

MARKETABILITY ANALYSIS: THE KEY TO CREDIBLE VALUATION IN A

CHANGING MARKET

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INTRODUCTION

All income property real estate investments comprise the following elements: expected holding period, anticipated yield rate, first year's income, change in income over the holding period and property reversion, or sale proceeds at end of holding period. The amount a knowledgeable investor is willing to pay for a property is a function of his anticipation of the present worth of these future benefits. Indeed, as Justice O.W. Holmes, Jr., said, "all values are anticipations of the future." For this reason, it is particularly important for the appraiser to recognize the position of the subject property in its market cycle. When a property is on the brink of a major directional change its value must accurately reflect the market's anticipation and properly factor it into each of the applicable valuation methods.

"Trends in real estate markets can be measured by the interaction of several related market statistics: vacancy rates, rental growth rates, capitalization rates, home price changes, and changes in supply. If vacancy rates rise, rents will fall and capitalization rates will rise. If vacancy falls, then rents will rise and capitalization rates will fall. There is a lag in real estate markets while the market participants react to new information. If vacancy rates begin to fall, rental rates will not change until the market has noticed the change in vacancy. Similarly, capitalization rates will not change until the trend in rental rates (and the potential gross income for a property) is evident."¹ Appraising during the period of "recognition" is as difficult an assignment as it gets.

The job of the real estate appraiser is to provide an opinion of how much a knowledgeable buyer would pay—on the date of appraisal—for the right to the property's future benefits. The correct amount will reflect the buyer's anticipation

¹ Appraisal Institute, *The Appraisal of Real Estate*, 13th ed. (Chicago: Appraisal Institute, 2008), 54.

of the future and the position of the subject in its market cycle. The mechanism for developing the opinion is market analysis, the results of which are incorporated into each of the value methods applied: cost, sales comparison and income capitalization. This paper will reveal how the results of a marketability study (property specific market analysis) are incorporated into each of the approaches in order to properly reflect the onset of a severe market decline.

MARKETABILITY ANALYSIS

“A marketability analysis is a demand and competition study for a specific property. The analysis forms the basis of the subject property’s forecast of future revenues. A revenue forecast in the income capitalization approach is a marketability conclusion. The estimate of economic obsolescence in the cost approach is another marketability conclusion. The selection of comparable properties and their comparison in the sales comparison approach also requires marketability conclusion.”²

SALES COMPARISON APPROACH

The complication with sales comparison in a market with change imminent is that none of the sales will reflect the change. For example, in a housing market that is crashing, only a sale on the date of appraisal will accurately reflect the current market condition. The problem is, one of the signatures of a market heading into decline is the lack of sales. As a result, the appraiser must rely on transactions that occurred before the decline manifested itself, then make appropriate market conditions adjustments to them. The question is, where does the appraiser get the evidence to support the market conditions adjustment? The answer is market analysis. The market conditions adjustment becomes a function of when the market will recover as opposed to the age of the comparable sale (date of sale is almost irrelevant). Let’s illustrate this with a simple example.

Sales Comparison Example³

Subject is suitable for retail development but is in a market that is currently overbuilt. There are no recent retail land sales. Residual demand analysis (the result of the marketability study) indicates that the retail market will not be back in balance for two to five years. The only land sales that are comparable in location, zoning, etc., are sales that occurred when the market was last in balance, four to six years ago.

² Stephen F. Fanning, *Market Analysis for Real Estate* (Chicago: Appraisal Institute, 2005), 177-178.

³ Examples are from *General Market Analysis and Highest and Best Use* course, Appraisal Institute.

How does the appraiser adjust these sales for market conditions? There is no direct sale or resale evidence because users are not purchasing property in the current market. Investors likewise have been inactive.

When in balance, retail land sells to users for \$10 per square foot. An appropriate discount rate (in this case to include typical holding costs) is 12% to 15%.

The market conditions adjustment is found by discounting the \$10 user price over the 2-5 year holding period before interest reappears.

Estimated User Price of Subject:	\$10 per sq. ft.	
Forecasted Holding Period	2 to 5 years	
PV of \$10	2 years	5 years
@ 12%	\$7.97	\$5.67
@ 15%	\$7.56	\$4.97

Adjustment ranges from \$2.03 to \$5.03 per sq. ft., indicating a reasonable conclusion of \$3.50 per square foot.

INCOME CAPITALIZATION

This approach, particularly the discounted cash flow application, is straightforward. The marketability study will identify the critical elements such as timing and risk. Let's use another example to illustrate its application.

Income Approach Example

The subject is a 60,000 square foot existing shopping center. It is currently 86% occupied but needs to implement rent concessions to retain tenants. The marketability study reveals the retail market will not be back in balance for three to four years. Current contract rent at the center averages \$13 per square foot, but most of the leases were signed when market was in balance, about three years ago. All tenants are demanding renegotiation of the lease terms. Comparables indicate that leases signed now will have to be at least 7% lower than leases signed three years ago. Occupancy levels at competitive properties are far below the historical stabilized level of 95%. Current market rents are \$11-\$12 per square foot.

An income and expense forecast will look as follows:

	Current	Year 1	Year 2	Year 3	Year 4
Rent/sf	\$13	\$12	\$12	\$12.50	\$13
PGI	\$780,000	\$720,000	\$720,000	\$750,000	\$780,000
V/CL	14%	14%	14%	10%	5%
EGI	\$670,000	\$619,200	\$619,200	\$675,000	\$741,000

The initial rent is at \$13 per square foot, but this will decline over the next three years as the higher-paying tenants renegotiate and new tenants move in at lower rates. As the retail market comes into balance in years 4 and 5, rents and occupancy are expected to increase (typically, occupancy increases precede rent increases). After a balanced market is achieved (best case in year 3) rents are expected to increase to at least the level of three years ago, before the 7% decline.

A direct capitalization model would begin with a prospective value as of the year the marketability study indicates market will be stabilized. This value would have to be discounted to date of appraisal and be reduced further by lost rent and carrying costs to stabilization.

COST APPROACH

The effects of a declining market are manifested in the cost approach as external obsolescence (economic). The loss is typically not permanent—absent a structural change in the market—and is best measured using feasibility rent analysis.

*Feasibility Rent: The amount of rent and other revenue required to justify the investment required in a project. "The project" can be a proposed one or an existing one.*⁴

"In essence, the detailed analysis of external obsolescence resulting from occupancy loss, rent loss to equilibrium levels, and rent loss to feasibility income fully explains the phenomena of investment properties in a depressed market."⁵

⁴ Max J. Derbes, Jr., "Feasibility Income Deficiency," *The Appraisal Journal* (January 1989): 88-98.

⁵ *Ibid.*, 98.

“Feasibility rent, which is the rent required for the property to be worth what it would cost to construct it at the effective date of appraisal, can be calculated by adding expenses and frictional vacancy to feasibility net income.”⁶

Cost Approach Example

Again, let’s illustrate, this time with an example for the Institute course, *Advanced Sales Comparison and Cost Approaches*.

Current Cost New = 35,000 sf x \$45/sf = \$1,575,000

Total Physical Depreciation calculated to be \$149,928

Site Value = \$190,000

Feasibility net income, which is the net income required for the property to be worth what it would cost to construct it at the effective date of appraisal, can be calculated as follows:

Cost	\$1,575,000
Site	\$ 190,000
Total	\$1,765,000

Using the basic relationship, Value equals Income divided by Capitalization Rate ($V = I/R$), and rearranging to solve for income we have, Income = Value (Cost new) x Rate

Total cost x 10.5% (Overall Capitalization Rate) = Feasibility net income (FI) = \$185,325.

In other words, if the subject’s net operating income were \$185,325, the property would be worth \$1,765,000.

Comparing this to the rent the property is actually able to generate in the current market will reveal the existing depreciation from all causes.

Cost	\$1,575,000
Site	\$ 190,000
Total	\$1,765,000

⁶ *Advanced Sales Comparison and Cost Approaches*, The Appraisal Institute.

Total Cost x 10.5% = FI		\$185,325
Potential Gross Income (actual) \$4.75 x 35,000 sf = \$166,250		
Less vacancy (5%)	- \$ 8,313	
Effective Gross Income	\$157,937	
Less expenses (10%)	- \$ 15,794	
Actual Net Income (I_o)		\$142,143
Income loss due to depreciation from all sources		\$ 43,182

This income shortfall can be capitalized to develop a lump sum amount that represents depreciation from all causes:

$$\$43,182 \div .105 = \$411,257$$

Of this total, \$149,928 represents physical depreciation, leaving \$261,329 as value loss due to market conditions, or external obsolescence.

If the market believes the obsolescence will disappear, then the overall capitalization rate will be low, feasibility net income will be low, the spread between feasibility net income and actual income will be less and external obsolescence will be less.

CONCLUSIONS

Tough real estate markets create tough appraisal assignments. Support for adjustments in sales comparison, rent and occupancy changes and capitalization and discount rates in the income approach, and depreciation in the cost approach is critical to credibility of the valuation. Frequently these critical components are simply judgment calls based on the appraiser's "years of experience." This is not acceptable, credible or reliable. The support for such crucial decisions must be solidly developed. Marketability analysis is the basis for the support. It allows the appraiser to establish the timing of the investment and evaluate its risk.

