The non-shaded area of the chart depicts the priority payment schedule for annual cash flows to be distributed after the payment of debt service. The developer and LOC investor split any available cash flows 50/50. The same formula is used to distribute the net sales proceeds after repayment of the outstanding mortgage balance.

EXPLANATION OF THE STRAIGHT DEBT SPREADSHEET MODEL

Exhibit 20 displays the straight debt cash flows. The commercial bank funds a total of \$10,657,069 which is composed of a total purchase price and improvements figure of \$10,271,946, and an interest reserve account amounting to \$385,122. The interest reserve account is used to fund the interest shortfall during the first two years. Some commercial banks are more comfortable setting up a reserve account that is drawn against to fund interest shortfalls. This is used instead of an accrual feature during a construction period or a period of high interest rates. An interview with a commercial lender explains the rationale behind such an account.

I would create an interest reserve. You draw against that interest reserve to pay the interest on a monthly basis. Say, you have a \$10 million commitment, all you need to borrow day 1 is \$8 million and there are no other items in the loan budget. So you have a \$2 million interest reserve and the presumption is that by the time that reserve is exhausted, the property will have increased its net operating income to the point where it can service \$10M. That's a way of handling it, but that's very different from the classic situation of the pay and accrue and backending the interest.^{1/}

In our straight debt deal we create an interest reserve account to cover our interest shortfall during the first two years.

Exhibit 20
Straight Debt Spreadsheet

STRAIGHT DEBT DEAL

Total Price w/ improvements + points	\$10,271,946.16
Interest Reserve	\$385,122.53
Total Debt	\$10,657,068.69
Investor's LOC (25% Total Debt)	\$2,664,267.17
Investor Participation	50.00%

	INITIAL FINANCING	REFINANCING
Lender's Points (swap + fee)	1.50%	0.00%
Lender's Fee	\$151,802.16	\$0.00
Interest rate (Prime + 150bp)	12.50%	10.50%
Interest Payment	(\$1,283,993.27)	(\$1,307,833.75)

REFINANCING EXPLANATION:

NOI @ yr 6	\$1,577,704.21
Capitalization Rate	9.50%
Value @ EOY 5	\$16,607,412.75
New Debt (75% L/V, 10.5%)	\$12,455,559.56
Existing Debt	(\$10,657,068.69)
Proceeds from Refinancing	\$1,798,490.87

YEAR	1	2	3	4	5	6	7	8	9	10	11
Interest Reserve Funding Table											
Begining Balance	385,122.53	170,264.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Draw from Interest Reserve	(214,857.95)	(170,264.58)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ending Balance	170,264.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Operating Income	1,069,135.32	1,113,728.69	1,331,339.65	1,387,369.80	1,513,790.88	1,577,704.21	1,640,014.94	1,831,077.29	1,901,028.11	2,026,133.67	2,101,937.17
Less: Debt Service	(1,283,993.27)	(1,283,993.27)	(1,283,993.27)	(1,283,993.27)	(1,283,993.27)	(1,307,833.75)	(1,307,833.75)	(1,307,833.75)	(1,307,833.75)	(1,307,833.75)	(1,307,833.75)
Plus: Draw from Interest Reserve	214,857.95	170,264.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plus: Proceeds from Refinancing	0.00	0.00	0.00	0.00	0.00	1,798,490.87	0.00	0.00	0.00	0.00	0.00
CF Available for Distribution	0.00	0.00	47,346.38	103,376.53	229,797.61	2,068,361.33	332,181.19	523,243.54	593,194.36	718,299.92	
CF to LOC Investors	0.00	0.00	23,673.19	51,688.27	114,898.81	1,034,180.67	166,090.60	261,621.77	296,597.18	359,149.96	
CF to Developer	0.00	0.00	23,673.19	51,688.27	114,898.81	1,034,180.67	166,090.60	261,621.77	296,597.18	359,149.96	
Debt Coverage Ratio	0.83	0.87	1.04	1.08	1.18	1.21	1.25	1.40	1.45	1.55	

	Developer's Returns			LOC Investor's Returns		
	9.00%	9.50%	10.00%	9.00%	9.50%	10.00%
sales cap rate	9.00%	9.50%	10.00%	9.00%	9.50%	10.00%
IRR	n/a	n/a	n/a	n/a	n/a	n/a
NPV	1,683,604.34	1,570,872.97	1,469,414.73	1,683,604.34	1,570,872.97	1,469,414.73

RESIDUAL CALCULATION:

Sales cap rate	9.00%	9.50%	10.00%
Sales price	23,354,857.47	22,125,654.45	21,019,371.73
Sales expense	(934,194.30)	(885,026.18)	(840,774.87)
Net sales proceeds	22,420,663.17	21,240,628.27	20,178,596.86
Outstanding Debt	(12,455,559.56)	(12,455,559.56)	(12,455,559.56)
Net Sales proceeds	9,965,103.61	8,785,068.71	7,723,037.29
RESIDUAL PARTICIPATIONS			
LOC Participation	4,982,551.80	4,392,534.35	3,861,518.65
Dev Participation	4,982,551.80	4,392,534.35	3,861,518.65

From the third year on, project NOI covers the debt service payments. The lender receives annual debt service payments of \$1,283,993 for the first five years. We assume that at the end of year 5, interest rates have dropped and we can refinance and increase our outstanding debt amount to \$12,455,560 at 10.5%. As one can see, the refinancing explanation shows that the property's year 6 NOI capped at 9.5% provides a new property value of \$16.6M. Maintaining a 75% loan/value ratio allows the developer to pull out \$1.79M from the deal. Our interview with a commercial lender emphasized the importance of two factors in evaluating a developer's pro forma: 1) the developer's ability to refinance and pull cash out of the deal as an indication of the property's successful operations, and 2) the property's ability to service the debt with a reasonable coverage ratio.

At the point the property is stabilized (could be 3 year stabilization process), the NOI of the property must be able to service the debt with a coverage margin, because from a lender's standpoint, the primary way out is not net cash flow of the property, it's a refinance. And if you've put too much debt on the property, that gives you no margin for error at the maturity of the loan to have the developer be able to go out in a tough interest rate scenario and refinance the property for more than or an amount equal to your outstandings. What you really want to see is that the project, in a reasonable amount of time, achieves the debt service coverage on the amount you're willing to lend. That's the biggest fear from a lender's standpoint for going long, is that you've got to be comfortable that under all kinds of scenarios that you can refinance out.^{2/}

As you see in our deal, we achieve a reasonable debt coverage ratio of 1.18 in year 5 and we refinance at the end of year 5. The other

specifics of the debt structure will be discussed in the lender section of this chapter.

The LOC investor participates in the cash flow available for distribution. These cash flows are split in a 50/50 ratio between the LOC investor and the developer. The residual distributions are allocated in the same ratio. The lender is repaid the outstanding mortgage balance and the net sales proceeds are split 50/50 between the LOC investor and the developer.

In the remainder of this chapter we will describe the deal participants' position and a discussion of this financing alternative from their perspective.

LENDER'S PERSPECTIVE

The straight debt deal involves a commitment with the commercial bank for a 10-year, floating rate note. We would use one of the newly developed "hedging" tools to eliminate the interest rate risk associated with this mortgage. Aside from the leasing and economic risks, the interest rate risk associated with a floating rate mortgage can be the greatest threat to the developer. Several "hedging" tools have been developed to guard against interest rate volatility. The interest rate swap market has evolved to the point where swaps can be used by developers to lock in a fixed rate liability for the life of

their loan. As stated in a March, 1988 National Real Estate Investor article,

The best-known hedging tool, interest rate swaps, are a method for converting floating rate debt into fixed. They do this by permitting two parties to exchange interest payments on a stipulated principal amount. Citicorp, for example, frequently enters into swaps with developers wherein Citicorp receives fixed interest payments and pays out to the developer or his lender a floating rate that matches the floating rate on his debt. The principal is not exchanged. As a result, the developer locks in a fixed rate, generally for up to 10 years, and is protected against any further rise in rates.^{3/}

Our interview with a commercial lender revealed the fact the their loan committee would insist on our "locking in" a fixed rate liability.

In fact I would insist on 'fixing' the interest rate liability. For a 5 year deal the developer must lock in his cost of funds day one to fix it for 5 years, because the biggest risk in any transaction after you've gotten over the market risk and the releasing risk--is the interest rate fluctuation risk. A perfectly sound project that works at 10% is a dog at 13% interest rates.^{4/}

Through our interviews with lenders we priced out this straight debt deal as follows: interest rate would be prime + 150 basis points, swap fee = 100 basis points, loan origination fee = 50 basis points. With our high risk economic scenario assumptions (prime rate = 11%), the straight debt deal translates into a fixed liability of 12.5% (prime + 150 basis points), and the loan fee is calculated as 150 basis points (150 = 100 swap fee + 50 origination fee) of the initial value figure of \$10,120,145. This provides the Lender's Fee

on the spreadsheet of \$151,802. This fee is then capitalized and the figure of \$10,271,946 represents the total price with capital improvements and capitalized loan points. The interest reserve account of \$385,122 is then added to this figure to get the total debt figure of \$10,657,069.

As we have already explained, we refinance the property at the end of year 5. The refinancing explanation on the spreadsheet displays this calculation. We have calculated a debt coverage ratio which is used to justify our progress in the property's operations and leasing activity to the lender. As one can see, it is not until year 3 that we break the 1.0 margin. In year 5, the property satisfies the lender's required debt coverage ratio of 1.15. With the LOC guarantee and the structured interest reserve account, we are able to achieve our financing objectives. Our discussion with a commercial lender suggested that the release of the LOC guarantee might be contingent on certain pre-defined growth marks (i.e., achieving the borrower's pro forma). As our actual debt coverage exceeded their comfort criteria, the LOC could be released.

Let's say I've done a 10-year deal, and it was 100% financing and there was a limited guarantee of repayment. The guarantee of repayment falls away as the property generates NOI on a predetermined formula basis. And certain other events like completion would also have to be met.^{5/}

As with the participating mortgage deal, in addition to providing the LOC the lender would want the personal guarantee of the developer as

well as the right to approve major lease decisions and capital expenditures.

DEVELOPER'S PERSPECTIVE

As can be seen in Exhibit 15 (previous), the straight debt deal has the greatest risk for the developer and provides the greatest reward. Although the developer did not contribute his own cash, he may be responsible for the \$2.66M LOC guarantee that has been provided to the lender. The LOC guarantee is provided by outside investors and allows the developer to preserve his capital. The developer's NPV totals \$1.57M. The IRR is not relevant for the developer and the LOC investor as their capital contribution is zero.

There are several advantages to this financing alternative from the developer's perspective. The greatest advantage is the fact that the developer gives away the least amount of the upside potential of the three financing alternatives. As can be seen in Exhibit 20 (previous), the developer and LOC investor split the cash flow available for distribution 50/50. The developer is able to structure the interest reserve account to fund the interest shortfall in the first three years. In addition he locks in the interest rate by using the interest rate swap.

LOC INVESTORS

The LOC investor serves as a critical player in the structuring of this deal. We have assumed that this deal would be done on a recourse basis and that the lender would require 25% equity in the deal or a substantial guarantee. In this deal, we have used the LOC from the third party (LOC investor) as the substantial guarantee to satisfy the lender's requirement. As stated in Warren, Gorham & Lamont's Real Estate Investor's Deskbook, the developer can use third parties to provide the guarantee.

In the case of income properties, the lender looks to the cash flow from the property to service the loan and therefore the primary security for the loan is the property itself. Where the property is of lesser quality or does not generate a cash flow, the borrower must assume personal liability on the mortgage and, in addition, may be required to provide other collateral in the form of stocks and bonds or other assets, or guarantees by third parties.^{6/}

By obtaining the LOC, the LOC investor becomes an integral player in the deal. In return for his LOC guarantee, he receives 50% of annual cash flow available for distribution, as well as 50% of the net sales proceeds. This provides him with an NPV of \$1.57M, which is equivalent with the developer's NPV. Again the IRR is irrelevant for the LOC investor because of his zero capital investment.

In the last chapter we will provide the reader with an analysis of the three financing alternatives and conclude our discussion.

FOOTNOTES

1. Interview with Mary Neuman, Vice President, Citicorp Real Estate, Inc. (2/19/88).
2. Ibid.
3. Sadoff, Amy and Lisa Cashin, "Hedging tools provide developers with flexibility in preparing for a worse-case economic scenario," National Real Estate Investor, March 1988, p. 80.
4. Neuman, op. cit.
5. Ibid.
6. Arnold, Alvin L., Real Estate Investor's Deskbook, Boston: Warren, Gorham & Lamont, Inc., 1982, pp. 6-12.

CHAPTER 10

CONCLUSION

In this concluding chapter we will discuss the advantages and disadvantages of each financing alternative. We will focus on the considerations that the developer would review in choosing the most appropriate alternative. Finally, we will provide some concluding remarks on our economic scenario and proposed deal.

FINANCING ALTERNATIVES

There is no "correct" answer to the choice of financing alternative. As we stated earlier, the choice comes down to a consideration of the risk the developer is willing or comfortable taking, and then trying to optimize his return based on this level of risk. We have attempted to keep all variables constant by accounting for the developer's cost of equity in each alternative. In reviewing the alternatives we have presented, we feel that the choice comes down to the following question: "Which alternative maximizes developer's NPV while allowing him to minimize his capital contribution and capital at risk?" The answer to this question is attained by focussing on the following three measurements for each alternative:

- 1) NPV of investment, 2) capital at risk, and 3) capital contribution.

The straight debt deal provides the developer with the greatest NPV and it allows the developer to maximize his participation in the upside potential of the project. Exhibit 11 (previous) shows that the developer maintains an effective 50% of the upside participation, compared with 35% and 25% in the participating and joint venture deals. The joint venture is the most attractive to the developer from a capital at risk perspective. The straight debt deal requires the LOC for \$2.6 million which becomes the capital at risk for the LOC investor. The participating mortgage deal required the developer to raise equity totalling \$1.5 million. This is the intermediate deal in terms of capital at risk; however, the developer might have an easier time raising the LOC than the equity (cash) for the participating mortgage deal. The developer achieves 100% financing in both the joint venture deal and straight debt deal and therefore these two alternatives look better from a capital preservation perspective.

The bottom line is that the straight debt deal offers the greatest reward but requires the greatest capital risk for the developer/LOC investor. The participating mortgage deal is intermediate in terms of capital at risk and reward. The joint venture offers the developer the opportunity to participate in the deal without any capital risk. Obviously the joint venture provides the lowest reward.

All three alternatives provide the developer with remedies against the high interest rate environment. If the developer's objective is simply to maximize return and he is comfortable with the capital at

risk, the choice becomes the straight debt or participating mortgage. Between these two deals the developer would have to ask if the extra \$1.1 million capital at risk with the LOC is worth the extra NPV of \$426,983 with the straight debt deal. If one assumes the developer can live with the extra capital risk, than he should choose the straight debt deal which will prove to be the most profitable!

An interview with a Washington, DC-based shopping center developer typifies many developers' objectives of capital preservation and profit maximization.

When deciding on financing alternatives we go out to the market and quantify what our true cost of equity will be. We then look at all the alternatives and figure out how we can minimize our capital contribution and maximize our return.^{1/}

CONCLUDING REMARKS

We feel that the high interest rate economic scenario we have described, or some variation of it, has a strong probability of occurring in the near future. We are reluctant to describe the extent to which the budget deficit or trade deficit might contribute to its cause or to what extent we might be faced with inflation or high interest rates. We selected our economic assumptions in an attempt to define a period that would not be a worst case.

Through interviews with numerous lenders and developers we have concluded that value can be maximized through a combination of

entrepreneurial asset management and creative financing. With increased competition from pension funds and foreign investors, grade A commercial properties are becoming too expensive and the best opportunities lie with the entrepreneur who can identify, purchase, and add value to mismanaged, under-utilized retail properties.

FOOTNOTES

1. Interview with William J. Wolfe, President, First Washington Development Group, March 11, 1988.

REFERENCES

- Arnold, A.L., Real Estate Investments After the Tax Reform Act of 1986, Boston: Warren, Gorham & Lamont, Inc., 1987, p. 7.
- Arnold, A.L., Real Estate Investor's Deskbook, Boston: Warren, Gorham & Lamont, Inc., 1982, pp. 6-12.
- Business Week, "Meet Real Estate's New Czars: The Middlemen," October 5, 1987, p. 98.
- Caron, A.S., The Plight of Thrift Institutions, Washington, DC: The Brookings Institution, 1982, p. 10.
- Downs, A., The Revolution in Real Estate Finance, Washington, DC: The Brookings Institution, 1985, p. 9.
- Economic Report of the President, January 1987, Washington, DC: United States Government Printing Office, 1987, pp. 324-325.
- Interview with Michael Ervolini, Vice President, Aldrich, Eastman & Waltch, February 26, 1988.
- Interview with Mary Neuman, Vice President, Citicorp Real Estate, Inc. (February 19, 1988).
- Interview with Joe O'Connor, President, Copley Real Estate Advisors, February 19, 1988.
- Interview with Mark J. Waltch, Partner, Artel Associates, February 29, 1988.
- Interview with Oscar Wasserman, President, Mutual Realty Financial Corporation, February 16, 1988.
- Interview with William J. Wolfe, President, First Washington Development Group, March 11, 1988.
- Kolman, J., "The boom in real estate development funds," Institutional Investor, November, 1984, p. 168.
- Mahoney, B.W., "New RELPs For Old: Strategies for a Changing Real Estate Marketplace," The Real Estate Finance Journal, Spring 1988, p. 12.
- Pension World, "Real estate development: How much risk can you take?", January, 1985, p. 38.

REFERENCES (continued)

Real Estate Research Corporation, "Markets in Perspective," Emerging Trends in Real Estate: 1987, Chicago, 1986, p. 29.

Sadoff, Amy and Lisa Cashin, "Hedging tools provide developers with flexibility in preparing for a worse-case economic scenario," National Real Estate Investor, March, 1988, p. 80.