



## REAL ESTATE & PROPERTY VALUATION

### Capitalization Rates: Band of Investment Technique (*explained*)

When valuing a property that produces an income stream, the Income Approach is an applicable approach to develop and report within an appraisal report. The Net Operating Income (“NOI”) produced by an income producing property has a value to an investor. An appraisal report that includes the Income Approach to value routinely reports the assets net operating income.

One of the most commonly utilized techniques employed in valuing an income stream is direct capitalization, which entails applying a capitalization rate to a single year’s income stream. The selected year is generally the current year, so long as the property is stabilized. The capitalization rate, often just called the cap rate, is the ratio of NOI to property asset value. Many readers may recall the “IRV” formula, which stands for  $\text{Income} \div \text{Rate} = \text{Value}$ . The same formula can be modified to solve for each component, for example, if a property was listed for \$1,000,000 (Value) and generated an NOI of \$100,000 (Income), then the cap rate (Rate) would be  $\$100,000/\$1,000,000$ , or 10%. Capitalization rates can be garnered from the marketplace by reviewing data from sales that sold with an income stream in place, similar to the data noted within our example.

But what if sales haven’t occurred or the range of capitalization rates is wide or varied? To lend support to concluding a capitalization rate, the Band of Investment Technique can be employed.

The Band of Investment Technique calculates a market-derived rate of return for real property based upon the weighted cost of the capital used to finance a real estate property or project. The weighting is applied to two components: the funds borrowed in the form of debt capital (or a mortgage); and the funds raised through investors who provide equity capital. In most cases, the mortgage funds represent the majority of the capital, generally 60 percent to 80 percent depending on the asset type. The interest rate of the mortgage is less than the required rate of return expected by the equity investor. The lower interest rate stems from the lending institution most often having lower borrowing costs than the equity investor and given the lender will have a priority lien on the real estate asset in the event of default, which equates to a lower risk of loss when compared with an unsecured equity investor. Mortgage rates for use in the Band of Investment technique are compiled by querying active lending institutions and from survey results reported by firms such as RealtyRates.com. Equity is invested to fund the gap between the mortgage amount and the purchase price of the property. Like the mortgage rates, equity rates can also be found by surveying active investors, from published surveys and by examining commensurate equity rates of return for real estate investment trusts (REITS).

The following is an example of how the Band of Investment technique is employed. After reviewing survey results and other market evidence, let's assume that a borrower could receive a mortgage at 75% of the property's appraised value. Assuming a 5.75% mortgage rate for a 30 year mortgage equates to a mortgage constant rate of 7.0% (the mortgage constant, also known as the loan constant, is simply defined as annual debt service divided by the original loan amount). Utilizing these rates and ratios, the applicable cost of the debt component would be 5.25% (7% X 75%).

Again, after reviewing survey results and other market evidence, let's assume that an equity investor requires a yield rate of 10% for the subject real estate investment. This rate indicates an equity component of 2.5% (25% equity investment X 10% rate of return). The sum of the two components yields 7.75% as an overall rate (5.25% weighted mortgage rate + 2.5% weighted equity rate).

The Band of Investment technique is an accepted way to calculate investor return expectations within the marketplace. The expected rate of return can then be utilized to estimate the overall value for a property. Of course there are other methods for estimating capitalization rates, including extracting rates directly from comparable sales with published NOI and selling price, but the Band of Investment technique is perhaps the best tool for measuring the cap rate specific to the asset being analyzed.



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Brian Barry is a Senior Manager of the firm and a licensed and state certified real estate appraiser specializing in real property appraisal and market feasibility analysis on a national basis.

Having spent 17 of his 20 year appraisal career with Cambridge Partners, Brian has participated on a number of highly complex and interesting assignments. Prior engagements include income-producing properties, numerous NASCAR motorsport facilities, affordable housing, special purpose properties such as power plants, cold storage facilities, dairy processing facilities, land valuation in rural and metropolitan areas, insurable value studies, and consulting experience with development projects, among others.

Brian has provided expert witness testimony in litigation matters, and appraised property located in 40 states and more than 10 countries for financial institutions, accounting and law firms, pension funds, real estate developers, and many members of the Fortune 500.

Brian earned his degree from Northern Illinois University and studied at the Institute for American Universities, Aix-en-Provence, France. Brian has completed all of the required coursework for designation as a Member of the Appraisal Institute (MAI) and is working on his demonstration report.