Market Value vs. Investment Value:
An Income Property Valuation Case

James Stotler

North Carolina Central University

ABSTRACT

Market value and investment value may often differ, and it is important to understand the difference between them. This case presents a scenario where a market value appraisal, using the income approach, is done by an appraiser for a seller client. The potential buyer wants to determine the investment value to decide if they should pursue the investment opportunity. The subject property is a residential quadplex located in a medium-sized university town.

The student will estimate the market value of the quadplex using the income approach and applying yield capitalization, direct capitalization and the gross rent multiplier techniques. The investment value of the same quadplex will then be determined based on the buyers' investment criteria and the market value and investment value will be compared and analyzed to determine if and how the potential buyer should proceed.

Keywords: Investment Value, Market Value, Income Approach, Yield Capitalization, Direct Capitalization, Net Operating Income, Gross Rent Multiplier.

INTRODUCTION

Market value and investment value are very similar concepts but are rarely equal. Market value and fair market value are often used interchangeably, and the meaning is the same. Investment value, however, often differs from market value. The Dictionary of Real Estate Appraisal, 6^{th} Edition, defines market value as "The most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite for a fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress." The Dictionary of Real Estate Appraisal, 6^{th} Edition also defines investment value as "The value of a property to a particular investor or class of investors based on the investor's specific requirements. Investment value may be different from market value because it depends on a set of investment criteria that are not necessarily typical of the market."

The Uniform Standards of Professional Appraisal Practice defines market value as "a type of value, stated as an opinion, that presumes the transfer of a property (i.e., a right of ownership or a bundle of such rights) as of a certain date, under specific conditions set forth in the value definition that is identified by the appraiser as applicable in an appraisal." In short, the investment value indicates the most that a specific investor is willing to pay for the real estate rights being conveyed and the market value is the most probable selling price for the real estate rights being conveyed in an open market.

There are three approaches which may be applicable to determining the market value of real estate: the income approach, the sales comparison approach, and the cost approach. This case focuses on the income approach which is closely aligned with the methods that an investor would use to estimate the investment value of real estate. The income approach to estimating value has various techniques for determining the value of the cash flows generated by the real estate. These approaches are yield capitalization, direct capitalization, and gross rent multiplier.

THE PROPERTY

The subject property in this valuation case is known as Church Street Apartments and it is a quadplex located in a medium-sized university town. It is located two blocks from the north edge of the campus and, due to its location, appeals mostly to students at the university. This university market is seasonal with peak demand in August through May and lower demand in the months of June and July. Long-term leases are not common in this market. Some rental property owners offer 10-month leases to correspond to the academic year and others require a full-year lease and may allow sub-leasing during June and July. The 10-month leases place the summer rental risk on the property owner and the 12-month leases transfer the summer rental risk to the tenant. These factors are reflected in vacancy rates.

Church Street Apartments is a four-unit apartment building with 3,400 square feet, including common areas, and it has two units with 2 bedrooms and 1 bathroom, and two units with 1 bedroom and 1 bathroom. The two-bedroom units have 850 square feet and will rent for $1,750 in the upcoming year. The one-bedroom units have 750 square feet and will rent for $1,300 in the upcoming year. The rent roll for last year and projections going forward can be found in the Table 1 (Appendix). The rate of increase in rent is expected to remain constant during the 5-year holding period.

THE SCENARIO AND TASK

Carolina Property Associates, the owner of Church Street Apartments, is considering a sale of the property and is interested in knowing the market value of their property. Keystone Investment Group is an investor group that specializes in student rental properties, and they are interested in determining the investment value of Church Street Apartments and potentially making an offer to buy the property.

Both Carolina Property Associates and Keystone Investment Group need the respective value estimates that apply to their situation. Prepare a market value estimate of Church Street Apartments for Carolina Property Associates and an investment value estimate for Keystone Investment Group using their investment criteria.

The appropriate valuation approach in this situation is the income approach since the subject property is an income generating property. Comparable sales will be used, but only for the purpose of determining a capitalization rate and a gross rent multiplier appropriate for estimating the market value of the property.

THE PROCESS

Part 1

The first part of the valuation project is to determine the market value of the subject property for Carolina Property Associates. This involves estimating the market value using three different approaches and reconciling the value estimates. The three approaches are yield capitalization, direct capitalization and the gross rent multiplier.

To estimate the value using the yield capitalization approach, the net operating income for the 5-year holding period and the year 6 net operating income value must first be estimated. This begins with the potential gross income that the property is expected to generate. This value can be determined by summing the rent per unit per year for the four units. Then, vacancy and collection loss estimates must be subtracted from the potential gross income to determine the effective gross income. Vacancy an collection loss is estimated to be 8 percent of potential gross income based on the historical rent roll for Carolina Apartments. Once the effective gross income is determined, the operating expenses must be subtracted from the effective gross income to arrive at the net operating income. The historical operating expense ratio for Carolina Apartments is 30 percent.

The process for determining the net operating income is outlined below and the relevant information for calculating it can be found in Table 2 (Appendix).

Potential Gross Income

- Vacancy and Collection loss

Effective Gross Income

- Operating Expenses

Net Operating Income

Once net operating income is determined for year 1, it should be projected over the 5-year investment horizon using the historical rent growth rate, vacancy rate and operating expense ratio. Once the net operating income over the 5-year investment horizon is estimated, the present value of the 5 net operating income values should be determined using the yield rate. The next step is to estimate the reversion value at the end of the 5-year investment horizon, using the reversion cap rate, and calculate its present value. This present value is then added to the present value of the net operating incomes in years 1 through 5 to determine the overall value using the yield capitalization approach.

Now that a value has been estimated using the yield capitalization method, the value should be estimated using the direct capitalization method. Direct capitalization involves estimating a capitalization rate from comparable sales to apply to the subject property. The capitalization rate can be estimated by dividing the net operating income for the comparable sale by the sale price for the comparable sale. The comparable sale information can be found in Table 3 (Appendix). Since there are 3 comparable sales, the capitalization rates derived from these sales must be reconciled. Once a capitalization rate has been determined, it can be applied to the year 1 net operating income of the subject property to determine a value estimate.

The last income approach to be applied is the gross rent multiplier. The gross rent multiplier is the sale price divided by the gross income. Table 2 (Appendix) contains the sale prices and operating statements for the comparable sales. Once a gross rent multiplier has been estimated for each comparable sale, the values should be reconciled, and the resulting gross rent multiplier estimate applied to the gross rent for the subject property to determine a value estimate.

Part 2

The second part of the valuation project is to estimate the investment value for Keystone Investment Group. The same methods are applied in the same way as when determining market value, but these methods are applied based on the investor's assumptions and investment requirements. These investor assumptions and requirements can be found in Table 4 (Appendix).

Keystone Investment Group plans to offer only 1-year leases, rather than both 10-month and summer leases, if they purchase the Church Street Apartments. They estimate that this will reduce their vacancy and collection losses from the current level of 8 % down to 5 %. Keystone Investment Group uses a yield rate of 7.8% and reversion capitalization rate of 9% when analyzing investments of this risk level. For direct capitalization, Keystone uses a rate of 7%. They are not expecting any change in the rental growth rate, operating expense ratio or the gross rent multiplier.

REFERENCES

1. The Dictionary of Real Estate Appraisal, 6th Edition, Appraisal Institute, Chicago, IL.
2. Uniform Standards of Professional Appraisal Practice (USPAP), 2020-2021 Edition, The Appraisal Foundation, Appraisal Standards Board.

APPENDIX

Table 1

Rent Roll							
	Last Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Unit 1	$ 20,192	$ 21,000	$ 21,840	$ 22,714	$ 23,622	$ 24,567	$ 25,550
Unit 2	$ 20,192	$ 21,000	$ 21,840	$ 22,714	$ 23,622	$ 24,567	$ 25,550
Unit 3	$ 15,000	$ 15,600	$ 16,224	$ 16,873	$ 17,548	$ 18,250	$ 18,980
Unit 4	$ 15,000	$ 15,600	$ 16,224	$ 16,873	$ 17,548	$ 18,250	$ 18,980
Total	$ 70,385	$ 73,200	$ 76,128	$ 79,173	$ 82,340	$ 85,634	$ 89,059

Table 2

Church Street Quadplex				
	Bedrooms	Bathrooms	Square Feet	Rent
Unit 1	2	1	850	$1,750.00
Unit 2	2	1	850	$1,750.00
Unit 3	1	1	750	$1,300.00
Unit 4	1	1	750	$1,300.00
Market Yield Rate	7%			
Market Terminal Cap Rate	8%			
Historical Rent Growth	4%			
Vacancy & Collection Loss	8%			
Operating Expense Ratio	30%			

Table 3

Comparable Sales of Quadplex Apartments			
	Comp 1	**Comp 2**	**Comp 3**
Sale Price	$1,000,000	$900,000	$750,000
Potential Gross Income	$105,263	$85,714	$88,235
Vacancy and Collection	$7,368	$6,000	$6,176
Effective Gross Income	$97,895	$79,714	$82,059
Operating Expenses	$37,895	$21,214	$44,559
Net Operating Income	$60,000	$58,500	$37,500

Table 4

Investor Assumptions and Requirements	
Yield Rate	7.80%
Terminal Cap Rate	9%
Growth Rate	4%
Vacancy and Collection Loss	5%
Operating Expense Ratio	30%

TEACHING NOTES

Operating Statement - Seller

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Potential Gross Income	$ 73,200	$ 76,128	$ 79,173	$ 82,340	$ 85,634	$ 89,059
Vacancy and Collection	$ 5,856	$ 6,090	$ 6,334	$ 6,587	$ 6,851	$ 7,125
Effective Gross Income	$ 67,344	$ 70,038	$ 72,839	$ 75,753	$ 78,783	$ 81,934
Operating Expenses	$ 20,203	$ 21,011	$ 21,852	$ 22,726	$ 23,635	$ 24,580
Net Operating Income	$ 47,141	$ 49,026	$ 50,987	$ 53,027	$ 55,148	$ 57,354

Operating Statement - Buyer

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Potential Gross Income	$ 73,200	$ 76,128	$ 79,173	$ 82,340	$ 85,634	$ 89,059
Vacancy and Collection	$ 3,660	$ 3,806	$ 3,959	$ 4,117	$ 4,282	$ 4,453
Effective Gross Income	$ 69,540	$ 72,322	$ 75,214	$ 78,223	$ 81,352	$ 84,606
Operating Expenses	$ 20,862	$ 21,696	$ 22,564	$ 23,467	$ 24,406	$ 25,382
Net Operating Income	$ 48,678	$ 50,625	$ 52,650	$ 54,756	$ 56,946	$ 59,224

Yield Capitalization	Seller	Buyer
PV of Years 1-5	$208,273	$210,413
Terminal Value in Year 5	$716,925	$658,047
PV of Terminal Value	$511,158	$452,026
Overall PV via Yld. Cap.	$719,431	$662,439
Direct Capitalization		
Direct Cap Value	$ 785,680	$ 673,440.00
Gross Rent Multiplier		
GRM Value	$ 695,400	$ 695,400
Average	$733,504	$677,093

	Seller		Buyer	
Rent g =	0.04		0.04	
V&C =	0.08	10 month & 1 yr.	0.05	1-year lease only
OER =	0.3		0.3	
Yield =	0.07		0.078	
Reversion Cap Rate	0.08		0.09	
Direct Cap Rate	0.06	Derived	0.07	
GRM =	9.5		9.5	

Comparable Sales of Quadplex Apartments					
Estimation of Capitalization Rate and GRM					
	Comp 1	**Comp 2**	**Comp 3**		
Sale Price	$1,000,000	$900,000	$750,000		
Potential Gross Income	$105,263	$85,714	$88,235		
Vacancy and Collection	$7,368	$6,000	$6,176		
Effective Gross Income	$97,895	$79,714	$82,059		
Operating Expenses	$37,895	$21,214	$44,559		
Net Operating Income	$60,000	$58,500	$37,500		
					Estimate
Cap. Rate	0.06	0.07	0.05		0.06
GRM	9.50	10.50	8.50		9.5