Valuing a Real Estate Undivided Interest in the Marital Estate

ROBERT F. REILLY

Many marital estates may own undivided interests (also called fractional interests) in real estate. When the marital estate includes such real estate interests, these undivided interests may have to be valued for equitable distribution and other family law purposes. This article summarizes the characteristics that affect the value of real estate fractional interests. It describes the generally accepted valuation approaches and methods that the valuation analyst typically considers when valuing fractional interests for family law purposes.

REAL ESTATE FRACTIONAL INTEREST

A real estate fractional interest, also called a tenancy in common interest, exists when two or more co-tenants each own a separate fractional share of an undivided real estate parcel. For purposes of this discussion, the terms *fractional interest* and *undivided interest* are used synonymously. Unlike a joint tenancy ownership, there is no right of survivorship among tenants in common. A tenancy in common requires only the unity of possession of the subject real estate.

In the absence of a contractual agreement between the co-tenants, each co-tenant may possess and enjoy the entire real estate property. For example, each co-tenant has the right to use and to enjoy a share of the property's income. Although each co-tenant has an equal right to possess and enjoy the real estate, a fractional owner cannot (1) exclude the other co-tenants or (2) designate any portion of the real estate as his or her own.

PROPERTY-SPECIFIC LEGAL INTEREST CONSIDERATIONS

The valuation analyst will typically consider the following property-specific legal interest factors in the fractional interest valuation.

State Statute Co-Tenant Rights, Privileges, and Obligations

- *Partition*—A co-tenant typically may compel a partition of the real estate. When the real estate is partitioned, then each co-tenant takes a distinct part of the real estate—according to the respective ownership interest.

  The purpose of a partition is to allow the tenants in common to sever their ownership. The partition enables each tenant to take possession, enjoy, and improve a separate real estate parcel at his or her own pleasure. If, because of its physical or functional characteristics, the real estate cannot be equitably divided in-kind, then:

  — the entire property may be ordered by a court to be sold and

  — the entire property sale proceeds may be ordered by the court to be divided among the co-tenants.

- *Conveyance and Sale*—Tenants in common each hold separate ownership interests. These separate ownership interests can be sold, conveyed, or transferred without the consent of the other fractional interest owners. However, one tenant in common cannot bind the nonconsenting co-tenants in any disposition of the real estate undivided interest.

- *Contribution and Costs*—Each co-tenant also has a right to a financial contribution from the co-tenants. For example, each co-tenant is responsible for the costs associated with the co-tenancy interest, including real estate taxes and property insurance.

Written Agreement of Co-Tenancy

The greater the number of undivided interests in the real estate, the greater the potential for co-tenant conflict with respect to how the real estate is managed. Many potential co-tenant conflicts could be avoided if the co-tenants execute a written agreement that describes how the real estate will be used or managed.

Debt Obligations

The undivided interest hypothetical buyer will typically consider whether the real estate is encumbered by a mortgage loan. In addition, the hypothetical buyer will typically be concerned with:

- whether the co-tenants are jointly and severally liable for the mortgage obligation,
- whether the mortgage obligation is assumable by the undivided interest buyer,
- whether the partition of the real estate or a sale of the undivided interest results in the call of the mortgage obligation, and
- whether the undivided interest holder is at risk of losing his or her interest if the lender forecloses on the real estate.

Ability to Subdivide the Real Estate Parcel

An undivided interest hypothetical buyer will generally prefer an interest in a real estate parcel that is capable of being subdivided rather than in a real estate parcel that is not capable of being subdivided.

Historical Sales of Undivided Interests

Although such sales are uncommon, any history of arm's-length sales of the real estate undivided interests may be relevant to the family law valuation.

Restrictions on the Transferability of the Undivided Interest

Any restrictions on the transferability of the real estate may be relevant to the family law valuation.

Lack of Sufficient Income to Cover Operating Expenses

The valuation analyst will typically consider the income-producing capacity of the real estate, and will typically consider whether there is sufficient property gross income in order to cover the real estate property tax, property maintenance expense, and any other operating expenses.

GENERALLY ACCEPTED VALUATION APPROACHES AND METHODS

Valuation analysts typically apply the following valuation approaches and methods to value a fractional interest:

- the market approach and the sale transaction analysis valuation method and
- the income approach and the partition analysis valuation method.

These two generally accepted valuation methods are summarized below.

MARKET APPROACH—THE SALES TRANSACTION ANALYSIS METHOD

This valuation method is based on a comparison of the fractional interest to empirical studies of data regarding actual arm's-length sales of fractional interests.

First, the valuation analyst obtains a fee simple interest market value appraisal of the real estate from an independent real estate appraiser.

Second, the analyst reviews (1) the subject real estate physical, fractional, and economic characteristics and (2) the relevant real estate market dynamics. These property-specific and market-specific considerations are typically described in the real estate appraisal report. In addition, the valuation analyst may conduct primary research of the relevant market influences from other publicly available sources.

Third, the analyst presents the real estate appraisal as a simple adjusted net asset value (ANAV) indication. That is, the valuation analyst reduces the real estate fee simple market value indication for (1) any outstanding mortgages or (2) other encumbrances. The fee simple interest market value minus the outstanding mortgage/other encumbrance amount is the real estate ANAV.

Fourth, the analyst compares (1) this real estate ANAV indication to (2) published studies of actual undivided interest sale transactions. Many of these published studies are summarized in the next section. In this comparison procedure, the valuation analyst "fits" the subject real estate into the empirical sale transaction data. This comparison of the real estate to actual sale transaction data allows the valuation analyst to select a property-specific undivided interest valuation discount.

Fifth, the undivided interest value is estimated as (1) the total real estate fee simple market value multiplied by (2) the undivided interest ownership percentage. The product of this multiplication is the undivided interest pro rata allocation of the entire property market value.

Last, the analyst multiplies (1) the pro rata allocation of the property market value by (2) the selected undivided interest price discount. The product of this last multiplication is the undivided interest value indication of the undivided interest, according to the sale transaction analysis method. The selected property-specific valuation discount typically reflects a combined price adjustment related to: (1) a discount for lack of control (DLOC) and (2) a discount for lack of marketability (DLOM).

Exhibit 1 illustrates a simplified example of the market approach sale transaction analysis valuation method. This valuation method—and this simplified illustrative example—are based on the analysis of fractional interest sale transaction data. In *Exhibit 1*, Harry Husband owns a 40 percent undivided interest in the Dockside Warehouse. It is assume that the appropriate valuation date is December 31, 2009.

Sale Price Discount Empirical Data

A number of empirical studies have quantified the price discounts associated with actual undivided interest sale transactions. The studies generally indicate that fractional interests in properties that generate significant income tend to sell for a below average price discount. They also generally indicate that larger fractional interests (i.e., a greater than a 50 percent ownership interest) tend to sell for a below-average price discount. Several of these studies of real estate fractional interest sale data are summarized below.

Harris-McCormick-Davis Study

In an article published in the December 1983 issue of the American Society of Appraisers *Valuation*, the authors described a survey of undivided interest sale transactions.[1] The fractional interest sale transactions were between unrelated buyers primarily located in the Southeast. The 21 sale transactions in the survey indicated an average price discount of 32.05 percent, with a standard deviation price discount of 8.29 percent.

The sale transaction price adjustments ranged from a price premium of 5.56 percent to a price discount of 86.95 percent. Both of these two extreme sale transactions were considered to be "unusual circumstances" and were discarded by the authors.

Healy Study

Real estate appraiser Martin J. Healy Jr. authored a study of undivided fractional interest sale transactions published in *The Appraisal Journal* in July 1988.[2] The Healy study involved "nearly 100" fractional interest sale transactions, all "primarily in the vicinity of Portland, Oregon." Healy found numerous non–arm's-length motives for a number of the undivided interest sale transactions. Therefore, Healy rejected some of the sale data as not being characteristic of arm's-length sale transactions.

Of the fractional interest sale transactions that were retained in the sample, the average price discount was 23.5 percent; and, the range of price discounts was between 3 percent and 52 percent.

Patchin Study

Real estate appraiser Peter J. Patchin authored a study of undivided interest sales in *Real Estate Issues*, Fall/Winter 1988 edition.[3] Patchin collected fractional interest sale transactions from real estate appraisers' records for properties located in Minnesota, Texas, California, and other states in the Southwest.

The total number of fractional interest sale transactions in the Patchin study was 54, with some 29 of these sale transactions being apartment limited partnership interests. The average price discount concluded in this study of fractional interest sales was 36.8 percent. The range of fractional interest sales price discounts was between zero percent and 82.4 percent.

Peterson-Hansen-Klafter Study

Real estate appraiser William D. Peterson prepared an analysis of undivided interest arm's-length sale transactions. The fractional interest sale transactions occurred in the Tucson area from 1980 through 1986. Peterson also included data from a study provided by appraisers John T. Hansen and Mark H. Klafter based on sale transactions in the same area through 1983.

The number of fractional interest sale transactions included in the Peterson study totaled 13. The average price discount indicated by these transactional data was approximately 50 percent. The range of the sale price discounts was from 23.4 percent to 83.45 percent.

Exhibit 1

Value of a 40% Fractional Interest
Harry Husband Illustrative Example
Market Approach
Sale Transaction Analysis Valuation Method
As of December 31, 2009

Name of the Subject Property

40% Fractional Interest in Dockside Warehouse
1234 County Highway
Oceanside, New Jersey

Description of the Subject Property

Type:	200,000 square foot, one story warehouse
Location:	Oceanside, New Jersey
Year Built:	1998
2009 Property Tax Assessment Value:	$14,000,000
Most Recent Sale of the Subject Property:	none

Estimate of 40% Undivided Interest Value	Value Indication
Indicated Fee Simple Interest Market Value Appraisal of the Subject Property [a]	$15,000,000
Times: Subject Undivided Interest Ownership Percentage	40%
Equals: Pro Rata Allocation of the Entire Property Fee Simple Market Value	6,000,000
Selected Valuation Discount for the Subject Undivided Interest at 25% [b]	(1,500,000)
Indicated Value of the Subject Undivided Interest	**$4,500,000**
Indicated Value of the Subject Undivided Interest (rounded)	**$4,500,000**

Notes:

[a] Based on a fee simple interest market value appraisal by the Accurate Appraisal Company as of December 31, 2009.

[b] Based on the valuation analyst's comparative assessment of the subject undivided interest to the published evidence of fractional interest actual sale transactions. These published studies of actual sale data indicate typical undivided interest price discounts within a range of 15% to 35%. Several of these published studies of undivided interest transaction data are summarized in the Sale Price Discount Empirical Data section of this discussion.

Hall Study

Business valuation analyst Lance Hall of the FMV Opinions valuation consulting firm prepared a study that was published in *Valuation Strategies* in 1998.[4] The FMV Opinions study included undivided interest sale transactions that occurred over a 20-year period. The FMV Opinions study included 30 such undivided interest sale transactions. The study concluded a mean price discount of 34.8 percent and a median price discount of 32.5 percent.

Humphrey Study

Real estate appraisers Walter and Bruce Humphrey conducted a study of 24 fractional interest sale transactions.[5] This study was published in *The Appraisal Journal* in 1997. Based on these 24 undivided interest sale transactions, the observed price discounts ranged from zero percent to 67 percent.

The Humphreys did not develop a central tendency price discount from the study data. However, the Humphreys suggested a formula for quantifying a fractional interest price discount. Also, the Humphreys suggested that 50 percent was the threshold price discount for undivided interests.

Eckhoff Accountancy Corporation Study

The Eckhoff Accountancy Corporation Study was published in *Valuation Strategies* in 2003.[6] Accounting firm partner Ted Israel analyzed 61 fractional interest sale transactions. The fractional interest properties were located in seven states and included (1) undeveloped land, (2) agricultural properties, and (3) commercial and multifamily residential rental properties.

In the Eckhoff Accountancy Corporation study, the average price discount was 37 percent, and the median price discount was 38 percent.

Willamette Management Associates Studies

Willamette Management Associates (WMA) prepared a number of fractional interest discount studies in various parts of the country. In one unpublished study, WMA reviewed all real estate transfer tax records for two counties in the state of Washington during 1985–86. Of the total 23,000 real estate transactions, only 50 (0.22 percent, or one in every 460 transactions) were undivided interest sale transactions. Of the 50 fractional interest sales, only nine transactions were at arm's length. The average price discount associated with these transactions was approximately 15 percent, with a range of a 16 percent price premium to a 55 percent price discount.

In summary, the evidence from all of these empirical studies supports the application of an undivided interest valuation discount pro rata allocation of the entire property fee simple market value. The undivided interest valuation discounts concluded in these various studies is in the range of 15 to 35 percent.

INCOME APPROACH—THE PARTITION ANALYSIS METHOD

The second generally accepted method for a real estate undivided interest is an income approach valuation method. In this method, the valuation analyst quantifies the expected costs (i.e., out-of-pocket expenses and investor opportunity cost) to physically partition the real estate.

This analysis typically includes two cost components. The first component is the cost to bring a real estate partition lawsuit. The second cost component includes the costs associated with the delays and the uncertainty related to the partition action.

Some of the costs that are typically considered in the analysis include:

- the legal and administrative expense of the real estate partition lawsuit,
- the probability of success in the partition lawsuit,
- the amount of the co-tenant's time required to complete the partition lawsuit,
- the cost to survey the subject real estate,
- the engineering and structural costs to physically divide the real estate (if necessary),
- the cost to replace any shared property infrastructure, such as access, utilities, etc.,
- the price uncertainty related to the future partitioned real estate, and
- the time required to complete the post-partition real estate sale.

A fair market value analysis of an undivided interest typically will not consider real estate sale commissions or other property-related direct selling expenses. This is because the fair market value conclusion represents the price that a property buyer would pay to a property seller—and not the after-selling expense net sale proceeds in the pocket of the property seller.

Exhibit 2 presents a simple illustrative example of the income approach partition analysis valuation method. Harry Husband again owns a 40 percent undivided interest in the Dockside Warehouse. The appropriate valuation date is again December 31, 2009.

FRACTIONAL INTEREST VALUATION CONSIDERATIONS

The principal considerations in the valuation of a real estate fractional interest relate to the type and scope of the legal rights that the fractional interest owner can convey. The fractional interest derives its value from the relationships among the

Exhibit 2

Value of a 40% Fractional Interest
Harry Husband Illustrative Example
Income Approach
Partition Analysis Valuation Method
As of December 31, 2009

Expected Time Period for Successful Legal Partition and Sale of Partitioned Property [a]	1.5 years
Fee Simple Interest Market Value Appraisal of the Subject Property [b]	$15,000,000
Multiplied by: Expected Property Price Appreciation at 4% per Year for 1.5 Years [c]	1.061
Equals: Expected Future Sale Price of the Subject Property	$15,915,000
Multiplied by: Subject Undivided Interest Percentage	40%
Equals: Pro Rata Allocation of the Expected Future Sale Price of Fee Simple Interest	$6,366,000
Less: Pro-Rata Portion of Partition Costs, Assumes 10% of Expected Future Sale Price [d]	637,000
Projected Future Value of Undivided Interest at Partitioned Property Sale Date, net of Partition Costs	5,729,000
Present Value Discount Factor at 15% Discount Rate for 1.5 Years Partition/Holding Period [e]	.8089
Present Value of Partitioned Real Estate Sale Price (net of Partition Costs)	**$4,634,000**
Indicated Value of the Subject Undivided Interest (rounded)	**$4,600,000**

Notes:

[a] The estimated amount of time to pursue a state court partition legal action. Includes the expected marketing time to sell the partitioned real estate.

[b] Based on the fee simple interest market value appraisal performed by the Accurate Appraisal Company as of December 31, 2009.

[c] Based on a 4 percent expected compound annual rate of price appreciation during the 18 month expected partition action and market exposure period.

[d] Estimated legal, engineering, site modification, and administrative expenses associated with (1) the partition action and (2) the real estate physical partitioning.

[e] Based on the opportunity cost (or required rate of return) of similar risk class assets and on the risk of a successful real estate partition.

[e] Based on the opportunity cost (or the required rate of return) of similar risk assets.

co-owners—and not from a pro rata percentage of the real estate fee simple interest market value.

An undivided interest lacks many of the elements of ownership control and of marketability that a real estate fee owner has. Some of these lack of control and lack of marketability considerations include:

Lack of typical mortgage financing. Typically, the other property co-owners may be unwilling (1) to obligate themselves to repay borrowings that went to the subject fractional interest owner or (2) to expose their ownership interest in the real estate to foreclosure.

Lack of the typical sale channels. Because of the lack of typical mortgage financing, a fractional interest transfer is more likely to be a cash sale. Also, unless the property co-owners agree, real estate brokers and multiple listing services will not handle undivided interest offerings without the signature of all of the co-owners (i.e., something that an individual co-owner cannot control).

Lack of typical real estate buyers—i.e., a relatively illiquid market. The majority of real estate sales are fee simple, single ownership interests. And, the vast majority of real estate buyers appear to prefer fee simple ownership. A Willamette Management Associates analysis of real estate transfers within a sample geographic area (discussed above) indicated that fractional interests comprised only a fraction of one percent of the total real estate transactions for the subject period.

The single fee simple owner will not have to incur the cost to defend his or her fractional interest against the actions of other co-owners.

If a co-owner wishes to dispose of the fractional interest, then the co-owner has three alternatives: (1) to complete the sale of the fractional ownership interest, (2) to seek a voluntary property partition, or (3) to request the appropriate court to involuntarily partition the subject real estate. The latter two fractional interest disposition alternatives involve time, expense, and uncertainty that a single fee simple interest owner will not experience.

The other co-owners typically are under no binding obligation to purchase the fractional interest. Nor are the other co-owners obligated to pay any particular price for the subject fractional interest if they, in fact, do decide to buy that undivided interest.

SUMMARY AND CONCLUSION

If the marital estate owns an undivided interest, that interest may have to be valued in the family law proceeding. The valuation analyst should apply generally accepted valuation approaches and methods when estimating the real estate undivided interest value. This article summarized the market approach sale transaction analysis method and the income approach partition analysis method. These valuation methods generally indicate that the value of the undivided interest should be materially discounted when compared to the pro rata value of the entire property fee simple interest value.

No matter which generally accepted valuation approach and method the valuation analyst applies, the undivided interest value conclusion will likely be subject to a contrarian review. Therefore, the appropriateness, accuracy, quantity, and quality of the undivided interest valuation data should be considered in the final value reconciliation procedure.

NOTES

1. Don L. Harris, Philip A. McCormick, and W.D. Davis, Sr., "The Valuation of Partial Interests in Real Estate," *ASA Valuation*, December 1983.

2. Martin J. Healy Jr., "Valuation of Partial Interests," *The Appraisal Journal*, July 1988.

3. Peter J. Patchin, "Market Discounts for Undivided Minority Interests in Real Estate," *Real Estate Issues*, Fall/Winter 1988.

4. Lance Hall, "Should the IRS Surrender Cost-to-Partition Discounts for Undivided Interests?" *Valuation Strategies*, January/February 1998.

5. Walter H. Humphrey and Bruce B. Humphrey, "Unsyndicated Partial Interest Discounting," *The Appraisal Journal*, July 1997.

6. Ted Israel, "Discounts on Undivided Interests in Real Estate," *Valuation Strategies*, May/June 2003.