



## Understanding Net Operating Income

By Frank Gallinelli

In a recent article, we discussed the use of capitalization rates to estimate the value of a piece of income-producing real estate. Our discussion concerned the relationship among three variables: Capitalization Rate, Present Value and Net Operating Income.

We may have gotten a bit ahead of ourselves, since some of our readers were unclear on the precise meaning of Net Operating Income. NOI, as it is often called, is a concept that is critical to the understanding of investment real estate, so we are going to backtrack a bit and review that subject here.

Everyone in business or finance has encountered the term, "net income" and understands its general meaning, i.e., what is left over after expenses are deducted from revenue.

With regard to investment real estate, however, the term, "Net Operating Income" is a minor variation on this theme and has a very specific meaning. You might think of NOI as the number of dollars a property returns in a given year if the property were to be purchased for all cash and before consideration of income taxes or capital recovery. By more formal definition, it is a property's Gross Operating Income less the sum of all operating expenses.

In the fine tradition of professional obfuscation, we have now succeeded in confounding our readers and compounding their problem by replacing one undefined term with two.

Let's take these two new terms one at a time:

**Gross Operating Income:** Definitions are like artichokes. You need to peel the layers off one at a time. In this case, take the Gross Scheduled Income, which is the property's annual income if all space were in fact rented and all of the rent actually collected. Subtract from this amount an allowance for vacancy and credit loss. The result is the Gross Operating Income.

**Operating Expenses:** This is the term that causes the greatest mischief. Many people say, "If I have to pay it, then it's an operating expense." That is not always true. To be considered a real estate operating expense, an item must be necessary to maintain a piece of a property and to insure its ability to continue to produce income. Loan payments, depreciation and capital expenditures are not considered operating expenses.

For example, utilities, supplies, snow removal and property management are all operating expenses. Repairs and maintenance are operating expenses, but improvements and additions are not - they are capital expenditures. Property tax is an operating expense, but your personal income-tax liability generated by the property is not. Your mortgage interest may be a deductible expense, but it is not an operating expense. You may need a mortgage to afford the property, but not to operate it.

Subtract the Operating Expenses from the Gross Operating Income and you have the NOI.

Why all the nitpicking? Because NOI is essential to apprehending the market value of a piece of income-producing real estate. That market value is a function of its "income stream," and NOI is all about income stream. As heartless as it may sound, a real estate investment is not a felicitous assemblage of bricks, boards, bx cables and bathroom fixtures. It is an income stream generated by the operation of the property, independent of external factors such as financing and income taxes.

In truth, investors don't decide to buy properties; they decide to buy the income streams of those properties. This is not such a radical notion. When was the last time you chose a stock based upon the aesthetics of the stock certificate? ("Broker, what do you have in a nice mauve filigree border?") Never. You buy the anticipated economic benefits. The same is true of investors in income-producing real estate.

Those readers who have not yet been lulled to sleep by this dissertation will alertly point out that they have in fact observed changes in the value of income property precipitated by changes in mortgage interest rates and in tax laws. Doesn't that



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observation contradict our assertion about external factors?

Go back to our earlier article on the use of capitalization rates, and you will recall that there are two elements to the value equation: the NOI and the cap rate. The NOI represents a return on the purchase price of the property; and the cap rate is the rate of that return. Hence, a property with a \$1,000,000 purchase price and a \$100,000 NOI has a 10% capitalization rate. However, the investor will purchase that property for \$1,000,000 only if he or she judges 10% to be a satisfactory return.

What happens if interest rates go up? In that case, there may be other opportunities competing for the investor's capital - bonds, for example - and that investor may now be interested in this same piece of property only if its return is higher, say 12%. Apply the 12% cap rate ( $PV = NOI / \text{Cap Rate}$ ), and now the investor is willing to pay about \$833,000. External circumstances have not affected the operation of the property or the NOI. They have affected the rate of return that the buyer will demand, and it is that change that impacts the market value of the property.

In short, the NOI expresses an objective measure of a property's income stream while the required capitalization rate is the investor's subjective estimate of how well his capital must perform. The former is mostly science, subject to definition and formula, while the latter is largely art, affected by factors outside the property, such as market conditions and federal tax policies. The two work together to give us our estimate of market value.