

A guide to cap rate dynamics

What marina financial analysts need to know before appraising a marina's market value

By John Simpson and Eileen Simpson

The most controversial and least understood part of valuing a marina is the capitalization rate, commonly referred to as the cap rate. Too often reliance is placed on unsupported data and the results can be misleading. Ironically, more time and effort is spent developing income and expense projections for a marina than developing an accurate, supportable cap rate, yet nowhere else will value be so heavily influenced.

Appraisers can use three valuation techniques to arrive at their market value estimate: the cost approach, the sales comparison approach and the income approach. In many parts of the country, there are not enough land sales for a cost approach or marina sales for a sales comparison approach. The only reliable value indicator is the income approach. Even if a sales comparison approach or cost approach is performed, the income approach carries the most weight in the appraiser's decision process and is the preferred valuation technique used by buyers and sellers.

Cap rate mathematics

A cap rate is any rate used to convert income into value. The net operating income is divided by the cap rate and the result is the value. Another way of viewing it is the ratio of net operating income to value (net operating income divided by market value). It reflects a return on capital.

In the income approach, the appraiser derives an indication of value by estimating income, subtracting a vacancy/collection loss allowance from the market, subtracting expenses, and then taking the result (net operating income) and dividing it by the cap rate.

Owners, lenders, appraisers, assessors

and others typically have similar projections for a marina's income, vacancy/collection loss and expenses, especially when these items are based on the last full year's income and expense statement (that is, they all work from the same starting point). Where value opinions usually differ is in the cap rate selection.

The following example illustrates the importance of the cap rate to the value conclusion and shows the mathematics behind calculating value using the income approach.

Most times these services say they've verified the sales — this is not always the case.

When data services report financial details like income, vacancy, expenses, net operating income and the cap rate, take a close look at the numbers. How round are they? If the vacancy is a nice round 5 percent, the income is a round \$200,000 or \$135,000, and the ratio of expenses to income is a round 50 percent or 55 percent, you probably cannot trust the data.

Another example is reporting income

ITEM	9% CAP RATE	11% CAP RATE	13% CAP RATE
Potential Gross Income	\$1,000,000	\$1,000,000	\$1,000,000
Less: Vacancy/Collection Loss (5%)	<u>\$5,000</u>	<u>\$5,000</u>	<u>\$5,000</u>
Effective Gross Income	\$995,000	\$995,000	\$995,000
Less: Expenses (50%)	<u>\$497,500</u>	<u>\$497,500</u>	<u>\$497,500</u>
Net Operating Income	\$497,500	\$497,500	\$497,500
Divided by Cap Rate	<u>9%</u>	<u>11%</u>	<u>13%</u>
Value Conclusion	\$5,527,777	\$4,522,727	\$3,826,923

Note: The value conclusion ranged from \$3.8 million to \$5.5 million or 44 percent, all depending on the cap rate.

Cap rate fallacies

The cap rate is always 10 percent.

This is the oldest fallacy that prevails. It has become a rule of thumb and a yardstick for measuring performance for all forms of real estate. Although there are times when the cap rate is indeed 10 percent, the prior discussion shows how important a 1 percent, 2 percent or 4 percent difference is to the final value. Rules of thumb are helpful, but they should not be a firm benchmark.

The data service is always right.

Whereas a decade ago obtaining sales transaction data from a national or local data service was almost impossible, there now are services that gather and sell sales data, commonly known as comparables or comps.

(called potential gross income) and then subtracting expenses to arrive at effective gross income, when marina owners report only effective gross income. When you see potential gross income and a vacancy and collection loss allowance, that typically means the analyst has imputed his/her opinions on what they are into the cap rate calculation, not having gotten it directly from the seller or purchaser. The national data services may say they're going to market to get that data, but what they are doing is applying their rounded opinion on what market income, vacancy/collection loss and expenses are and then calculating the cap rate. The result is that the calculation of cap rate (again, net operating income divided by sales price) is

likely inaccurate. The error is doubly compounded by the fact that these services usually claim the data is verified, when in fact it is not.

Sales disclosures are always consistent. Some states in the United States do not require sellers or buyers to record sales prices (referred to as nondisclosure states). Unless the state requires a separate disclosure instrument for determining the sales price, it is necessary for someone to speak to a party involved in the transaction to verify the sales price.

A problem we have run into many times in nondisclosure states is inconsistent information. When we verify sales data, we contact the buyer, seller or others involved with the transaction. There are times when the same person will tell two fictional sales prices because it is only his or her affair, not those of any other person. Usually, the sales price will be inflated in these situations.

The moral of the story is that in nondisclosure states, it is extremely important to make sure the reported sales prices are accurate and two or more different sources are consulted to verify the sales price. Few sales reported by third parties that sell the data bother to go through this necessary step. If the sales price is incorrect, the cap rate will be either higher or lower and the end result is misleading.

Cap rate components and comparability

Data services try to report sales above a certain dollar amount, usually \$500,000 to \$1 million at a minimum. Frequently, these marina sales have business elements in them that vary from most

marinas. If your marina does not have a major boat repair facility, boat sales facility, office/retail buildings or the ratio of slip income to total income is materially different, comparing it to sales that have these components can produce skewed results.

Regarding historical projections, this oxymoron frequently is overlooked by marina analysts. Cap rates almost always are calculated on the prior year's income/expense statement. Although the income projection used by the analyst will be for the next 12 months, the cap rate is based on the prior 12 months, as calculated from the prior sales price and the full year's income/expense statement. That can produce inaccurate results when the economy and your local marina market are changing.

Cap rates themselves also require some clarification. The most common explanation for why some cap rates appear low is buyer expectation. Did the buyer expect to expand a boat dealership, renovate the marina, upgrade the repair facility to include a major boat repair operation, plan to add a large number of wet slips, or build a dry stack storage building? Was there a particular reason why this marina is needed, such as its being the only deep water marina in the area?

If the buyer had a particular compulsion to buy because in his/her mind the property and/or location was unique, that might have resulted in a higher selling price and a lower cap rate.

Doing the math

One of the most common questions we're asked is what is an

appropriate cap rate for a particular marina or market? Many times people's cap rate conceptions result in market values that do not provide a purchaser with a sufficient return on investment. Let's take the prior example and work it through to simulate an investor's requirements. We'll use a 70 percent loan-to-value ratio, an 8.5 percent interest rate, monthly mortgage payments and a 25-year amortization rate.

Table 2		Investor Return Calculation		
ITEM	9 % CAP RATE	11% CAP RATE	13 % CAP RATE	
Value Conclusion	\$5,527,777	\$4,522,727	\$3,826,923	
Net Operating Income	\$497,500	\$497,500	\$497,500	
Mortgage Payments (70%)	<u>\$373,894</u>	<u>\$305,913</u>	<u>\$258,850</u>	
Income before Taxes	\$123,606	\$191,870	\$238,650	
Divided by Purchaser Equity (30%)	<u>\$1,658,333</u>	<u>\$1,356,818</u>	<u>\$1,148,077</u>	
Equity Return¹	7.45%	14.12%	20.79%	

Note: For simplicity, equity return has been used in this article. The above number technically is the equity dividend rate and it represents the one-year return for an investment. It is not a yield rate in that it does not consider property appreciation, just a return for the first year (going-in) rate.

As shown in Table 2, the investor's equity return ranges from 7.45 percent to 20.79 percent, a very large 179 percent range depending upon the cap rate. The equity return must then be compared with other more liquid, safer investments to determine if capital would be attracted to this investment. If the first year equity return is not sufficient for an investor compared with other

investment vehicles, the only way to generate that return is to bank on appreciation and that is no longer considered good investment strategy.

Marinas that are listed at prices which result in poor equity returns for the purchaser often turn out low offers from other financially savvy marina owners and investors for the property. The low offers reflect a purchaser's return on investment requirements with no nebulous appreciation factor considered. Many potential purchasers would not even make an offer on properties in these situations because the spread for negotiation is too great.

We frequently are called upon to review appraisals performed where the equity return is very low, sometimes negative. Nine times out of 10, the cap rate is too low to attract capital to the project.

Risk and the cap rate

The cap rate is the primary place where risk is considered. Major marina owners develop them not from the market but from their instinct using a build-up method. They simply take the percentage of total revenue that a marina component generates, multiply it by their component cap rate and sum each component.

Table 3 shows the results of the last survey we performed.

Table 3 Marina Survey Participant Required Cap. Rates		
MARINA COMPONENT	MAJOR INVESTORS	INVESTMENT ANALYSTS
Wet Slips/Dry Stack	10-12%	8-10%
Dry Storage	N/A	10-12%
Leases	N/A	N/A
Boat Rentals	N/A	16.67%
Retail	N/A	16.67%
Boat Service	30%+	20%
Boat Sales	30%+	33%
Hotel & Rec. Vehicle	N/A	N/A

Note: Survey participant identities and company names withheld by request.

Note that these purchasers build up their cap rates from percentage of gross income, not net income. Some expenses are almost impossible to partition among various marina components, such as management, an administrative staff, insurance and real estate taxes.

It is interesting to note that the investment analysts we interviewed had a more aggressive attitude toward component cap rates than large-scale owners of marinas. Both view any component other than slips as much riskier, especially boat sales and service operations that are heavily dependent upon the economy and discretionary income levels.

Methods to develop cap rates

There are many techniques appraisers and marina investment analysts can use to derive a cap rate in addition to abstracting a cap rate from sales and the investor build-up method. Other techniques include the band of investment, the mortgage equity technique and hybrids of these two approaches. These techniques also build up cap rates, but they emphasize not the components of the marina but the components necessary to create a deal.

Without delving into appraisal theory, each attempts to model investor and lender requirements by building up or weighting the cap rate for each of these two deal participants. For example, using the loan terms cited earlier and a 15 percent return for the purchasers, a built-up cap rate would be calculated as follows:

Table 4 Band of Investment Cap Rate					
PARTICIPANT	LOAN TO VALUE RATIO	TIMES	RETURN	EQUALS	COMPONENT CAP RATE
Lender	70%	x	9.66%	=	6.76%
Purchaser/Owner	30%	x	13.00%	=	<u>3.90%</u>
Built-up Cap Rate					10.50%

Note: The return to the lender is called the mortgage constant or mortgage cap rate. It is the ratio of the annual debt service to the principal amount of the loan. To calculate it, take the monthly mortgage payment, multiply it by 12 to derive an annual payment and divide it by the principal amount of the loan.

The mortgage equity technique and the others that have been developed all use the calculation described in Table 4, but modify it to reflect things like the increase in equity that occurs as a loan gradually is paid off and an annual amount for the appreciation in property value is applied (if applicable).

One important caveat in regard to cap rates: In today's low interest rate environment, the calculation above implies that cap rates are heavily dependent upon the mortgage interest rate. Although this is true to some degree, risk parameters are difficult to gauge.

For instance, marinas are considered to be recreational properties that carry higher risks than the more traditional properties such as office or industrial buildings.

Also, there are far fewer numbers of potential buyers in the market for a marina than these common property types. The result is a higher equity return requirement than other property types that are more commonly understood or triple-net leased.

The ratio of the components also must be considered; marinas with significant percentages of incomes from boatyards or sales centers warrant higher equity rates because they are much more subject to fluctuations in the economy and discretionary income. Persons who rely on just the cap rate calculations above must fully consider the risks inherent in the equity rate portion of these equations.



John Simpson is CEO of *CommercialAppraisal.com*, a nationwide appraisal and environmental site assessment firm headquartered in Arnold, MD, that specializes in marina valuations. He holds the MAI designation from the Appraisal Institute and the CCIM designation from the CCIM Institute, a subsidiary of the National

Association of Realtors. He has authored three books offered by the Appraisal Institute, *Marina Valuation*, *Property Inspection: An Appraiser's Guide* and *Cooperative Apartment Valuation*, as well as 11 Appraisal Journal articles on a variety of topics. He can be reached at (410) 431-5310 x 302 or john@commercialappraisal.com.

Eileen Simpson, president of *CommercialAppraisal.com* where she handles business development and complex property appraisals, has more than 10 years of brokerage experience and eight years of appraisal experience. She has an extensive tax appeal background and litigation background. She can be reached at (877) 877-1616 or eileen@commercialappraisal.com.