



Risk Management Insights

Land, Condos and Subdivisions – Solutions to Hard to Value Assets

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This last article in our four-part series will address what to look for when reviewing appraisals that include a discounted cash flow analysis as well as our observations for appraisals of raw land, condominium developments, and residential subdivisions, which often use discounted cash flow analysis as a valuation technique.

DISCOUNTED CASH FLOW ANALYSIS

You will recall in our last article that “Direct capitalization” processes a single projected year’s net operating income into an estimate of value by either (a) dividing the NOI by a rate or (b) multiplying income by a factor. “Yield capitalization”, also known as a discounted cash flow (DCF) analysis, is the second method of capitalizing an income producing property’s net income into an estimate of value.

DCF processes a *series* of annual net operating incomes projected over a typical holding period of ownership. The appraiser goes through exactly the same steps for either Direct or Yield capitalization in projecting the project’s *first year income and expense* and resulting NOI. But that is where the similarity ends.

“For Lease” Properties

The appraiser will then make a series of assumptions as follows:

Holding Period – The appraiser must first estimate a typical investor’s holding period of ownership over which to project the NOI. This period should mirror expectations of investors in the market and can be supported through discussions with buyers and sellers.

Income and Expense Projection - The appraiser must also make assumptions about what is going to happen to income and expense over that holding period. Each line item is carefully evaluated for future expectancy.

1) Rental Income & Vacancy Projection

- a) *Occupied Space* – If the property is subject to one or more leases, the appraiser must evaluate whether the current lease(s) reflect(s) current market rental conditions in terms of rental rate and terms to determine the likelihood of the income continuing. Consideration is also given to the prospect of the tenant renewing its lease vs. vacating the space at the expiration of term. If the space is vacated, the appraiser must decide (i) how long the space is likely to remain vacant, (ii) whether the space can be rented with only minor refurbishment or a complete demolition and re-build and payment of a broker’s commission; and (iii) the new market rent and terms of a new lease.
- b) *Vacant Space* – If any of the space is vacant, the appraiser must evaluate the same criteria as in paragraph (a) above.
- c) *Absorption Period* – In estimating the amount of time it will take to lease vacant space or release occupied space that will be vacated, the appraiser must look at current and future market conditions. This is where many appraisals fall short. Reliance on historical data may no longer be a viable approach in today’s economy. Without an accurate understanding of existing and future supply, and future demand in the market, this assumption will be flawed.

- 2) Expense Projection** – Each expense line item is carefully reviewed.
- a) *Operating Expenses* – In some cases, the appraiser may decide the item will increase in line with the CPI index or the rate of inflation. In other cases, the appraiser may choose to vary the rate of change based on other data he has available. Each line item should be carefully compared to (a) historical data for the subject; (b) published expense survey data; and/or (c) expense comparable data from the appraiser's files.
 - b) *Replacement Reserve* – The reader will recall from last month's discussion that oftentimes items from this category are lumped into the "maintenance and repair category". While that may be appropriate for a Direct Capitalization analysis, those items need to be removed from the M&R category and placed into their appropriate line item here.
 - c) *Rollover Expenses* – As with paragraph (b), items of this type need to be separately projected in line with the tenant lease expirations from the Income Projection. The costs included here are space refurbishment or re-build, and payment of broker leasing commissions.
- 3) Discounting Process** – Once the above assumptions have been made, the appraiser has a projection of income and expense for the property over the holding period selected, usually five to ten or eleven years. The appraiser now conducts a two-step analysis to process the projected net operating incomes into an estimate of value.
- a) *Selection of an Appropriate Discount Rate* – The discount rate is the investor's expected rate of return expected over the holding period. The reader is referred to last month's discussion of risk and building up a rate to reflect market conditions.
 - b) *Application of the Discount Rate* – This is a two-step process.
 - i) *Series of Net Operating Incomes (PV)* – The series of net operating incomes developed over the holding period are now multiplied by the discount factor for the year in which the income is projected to account for the time value of money. For example, the first year's NOI would be multiplied by the discount factor for the first year. The second year's NOI would be multiplied by the discount factor for the second year, and so forth.
 - ii) *Reversion* – The proceeds of re-sale of the property at the end of the holding period are referred to as the reversion. Thus, the proceeds must first be estimated and then discounted.
 - (1) Investors typically assume that the value of the property at the end of their projected holding period is the next year's NOI capitalized (using direct capitalization) at that period's appropriate capitalization rate.
 - (2) Some investors will further assume that there will be costs associated with the sale including some refurbishment of the property, or deduction of a sale commission.
 - (3) Finally, the net proceeds are discounted back to present value at the discount rate applicable to the period in which the sale occurs.
 - c) The resulting discounted cash flows projected along with the discounted value of the reversion are summed to measure the value of the property.

"For Sale" Properties

The discounted cash flow analysis of "for sale" property (condominium projects and subdivisions) is very similar to that of "For Lease" property. The major differences are:

- 1) **Income & Expense Projection** – The income will result from sale of portions of the property rather than from rental of portions the property.
 - a) *Sale Price* – The appraiser surveys the market to determine an appropriate retail consumer sale price for the commodity (lots or units) being sold. If there are similar projects in the market, this piece is fairly straightforward.
 - b) *Sales Velocity* – The market survey will also tell the appraiser how quickly the individual pieces will sell at the projected retail value over what is referred to as a sell-off period. This projection is more difficult to support, especially in declining markets where sales may be few and far between.
 - c) *Expense Analysis* – The costs associated with holding and operating the property are then deducted over the projected sell-off period. The types of expenses to consider include marketing expense, closing expense, profit, etc.
 - d) *Discounting of Annual Cash Flow* – Once the net incomes from sales have been projected, the series is discounted exactly as discussed under the "For Lease" property.
 - e) *Reversion* – Typically, there is no reversionary interest because at the end of the holding period, all of the individual components have been sold.

Now let us look at market influences.

RAW LAND

Most appraisers will confirm that, even in good economic times, raw land can be the toughest property type to appraise. In current economic times, with almost no sales occurring since 2008, this is certainly one of the most difficult property types to appraise.

Even without recent sales, the appraiser has the following ways to tackle this problem:

- Analyze pre-2009-10 sales and apply a **supported** market conditions adjustment to arrive at a current indication of value;
- Discount a future market value for the number of years projected to achieve market equilibrium; and
- Apply the land residual technique.

These are not the only ways to value raw land today, but they are the most common methods we see in the appraisals we review nationwide. Each method will be explained below.

Adjusting Pre-2009-10 Comparable Sales

This is the most comfortable technique for appraisers as they are used to adjusting comparable sales for various factors, including market conditions. Of course, past market conditions adjustments have usually been to the upside.

The key in reviewing this method is to be satisfied with the support for the market conditions adjustment. As in the past, too often we are simply seeing a -10 percent or -20 percent or such without any attempt at supporting these figures.

As noted in the second article in this series, there are several ways to support a market conditions adjustment:

- Sale and Re-Sale of the same property
- Paired Sales – Sale of a similar property in 2007 or 2008 compared to a 2009-10 sale
- Survey of market participants – e.g., brokers
- Change in cap rates from 2007 to 2008 to 2009-10
- National price indexes

Due to the lack of raw land sales, the first two methods above probably will not be available that often. The last three methods can be used with some judgment needed as to how the change in market conditions for improved properties relates to that for raw land – as we'll explain in the land residual technique below, typically the adjustment derived from improved properties is significantly less than what needs to be applied to raw land.

Discounting Equilibrium Value

This method of valuing raw land might best reflect how market participants are currently determining the prices they are willing to pay.

The logic is that sometime in the past, the market was in equilibrium and the prices being paid for subject-type land reflected what land was worth to make development feasible. The second part of the puzzle is estimating how long it will be before the market for the subject is at equilibrium again.

In order for this method of valuation to be well developed and to provide a credible answer, the following steps are critical:

- A local appraiser who has been active in the market for 10-20+ years will need to be hired – he/she is best suited to determine when the market last had a balanced supply and demand; and
- A detailed market analysis is needed to support how many years into the future it will be before equilibrium should once again occur. This element will make the appraisal somewhat more costly than without it; however, the answer will not be supported without it.

As an example, the appraiser determines that sales in 2003-2004 best reflected the local market having supply and demand in balance – for many markets, sales from 2005-2008 occurred when demand was excessive in comparison to supply. The appraiser analyzes the 2003-2004 sales as if he or she was appraising the subject back then. Let us also assume the appraiser arrives at a value estimate of \$10 per square foot.

In a detailed market analysis that analyzes future supply and demand, he concludes that it will be three to five years before balance is going to be achieved again. Therefore, the logic is a market participant would say that the subject is worth \$10/sf when it is feasible to build, but that should not occur for three to five years – so what price do I pay today?

This is a basic time value of money (discounting) problem with consideration being given to holding costs in addition to holding risk. There is very little support for what discount rate to apply in this situation. In the last down cycle 20 years ago, we recall market participants using 1 percent per month to account for holding costs and risk. We have heard mention of that today, also. The appraisals we review use rates from 9 percent to 18 percent for the most part. Any figure in that range is probably reasonable and acceptable.

Let us use 12 percent for this example. Discounting \$10/sf at 12 percent for three to five years yields a value range from \$5.67 to \$7.12/sf. If we reviewed such an appraisal and the conclusion was \$6-\$7/sf, then we would find the report acceptable.

Land Residual Technique

There are six techniques an appraiser can use to value raw land. For almost all appraisals, we usually just see the Sales Comparison Approach. This is all that is needed – except in times when there are no recent sales.

We mention this technique, not just because it is valid in today's market, but also because bank examiners requested this method of valuation be presented to appraisers in a recent Appraisal Institute seminar (Appraising Distressed Properties). Therefore, we can assume that as bank examiners review raw land appraisals they will be looking for a land residual technique if there are no recent comparable sales.

As shown in the example below, the land residual technique is a method of estimating land value in which the net operating income attributable to the land is isolated and capitalized to produce an indication of the land's contribution to the total property.

	Spring 2008	Fall 2009
Highest & Best Use	Apartment Development	Apartment Development
Potential Gross Revenue	\$500,000	\$515,000
LESS Vacancy Loss	<u>(\$25,000)</u>	<u>(\$51,500)</u>
Effective Gross Revenue	\$475,000	\$463,500
<u>LESS Operating Expenses</u>		
Real Estate Taxes	\$50,000	\$45,000
Other Operating Expenses	<u>\$125,000</u>	<u>\$128,750</u>
Total Operating Expenses	<u>(\$175,000)</u>	<u>(\$173,750)</u>
Net Operating Income	\$300,000	\$289,750
Overall Cap Rate	<u>7.0%</u>	<u>8.5%</u>
Indicated Property Value	\$4,285,714	\$3,408,824
Less Construction Costs	(\$3,000,000)	(\$2,700,000)
Less Expected Profit	<u>(\$500,000)</u>	<u>(\$400,000)</u>
Residual to the Site	\$785,714	\$308,824
Estimated Loss in Land Value		(\$476,890)
Percentage Loss in Land Value		(60.7%)
Percentage Loss in Property Value		(20.5%)

The assumptions in this example will differ from market to market and by property type. That aside, the example shows how to perform the land residual technique and that if improved properties have declined a certain percentage, the underlying land has declined in value significantly more.

Our reviews of residential land appraisals over the past year have shown declines of 60 percent to 90 percent in value from pre-2009 levels. The land residual technique best explains how such declines have occurred.

Summary of Raw Land Value Techniques

Three methods of supporting raw land value in today's market were presented above. This does not mean all three techniques must appear in every appraisal. Each assignment is different and the appropriate technique will depend on specifics regarding the subject property and the availability of market data. Most important from a client's perspective is to expect such support when reviewing a land appraisal today – especially given the likelihood of a very large decline in value from the last appraisal.

RESIDENTIAL CONDOMINIUM AND SUBDIVISION PROJECTS

For the most part, three project types are causing significant problems for lenders and borrowers: the new/newer high-rise condominium project (especially in second home markets); the apartment complex that was converted to condominiums between 2006 and 2009; and residential subdivisions of all shapes and sizes. The appraisal of each is about the same so the discussion below applies to condominiums and residential lots.

The basic data needed for an appraisal includes:

- Retail sales from comparable projects to estimate retail prices for the subject
- Market analysis to forecast a sellout period
- Expenses to be deducted during the sellout period
- Market support for a discount rate/internal rate of return

Questions to be asked while you review the appraisal report include:

- Were the retail prices reduced enough from prior levels to induce market activity?
- Are the estimated retail prices in a range that is affordable for the given market?
- Was a detailed market analysis provided to support future absorption?
- Is the projected absorption realistic based on economic forecasts?
- Are total expenses reasonable?
- Is the internal rate of return (IRR) supported by market surveys?

Retail Prices – For almost all projects, retail prices must be lowered from the developer's original 2006-2008 prices. We have typically seen 20 percent to 40 percent reductions made by developers and appraisers. For some projects, this was enough to start or sustain sales. However, for many projects such reductions have not resulted in any sales.

It is important to consider the new price level and how it fits in the local marketplace. Units priced above \$300,000 in many markets are difficult to finance in today's market. Units under \$200,000 still seem to have an active market. Condominium projects in vacation markets may have an extended period before buyers can afford to purchase second homes. We should not assume a price reduction guarantees an increased sales pace.

Absorption – Projecting subject absorption is difficult, but a solid market analysis that considers future demand and the existing and future supply of units will provide support for the sellout period. Numbers can be concluded from any set of data – but some logic needs to be applied in this area of the report. Economic forecasts are nearly unanimous that 2010 is not going to be a good year for housing or employment.

As such, we look for absorption to be slow, or even nil, in the first year with increases occurring gradually in subsequent years. Some appraisers believe no sales should occur in the first three to six months for projects that have been at a standstill the past few years – the logic being it will take that long just to refocus marketing. Houses and condominiums priced at \$150,000 or less seem to be the lone bright spot in sales pace.

Expenses – We generally see expenses between 8 percent and 12 percent of total revenues. The percentage could be higher for condominium projects due to homeowner association dues. We have not seen much of a change in expenses during this down cycle. In reviewing a report, simply make sure expenses are deducted and are at a level that is reasonable.

Discount Rate/Internal Rate of Return – If entrepreneurial profit is included in the discount rate, then the discount rate and internal rate of return (IRR) are the same. If entrepreneurial profit is deducted as a line item expense, then the rates differ.

As has always been the case, this area of the analysis remains the least supported and most controversial topic in the valuation of these properties. We are aware of only two national publications that provide discount rates/IRRs for residential subdivisions: the Korpacz Survey and RealtyRates.com. Only RealtyRates.com provides discount rates for condominium projects.

Most appraisers will present one or both of those surveys in their reports. Korpacz applies to institutional grade properties so this survey is not presented as much as it does not apply to most subdivisions appraised for community banks. RealtyRates.com is a regional survey that covers both residential lots and improved condominium projects so it will appear in most reports.

Regretfully, very few appraisers survey local/regional market participants for this information. The few local surveys that we have seen tend to support the published surveys with IRRs ranging from 20 percent to 35 percent for the most part. This range is up from the 15 percent to 25 percent range we saw pre-2009.

As for how to deal with entrepreneurial profit, we always fall back on the requirement that appraisal conclusions be market supported. Many appraisers deduct entrepreneurial profit as an expense when appraising residential lots. You can ask the simple question – Where is your market support for that rate of profit and that discount rate? We have yet to see either item supported by market data. RealtyRates.Com, Korpacz, and local/regional surveys by appraisers all show that market participants include profit in their rate of return and do not deduct profit as a line item expense. Thus, market support is only available for use of an IRR.

The above would also apply to condominium projects, except RealtyRates.com provides discount rates that are exclusive of entrepreneurial profit. Therefore, for condominium projects an appraiser can support their discount rate from market data (RealtyRates.com) and deduct profit as a line item expense. My past conversations with the owner of RealtyRates.com indicated that a 12 percent to 15 percent (based on total revenues) profit should be deducted.

SUMMARY

These property types were difficult to value in good economic times and they are now near impossible to appraise. Combine that with value declines of 40 percent to 90 percent and there are many concerned market participants. These were two of the most risky property types that achieved inflated price levels between 2005 and 2008. The subsequent decline has taken away the inflated prices while also increasing the required return. This combination has resulted in large value declines.

Appraisers should go the extra mile to support their appraisals as significant decisions are being made by banks and examiners are reviewing these loans and appraisals closely. Banks base their loan loss reserves and estimates of impairment on the appraised values they receive—these items affect earnings and the viability of the institution going forward.

From the bank's perspective, it is imperative to engage the most competent appraisers in these property types. Although the appraisal fee for a supported appraisal with a quality market analysis is higher than normal, it usually is minor in comparison to the multi-million dollar decisions being made. However, if you do order and pay for a quality appraisal, you should ask the questions in this article to ensure that you have a well supported value conclusion to rely on.

Our last piece of advice is what we always recommend—communication between appraisers and bankers. These are complex loans and properties and it takes a lot of communication **before** the assignment even starts to understand the problem at hand and, more importantly, what answers and information the bank actually needs. Appraisers can provide appraisals that supply a lot more information than just a value conclusion. However, as a client, the bank needs to explain its situation and what it is trying to achieve. Communication between the appraiser and the bank is key to developing an appraisal that accurately reflects the true market value of the property and assists the bank in its decision process.

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