



## *Risk Management Insights*

### **Appraisal Review Part II: Income Capitalization Approach**

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The income capitalization approach is based on the assumption that the market value of a property is related to the rent that the property can be expected to earn. Its use is appropriate in areas where there is a substantial rental market as well as properties that were rented at the time of appraisal.

#### **Estimate of Potential Gross Income (PGI)**

The summation of contract rental income and market rental income for each vacant space results in an estimate of potential gross income.

Contract rental income is derived from existing leases that encumber the subject property. Although there is no set rule, many appraisers only consider leases with remaining term exceeding one year to be part of the contract rental income.

At this point of our review, we have a number of questions to ask:

- What is the quantity of the income stream (What are the total contract rents?)
- What is the quality of the income stream?
- How credit worthy are the tenants?
- What is the risk?
- Do credit tenants or non-credit tenants produce the income?
- Are the tenants established businesses or start-up operations? Are there any franchises? Is the business guaranteed by the national franchise or a local operator?

The second component of potential gross income is the market rental estimate. Market rent is estimated for:

- Vacant space
- Occupied space that is subject to a lease with a term of less than one year
- Occupied space subject to a lease that is not an arm's-length lease (i.e., owner occupied space)

While estimating the above income it is important for the appraiser to consider any concessions. In current market conditions, almost all property types are offering concessions and thus the contract or asking rent probably does not reflect the effective rent collected.

Depending on the property type and the type of leases, other income may also be estimated. Examples might include expense reimbursements, CAM (common area maintenance) charges, parking income, laundry income, and miscellaneous fee income.

#### **Vacancy and Collection Allowance**

Potential gross income assumes 100 percent occupancy. It is standard appraisal practice to deduct a vacancy and collection allowance. This item should be supported with market data and not a simple statement that the appraiser believes five percent, eight percent or ten percent is reasonable.

The appraisal should show current and historical market vacancy along with current and historical vacancy for the subject property. These figures often represent only physical vacancy.

Economic vacancy can also be a significant factor. We have seen apartment complexes that routinely have five to ten percent physical vacancy, but the total income loss including economic vacancy is often 15 to 20 percent. Economic vacancy can include concessions (e.g., free rent), credit loss, and rents that are below market.

Subtracting a vacancy and collection allowance from potential gross income results in effective gross income (EGI).

## **Expenses**

Although not always displayed this way in appraisals, expenses can be divided into the following groups:

- Operating expenses
- Replacement reserve expenses
- Rollover expenses

Operating expenses are required for the day-to-day operation of the property. Appraisals will typically sub-divide this category into fixed and variable expenses. Fixed expenses include real estate taxes and property insurance. Regardless of occupancy these expenses are incurred by the property owner.

Variable expenses change with occupancy and include management fees, maintenance and repairs, utilities, administrative and general, marketing, and a variety of other expenses depending on the property type and location.

The best indication of subject expenses is historical data for the past few years along with the current budget. Besides historical data (which is not always available), appraisers will use published survey data or expense comparables. Any appraisal you review should have expense comparables at a minimum.

Replacement reserves expense is the annual expense to replace short-lived items. Whether this item is deducted or not depends on market standards. Many appraisers and clients deduct a replacement reserve although the majority of market participants do not. If market participants account for these expenses under maintenance and repairs (an operating expense), then deducting a replacement reserve double hits the income stream. In addition to asking the appraiser what specific market participants do with this expense, you should ask how it was also treated in the market sales that the appraiser derived his/her capitalization rates from. This is a common area of inconsistency in appraisal reports.

Rollover expenses are capital expenses that are incurred when a vacancy occurs. These include refurbishing or retrofitting the space and payment of a broker's commission. This expense typically applies to projects that are leased for lengthy periods such as office, retail, and industrial buildings. Most appraisals label these expenses Leasing Commissions and Tenant Improvements.

Deducting expenses from effective gross income results in net operating income (NOI).

## **Summary Questions for Income and Expenses**

The following is a list of questions financial staff members should ask about the income and expenses estimates in an appraisal:

- How recent and how comparable are the rent comparables selected for comparison?
- What has been going on in the market since the date of rental of the comparable?
- Has the market been stable, trending upward, or declining?
- What is the magnitude of quantitative adjustments made to the rent comparables?
- What are the gross and net magnitudes of those adjustments?
- Was historical operating expenses data available? If not, was good comparable expense data available or was survey data utilized?

## Capitalization of Net Operating Income

Once the net operating income (NOI) has been projected, there are two different models or methodologies available to appraisers to process the NOI into an estimate of value. The first model is discussed in this article; the second model is an advanced topic and will be discussed in a future article.

### Model #1 - Direct Capitalization

Direct Capitalization can be accomplished using one of two techniques:

- *Technique #1* - The subject's NOI projection is divided by an Overall Rate (Ro) that has been extracted from market data. This is the most commonly applied method.
- *Technique #2* - The subject's NOI projection is multiplied by an income factor that has been extracted from market data. Depending on the income estimate provided, the factor could be referred to as a Potential Gross Income Multiplier (PGIM), Effective Gross Income Multiplier (EGIM), or sometimes just as a Gross Income Multiplier (GIM). This method is less commonly used, and is often most applicable to smaller apartment projects.

An overall rate or multiplier is the rate of return necessary to attract capital to the real estate investment. The rate or multiplier must be competitive when compared with non-real estate investment alternatives such as CDs, money market instruments, stocks, bonds, collectibles, etc. When compared with these alternative investments, the rate must take into account several risk factors including (1) safety of the investment, (2) liquidity, (3) management burden, (4) the inflation rate, and (5) market risk. Many appraisal reports will discuss this concept and refer to it as "building up a rate."

Note that both methods are market derived. Let us look at the ways the data is derived from the market.

#### 1. Extraction from Market Sales Data

Recent sale transactions of properties similar to the one being appraised can often provide clues to what investors are currently looking for in the market in the way of returns. If sufficient data are available from several meaningful sales, the appropriate Ro or income multiplier (or range) is narrowed down considerably.

When confirming sale transaction data, the appraiser asks a party to the sale (buyer, seller or broker) to confirm not only the sale price, but also the income at the time of sale. Once those two pieces of information are confirmed, the following calculations can be performed:

$$\text{Net Operating Income} / \text{Sale Price} = \text{Ro}$$

Or

$$\begin{aligned} \text{Sale Price} / \text{Gross Income} &= \text{GIM} \\ \text{Sale Price} / \text{Effective Gross Income} &= \text{EGIM} \\ \text{Sale Price} / \text{Gross Rental Income} &= \text{GRM} \end{aligned}$$

There are three major pitfalls with this method of deriving an overall rate.

- The first relates to the quantity and quality of meaningful sales and data that are available for comparison. In most markets today, the number of sale transactions occurring is very low compared to historical standards. Further, many of the sales are distressed, and thus, not representative of the "market value" definition. There are a myriad number of reasons for this, but in general, sellers are reluctant to sell at today's prices (which they view as distressed) and buyers are not willing to pay today's asking prices (which they view as inflated).
- The second relates to the fact that mortgage financing is very difficult if not impossible in many cases to obtain.
- The third relates to the fact that often data from each sale is not uniformly analyzed. If the appraiser asks for the "NOI at the time of sale" during the confirmation process, one party could give the historical NOI for the prior year, another might give the NOI projected for the forthcoming year, and another party might give actual NOI at the point in time. If the data is derived differently, the result can be distorted.

Thus, the reliability of this method can be suspect. The appraiser should discuss all possible issues and then reconcile to his/her best estimate.

## 2. Survey Data

There are a number of published survey data available by subscription to all types of real estate participants. These surveys query financial services institutions and investors about their prior quarter's sale activity and summarize a variety of data, including cap rates. Several of the more popular surveys include the following:

- Korpacz Survey available at PWC.com, published by Price Waterhouse Coopers
- Realty Rates available at RealtyRates.com – A variety of surveys are available including those for the investor, developer and market
- Real Estate Research Corporation available at RERC.com
- CB Richard Ellis available at CBRE.com

This approach can be problematic as well for several reasons: one, by the time survey data is available and published on a quarterly basis, it can lag the market; two, the transactions surveyed may or may not be similar to the property appraised. The survey properties may have appealed to a national institutional investor, while the property being appraised appeals to a small local investor. Thus, the reliability of this methodology may be suspect as well.

## 3. Band of Investment

The Band of Investment method utilizes as its underlying premise the fact that a portion of each sale transaction is typically financed with both debt and equity. If the rate of return necessary to attract capital to each element of the investment can be determined, a blended rate can be developed. The following is an example of the calculation:

Component	Investment %	X	First Year ROI Required	=	Blended Rate
Mortgage (LTV)	75%	X	8%	=	6%
Equity	25%	X	12%	=	3%
Total Investment	100%		Calculated overall rate		9%

*NOTE: The first year ROI for the mortgage would be the mortgage constant and the first year ROI for the equity would be the projected Cash Flow after Annual Debt Service divided by the original equity investment.*

When the market is active, this can be a very viable method. However, in today's environment, with lenders very reluctant to finance commercial real estate, and buyers and sellers unwilling to commit at today's prices, it becomes problematic.

## 4. Debt Service Coverage Ratio Method

This method is usually the banker's favorite, because the required elements are typically available within their own institutions as underwriting criteria. The elements include the debt service coverage ratio (DCR), loan to value ratio (M), and first year's mortgage constant (Rm). The following equation is utilized:

$$\text{Overall Rate (Ro)} = \text{DCR} \times \text{M} \times \text{Rm}$$

Again, with the limited number of transactions occurring, and the limited amount of financing available from most banks, this method's reliability is also questionable.

## Capitalization Summary

Direct Capitalization is generally used for stabilized "for lease" property. For proposed projects, or for existing but non-stabilized projects, or for "for sale" projects, a discounted cash flow analysis is the preferred method to arrive at the "as-is" value of the property.

For an appraisal today of an income producing property, the lack of recent, comparable sales transaction data is probably the largest threat to the reliability of the final value conclusion. When comparable sales are few and far between, or comparability is questionable, the appraiser must do an even better job of analyzing what trends are occurring in the market since the last sale.

The income approach of a credible appraisal today should provide a derivation of the capitalization rate utilizing two at a minimum, and preferably, at least three, of the four methods described above, with a final reconciliation of the indicators from each method.

In lieu of good transaction data, another way for the appraiser to augment the appraiser's analysis is to include a survey of local market participants (brokers, developers and investors) who deal with the type of property being appraised. The participants could be queried as to what they felt would be a reasonable capitalization rate (or range) as well as the range within which they believe a reasonable investor would pay for the property.

## **SUMMARY**

The Income Approach is not necessary for all appraisals. It is most applicable for income producing (investment) real estate. It is a secondary analysis at best for owner-occupied real estate, and is virtually never used for special purpose real estate unless a going concern is being valued (which is a topic for another day).

It should only be completed by appraisers skilled in its application who have data appropriate for the property type. Many appraisers specialize in one property type, and as a result, may lack data for the subject at hand. Banks should be asking appraisers for a list of recent similar assignments when requesting bids on each assignment.

**Next article in the series:** Land, Condos, and Subdivisions – Solutions to Hard to Value Assets

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