



Calculating Apartment Values

The Valuation Calculation



Why are apartment values important?

Over-leveraging has forced many buildings to be repositioned by means of loan workouts, receiverships, foreclosures and sales, and as such:

- Owners need to know value
- Receivers need to know value
- Brokers need to know value
- Lenders need to know value
- Buyers need to know value
- **YOU NEED TO KNOW THE VALUE!**



What's the Formula?



No, it is much easier I swear!

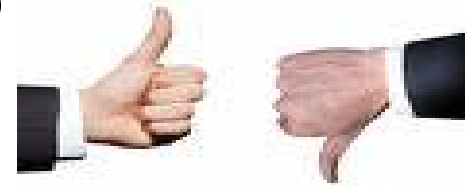
NOI divided by Cap Rate = Value

What's Cap Rate?

- Cap rate is short for capitalization rate and is represented as a percentage:
 - **Capitalization rate** (or "cap rate") is a measure of the ratio between the net operating income produced by an asset (usually real estate) and its capital cost (the original price paid to buy the asset) or alternatively its current market value. (thanks Wikipedia)
- Rules to Remember
 - The lower the cap rate, the more valuable the asset
 - The higher the cap rate, the less valuable the asset

What have cap rates been doing?

- At the top of the market when buildings were overvalued but continuing to be sold, cap rates reached lows of 5.5%
- Today cap rates are 8% to 10.5%
- Cap rate influences:
 - Location, location, location
 - Property condition
 - Market strengths/weaknesses
- The better the building, the lower the cap rate



The NOI calculation

- $\text{NOI} = \text{Income} - \text{Expenses}$
- For purposes of computing value, we also must deduct replacement costs from the NOI
- Annual Replacement costs should be calculated at \$350 per unit
- NOI needs to also be calculated on an annual basis
- Ensure taxes and insurance are reflected correctly in expense number

How to Annualize

- Regardless of what period the property is in, the NOI numbers must be calculated on a 12 month basis in order to compute value
- To annualize you must know:
 - What month you will use for actual NOI
 - NOI figure for that month
 - How to use division

Annualization Example

- Sonoran Village's July YTD NOI is \$658,000
- In order to compute value, I need NOI for the whole year, so I need to annualize that July number:
 - $658,000 / 7 \text{ months} = \$94,000$ average per month
 - $94,000 \times 12 \text{ months} = \$1,128,000$ annual NOI
 - Replacement Reserves = \$119,000 ($\350×340 units)
 - Annual NOI used to compute value = \$1,009,000

Problems with Annualization

- Annualizing is an estimate; drastic unforeseen changes in future months can really throw off annual NOI
- The earlier in the year you annualize, the less accurate your number will be
- Use a Trailing-12 report instead



Subtle changes In Income or Expenses create big changes in value

- Example:
 - An annual Apt Guide contract is about \$9000 (\$750/month)
 - A building with NOI of **1,009,000** at an 8 cap has a value of 12,612,500
 - A building with and NOI of **1,000,000** at an 8 cap has a value of 12,500,000
 - At an 8 cap, that Apt Guide expense depletes value by \$112,500 ($9000/.08=112,500$)

Subtle changes in Cap Rates create big changes in value

- Using Sonoran Village's NOI number of 1,009,000, let's look at how cap rates influence value:
- At an 8 cap, the value would be \$12,612,500 ($1,009,000 / .08$)
- At an 8.25 cap, the value would be \$12,230,303 ($1,009,000 / .0825$)
- That's a difference of \$382,197 in value for just a $\frac{1}{4}$ point adjustment in the cap rate

Cap Rate Caution



- Consult with as many people as you can before determining cap rates
 - Letters, VPs, Brokers, Lenders, Clients
- Use several cap rates in your math rather than just one
- Make sure you are comfortable explaining why you chose to use the cap rates you used

Quiz Time (not really)



Now that the calculation has been explained, let's work through the problem from start to finish



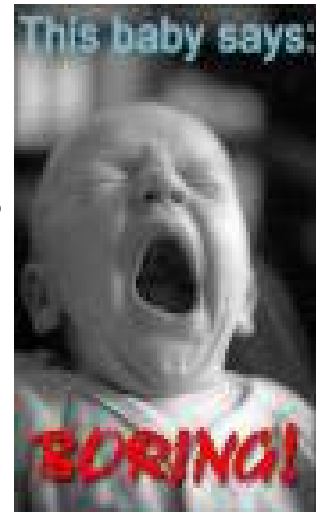
How much is Sonoran Village Worth?

- Here's what I need:
 - Most recent P&L
 - Cap Rates
 - Number of units at Sonoran Village
 - Calculator
 - Caffeinated Drink



Let's Do Some Math

- June's Year-to-date NOI at Sonoran Village is \$359,665
- To Annualize NOI, we would use the following calculation:
 - $359,665 / 6 \text{ months} \times 12 \text{ months}$
 - The annualized NOI is - **\$719,330**
 - Extra Credit: Is there a faster way to do this calculation?



Not Done Yet



- Sonoran Village is 268 beautiful apartments!
- Annual Replacement Reserves are computed at:
 - $\$350 \times 268 = \$93,800$
- So what do we do with the Replacement Reserve number???
 - Reduce NOI by \$93,800 or add to NOI by \$93,800?
 - Reduce NOI because Replacement Reserves are an expense and expenses reduce net income

Getting Close

- NOI for computing of value is calculated by taking the annualized NOI and subtracting the Annual Replacement Reserves:
 - $719,330 - 93,800 = \mathbf{\$625,530}$
- So now we have half of our equation
- Annual NOI = $\$625,530$



The Other Half

- As mentioned before, pick the brains of people who are in the know:
 - Melanie says cap rate at Sonoran Village is 8.5%
 - Libby says it is closer to 8%
 - Art Wadlund, a broker, says it is 8.25%

Let's use the median rate of 8.25% for our problem

The Answer



Let's revisit our calculation:

NOI divided by Cap Rate = Value

625,530 / .0825 =

\$7,582,182



Q & A





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