Real Estate Investment – A Brief Introduction

Investing means giving up something of value today, in return for the expectation of getting back something even more valuable in the future. The importance of real estate investing to the American economy rivals that of the stock market; the value of U.S. income-producing real estate is in the multi trillions of dollars. As measured over the past quarter century, real estate has provided lower returns, but at lower risk, than has a diversified portfolio of corporate common stock. Real estate sometimes is described as a form of alternative investment (along with derivative instruments and such commodities as oil, gas, and metals) because its returns historically have not tended to closely mirror those of stocks and bonds. One reason is thought to be that leases on income-producing real estate typically run for many years, so the cash flows are largely determined far in advance, and thus independently of the economic conditions that prevail during the lease periods.

Owning real estate for its income-generating potential has been a profitable, if sometimes controversial, form of economic activity throughout history. More recent developments in the real estate investing arena have included real estate investment trusts (REITs), which promote diversification and liquidity, and the secondary mortgage market, which has provided the foundation for many new investment products (and hedging instruments as well) through CMOs and other mortgage-backed investment instruments. Of course, these mortgage-related products have been controversial in the recent financial market turbulence. (Land and buildings are called hard real estate assets; REIT shares and other securities are soft real estate assets.)

The primary focus of this chapter, however, is on “bricks and mortar” investing in equity (ownership) positions in income-producing buildings by individual or institutional investors. (The long life of improved real estate has made real estate equity an effective investment for institutional investors with long-term horizons, especially pension funds and life insurance companies.) In this unit we discuss some important historical and conceptual aspects of real estate investment, along with some basic computational issues.

I. Real Estate Investment on a Stand-Alone Basis

An individual or institutional investor that buys (takes an equity interest in) an office building, apartment building, or other type of income-producing real estate has traditionally sought financial benefits in the form of:

A. Yearly after-tax cash flows (ATCFs), the amounts left from rental revenues after operating expenses, income taxes, and loan payments have been met.

B. An eventual after-tax equity reversion (ATER), the amount (net of loan principal repaid) received when the investment period ends and the property is sold. This component of investment return is, obviously, higher if the property appreciates in value during the holding period. (Alternatively, we might note that an investor can justify paying a higher price, relative to the expected stream of annual after-tax cash flows, if appreciation in value is expected to provide part of the owner’s rate of return on equity.) In recent decades, real estate has come to be viewed as an “inflation hedge,” in that many properties’ nominal values have tended to rise with increases in the general price level (along with increases in land, construction material, and construction labor prices).

The ATCFs and ATER provide the basis for evaluating real estate investments with the same discounted cash flow analytical techniques – net present value (NPV) and internal rate of return (IRR) – employed in corporate investment analysis.

Example: You buy an income-producing property for $125,000 ($25,000 equity and $100,000 borrowed). It is expected to generate annual ATCFs of $4,000. You also expect to sell the property at the end of year 5 for $145,000, netting $34,500 as the ATER after paying transaction fees, capital gains taxes, and the remaining balance on the loan.

If the opportunity rate (the minimum required rate of return on equity, or ROE) were 16%, the NPV would be computed as

\[
\text{NPV} = \frac{-25,000}{(1.16)^5} - \frac{4,000}{(1.16)^1} - \frac{4,000}{(1.16)^2} - \frac{4,000}{(1.16)^3} - \frac{4,000}{(1.16)^4} + \frac{34,500}{(1.16)^5} = 3,448.28 + 2,972.65 + 2,562.63 + 2,209.16 + 2,183.05 - 25,000 = 4,523.07
\]

FIL 360/Trefzger
This property is projected to provide the equity investor with the minimum required 16% ROE, plus an additional $4,523 increase in wealth. Because the NPV is positive, the investment appears to be profitable in an economic sense. The IRR, which represents the after-tax ROE that will actually be realized if the cash flows occur as expected, is computed as:

\[
\frac{4,000}{(1 + r)} + \frac{4,000}{(1 + r)^2} + \frac{4,000}{(1 + r)^3} + \frac{4,000 + 34,500}{(1 + r)^4} - 25,000 = 0 \quad ; \quad \text{solve for } r.
\]

The IRR turns out to be just over 21% (if you discount the expected ATCFs and the ATER at a 21.006% rate, you get a present value of $25,000). Because the 21% expected ROE (the IRR) exceeds the opportunity rate (which is the 16% minimum required ROE in this example), the investment, again, appears to be profitable in an economic sense.

C. Positive financial leverage – benefits from the use of borrowed money (this effect is shown in the above computations through its impact on the required ROE, since the required ROE is influenced by the debt/equity financing mix). The owner of real estate can borrow money against its value under favorable terms because of the features of real estate (long life, can not be hidden) and the highly developed mortgage markets. If after-tax returns earned on the asset are higher than the after-tax cost of borrowing, the result of using leverage is to 

\text{magnify the percentage returns} \text{ to the equity investor. But: if the after-tax percentage return earned on the asset is below the after-tax percentage cost of borrowing, then there is a \text{magnification of losses} (negative financial leverage) to the owner. Leverage thus is said to be a “two-edged sword;” the fixed-dollar outlay to meet loan payments represents a low relative cost when revenues are high but a high relative cost when revenues are low.}

\text{[Example: Consider a $1,000,000 property that produces an after-tax cash flow of $140,000. If the owner pays the entire purchase price with equity money, then the return on equity (ROE) is $140,000/$1,000,000 in equity = 14%. If the owner borrow...}

However, what if after-tax cash flow is only $90,000? If the owner pays the entire purchase price with equity money, then the ROE is 9%. If the owner borrows 50% of the purchase price, then the after-tax cash flow is $90,000 – $50,000 = $40,000, and ROE is $40,000 ATCF/$500,000 equity = 8%. If the owner borrows 80% of the purchase price, then the after-tax cash flow is $90,000 – $88,000 = $2,000, and ROE is $2,000/$200,000 in equity = 1%.

The buyer of an individual property may also like the idea of owning something under his or her managerial control, unlike, for example, investing a large amount of money only to become a small percentage stockholder in a large corporation. But the accompanying desire to own a large enough property to operate at an efficient scale may \text{necessitate} the use of leverage, thereby adding to the high stand-alone risk of real estate investing (which is also increased by the owner’s inability to move real estate to a more desirable location if market conditions change).

D. Income Tax Benefits

The figures used in the NPV and IRR computations above reflect dollars expected to remain after income taxes have been paid. Until the mid 1980s, owning income-producing real estate allowed wealthy absentee owners to shield their incomes from high income taxes. This result was achieved through \text{accelerated depreciation} writeoffs on investments that were sometimes funded with nonrecourse loans (especially if the investor was not an outright owner, but rather a participant in a \text{real estate limited partnership} [RELP] whose general partner purchased and managed the property). An individual owner, or a partner, could show losses “on paper” that offset other income for tax purposes, and thereby provided positive cash flows.

But then Congress passed the Tax Reform Act of 1986, three aspects of which greatly reduced the \text{tax shelter} benefits of real estate that people owned directly (or through partnership arrangements):

- **Depreciation:** Instead of accelerated (175% declining balance) over 18 years, investors now are restricted to depreciating on a straight-line basis over longer periods (27.5 years for residential rental property, 39 years for non-residential income property).
- **At-Risk Rules:** Investors now generally can claim depreciation deductions only based on the dollar amounts that they actually are at risk of losing. Amounts borrowed by, or on behalf of, an investor through nonrecourse loans (in which
the lender can go after only the property’s value if there is a default, and can not seek a judgment against the borrower’s other assets) generally do not provide a basis for interest deductions.

- **Passive Losses:** Investors now can reduce their taxable incomes through losses claimed on investments in income-producing real estate only by using these losses to offset income on similar kinds of investments. For example, today a physician can not reduce her taxable medical practice income by showing “paper” losses from real estate investments that she does not actively manage.

There are still some tax benefits to investing in real estate. Value appreciation (relative to depreciation that has been claimed) is taxed favorably when a property is sold. In fact, an owner who wants to sell investment real estate can gain even better tax treatment by structuring the transaction as a tax-free exchange. In this arrangement, an owner exchanges his parcel for “like-kind” real estate without paying any income tax on the realized increase in value. (With stocks and bonds, you must pay income tax on any capital gains at the time of disposition even if you end up buying other, very similar securities.)

We also should recognize that some major real estate investors are tax-exempt (such as pension funds), and therefore are not motivated by tax concerns.

II. **Real Estate Investment in the Context of a Diversified Portfolio**

Of course, real estate investors, like all investors, must also be acutely aware of portfolio issues. The key to constructing an investment portfolio is diversification: the inclusion of assets whose returns have not been highly correlated during different economic scenarios in the relevant past. In the study of real estate investing, two diversification issues arise:

A. Diversifying within the real estate asset class itself. Proper diversification here requires a variety along dimensions that could include:
   - Property types – residential (rental), commercial, industrial, agricultural
   - Geographic regions – areas that appear not to be highly subject to the same economic influences
   - Lease provisions – short-term vs. long-term; fixed vs. variable rents

B. Using real estate to further diversify a traditional portfolio of stocks and bonds:

The returns realized on income-producing real estate have not been (in recent history) highly correlated with those realized on stocks and bonds. One study found real estate returns to have correlation coefficients of 50% with stocks and 30% with bonds; some other studies have shown lower, and even negative, correlations. So including real estate in a broader portfolio can offer significant diversification benefits. My casual observation in 2008’s turbulent markets was that the value of my broad-based equity REIT index mutual fund shares followed the same general pattern of price movements as did my broad-based common stock index mutual fund shares, but the percentage changes were not the same (and the REIT shares pay better dividends), although on a few occasions the price movements were actually in opposite directions.

(An investor’s personal residence should be viewed as part of the investment portfolio, in that its value will rise or fall in a manner that is strongly/weakly correlated with other asset value changes.)

Diversifying allows us to reduce the variability of returns. The efficient frontier plots the investment portfolios yielding the highest returns at specified risk levels (or yielding specified returns at the lowest risk levels). A portfolio including real estate has been found to offer better opportunities in this regard than does one with stocks and bonds alone.

Real estate investors are not always as focused on diversification as securities investors are. Some real estate investors may place more emphasis on goals such as owning similar types of property in a small geographic area to keep management costs low and to benefit from knowledge of the local market. Income-producing real estate tends to be so expensive that broadly diversifying with individual properties can be quite difficult for all but the largest-scale investors.

III. **Ownership Forms in Investment Real Estate**

A. **Limited Liability Corporations**

Whereas the partnership was a popular form of ownership for investment property a generation ago, today multiple owners
often hold an individual property through a limited liability corporation (LLC), which limits each investor’s liability to the amount invested in the property but is taxed the same way a partnership is on both the income and loss sides. The entity itself does not pay income taxes. But there can be legal complications and therefore high legal costs, especially since this form of ownership is still somewhat new such that the relevant statutory and case law are still in their early stages.

B. Real Estate Investment Trusts

The competitive market has found a way to address the diversification problem through a form of securitization of real estate called a real estate investment trust (REIT, pronounced “reet”). A REIT is similar to a mutual fund, but with a focus on holding equity investments in real estate (and/or mortgage notes). Just like an investor in a mutual fund that holds stocks or bonds, a REIT shareholder can, with a fairly small investment, gain the benefits of professional management and a claim on a diversified, liquid portfolio. Liquidity is enhanced through the shares of some (though not all) REITs’ being traded on the organized stock exchanges, or held by mutual funds (Vanguard has both a traditional index fund and an ETF that hold shares in all US-based equity REITs). Of course, the investor who holds REIT shares gives up control of the assets themselves.

Shares of large, actively-traded REITs are sufficiently liquid that even larger investors, especially pension funds, have been lured from direct real estate ownership to REITs in recent years for the liquidity benefits. (Iliquidity of the partnership shares was one of the big problems with RELPs, which also provided for professional management and some diversification benefits. Illiquidity is also a problem of direct real estate ownership and LLCs, of course.)

A REIT can specialize in holding equity positions, can specialize in holding debt instruments, or can hold both debt and equity (“hybrid”) interests in real estate. Early REITs tended to hold portfolios of diverse property types, but more recent practice has been to specialize (and arguably become less diversified), toward achieving economies of scale in management. An equity REIT might specialize in owning many properties of a particular type; some interesting examples are apartment complexes, single-family houses to be rented out, office buildings, warehouses, movie theaters, shopping centers, health care facilities, self-storage facilities, senior housing, hotels, timber land, cell phone towers, and even prisons. (By early 2013 farm land and single-family homes to be rented out were also being held in REIT form.)

Interestingly, some studies have shown REITs providing their investors with returns that have more closely paralleled the returns on small company stocks than the returns on stand-alone real estate investments. Of course, a REIT is an ongoing business operation that includes assets and a management team (just like a small company). Two financial measures often used in REIT analysis are adjusted funds from operations (AFFO), a figure somewhat analogous to net operating income in traditional corporate financial analysis, and cash available for distribution (CAD), a figure somewhat analogous to economic value added (EVA) in a more typical corporate analysis. Some investors analyze REIT shares the same way they analyze shares of corporate common stock: with price/earnings multiples (though instead of price per share/EPS they would consider the REIT’s price per share/AFFO). Others consider the relationship between the net asset value of the REIT (the per-share value of the underlying property, net of debt obligations) and the market price per share.

A REIT is a type of corporation, but it avoids the traditional corporate problem of double taxation if it 1) holds 75% or more of its assets in real estate equity or debt, 2) earns 95% or more of its gross income as rent on real estate equity or interest on real estate debt, 3) has wide and non-concentrated ownership, with at least 100 shareholders while the five largest holders control no more than 50% of the shares, and 4) pays 90% or more of its earnings each year as dividends to its shareholders. Some analysts view this need to pay most of the cash out in dividends as the major drawback to REITs; with no ability to retain earnings the managers have no internal source of money for growth.

Like shares of stock, REIT shares have had their good and bad investment periods in recent decades. (The mid-1970s and part of the late 1990s were particularly bad periods for REITs, although, as with the stock market, some shares perform well even in “bad” times and some perform poorly even in “good” times.) Rate of return figures are compiled by a trade association called the National Association of Real Estate Investment Trusts (NAREIT). But the returns must be estimates, based on periodic reappraisals, since the underlying properties are not sold frequently. (The trade association for managers of individual properties is the National Council of Real Estate Investment Fiduciaries, NCREIF, pronounced NAY-creef.)

REIT share values generally fell by even greater proportions than did common stocks in the recent financial crisis. (Shares of heavily leveraged Chicago-based General Growth Properties, a REIT owning large retail properties, fell from more than $41 to just over $1.00 between November 2007 and November 2008.) This high decline was frustrating and surprising to REIT managers, because the steady dividends and the long-term nature of the leases on which REIT cash flows are based had historically kept REIT share values less volatile than those of other equity securities.

FIL 360/Trefzger
IV. The Role of Real Estate in the Broader Capital Asset Markets

This schematic summarizes the markets in which real estate and other assets are bought and sold. Of course, public markets provide for liquidity that private market transactions generally lack.

<table>
<thead>
<tr>
<th>Equity Assets</th>
<th>Sold in Public Markets</th>
<th>Sold in Private Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Corporate Stocks</td>
<td>Operating Businesses</td>
</tr>
<tr>
<td></td>
<td>Equity Mutual Funds</td>
<td>Oil &amp; Gas Partnerships</td>
</tr>
<tr>
<td></td>
<td>Real Estate Investment Trusts</td>
<td>Real Estate (Land, Buildings)</td>
</tr>
<tr>
<td>Debt Assets</td>
<td>Corporate and Government Bonds</td>
<td>Bank Loans</td>
</tr>
<tr>
<td></td>
<td>Money Market Instruments</td>
<td>Venture Capital Loans</td>
</tr>
<tr>
<td></td>
<td>Debt Mutual Funds</td>
<td>Individual Mortgage Notes</td>
</tr>
<tr>
<td></td>
<td>Mortgage Backed Securities</td>
<td></td>
</tr>
</tbody>
</table>

As in all capital asset transactions, prices reflect the expected level and growth in cash flows, the cost of capital, and perceived risks (the degree to which cash flows could differ from projected levels). Cash flows that are more stable and expected to grow, lower perceived risk, and lower capital/financing costs should be accompanied by higher transaction prices.

V. Personal Investing in Real Estate: Some Practical Issues

A. Unless held in a securitized form, such as a REIT, real estate is characterized by low liquidity and high transaction costs. Also, on a small scale, it is difficult to make money if you must pay outside parties to do such work as plumbing repairs, yard work, and general property management. Small investors in real estate typically earn returns both on their capital and on their labor, by supplying their own management and maintenance/repairs. Sometimes people think that their investment returns are high because they ignore the value of the labor they supply, and thus are viewing money that represents a combined return to capital and labor as though it were a return only to capital. Something else to be aware of with investment property is that a lender generally will not lend as high a proportion of the purchase price as lenders willingly advance on owner-occupied real estate (no more than 75% of the value typically will be lent, whereas loans of 80% are routine, and loans exceeding 90% are possible with private or government insurance, on owner-occupied homes). The concern is that an investor might be more inclined to default than is someone with a loan on a property that he/she needs as a place to live. The lending community also tends not to allow a small investor to have mortgage loans on more than four income-producing properties.

[There is nothing legally, morally, or ethically wrong with combining a financial investment with a part-time job, which is what small-scale real estate investing often involves. The issue is merely one of correctly analyzing and measuring return on investment. We might also raise technical portfolio concerns, if the returns on someone’s human capital (skills) and financial capital thereby become too closely correlated: high (low) returns on both in a strong (weak) rental market. Consider the interesting portfolio question of whether a real estate broker or developer should own a house in the community where she lives.]

B. One successful residential real estate investor has written of the benefits of owning “horizontal apartments” – buying numerous separate houses instead of an apartment building. Among the advantages cited are the ability to start small and add units over time; the ability to diversify geographically within a local area (some near the college, some near downtown, some near the retail area); the ability to offer different terms to different types of tenants (lease-with-option-to-buy for the young family, lower rent for the quiet widow than for the rowdy young party animals); and less difficulty in dealing with tenants (no neighbor disputes to resolve, no instances of tenants taking organized action against the landlord).

C. There always seem to be people touting real estate “get-rich-quick” schemes. Among promoted techniques, to be used alone or in various combinations, have been:

- Buying real estate with no money down.
- Buying real estate for a small fraction of its value at “tax sales.”
- Making down payments with credit card liabilities for maximum “leverage.”
- Making minor repairs/getting zoning changed to alter the character of a property and, in the process, greatly increasing its value.
• Going into partnership with the organizer of the scheme.

These schemes (often promoted on late-night television “infomercials”) all tend to have some common features:
• They rely on the other transactor’s being a blithering idiot, who would cheerfully walk away from a great money-making opportunity and hand it over to you.
• They rely on the investor’s purchasing books/tapes from the promoter. (Recall the two ways to earn high returns in the financial markets without taking high risks.)
• They rely on your belief that people would hand their best money-making secrets to you for a small fee, instead of keeping them or giving these secrets to their loved ones.
• Objective parties (e.g. news reporters) who have purchased the promoted materials and tried the techniques have found that succeeding in these schemes is extremely difficult.

Some promoters of such schemes have been fined, or even imprisoned, for fraud by the attorneys general of various states. Specific reasons for the sanctions have included:
• The promoters paid actors to portray successful, satisfied investors at promotional events or on video tapes.
• The promoters failed to disclose that they had earned their wealth not by using their recommended investment strategies, but by selling their books and tapes.

New faces, and new twists on the old themes, seem to keep showing up on your late-night TV screen. As your grandmother told you: if something seems too good to be true, it probably is too good to be true. Proceed with great caution in pursuing any of these schlocky schemes.