COOK COUNTY
ASSESSOR'S
OFFICE
Fritz Kaegi, Assessor

Determining a Capitalization Rate for the Assessment of Income-Producing Properties

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The Assessor's Office has a statutory duty to assess real property at fair market value (or "fair cash value" to use the language of the Property Tax Code). In the absence of very recent arm's-length sales, the valuation of income-producing properties is typically based on estimates of a property's income, expenses, and vacancy rate. Known as the income capitalization approach to value, it involves a set of procedures through which a market value is derived for an income-producing property by converting its anticipated benefits, in the form of cash flows and reversion, into an indication of present value.

The Framework for Assessing Income-Producing Properties

When assessing or appraising income-producing property for purposes of *ad valorem* taxation, determining an appropriate capitalization rate is crucial. In the property valuation industry, the capitalization rate is commonly referred to as the "cap rate." There are various ways to develop the appropriate cap rate. These include extracting the information from an analysis of recent sales of similar local properties, subscribing to reliable published sources that periodically release the capitalization rates for various property types, calculating the rate from a band-of-investment formula, and other ways to determine value.

The essence of real property valuation is how market data applies to a given property. There are three approaches to value:

1. The cost approach;
2. The sales comparison approach; and
3. The income capitalization approach.

Generally, two approaches to value are applied. For income producing properties, reliance is typically placed on the income capitalization approach. These properties are valued on a leased fee basis (ownership's rights under a bundle of rights theory). This approach is often supported by the sales comparison approach based on the sale of similar, comparable properties. The Assessor looks to the market to determine the market rental rates (on a net, gross or modified basis), evaluate the market for any market concessions such as free rent or downtime and determine market level expenses and lease-up costs such as market leasing commissions and tenant improvement allowances. The last step is to determine a market-derived cap rate, which may be extracted from similar investment sales and/or supported through independent market surveys or band of investment techniques.

- **What is the Cap Rate and How Does It Work?**

The cap rate represents multiple ideas: a rate of return, amount of risk in the investment, quality and durability of an income stream, and the relative quality of a property in the marketplace.

There are two ways to convert income into value, using: (1) direct capitalization; and (2) yield capitalization. In direct capitalization, a property's stabilized annual net operating income is divided by an overall capitalization rate ("OAR") to determine value. The yield capitalization is a more comprehensive valuation method that employs a discounted cash flow analysis, where the net income, cash flow, and property value are estimated over a projected hold period. Both techniques are market-derived, and utilized in different circumstances, depending on information available and use of the value conclusion.

Here, we utilize the direct capitalization approach, as our assessment analysis is for a specific retrospective date, a snapshot in time. The formula is:

$$\text{Value} = \frac{\text{Net Operating Income}}{\text{Overall Capitalization Rate}}$$

In applying the direct capitalization method, a reliable estimate of stabilized net operating income must be developed. Because income-producing properties generate rental income, expense responsibilities are provided for in the lease agreement(s). The type of lease will help determine how to develop the cap rate variable.

- **Determining the Net Operating Income**

When using the term income in the income approach to value, assessors and appraisers refer to the net operating income ("NOI"). The NOI is the cash flow remaining after the payment of all direct property operating expenses, inclusive of real estate taxes, but before the payment of debt service or profit to the owner.

To calculate the NOI, we start with the potential gross income ("PGI") for a particular property. The PGI is the anticipated rental income and other income from the real property at full occupancy before vacancy and operating expenses are deducted.

We then calculate the effective gross income ("EGI"). The EGI is the PGI from the real property less an allowance for vacancy and collection losses. Property operating expenses are then deducted from EGI to determine NOI. Any capital expenses or reserves are typically deducted after NOI and are not capitalized as these are one time capital expenditures that may include leasing commissions, tenant improvement costs and any or major capital investment. Expressed mathematically, the formula is:

PGI
– Vacancy
EGI

EGI
– Operating Expenses
NOI

- **The Overall Capitalization Rate and the Effective Tax Rate**

- *Overall Capitalization Rate ("OAR")*

In standard appraisal theory and practice, appraisers arrive at an overall capitalization rate, known as the unloaded cap rate. The OAR is a rate that is used to convert income into property value. There are various ways to develop the appropriate OAR, including extracting OARs from recent comparable sales or third-party market sources such as commercial real estate brokerage houses like CBRE Group, Inc. ("CBRE"), Jones Lang LaSalle ("JLL"), Cushman & Wakefield as well as from survey data that comes from the advisory firm, PricewaterhouseCoopers ("PwC"), or from Real Estate Resource Corporation ("RERC"), and other published cap rate survey sources.

- *Effective Tax Rate ("ETR")*

In *ad valorem* taxation, one way of forming an opinion of value when property taxes are not known – as described by the IAAO – is to load the cap rate with the ETR, if the tax rate is static and unchanged from year to year. The IAAO defines the ETR as "the tax rate expressed as a percentage of market value."[1] Here in Cook County, where the State adjusts overall values by equalization and typically assessment levels for commercial and industrial properties, apart from multi-family properties, are set at 25% of market value, then the ETR is the ratio of tax rates to assessment level. Expressed formulaically:

Equalization Rate
x Level of Assessment (25%)
x Tax Rate
Effective Tax Rate

The equalization and tax rates used in the typical appraisal for *ad valorem* taxation in Cook County, however, are the prior year's tax rates. As such, these rates are not current year tax rates.

- **Types of Leases**

For income-producing properties, there are several terms used to describe leases, all of which are meant to convey the intentions of the owner-lessor and tenant-

[1] *International Association of Assessing Officers, Course 102: Income Approach to Valuation*, Glossary, pg. 286, 2022 Student Reference Manual.

lessee regarding the payment of property operating expenses. The three typical expense categories that can be negotiated are real estate taxes, insurance and common area maintenance ("CAM") charges. The lease terms used generally vary by property type, market areas and even within market areas. The clearest and most direct method for an assessor or appraiser is to determine simply who pays what, by asking the parties to the agreement or reviewing the actual lease agreement(s) in place. The commonly used terms used to describe lease types include:

- *Gross Lease* – where the tenant is required to pay the landlord a flat rental fee that includes all of the costs associated with property ownership. The landlord cannot pass on to tenants any or all increases in operating expenses (including taxes).

- *Modified Gross Lease* – where the tenant is required to pay the landlord a flat rental fee that includes all of the costs associated with property ownership. The landlord passes on to tenants any and all increases in operating expenses (including taxes) above a base year amount.

- *Triple Net (NNN) Lease* –where the tenant is required to pay its full pro-rata share of operating expenses and real estate taxes in addition to rent. The stated rental rate of a NNN lease excludes the cost a tenant will be required to pay for operating expenses, insurance, and real estate taxes since these are considered to be "pass-through" expenses. Tenants pay a monthly estimate for the operating expenses, insurance, and real estate taxes to the landlord. At the end of the fiscal year, the landlord will balance the funds collected for operating expenses, insurance, and real estate taxes with the actual expenses and either issue refunds to tenants (if there are excess funds) or request additional payment from tenants (if there is a deficit).

TYPE OF LEASE	CAP RATES: LOAD (OAR + ETR) OR UNLOAD (OAR)?
Gross Lease	A loaded or unloaded cap rate can be implemented
Modified Gross Lease	A loaded or unloaded cap rate can be implemented
Net Lease (NNN)	Unloaded cap rates are the most applicable

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ASSESSOR'S POLICY AND PRACTICE – USING AN UNLOADED CAP RATE

The Assessor often sees property tax appeals presented with appraisals that have added the ETR to the OAR to get a loaded cap rate, and the NOI capitalized, or divided, by the resulting cap rate. This can be misleading when real estate taxes are accounted for in both the operating expenses and the loaded capitalization rate. Loading the cap rate in the cases where the tenant is responsible for some, or all, of the real estate tax expense is inappropriate because the owner is not responsible for the full tax burden (the tenant is reimbursing the owner for taxes) and should not be given credit for it in the loaded cap rate scenario. Consequently, loading the cap rate in this scenario produces an artificially low value by inflating the percentage used to arrive at an indication of market value.

- **First Pass Assessment**

  When the Assessor initially sets values for income-producing properties in Cook County (which the office refers to as "First Pass"), it applies prevailing expense ratios that include property taxes, suited for each jurisdiction. The office also looks at actual taxes paid historically. If the estimated value of a commercial property is rising substantially, one can estimate the increase in tax that affects the expense ratio by considering how much assessed value is projected to rise in that jurisdiction.

- **Second Pass Assessment**

  When reviewing taxpayer-filed appeals (which the office refers to as "Second Pass"), the Assessor uses an unloaded cap rate and considers all of the non-tax factors that come into play during Second Pass.

<u>The Assessor does not load the overall cap rate in any scenario</u>. To properly account for the tax expenses in a gross or modified gross lease, the total operating expense cost is inclusive of the real estate tax, so there is no justification for loading the cap rate. In a NNN lease, operating expenses (including real estate taxes) are passed through to the tenant. This means the expenses are 100 percent reimbursed and there is no justification for loading the cap rate.

A gross lease accounts for a base rental rate plus some level of property operating expenses baked in. The NNN lease assumes a lower base rent because the tenant also must pay the passed through triple net reimbursements, which increases their total lease costs. As such, the amount paid in total by the tenant should roughly equal out (under a NNN or modified gross lease) given similar properties.

CONCLUSION

The Assessor uses a market-derived unloaded capitalization rate, accounting for real estate taxes up front, rather than inflating the percentage used on the back end, to produce a present market value. This approach is market-driven, and reinforces the

Assessor's commitment to fairness, and the delivery of accurate and transparent assessments. To that end, the Assessor's policy provides balance to the property tax system, and avoids the potential for underassessment of income-producing properties throughout Cook County.