LESSON EIGHT: HOW MUCH LEVERAGE WILL THIS BUILDING SUPPORT?

1.1 CAP RATES: THE KEY TO INCOME PROPERTY VALUE

The formal term for cap rate is capitalization rate. This is the key factor in determining the value of a commercial real estate project. Cap rates are set by the market, and is the rate or yield that the buyers and sellers will accept on an unleveraged basis, to own the building. Cap rates are influenced by:

- The rate of return on the 10 year Treasury Bill
- The availability of debt in the market (the more debt, the lower the cap rates)
- The overall health of the real estate market
- The rent roll of the property (tenant quality, lease terms, etc.)
- Local market factors

Different asset classes typically have different cap rates:

- Multifamily: lowest cap rate – lowest perceived risk
- Anchored retail: low cap rate, generally has credit tenant
- Class A Office: low cap rate, location and market driven
- Hotel: higher cap rate, leases roll every night
- Unanchored retail: high cap rate, credit of tenants is the weakest

The formula for calculating the cap rate is listed below:

QUICK FORMULAS:

Asset Value = Stabilized NOI / Market Cap Rate

Example: $950,000 / 9.5% = $10,000,000

Cash-on-Cash Return or Cap Rate:
Cap Rate Analysis = Stabilized NOI / Acquisition Price

Example: $950,000 / $10,000,000 = 9.5%

1.2 LOAN TO VALUE: THE LENDER'S KEY METRIC

Loan to Value is one of the key formulas that drives the loan size. This percentage represents the amount of equity in the property and is the measurement of risk. The lower the loan to value, the greater the implied safety of the loan. The lower the better:

- 70% and below = good
- 80% and below = market
- 90% and below = high
- 95% and below = very high

Below is the formula for calculating loan to value:

QUICK FORMULA:

LTV = Loan Amount / Asset Value (or Purchase Price)

Example: $8,000,000 / $10,000,000 = 80.0% Loan to Value

1.3 DEBT SERVICE COVERAGE RATIO (DSCR): ANOTHER KEY LENDER METRIC

Debt Service Coverage ratio is one of the key formulas that drives loan size. Debt Service Coverage Ratio is also known as the "coverage ratio." If the debt service coverage ratio is a 1.0x, it means that monthly property cash flow is equal to the principal and interest payments. Permanent lenders typically look for a 1.20 to 1.25x coverage ratio as the benchmark for a safe loan.

Below is the formula for calculating the DSCR:

QUICK FORMULA:

Stabilized DSC Ratio = Conduit Underwritten NOI / Debt Service

Example: $779,375 / $622,400 = 1.25x

DEBT SERVICE COVERAGE RATIO CHART

Less than 1.0:	The property does not cover interest payments
1.0-1.05:	Poor
1.05-1.10:	Weak
1.10-1.15:	Fair
1.15-1.20:	Improving
1.25 & above:	Acceptable for permanent lenders

GENERAL STABILIZED PROPERTY DSC RATIO GUIDELINES:

Multifamily:	1.20x
Office:	1.25x
Retail (anchored):	1.30x
Retail (unanchored):	1.25x
Industrial:	1.25x
Hotel:	1.40x

1.4 AMORTIZATION OR LOAN CONSTANT

Simply put, the constant is the loan "pay rate" when amortization is included. The loan contract ("K") is the implied interest rate when amortization is considered. For example, a loan with an 8% rate, with a 30-year amortization has a loan constant of 8.81%. This means that constant or continuous rate the property must service to meet its debt obligation. Interest only loans have the same constant as the rate. The interest rate (pay rate) and the constant are the same. Amortizing loans have a constant difference from the pay rate. It is the "constant" rate of interest when amortization is taken into account.

1.5 SOLVING FOR THE LOAN CONSTANT

Using MS Excel, you can calculate a loan constant by entering the following formula:

= PMT (Interest Rate/12, Amortization * 12, -1) *12
= PMT (0.08/12, 30*12, -1) * 12
= 8.81%

With a financial calculator, you can calculate a loan constant using the following assumptions:

Interest Rate (i) = Annual Interest Rate / 12 i = 8.00% / 12
Number of Payments (n) = Years * 12n = 30 x 12
PV = -1
FV = 0
PMT = Calculate PMT and multiply by 12 to find the annual loan constant = 8.81%