

Development of Capitalization Rates: Proforma vs. T-12

Developing capitalization rates from comparable sales using T-12 income and expense data without considering, adjusting or applying to the subject's future/proforma net operating income (NOI) is inconsistent with industry best practices and Freddie Mac appraisal requirements. Additionally, this incorrect methodology produces an aggressive capitalization rate not supported by market evidence and potentially overvalues the subject property.

The appraiser's development of the capitalization rate must align with industry best practices. These are excerpts taken from the Appraisal Institute's textbook, *The Appraisal of Real Estate* (15th edition), pages 460 and 462 (particularly the last sentences of each paragraph of this snippet):

Deriving capitalization rates from comparable sales is the preferred technique when sufficient information about sales of similar, competitive properties is available. Data on each property's sale price, income, expenses, financing terms, and market conditions at the time of sale is needed. In addition, appraisers must make certain that the net operating income of each comparable property is calculated and estimated in the same way that the net operating income of the subject property is estimated.

Often the operating data available for comparable sale properties is from the year that ended just prior to the date of sale, so appraisers may have to account for changes that have occurred over time. Both income and expense data (in the 12 months after the date of valuation) and the structure of expenses in terms of replacement allowances and other components should be similar to those of the subject property.

Sale properties used as sources for calculating overall capitalization rates should have current date of sale and future market expectations, including income and expense patterns and likely value trends, that are comparable to those affecting the subject property.

Quoted from the above text (for easier reading):

- "...appraisers must make certain that the net operating income of each comparable property is calculated and estimated in the same way that the net operating income of the subject property is calculated."
- "Both income and expense data (in the 12 months after the date of valuation) (emphasis added) and the structure of expenses in terms of replacement allowances and other components should be similar to those of the subject property."
- "Sale properties used as sources for calculating overall capitalization rates should have current date of sale and future market expectations..."

And, the *Freddie Mac Multifamily Seller/Service Guide* (Guide) Section 60.14c states:

"Capitalization rates extracted by proforma income or with actual income must be reconciled consistently with the appraiser's estimate of the property's income."

Examples of capitalization rate differential, solely from the income methodology:

	Pro Forma Stabilized	Trailing Actuals
Revenue Type		
Period Ending	N/A	N/A
Source	Appraiser	Buyer
Price	\$29,400,000	\$29,400,000
Potential Gross Income	\$2,437,520	\$2,211,933
Economic Occupancy	96%	96%
Economic Loss	\$109,688	\$87,371
Effective Gross Income	\$2,327,832	\$2,124,562
Expenses	\$833,965	\$783,302
Net Operating Income	\$1,493,867	\$1,341,260
NOI / sf	\$13.68	\$12.28
NOI / Unit	\$10,374	\$9,314
EGIM	12.63	13.84
OER	35.83%	36.87%
Net Initial Yield/Cap. Rate	5.08%	4.56%

	Pro Forma Stabilized	Trailing Actuals
Revenue Type		
Period Ending	N/A	N/A
Source	Appraiser	N/A
Price	\$43,500,000	\$40,200,000
Potential Gross Income	\$3,879,325	\$2,590,000
Economic Occupancy	94%	95%
Economic Loss	\$232,760	\$132,090
Effective Gross Income	\$3,646,566	\$2,457,910
Expenses	\$1,472,815	\$1,128,206
Net Operating Income	\$2,173,751	\$1,329,704
NOI / sf	\$13.22	\$8.09
NOI / Unit	\$10,979	\$6,716
EGIM	11.93	16.36
OER	40.39%	45.90%
Net Initial Yield/Cap. Rate	5.00%	3.31%

	Pro Forma Stabilized	Trailing Actuals
Revenue Type		
Period Ending	N/A	10/31/2019
Source	N/A	Buyer
Price	\$80,350,000	\$80,350,000
Potential Gross Income	\$6,769,980	\$5,769,729
Economic Occupancy	95%	93%
Economic Loss	\$358,809	\$380,802
Effective Gross Income	\$6,411,171	\$5,388,927
Expenses	\$2,404,160	\$2,203,503
Net Operating Income	\$4,007,011	\$3,185,424
NOI / sf	\$13.56	\$10.78
NOI / Unit	\$11,926	\$9,480
EGIM	12.53	14.91
OER	37.50%	40.89%
Net Initial Yield/Cap. Rate	4.99%	3.96%

As can be seen from these examples, there is a 50 bps to 100+ bps difference between the capitalization rates calculated with T-12 versus proforma NOI.

If the appraiser applies the more aggressive T-12 capitalization rate to the subject's proforma NOI, the result will be a materially higher indicated value than would result if the appraiser applied the capitalization rate developed with each sale's proforma NOI. **This would be indicative of an overvaluation of the subject and an escalated valuation risk.**

The appraiser should refrain from substituting their own interpretation of market data (rents, expenses, occupancies, etc.) for that of market participants.

In the example below, the appraiser's calculated rates (the far-right column of the exhibit) are theoretical based on their perceptions instead of the actions and expectations of the buyer and/or the seller. The appraiser decided, without support, that they would calculate the capitalization rates from these sales based on T-3 income and T-12 expenses without consideration of actual income and/or actual expenses. And, they did these substitute calculations for all six of the comparable sales in the report so the resulting concluded cap rate bore no resemblance to the actual actions of buyers and sellers in this local market.

Revenue Type	Pro Forma Stabilized	Trailing Actuals	Other See Comments
Period Ending	8/31/2021	8/31/2021	N/A
Source	Buyer	Seller	Appraiser
Price	\$40,096,000	\$40,096,000	\$40,096,000
Potential Gross Income	\$3,127,689	\$3,378,880	\$2,899,188
Economic Occupancy	N/A	N/A	N/A
Economic Loss	N/A	N/A	N/A
Effective Gross Income	\$3,161,629	\$2,854,372	\$3,109,431
Expenses	\$1,472,074	\$1,646,584	\$1,505,747
Net Operating Income	\$1,689,555	\$1,207,788	\$1,603,684
NOI / sf	\$8.46	\$6.05	\$8.03
NOI / Unit	\$8,046	\$5,751	\$7,637
EGIM	12.68	14.05	12.89
OER	46.56%	57.69%	48.43%
Net Initial Yield/Cap. Rate	4.21%	3.01%	4.00%

Freddie Mac fully understands and appreciates that appraisers might not be privy to the income, expenses, NOI or the motivations/expectations of each sale they research. Sometimes this data is closely held and not available from confidential sources but this does not mean that the appraiser can substitute their assumptions for those of market participants.

Summary and Best Practices

- For the development of the capitalization rate, industry best practices require an apples-to-apples comparison of the comparable sales' NOI to the subject property's NOI.
- The estimate of the subject property NOI should be forward-looking, i.e., aligned with the Principle of Anticipation.
- The appraiser should not substitute their expectations of market performance for the buyer's or seller's rationalization for entering the sales agreement.
- Applying a capitalization rate developed with T-12 NOI (or any backward-looking NOI estimate) to the appraiser's proforma NOI will yield a potentially aggressive result and a potential overvaluation of the subject property.
- This potential overvaluation is indicative of a higher valuation risk from Freddie Mac's use of that appraisal report.