# VALUATION ISSUES IN FRACTIONAL REAL ESTATE INTERESTS AND PARTITION COST ANALYSIS – PART II

This article develops a probability weighting methodology for evaluating and supporting an appropriate valuation discount for undivided tenancy in common real estate interests. Traditional cost-of-partition models do not reflect the most probable outcome, but instead the least likely and least profitable outcome for a co-owner seeking a liquidity event. We also develop a supportive methodology for estimates of partition likelihood and discount rates, both of which are also consistent with the issues raised in the *Ludwick*[1] tax court case.

### *Discount Rate via Survey Method*

The discount rate appropriate for the cost of partition analysis is only tangentially comparable to the time value of money on a related discount rate for several reasons. First, a cash flow applicable to leased real property usually reflects contractual lease income, with arm's-length leases for a typical 10-year period, and coupled with a property reversion. By contrast, a partition action is a hostile action involving recalcitrant co-owners, unpredictable attorneys and a judge. Second, the buyer pool for passive investments in leased properties is much larger than that for undivided interests that may require litigation and court testimony. Third, leased real properties typically produce cash flow and can be leveraged with debt,[2] whereas investments in undivided interests produce negative cash flows (net of litigation expenses) and cannot be financed with conventional lenders.

[1] Ludwick v. Commissioner, T.C. Memo. 2010-104 (May 10, 2010).

[2] While the co-owners may encumber a property, a buyer of a fractional interest may not finance his investment without the consent of the non-selling co-owner.

In real estate valuation, the least risky properties are real properties leased for over 20 years to a "credit" tenant, while the riskiest are renovation properties or vacant properties that require tenant improvements and leasing. Subdivision developments are also very risky. Moreover, there is survey data available for these development types that could serve as proxies when calculating an appropriate discount rate in a cost-of-partition model.[3]

The riskier property development types command higher discount rates and suffer from many of the same problems as undivided interests, such as scant available financing, poor cash flow, poor buyer appeal, and intensive management requirements.

One investor survey, Realtyrates.com, also provides discount rates obtained from lenders and developers for condominium and co-op subdivisions. Based on a survey of the 1st quarter of 2005, I estimated the appropriate discount rate for the Subject Property at 15 percent.[4]

Another reason for a risk premium that is above that required for an institutional property is the imprecision implicit in both the cash flow analysis and the probability-based decision analysis. That is, for a sale of an undivided interest, the seller usually cannot estimate, with reasonable certainty, the outcomes related to the investment decision. Consequently, more sophisticated models (such as case-based decision analysis and qualitative scenario analysis) and more research is required[5] to make an accurate decision relating to investment choice and pricing.

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[3] *See* Realtyrate.com and various large appraisal companies that include surveys in their subdivision appraisal analysis.

[4] *See* Realtyrate.com, *Developer Survey, 1st Quarter 2005* (Bradenton: Realtyrate.com, 2005), 5. The 15 percent rate approximates the mean discount rate for actual rates related to "Garden/Townhouse, Resort, and Second Homes" in the California/Pacific region. This category was selected because of the governmental approval process required for such developments, and this factor is similar to that of the partition action process.

[5] *See* Hugh Courtney, Dan Lovallo, and Carmina Clarke "Deciding How to Decide," Harvard Business Review (November 2013):65. Specifically, a plaintiff in a partition action (a) cannot know, with a high degree of certainty, what it takes to succeed and (b) cannot easily predict the range of possible outcomes.

***Impact of Various TIC Agreements***

Each fractional interest valuation is greatly impacted by the relevant TIC agreement of lack thereof, and we recapped the three most prevalent scenarios. In TIC Valuation Example A, the Subject Property in the *Ludwick* case was encumbered by a TIC agreement that enhanced its marketability similar to a 100-percent ownership interest. In TIC Valuation Example B, a property without a TIC agreement suffers from a moderate impairment of marketability because of an inability to unilaterally market the same property. In TIC Valuation Example C, a property with a typical TIC agreement suffers from a significant impairment of marketability because of a partition action prohibition, coupled with an inability to unilaterally market the same property.

For TIC Valuation Example B, which is very common, we developed a reconsidered method. For TIC Valuation Example C, a suitable valuation would not rely upon a cost-of-partition method.

***Reconsidered Valuation Model – Property Without Any TIC Agreement***

In response to the specific methodology offered by the *Ludwick* court, I refined and developed an alternative valuation model that uses three alternatives: property sale at par, property sale at discount, and sale via partition action. This alternative model does not reflect all of the facts of the *Ludwick* case, as it does not include an adjustment for any tenancy in common agreement. My model develops and supports a three-prong, comprehensive analysis that applies to fractional interest valuations whereby the property is unencumbered by any prohibition of any partition action. The Subject Property's atypical TIC Agreement, on the other hand, fails to impair marketability, and each co-owner enjoys the enhanced liquidity from a right to market the entire Subject Property, and not just a fractional interest.

## Alternative A – Sale at Par

The first alternative is that a non-selling co-owner, or another buyer, pays the pro rata share of the real property (net of costs of sale). I applied a 20 percent probability to this alternative, which reflects a minimal to moderate probability. Absent any buy-sell

agreement between the co-owners, this alternative seems unlikely. While many co-owners eventually sell at par, it may take months to negotiate and require other personal or financial concessions unrelated to the instant transaction. Any assumption that a non-selling co-owner will liquidate a long-term realty investment because of the whims of the selling co-owner, especially a third party, is speculative. Consequently, I calculated Alternative A as follows:

| | |
|---|---|
| Fair Market Value of the Subject Property | $7,250,000 |
| Pro Rata Share@50% | $3,625,000 |
| Less: Cost of Sale @ 6% | ($217,500) |
| Indicated Value via Alternative A | $3,407,500 |
| Rounded to | **$3,400,000** |

## Alternative B – Sale at Discount

Second, I used another alternative that is similar to the first one, but I used a valuation discount of 20 percent, plus six percent cost of sale (about 26 percent total). This rate is supported by the undivided interest comparables. We also applied a 45 percent probability to this alternative, as this is the most reasonable alternative. This alternative is most likely, because (a) the Subject Property sale may incur unacceptable tax consequences for the co-owners (capital gains taxes for non-spouses), and (b) the selling co-owner is a 50 percent owner who suffers from an onerous negotiating disadvantage for the Subject Property. We calculated Alternative B as follows:

| | |
|---|---|
| Fair Market Value of the Subject Property | $7,250,000 |
| Pro Rata Share@50% | $3,625,000 |
| Less: Cost of Sale@6% | ($217,500) |
| Net Property Proceeds | $3,407,000 |
| Less Valuation Discount @ 20% | ($681,500) |
| Indicated Value via Alternative | $2,726,000 |
| Rounded to | **$2,730,000** |

## Alternative C – Sale Via Partition Action

Thirdly, I used a cost of partition analysis similar to that of the *Ludwick* court, except I used a 15 percent discount rate. For the two-year cash flow, I assumed a four percent growth rate for rental income (none for the Subject Property) and operating expenses. Similar to the *Ludwick* court, I also used a three percent property growth rate and a six percent cost of sale, which I based it upon the projected sale price. The probability of Alternative C is estimated at 35 percent, which makes it a moderately likely alternative. This is because there is (a) no evidence of funds available to pay litigation expenses, and (b) no evidence of financial ability to either buy-out as an alternative to sale, or fund the marketing period for the Subject Property. In its model, the *Ludwick* court used a discount rate of 10 percent, presumably because of the restrictive tenancy in common agreement. My alternative model does not reflect this restriction and I used a rate of 15 percent. The cost of partition model's assumptions are recapped as follows:

| Assumptions for Model | |
|---|---|
| Date of Value | February 2005 |
| F.M.V. of Subject Property | $7,250,000 |
| Annual Property Growth Rate | 3% |
| Annual Expense Growth Rate | 4% |
| Cash Flow Period | 2 years |
| Costs of Sale | 6% |
| Annual Subject Property Expenses | $175,000 |
| Subject Property Discount Rate | 15% |

Alternative C's cash flow is presented in Exhibit 1.

| *EXHIBIT 1*<br>*CASH FLOW MODEL FOR ALTERNATIVE C* | | | | | |
|---|---|---|---|---|---|
| Year | Operating Cash Flow | Partition & Selling Costs | Gross Sale Proceeds | Total Cash Flow | Present Value |
| 1 | -$175,000 | -$18,125[6] | 0 | -$193,125 | - $167,935 |
| 2 | -$182,000[7] | -$242,875[8] | $3,845,763[9] | $3,420,888 | $2,586,683 |
| Indicated Value of Alternative C | | | | | $2,418,748 |
| Rounded to | | | | | **$2,420,000** |

The weighted average of these three alternatives is calculated as follows:

| | |
|---|---|
| Alternative A - $3,400,000 x 20% prob. = | $680,000 |
| Alternative B - $2,730,000 x 45% prob. = | $1,228,500 |
| Alternative C - $2,420,000 x 35% prob. = | $847,000 |
| Indicated Value via Weighted Average Method | $2,755,500 |
| Rounded Effective | $2,760,000 |
| Discount Valuation | 23.9% |

All three alternatives relate to the investment calculus of a potential buyer. That buyer may buy the fractional interest outright, or that buyer may buy the Subject Property via a mutually coordinated sale. In any event, no consideration is warranted for the investment horizon of the potential buyer, who may want to lease it out or occupy it over a long holding period.

***Concluding Comments***

In this article I have offered support and methodologies required for a supportable discount analysis applicable to undivided property interests. As the *Ludwick* tax court decision shows, both the courts and IRS apply a variety of tests when analyzing such interests. Moreover, these entities have a tendency to challenge appraisers' assumptions inconsistently, varying greatly over time and by geographic region. As such, it is important

[6] Calculated as negative $36,250 x 50%.
[7] Calculated as negative $175,000 x 1.04.
[8] Calculated as negative ($36,250 x 50% x 1.04) + ($7,250,000 x 50% x1.03 x 6%).
[9] Calculated as $7,250,000 x 1.03 x 1.03.

for appraisers to utilize multiple approaches when completing a discount report. Specifically, the tax courts have frequently emphasized the cost-of-partition method, partly because of the judges' inexperience with business valuation and discount rates. In this article I offered sources and methodologies required for a supportable discount analysis applicable to fractional property interest valuation.

**About the Author**

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