



# Rental Properties: Cash Cow Or Money Pit?

by Robert Stammers, CFA ([Contact Author](#) | [Biography](#))

Real estate investors must have basic [valuation](#) skills to make buy, sell, or hold decisions. Real estate investment companies have developed sophisticated valuation models to aid them in making investment decisions. However, by using spreadsheet tools an individual can produce an adequate valuation on most income-producing real estate. This would include residential real estate purchased as [residential rental property](#).

Valuing real estate using [discounted cash flow](#) or [capitalization](#) methods is similar to valuing stocks or bonds. The only difference is that cash flows are derived from [leasing](#) space as opposed to selling products and services. Read on to find out how any investor can create a valuation satisfactory enough to weed through prospective investment opportunities.

## Individual Valuations

Some individuals feel that producing a valuation is unnecessary if a certified [appraisal](#) has been completed. However, an investor's valuation may differ from an appraisal for several reasons. The investor may have different opinions about the property's ability to attract [tenants](#) or the lease rates that tenants are willing to pay. As a prospective purchaser or seller, the investor may feel that the property has more or less risk than the appraiser. Appraisers are compelled to conduct separate assessments of value. They include the cost to replace the property, a comparison of recent and comparable transactions and an income approach. Some of these methods commonly lag the market, underestimating value during uptrends, and overvaluing [assets](#) in a downturn. (To learn more, read [Exploring Real Estate Investments: Finding Investment Value](#).)

Finding opportunities in the real estate market involves finding properties that have been incorrectly valued by the [market](#). This often means managing a property to a level that surpasses market expectations. A valuation should provide one's estimate of the true income-producing potential of a property.

## Real Estate Valuation

The income approach to evaluating real estate is similar to the process for valuing stocks, bonds, or any other income-generating investment. Most analysts use the discounted cash flow (DCF) method to determine an asset's [net present value](#) (NPV). NPV is the property value in today's dollars that will achieve the investor's [risk adjusted return](#). The NPV is determined by discounting the periodic cash flow available to owners by the investor's [required rate of return](#) (RROR). Since the RROR is an investor's required rate of return for the risks involved, the value derived is a risk-adjusted value for that individual investor. By comparing this value to market prices, an investor is able to make a buy, hold, or sell decision. (For more see, [Taking Stock of Discounted Cash Flow](#) and

[Understanding the Time Value of Money.](#))

Stock values are derived by discounting [dividends](#), bond values by discounting interest [coupon](#) payments. Properties are valued by discounting net cash flow or the cash available to owners after all [expenses](#) have been deducted from leasing income. Valuing a property involves estimating all the rental [revenues](#) and then deducting all expenses required to execute and maintain those leases. (For more, read [Analyze Cash Flow The Easy Way.](#))

All income estimates come directly from leases. Leases are contractual agreements between tenants and a [landlord](#). All rent and contractual increases in rent (escalations) will be spelled out in the leases, as well as options for space and rent concessions. Owners also recoup part or all of the property expenses from tenants. The manner in which this income is collected is also stated in the lease contract. There are three main types of leases:

- Full-service leases
- Net leases
- [Triple-net \(NNN\) leases](#)

In full-service leases, tenants do not pay anything in addition to rent. In net leases, tenants usually pay their portion of the increase in expenses for the period after they move into the property. In triple-net leases, the tenant pays a [pro-rata](#) share of all property expenses.

The following are the types of expenses that have to be considered when preparing an income valuation:

- Leasing costs
- Management cost
- Capital costs

Leasing costs refer to the expenses necessary to attract tenants and to execute leases. Management costs refer to property level expenses, such as utilities, cleaning, taxes, etc. as well as any costs to manage the property. Income less [operating expenses](#) equals [net operating income](#) (NOI). NOI is the cash flow derived from normal operations of the property. Cash flow is then derived by subtracting capital costs from NOI. Capital costs are any periodic [capital](#) outlays to maintain the property. These include any capital for leasing commissions, tenant improvements, or capital reserves for future property upgrades. (For more on NOI, see [Zooming In On Net Operating Income.](#))

### Valuation Example

Once periodic cash flows are determined, they can be discounted back to determine property value. Figure 1 shows a simple valuation design that can be adjusted to value most properties.

<i>Assumption</i>	<i>Value</i>	<i>Assumption</i>	<i>Value</i>
Growth in Income Yr1-10 (g)	4%	Growth in Income Yr11+ (g)	3%

RROR (K)	13%	Expenses % of Income	40%
Capital Expenses	\$10,000	Reversion Cap Rate (K-g)	10%

Figure 1

The valuation assumes a property that creates annual rental income of \$100,000 in year one, which grows by 4% annually and 3% after year 10. Expenses are estimated at 40% of income. [Capital reserves](#) are modeled at \$10,000 per year. The discount rate, or RROR, is set at 13%. The capitalization rate for determining the reversion value of the property in year 10 is estimated at 10%. In financial terminology, this [capitalization rate](#) equals  $K-g$ , where K is the investor's RROR (required rate of return) and g is the expected growth in income.  $K-g$  is also known as the investor's required income return, or the amount of the total return that is provided by income.

The value of the property in year 10 is derived by taking the estimated NOI for year 11 and dividing it by the capitalization rate. Assuming the investor's required rate of return stays at 13% then the capitalization would equal 10%, or  $K-g$  ( $13\% - 3\%$ ). In Figure 2, NOI in year 11 is \$88,812. After periodic cash flows are calculated, they are then discounted back by the discount rate (13%) to derive the NPV of \$58,333.

Item	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11
Income	100	104	108.16	112.49	116.99	121.67	126.54	131.60	136.86	142.33	148.02
Expenses	-40	-41.60	-43.26	-45	-46.80	-48.67	-50.62	-52.64	-54.74	-56.93	-59.21
Net Operating Income (NOI)	60	62.40	64.896	67.494	70.194	73.002	75.924	78.96	82.116	85.398	88.812
Capital	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-
Cash Flow (CF)	50	52.40	54.90	57.49	60.19	63	65.92	68.96	72.12	75.40	-
Reversion	-	-	-	-	-	-	-	-	-	888.12	-
<u>Total Cash Flow</u>	<u>50</u>	<u>52.40</u>	<u>54.90</u>	<u>57.49</u>	<u>60.19</u>	<u>63</u>	<u>65.92</u>	<u>68.96</u>	<u>72.12</u>	<u>963.52</u>	-
Dividend Yield	9%	9%	9%	10%	10%	11%	11%	12%	12%	13%	-

Figure 2 (in thousands of dollars)

Figure 2 provides a basic format that can be used to value any income-producing or rental property. Investors purchasing residential real estate as rental property should prepare valuations to determine whether rental rates being charged are adequate enough to support the purchase price being paid. Although appraisers will often use a 10-year cash flow by default, investors should produce cash flows that mirror the assumptions on which the property is assumed to be purchased. This format, although simplified, can be adjusted to value any property, regardless of complexity. Even hotels can be valued this way. Just think of nightly room rentals as one-day leases.

### **Buy, Sell or Hold**

When purchasing a property, if an investor's assessed value is greater than the seller's offer or appraised value, then the property can be purchased with a high probability of receiving the RROR. Conversely, when selling a property, if the assessed value is less than a buyer's offer, the property should be sold. In addition, if the assessed value is in line with the market and the RROR offers an adequate return for the risk involved, the owner may decide to hold the investment until there is a [disequilibrium](#) between the valuation and market value. (For further reading, see [Flipping Houses: Is It Better Than Buy And Hold?](#))

Value can be defined as the greatest amount that someone would be willing to pay for a property. When purchasing an asset, [financing](#) should not affect the ultimate value of the property because each buyer has different financing options available. However this is not the case for investors who already own properties that have been financed. Financing must be considered when deciding on an appropriate time to sell because financing structures, such as prepayment penalties, can rob the investor of his or her sale's proceeds. This is important in cases where investors have received favorable financing terms that are no longer available in the market. The existing investment with debt may provide better risk-adjusted returns than can be achieved when reinvesting the prospective sales proceeds. Adjust risk RROR to include the additional financial risk of mortgage debt.

### **Conclusion**

Whether buying or selling, it is possible to produce a valuation model accurate enough to assist in the decision-making process. The math involved in creating the model is relatively straightforward and within the grasp of most investors. After gaining some rudimentary knowledge about local market standards, lease structures and how income and expenses work in different property types, one should be able to forecast future cash flows.

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Robert Stammers is an independent consultant specializing in providing strategic planning and analysis for business owners and private investors. As a senior executive for Lend Lease Real Estate Investments, he ran the Portfolio Analysis Group, which enhanced the development of portfolio strategy, composition and performance through the design and implementation of new quantitative methods and analysis.

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