## Real Estate 101: Terms and Definitions

Pro Forma: A projection of financial results (income, expenses, and resulting net operating income) usually over a ten-year horizon.

Revenue: The amount of money that a company actually receives during a specific period including discounts and deductions for vacancy, bad debt, gain/loss to lease. It is the top line or gross income figure from which costs are subtracted to determine net income. Is calculated by multiplying the price at which apartments or services are sold by the number of units or amount sold.

Operating Expenses: The day-to-day expenses of maintaining a community; includes payroll (office and service), utilities, lawn care, marketing, insurance, property taxes, repairs, supplies, turn, etc.

Capital Expense (aka Replacement Reserves): Carpet, floor coverings, appliances, ACs. Also roof replacement, exterior painting, parking lot(s). Generally, these are longer-term expenses with a useful life greater than one year. Capital expense also can include the cost of repositioning the community or making genuine improvements.

Net Operating Income (NOI): A company's operating income after operating expenses are deducted, but generally before capital expenses are deducted. Sometimes ongoing replacement costs may be deducted prior to calculating NOI. NOI is ALWAYS before income taxes and interest are deducted. CapEx that involves repositioning the community or making genuine improvements is generally not deducted in arriving at NOI

NOI = Income - Expenses - Replacement Reserves
If this is a positive value, it is referred to as net operating income, while a negative value is called net operating loss (NOL).

Debt Service: The mortgage payment; interest plus principle (if required)
Cash Flow: The current return to the investor, the money remaining after paying the mortgage payment. Cash flow = NOI - debt service

Capitalization Rate: A measure of unleveraged return on real estate, cap rate is similar to interest rates on bonds. If the current cap rate demanded by the market is $5 \%$, than a real estate investment that returns $\$ 100,000$ a year in NOI is worth $\$ 2,000,000$
$\$ 100,000 / 5 \%=\$ 2,000,000$ or $\$ 2,000,000 \times 5 \%=\$ 100,000$
NOI divided by desired rate of return (Cap Rate) $=$ Value
Or
Value $x$ desired rate of return (Cap Rate) $=$ NOI
Cap rates move inversely to value: as cape rates rise, values drop. As cap rates fall, values rise.
Cap rates are determined by the marketplace and are heavily influenced by the amount of investor interest, the amount of equity capital available to invest, and by the rates at which debt capital can be obtained. Cap rates are frequently a spread above 7 or 10 year treasury rates.

Cash on Cash: (Equity in investment/Cash flow of investment): A measure of current return on a community, cash on cash, is simply the cash flow of a community divided by the amount of equity the investor has in a community. Since most real estate investments carry debt, cash on cash is also a measure of leveraged return. Cash on cash return should be higher than the interest rate, the mortgage constant, and the cap rate otherwise negative leverage is occurring which is a bad thing. An investor who has put in $\$ 30,000,000$ and expects an $8 \%$ cash on cash return is looking for $\$ 2,400,000$ a year or $\$ 200,000$ a month.

IRR: Internal Rate of Return: The internal rate of return (IRR) of an investment is the "annualized compounded return rate" that makes the net present value of all cash flows (both positive and negative) equal to zero. Put another way, the IRR of an investment is the discount rate at which the net present value of costs (negative cash flows) of the investment equals the net present value of the benefits (positive cash flows) of the investment. IRR calculations are used to decide between competing investments. Given sufficient capital, the investment with the highest IRR wins and theoretically one should do all the deals with IRRs that exceed the one's cost of capital. In real life, one is constrained by the ability to raise investment funds and by the number of investments a management team can handle simultaneously.

Issues with IRR
a) Not a measure of Absolute Return: Big difference in absolute terms between a $20 \%$ IRR on ten thousand dollars and on a million dollars: $\$ 2,000 \mathrm{v} . \$ 200,000$. It is great to make a $20 \%$ IRR but on what dollar amount? It is a lot easier to get eye popping returns on small dollar amounts.
b) VERY Time Sensitive: Invest a million dollars, make a hundred thousand dollars. Good? Excellent? So-so? If it only took 30 days, then made $120 \%$ IRR. But if it took a year, it is only a $10 \%$ IRR.
c) Contains no Measure of Risk: Evaluates outcomes, not their probability.
d) Not designed to measure Liquidity Costs: Assumes you can re-invest at same return; i.e. terrific if you have a series of short term investments that all make $18 \%$ but what if you have to sit on millions of dollars in cash in between which is only making $.25 \%$ in a bank?
e) Pre-tax measure of return: But post-taxes are what you get to keep.

Payback Period: Payback period refers to the amount of time required for an investment to "repay" the original investment. For example, an upgrade to a unit that costs $\$ 480$ and yields a $\$ 20 /$ month rent pop (or $\$ 240 / \mathrm{yr}$.) has a two-year payback i.e. Investment Cost divided by Annual Return = Length of Payback Period or $\$ 480 / \$ 240=2$. Obviously, generally shorter payback periods are preferred to longer.

Payback period is an appealing measure because it is easy to calculate \& shows how long an investment takes to "pay for itself" BUT payback period has serious limitations:
a) Not a measure of return or profitability,
b) Includes no measure of risk, and
c) Has no measure of the LENGTH of the BENEFIT i.e. upgrades will lose their ability to generate a rent pop after some period of time

Operating Expense Ratio: Operating expenses divided by income i.e. $\$ 40,000$ of Operating Expenses divided by $\$ 100,000$ of Income = operating expense ratio of $40 \%$. Newer or more luxurious communities tend to have lower ratios, some even in the low $30 \%$ range. Older or smaller communities or ones with a large percentage of studios \& one bedrooms tend to have higher ratios, closer to $50 \%$. Including utilities will move the ratio higher.

Amortization: Most mortgage payments are a combination of principal and interest, i.e. they are said to amortize the debt over a given period of time. 20,25, and 30 years are common amortization periods.

Term: The length of a mortgage. In commercial real estate the amortization period and the term of a mortgage are frequently different. Thirty-year amortization with a 10 -year term is common.

Balloon Note: When the term of a note is shorter than the amortization, i.e. the loan is not fully amortized when it is due thus a large payment (the balloon) must be made when the loan comes due.

Interest Only (I/O): Periods of interest-only payments at the start of a loan are not unusual. One to two years is common now; however, in boom time's 5 -year and even 10-year interest only periods were negotiated.

Debt Service Coverage Ratio (DSCR): NOI divided by the debt service. It is a measure of the "cushion" that exists to pay the mortgage. $\$ 100,000$ NOI divided by $\$ 75,000$ of debt service $=1.33$ debt service coverage ratio. In other words, after making the mortgage payment, there is $\$ 25,000$ left over $(\$ 100,000$ NOI less $\$ 75,000$ of debt service) or a third of the $\$ 75,000$ mortgage payment. Hence a DSCR of 1.33 .

The bigger the DSCR, the better in terms of refinancing. Communities with low DSCR will experience difficulties refinancing. A DSCR of 1.35 and above is golden, you can name your terms. Go below 1.3 and financing institutions will start to dictate to you. Much below 1.25? Better start looking for your local loan shark because banks won't touch you.

## Things That Lower Your DSCR (and the opposite that raise it!)

a) Higher NOI (raise rents, control expenses),
b) Lower loan amount (If it is a refinance, you may be constrained by the amount required to pay off the old loan. Also, many investors depend on net loan proceeds to fund new investments.),
c) Lower interest rates (but troubled communities often get charged HIGHER rates, not lower),
d) Interest only or longer amortization (Once again, lenders prefer faster payback with troubled communities, no longer).

Mortgage Constant: The mortgage constant is the mortgage payment divided by the outstanding loan balance. When a loan is amortizing, the mortgage constant is always higher than the interest rate. Assume a $\$ 1,000,000$ outstanding loan balance with a $5 \%$ interest rate and $\$ 60,000$ annual (principal + interest) mortgage payment. This would yield a $6 \%$ mortgage constant: $\$ 60,000 / \$ 1,000,000=6 \%$.

## REAL ESTATE 102: Terms and Definitions

Treasury Instruments: Debt obligations of the United States and backed by its full faith and credit.
a) Treasury-Bills or T-Bills: One year or shorter Maturity,
b) Treasury Notes: Two to 10 years,
c) Bonds: More than 10 Years, generally 30 years

LIBOR: London International Bank Offered Rate: The rate at which banks lend to each other. Frequently used as the base rate over which variable rate loans are made.

Carve Outs: Many long-term commercial loan transactions are essentially non-recourse except for certain carve-outs or "bad boy" provisions - describing events which, if they occur, can create partial (or even total) personal liability under the loan.

Most non-recourse loans include exceptions (or carve outs) within the loan documents that result in fullrecourse liability to the borrower and the guarantor when certain so called "bad boy" behaviors exist.

## Examples of these "bad boy" behaviors are

a) fraud or intentional misrepresentation by the borrower;
b) waste occurring to or on the mortgaged property;
c) gross negligence or criminal acts of the borrower that result in the forfeiture, seizure or loss of any portion of the mortgaged property;
d) misapplication or misappropriation of rents, insurance proceeds or condemnation awards received by the borrower after the occurrence and during the continuance of an event of default; and
e) any sale, conveyance, mortgage, grant, bargain, encumbrance, pledge, assignment or transfer of the mortgaged property, or any part thereof, without the prior written consent of the lender.

While seemingly reasonable on their face, the way the contract language is written makes them highly unreasonable:
a. No causal link is required between a lender having a loss and the alleged "bad act"; it is merely enough that they both exist independently;
b. No personal knowledge is required on behalf of the borrower/guarantor. They may be held personally liable for actions done by others without their knowledge or consent;
c. No standard of proof; as a practical matter lender may simply allege, declare default, and leave to the borrower/guarantor the challenge of proving innocence;
d. No level of materiality is required or stated.

Mezzanine financing: refers to a subordinated debt that represents a claim on a company's assets, which is senior only to that of true or pure equity. In its purest form, mezzanine financing is debt but it can be structured either as debt (typically an unsecured and subordinated note) or preferred equity, and the line between the two can blur. The softer the payment requirement and the more risk the mezzanine capital shares with the owner; the more it resembles preferred equity.

Mezzanine capital is often a more expensive financing source for a company than secured (senior) debt. The higher cost of capital associated with mezzanine financings is the result of its location as an unsecured, subordinated (or junior) obligation in a company's capital structure.

In the event of default, mezzanine financing is less likely to be repaid in full after all senior obligations have been satisfied. In compensation for the increased risk, mezzanine debt holders require a higher return for their investment than secured or other more senior lenders.

In real estate finance, mezzanine loans are often used by developers to secure supplementary financing for development projects (typically in cases where the primary mortgage or construction loan equity requirements are larger than $10 \%$ ). These sorts of mezzanine loans are often collateralized by the stock of the development company or the entity (partnership or LLC, say) owning the property rather than the developed property itself (as would be the case with a traditional mortgage).

This allows the lender to engage in a more rapid seizure of underlying collateral in the event of default and foreclosure. Standard mortgage foreclosure proceedings can take more than a year, whereas stock or entity interest is a personal asset of the borrower and can be seized through a legal process, taking as little as a few months. However, negotiated solutions, including deed backs, are much more common than litigation among industry professionals.

Preferred Equity: While many in real estate have come to see mezzanine debt and preferred equity as two different names for the same structure, this is not the case. With preferred equity deals, the preferred equity holders receive a true equity stake (an ownership interest) and are usually paid both a preferred return and a piece of the "back end."

First, the preferred equity investor acquires direct involvement with the property owner and the management of the property. This enables the investor to better protect its initial investment and potentially share in the project's growth over time, thereby increasing the return on investment.

Second, from the property owner's perspective, the equity nature of the investment will not violate any secondary financing prohibition erected by the first mortgage holder. While a preferred equity structure may potentially run afoul of the ownership transfer restrictions often contained in first mortgage documents, many mortgages permit borrowers to make limited transfers of ownership interests in the property owner without the existing lender's consent, usually so long as certain individuals or entities retain either a minimum level of ownership and/or managerial control over the asset. Unless the ownership requirements are violated or the preferred equity holder is assuming managerial control, the preferred equity structure may be implemented without obtaining the first mortgage holder's consent.

Promotes: Some investments and joint ventures compensate the operating partner with bonuses (promotes) when certain financial return benchmarks are achieved (IRR/ ROI/ ROE, Gain on Sale etc). Promote fees are recognized when the earnings events have occurred. Promote fees are generally a percentage of profits/returns.

Waterfall: Operators and their equity partners often opt for progressive strategies that shift downside risk away from the equity investor and provide greater upside potential/incentives for the operating partner. The internal rate of return waterfall technique is an increasingly popular method that accomplishes these goals.

Debt investors, equity investors, and operators/developers always have jockeyed for position in splitting profits. The traditional structure represents an inverse hierarchy of risk and payment priority. The debt investor, or lender, has the first repayment priority and the lowest element of risk. In exchange, the lender accepts a predetermined return, namely the effective interest rate.

Next in line is the equity investor, who invests risk capital and is subject to a fluctuating return depending on the project's success. Finally, the operator/developer, who also may be an equity investor, takes on the highest level of risk. While the developer's skill, tenacity, and vision often are critical to a project's success, the operator/developer's return typically is subordinate to both the lender's and the equity investor's.

An IRR waterfall arrangement rectifies this situation by positively compensating the developer for a project well done, while at the same time minimizing downside risk for the equity investor. The concept is simple: If the returns are lower than expected, a greater proportion flows to the equity investor; if the returns are greater than expected, a larger share flows to the operator/developer. Since the operator/developer has the greatest influence on a project's success, the waterfall arrangement allocates risk and return in a more equitable fashion.

Pari passu: A legal term referring to the equal treatment of two or more parties in an agreement; in real estate, according to each partner's equity investment.

Classifications of Real Estate:
Class A.....Newer, Institutional
Class B.....Older, Aggressive Institutional
Class C.....Older and/or Declining Area
Class D.....Older, Declining Area, Poor Condition
a) Primary Markets: Larger cities and metropolitan areas such as New York, Washington, D.C., Chicago and Los Angeles
b) Secondary Markets: Mid-size cities and metropolitan areas such as Las Vegas, Norfolk, Pittsburgh, Oklahoma City, Honolulu
c) Tertiary Markets: Smaller towns and cities such as Naples, Florida; McAllen-Edinburg-Mission, Texas; Tucson; Reno; Stockton-Lodi, California

