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Standards of Value and Premises of Value— What is Appropriate for Unit Valuations?

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- *The Use and Misuse of Transaction Data in Valuations Prepared for Property Tax Purposes* (Journal of Property Tax Assessment & Administration)
- *The Property Tax Implications of Lease Accounting GAAP Changes* (Journal of Multistate Taxation and Incentives)
- *The Relevance of Fair Value Measurements for Property Tax Purposes* (Journal of Multistate Taxation and Incentives)

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BEST PRACTICES



Thought Leadership
in Valuation, Damages, and
Transfer Price Analysis

ROBERT F. REILLY & ROBERT P. SCHWEIHS

Thought Leadership Discussion Outline

- Applying the correct standard (or definition) of value and premise of value in the unit principle valuation
- Defining the unit of property subject to valuation
- Considering generally accepted standards of value
- Considering generally accepted premises of value
- Using fair value (FV) purchase price allocations as an indication of fair market value (FMV) in the valuation of the subject taxable unit
- Considering differences in FV and FMV definitions and differences in valuation procedures and valuation variables
- Reviewing examples of FV and FMV calculation differences

Thought Leadership Discussion Outline

- Applying investment value (IV) transactional data when developing FMV valuations
- Considering differences in IV transactional data and FMV valuations
- Reviewing examples of IV and FMV calculation differences
- Summary and conclusion; questions and discussion

Introduction

- Many state assessment authorities apply the unit valuation principle to value properties that are centrally assessed.
- Many local assessment authorities also apply the unit valuation principle to value certain types of properties that are locally assessed.
- The unit valuation principle values all of the taxpayer operating assets collectively (as a single unit of property).
- The generally accepted unit valuation principle includes the market approach methods, income approach methods, and cost approach methods.
- Based on the laws of the taxing jurisdiction, the value of nonoperating assets and exempt property may be deducted from the taxpayer total unit value to arrive at the value of the unit of taxable property.

Introduction

- Analysts sometimes use industry merger and acquisition (M&A) transactional data to extract pricing multiples to apply in the subject unit valuation.
- Analysts sometimes rely on reported M&A transaction purchase price allocation data in the subject unit valuation.
- Analysts sometimes rely on the reported transaction purchase price in the subject unit valuation.
 - The taxpayer is acquired, and the taxpayer assets are restated to FV.
 - Industry guideline companies are acquired, and the target company assets are allocated to FV.
 - Analysts accept the FV of the acquired assets as the FMV of the acquired assets.
 - Analysts calculate FV pricing multiples/ratios (for tangible assets and intangible assets) and use these data to estimate the subject unit FMV.

Introduction

- Significant differences can exist between:
 1. the transaction price of an acquired company (guideline or taxpayer) and the FMV of the acquired company (guideline or taxpayer)
 2. the FV of the acquired assets (guideline or taxpayer) and the FMV of the acquired assets (guideline or taxpayer)
- Without further analysis, analysts should not assume that M&A transaction price = company FMV or that acquired asset FV = asset FMV.
- The word assets is an accounting term and the word property is a legal term. These two terms do not necessarily mean the same thing (i.e., assets are not necessarily property and vice versa). For simplicity, we will use these terms interchangeably in this presentation.

What is the Subject Unit?

- Unit principle valuation methods typically value all of the taxpayer assets collectively – as one total unit. The taxpayer asset categories typically include the following:
 1. Current (financial) assets
 2. Tangible assets:
 - a. Real estate
 - b. Tangible personal property
 3. Intangible assets:
 - a. Identifiable intangible assets
 - b. Intangible value in the nature of goodwill
 4. Nonoperating assets

What is the Subject Unit?

- Depending on the individual valuation variables applied, some unit principle valuation methods also capture the value of intangible investment attributes (such as liquidity, diversification, limited investment liability, etc.) These value components do not represent either assets or property.
- Applying unit principle valuation methods (without adjustment) concludes the subject total unit.
- Not all categories of taxpayer assets are subject to property tax in a particular taxing jurisdiction. The statutory authority of the taxing jurisdiction determines the categories of assets subject to property tax.

What is the Subject Unit?

- In most taxing jurisdictions, some combination of taxpayer assets is subject to property tax. We refer to these assets as the subject taxable unit.
- For example, the subject taxable unit may include:
 - All tangible and intangible operating assets
 - All tangible and intangible operating assets, less certain exempt intangible assets
 - All tangible operating assets only
 - All assets in place on the valuation date (i.e., may exclude goodwill as the present value of future assets)
- An important procedure in any unit valuation is the identification of the subject taxable unit.

Alternative Standards (Definitions) of Value

- Some of the alternative generally accepted standards of value include:
 - Fair market value
 - Market value
 - Fair value
 - Investment value
 - Use value
 - User value
 - Strategic value
 - Acquisition value
 - Owner value
 - Collateral value
- The standard of value generally answers the question: value to who (or price that what parties would agree to)?

Alternative Standards (Definitions) of Value

- The selection of the appropriate standard of value is usually determined by:
 - The client assignment
 - Relevant statutory authority, judicial precedent, or administrative ruling
- Authoritative sources that provide definitions for these various standards of value include the following:
 - *Dictionary of Real Estate Appraisal*
 - *International Glossary of Business Valuation Terms*
 - *Uniform Standards of Professional Appraisal Practice*
 - Financial Accounting Standards Board
 - International Valuation Standards Council: *International Valuation Standards*

Alternative Premises of Value

- The premise of value generally describes the assumed circumstances under which a hypothetical property sale transaction occurs.
- Some alternative premises of value include:
 - Value in use, as part of a going concern
 - Value in place
 - Value in exchange, with all assets sold collectively
 - Value in exchange, with all assets sold individually
 - Value in exchange on an orderly disposition basis
 - Value in exchange on a liquidation basis (voluntary or involuntary)

Alternative Premises of Value

- For property tax purposes, many taxing jurisdictions rely on the *value in use, as part of a going concern* premise of value.
- What determines the appropriate premise of value?
 - The client assignment
 - Relevant statutory authority, judicial precedent, or administrative ruling
 - The analyst's highest and best use (HABU) determination

Alternative Standards (Definitions) of Value That Affect Unit Principle Valuations

- Transaction prices typically represent one of the follow definitions of value:
 - Fair value
 - Fair market value
 - Investment value
- Definitions are similar, but different.
 - Differences relate to the application of the property valuation approaches, methods, and procedures.
 - Differences relate to the selection and application of individual valuation variables within a property valuation method.
 - Differences may result in different value conclusions for same bundle of taxpayer assets – and particularly for the same bundle of assets in an M&A transaction.
 - Important analyst consideration: FV is not necessarily same as FMV is not necessarily the same as IV.

Fair Value Definition

- For purchase accounting purposes, the Financial Accounting Standards Board (FASB) defines fair value in accounting standards codification (ASC) *Topic 820 - Fair Value Measurements*.
- Not all taxpayer or guideline company balance sheet accounts are reported at FV.
- FV measurements are only reported on company financial statements in certain situations:
 - Business combinations
 - Derivatives and hedging disclosures
 - Share-based compensation
 - Purchased goodwill and other long-lived asset impairment tests

Fair Value Definition

- FV is defined in ASC 820 as: “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.”
- Market participants are buyers and sellers in the principal (or most advantageous) market for the subject asset or liability.
- Market participants are:
 - Independent of the reporting entity (unrelated)
 - Knowledgeable
 - Both able and willing to transact
- Market participants may include strategic buyers.

Fair Value Definition

- Principal market is the market with greatest volume and greatest level of activity.
- Most advantageous market is the market that:
 - Maximizes the amount received for the asset, or
 - Minimizes the amount paid to transfer the liability.

Fair Value Definition

- An “orderly transaction” is a hypothetical transaction assumed to take place on the measurement date with the subject asset having been exposed to the market for the usual and customary period of time for transactions involving such assets in order to provide sufficient time for marketing activities.
- An orderly transaction is not a sale where the seller is under duress (e.g., a forced liquidation or distress sale).

Fair Value Definition

- FV is considered from the perspective of a market participant that already holds the asset or owes the liability.
- The objective of measuring FV is to determine an exit price: the price that would be received to sell an asset or the price that would be paid to transfer the liability.

Fair Value Definition

ASC 820 Hierarchy of FV Inputs:

- Level 1 – Directly Observable
 - Quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.
- Level 2 – Indirectly Observable
 - Directly or indirectly observable prices in active markets for similar assets or liabilities; quoted prices for identical or similar items in markets that are not active; inputs other than quoted prices (e.g., interest rates, yield curves, credit risks, volatilities); or “market corroborated inputs.”

Fair Value Definition

Hierarchy of FV Inputs:

- Level 3 – Unobservable
 - Unobservable inputs that reflect management's own assumptions about the assumptions market participants would make.
- ASC 820 requires the analyst to maximize the use of assumptions (valuation inputs) that are observable from market data obtained from independent sources.

Fair Value Definition

Highest and best use:

- The use of an asset by market participants that would maximize its value or the value of the group of assets in which those market participants would use it. An asset is valued using one of the following premises:
 1. In use. This premise is used if the maximum value would be provided to market participants by using the asset in combination with other assets as a group. The asset could be used as it is installed and configured at the measurement date or in a different configuration.

An in-use fair value is based on the price that would be received by the reporting entity on the measurement date in a current transaction to sell the asset along with the other assets in the group using consistent assumptions regarding the HABU of all of the assets in the group.

Fair Value Definition

Highest and best use:

2. In exchange. This premise is used if the maximum value would be provided to market participants from the asset on a stand-alone basis.

An in-exchange fair value is based on the price that would be received on the measurement date in a current transaction to sell the asset individually and not as part of a group of assets.

Where to Obtain Fair Value Measurement Guidance

- The following ASC topics provide professional guidance on FV measurements:
 - ASC 350 – ASC 715 – ASC 820 – ASC 946
 - ASC 360 – ASC 718 – ASC 825 – ASC 965
 - ASC 606 – ASC 805 – ASC 860
- Analyst caveat one: Unless you can name at least half of these ASC topics, maybe you should not rely on FV measurements to perform unit principle valuations.
- Analyst caveat two: FV measurements are rules driven. They are intended to be transparent, replicable, and auditable.
- In contrast, FMV valuation are judgement driven. They are intended to emulate market dynamics and are influenced by the analyst's professional judgement and experience.

Where to Obtain Fair Value Measurement Guidance

- FASB ASC topics:
 - ASC 350 Intangible – Goodwill and Other
 - ASC 360 Property, Plant, and Equipment
 - ASC 606 Revenue from Contracts with Customers
 - ASC 715 Compensation – Retirement Benefits
 - ASC 718 Compensation – Stock Compensation
 - ASC 805 Business Combinations
 - ASC 820 Fair Value Measurements
 - ASC 825 Financial Instruments
 - ASC 860 Transfer and Servicing
 - ASC 946 Financial Services – Investment Companies
 - ASC 965 Plan Accounting

Where to Obtain Fair Value Measurement Guidance

- Also consider FV measurement guidance from the following International Accounting Standards Board (IASB) International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS):
 - IAS 16 Property, Plant and Equipment
 - IAS 36 Impairment of Assets
 - IAS 38 Intangible Assets
 - IAS 39 Financial Instruments: Recognition and Measurement
 - IAS 40 Investment Property
 - IAS 41 Agriculture (biological assets)
 - IFRS 3 Business Combinations
 - IFRS 5 Non-current Assets Held for Sale and Discontinued Operations
 - IFRS 13 Fair Value Measurement

Where to Obtain Fair Value Measurement Implementation Guidance

- FASB
 - FASB Staff Positions
- Appraisal Foundation Valuation Advisories
 - VFR #1: Identification of Contributory Assets and Calculation of Economic Rents
 - VFR #2: The Valuation of Customer-Related Assets
 - VFR #3: The Measurement and Application of Market Participant Acquisition Premiums
 - VFR #4: Valuation of Contingent Consideration
- AICPA
 - numerous AICPA Guides
 - numerous AICPA Technical Practice Aids
- Valuation Professional Organizations
 - Mandatory Performance Framework

Fair Market Value Definition

- For property tax purposes, most states require taxpayer property to be valued at FMV (or an equivalent standard of value).
- One common definition of FMV is: the price paid in a transaction between a hypothetical willing buyer and a hypothetical willing seller, neither being under any compulsion to buy or sell and both having reasonable knowledge of the relevant facts.
- Many states use different terms to describe the statutory valuation standard of value, including:
 - “Actual value” or “true cash value”
 - Typically defined to mean FMV

Investment Value Definition

- Investment value is defined as “[t]he specific value of a property to a particular investor or class of investors based on individual investments requirements; distinguished from market value, which is impersonal and detached.”¹
- IV is value to an individual, not necessarily value in the marketplace.²
- IV is “The value to a particular investor based on individual investment requirements and expectations.”³

1. *The Appraisal of Real Estate*, 14th ed. (Chicago: The Appraisal Institute, 2013), 63.

2. *Ibid.*

3. AICPA Statement on Standards for Valuation Services, VS100

Investment Value Definition

- IV typically includes some synergistic or acquisition price premium.
- IV may represent FV.
- It is generally accepted that IV is not consistent with the definition of FMV.
- IV, in most instances, should not be used for unit principle valuation purposes.

FV analysis vs FMV Analysis

- Analysts sometimes use FV purchase price allocations as an indication of the subject taxable unit FMV.
- FV and FMV definitions are similar; valuation procedures and valuation variable applied in the two types of analyses are different.
- Some of the standard of value differences include:
 - Differences in the assumed transaction
 - Differences in the assumed buyer and seller
 - Differences in the assumed unit of account
 - Differences in the assumed HABU of the unit of account
 - Differences in the valuation methods and procedures applied
 - Differences in the valuation variables selected and applied

FV analysis vs FMV Analysis

Differences in the assumed transaction:

- FV assumes a hypothetical transaction between a market participant buyer and a known seller (i.e., the current owner seeking an exit price).
- In contrast, FMV assumes a transaction between a hypothetical buyer and a hypothetical seller with no special, unique motivations or circumstances.

FV analysis vs FMV Analysis

Differences in the assumed buyer and seller:

- FV definition of buyers and sellers are “market participants” in the principal (or most advantageous) market.
 - Market participants may include industry participants, each with potentially different strategic motives.
 - If the transaction includes a strategic buyer, then transaction price may represent IV and not FMV.

FV analysis vs FMV Analysis

Differences in the assumed unit of account (i.e., different valuation principle):

- Most states require all centrally assessed taxpayer assets to be valued at FMV collectively, as a single operating unit – a unit valuation principle.
- FV is based on a summation valuation principle requiring a separate valuation for each unit of account – i.e., each general ledger asset account.

FV analysis vs FMV Analysis

Differences in the assumed HABU of the unit of account:

- Most states require the taxable unit HABU assumption of value-in-use.
- FV typically requires a separate HABU conclusion for each asset category unit of account, considering possible alternative uses (i.e., value-in-exchange or value-in-use, whichever is greater from the market participant perspective).

FV analysis vs FMV Analysis

Differences in the valuation methods and procedures applied:

- Most states allow the analyst to use any (or all) generally accepted valuation approaches and methods to estimate FMV.
- Purchase accounting GAAP prioritizes the valuation approaches and methods used to estimate FV based on hierarchy of observable and unobservable inputs.
- FV measurements are principally based on the market approach, if market data are available.

FV analysis vs FMV Analysis

Other procedural differences between FV measurements and FMV valuations:

- Disposition costs
 - FMV requires consideration of make-ready costs, disposition costs, holding period costs, market absorption, etc.
 - FV considers the exit selling price only – no selling costs or market absorption discount.
- Regulatory approvals
 - Most states recognize that the taxpayer may have to obtain regulatory approval to discontinue utility operations and to sell off assets (which affects FMV).
 - FV assumes the taxpayer can sell all of its assets on the valuation date without regulatory delay.

FV analysis vs FMV Analysis

Other procedural differences between FV measurements and FMV valuations :

- **Obsolescence measurement**
 - Most states recognize that unit-level functional and economic obsolescence should be considered in the valuation.
 - Only unit of account level obsolescence is considered in a FV measurement. All unit level obsolescence is assumed to be already included in the purchase price.
- **Intangible assets**
 - Most states require intangible assets to be valued at FMV, between a willing buyer and a willing seller.
 - FV requires consideration of the acquirer's expected use of purchased intangible assets (e.g., software, trademarks, etc. have no FV if the acquirer does not plan to use them).
 - Not all intangible assets (e.g., assembled workforce) are recorded under FV GAAP.

Illustrative Example – FV vs FMV Differences

- An example within the context of a business combination illustrates some of the differences between FMV valuation procedures and FV measurement procedures. This example is deliberately simplified for illustrative purposes. Let's assume the following hypothetical transaction variables:
 1. Alpha develops a new widget business called Beta.
 2. The Beta business just built a widget machine for \$10,000,000; therefore, the replacement cost new ("RCN") for the Beta personal property is \$10,000,000.
 3. The Beta machine can produce 1,000,000 widgets per year.
 4. The cost to manufacture the widgets is \$4 per widget.
 5. The current market selling price for widgets is \$6 per widget.

Illustrative Example – FV vs FMV Differences

6. The market selling price for widgets is expected to decrease during the next few years as follows:
 - Year 1 widget unit sale price - \$6
 - Year 2 widget unit sale price - \$6
 - Year 3 widget unit sale price - \$5
 - Year 4 widget unit sale price - \$4
 - Year 5 widget unit sale price - \$4
7. The Beta machine starts producing widgets on the valuation date, January 1, 2019.
8. On January 1, 2019, Alpha sells the Beta widget business to Gamma for \$12,500,000.

Illustrative Example – FV vs FMV Differences

9. As part of the transaction, Gamma enters into a hedge price agreement (“the contract”) with Delta, a major consumer of widgets.
10. Under the terms of the contract, Delta agrees to pay for all of the Beta widget production capacity (1,000,000 widgets per year) whether or not Delta takes delivery of the widgets. Under the terms of the fixed price contract, Delta agrees to pay \$5 per widget for the next five years.
11. Under the contract, Beta is assured of selling all of its capacity at a fixed price per unit for the next five years.
12. Under the contract, Delta is assured of a source of widget supply at a fixed price per unit for the next few years.
13. Let’s assume that the above-described contract terms are standard for the widget industry. The contract is considered to be an “at-market” contract.

Illustrative Example – FV vs FMV Differences

14. The market-derived cost of capital for Gamma is 10 percent. That 10 percent is also the industry required return on investment.
15. In year one, Gamma will earn \$5,000,000 in revenue ($\$5 \text{ unit sales price} \times 1,000,000 \text{ widgets}$) and incur \$4,000,000 in costs ($\$4 \text{ unit cost} \times 1,000,000 \text{ widgets}$). In year one, Gamma will earn \$1,000,000 in income.
16. Let's assume all revenue, cost, and income variables are measured on a net cash flow basis. Let's assume that all financial variables are recognized once a year – at year-end.
17. The Gamma return on the Beta business acquisition in year one will be 8 percent ($\$1,000,000 \text{ income} \div \$12,500,000 \text{ purchase price}$).

Illustrative Example – FV vs FMV Differences

- Let's consider the illustrative Beta widget business purchase price allocation – based on the FMV standard of value. In this transaction, only three assets are acquired by Gamma: tangible personal property (the widget machine), the contract, and goodwill. The FMV valuation is summarized below:
 1. The analyst decides to apply the cost approach and the replacement cost new less depreciation (“RCNLD”) method to value the tangible personal property.
 2. The RCN for the property is \$10,000,000. Since the machine is new, there is no physical depreciation. Since the machine is performing the function for which it was just designed, there is no functional obsolescence. The machine RCNLD is \$10,000,000. The market demands a 10 percent return on investment (“ROI”). The machine operations only produce an 8 percent ROI for the owner/operator. There is economic obsolescence related to the tangible personal property.

Illustrative Example – FV vs FMV Differences

3. The analyst decides to apply the capitalization of income loss method (“CILM”) to measure the economic obsolescence. The analyst measures the required income ROI as 10% – the industry average cost of capital. The analyst measures the actual income ROI as 8% – the actual return based on the business purchase price. The income loss is 10% required return - 8% actual return = 2% income loss; 2% income loss ÷ 10% required return = 20% economic obsolescence. Based on the CILM, economic obsolescence is: \$2,000,000 (\$10,000,000 RCNLD × 20%).
4. Based on the cost approach, the FMV of the tangible personal property is:

Replacement cost new	\$10,000,000
- Physical depreciation	0
- Functional obsolescence	0
- Economic obsolescence	<u>2,000,000</u>
= Fair market value	<u>\$8,000,000</u>

Illustrative Example – FV vs FMV Differences

5. The analyst decides to use the income approach and the discounted cash flow (“DCF”) method to value the contract. The contract produces the following annual income: \$5,000,000 revenue – \$4,000,000 costs = \$1,000,000 income (cash flow). The contract runs for five years. The present value of annuity factor for 10 percent for 5 years is 3.7908. The present value of an annuity of \$1,000,000 per year for five years is: $\$1,000,000 \times 3.7908 = \$3,800,000$ (rounded). Based on the DCF method, the contract FMV is \$3,800,000.

6. The total purchase price is \$12,500,000. Based on the residual method, the FMV for goodwill is:

Purchase price	\$12,500,000
- Tangible personal property	8,000,0000
- Contract	<u>3,800,0000</u>
= Goodwill	<u>\$700,000</u>

7. The FMV-based allocation of purchase price for the Beta widget business transaction is summarized in Exhibit 1 (below).

Illustrative Example – FV vs FMV Differences

- Let's consider the illustrative Beta widget business purchase price allocation based on the FV standard of value. ASC Topic 805 provides the rules-based guidance for FV measurements. ASC 805 requires the application of the acquisition method of accounting.
1. The analyst has to calculate the FV of the total consideration related to the transaction. The total consideration has two components: (a) the cash paid and (b) the hedge-contract-related liability assumed.

The contract allows Gamma to receive a \$5,000,000 fixed payment each year over the five-year term of the contract. Those fixed payments are based on a hedge contract price that is different from the expected market prices for the widgets. The contract payments are lower than the expected market prices in the earlier years and are higher than the expected market prices in the later years. Due to the present value impact of these price differences, the price component of the hedge contract has a negative value – and would be recorded as a liability. The mathematics of option pricing are complicated. Let's assume the FV of the contract liability is about \$500,000. (This is a reasonable approximation.) The total transaction consideration is \$13,000,000 (\$12,500,000 cash paid plus \$500,000 liability related to the price hedge portion of the contract).

Illustrative Example – FV vs FMV Differences

2. The analyst decides to use the cost approach and the RCNLD method to value the tangible personal property.
3. The tangible personal property RCN is \$10,000,000. The tangible personal property (i.e., the widget machine) is new. There is no physical depreciation or functional obsolescence.
4. The analyst assumes that the transaction internal rate of return (“IRR”) equals the transaction cost of capital (“WACC”) – and also equals the transaction weighted average return on assets (“WARA”). This assumption (that $IRR = WACC = WARA$) is based on the following analysis: Gamma entered into the transaction knowing it would earn an 8 percent ROI. Gamma agreed to the purchase price knowing it would only earn an 8 percent ROI. Gamma priced this deal based on an assumed 8 percent cost of capital (for this particular transaction). There is no economic obsolescence from the perspective of Gamma. The next willing buyer/willing seller would demand a 10 percent ROI (based on the market-derived industry cost of capital), and that next willing buyer and willing seller would negotiate a lower deal price (and a lower value for the personal property). Gamma paid the deal price it paid and Gamma accepts the below-market ROI. The analyst may conclude that he or she “considered” economic obsolescence (to Gamma) in the valuation. Based on the consideration of the Gamma motivations, the analyst concludes that there is no economic obsolescence in this transaction. This is a reasonable assumption in a FV-based property valuation prepared in accordance with the acquisition method of accounting rules.

Illustrative Example – FV vs FMV Differences

5. We recall that the contract is considered to be an at-market contract. Under the ASC 805 rules-based guidance, an at-market contract is an intangible asset that has zero FV. This zero FV conclusion is consistent with the FV measurement rules – even though the contract generates \$1,000,000 per year in cash flow.

6. The total FV purchase price is \$13,000,000. The residual FV measurement for goodwill is:

Purchase price	\$13,000,000
- Tangible personal property	10,000,000
- Contract	<u>0</u>
= Goodwill	<u>\$3,000,000</u>

7. The FV measurement allocation of purchase price for the Beta widget business purchase transaction is summarized in Exhibit 2 (below).

Illustrative Example – FV vs FMV Differences

EXHIBIT 1
BETA WIDGETS
ALLOCATION OF PURCHASE PRICE
FMV STANDARD OF VALUE
AS OF JANUARY 1, 2019

Total consideration to allocate: \$12,500,000 cash paid	
Tangible Personal Property	\$8,000,000
Contract	3,800,000
Goodwill	<u>700,000</u>
Total Purchase Price	<u>\$12,500,000</u>

EXHIBIT 2
BETA WIDGETS
ALLOCATION OF PURCHASE PRICE
FV STANDARD OF VALUE
AS OF JANUARY 1, 2019

Total consideration to allocate: \$12,500,000 cash paid plus \$500,000 hedge contract liability	
Tangible Personal Property	\$10,000,000
Contract	0
Goodwill	<u>3,000,000</u>
Total Purchase Price	<u>\$13,000,000</u>

Illustrative Example – FV vs FMV Differences

- A comparison of Exhibit 1 and Exhibit 2 indicates that there may be material differences between FMV valuations and a FV measurement.
- FMV valuations are judgment-based and are intended to reflect the economics of the subject transaction. FV measurements are rules-based and are intended to be transparent, replicable, and auditable.
- Without analyzing and understanding the differences that exist between the FV standard of value and the FMV standard of value, it is not appropriate to rely on FV measurements for acquisition method accounting purposes to estimate the FMV of the subject taxable unit or the subject tangible/intangible assets.

M&A Transaction Prices vs FMV

- Analysts sometimes use M&A transaction prices to estimate the FMV of the subject taxable unit.
- There are at least four concerns related to the use of M&A transaction prices in unit principle valuations:
 1. Transactions typically involve the stock and debt of the company and not the purchase of the company unit of operating assets. Stock and debt acquisition prices often include intangible investment attributes, such as liquidity, that are not part of a taxable unit.
 2. Aggregate stock and debt acquisition prices includes all property of the target company and not just the operating property subject to property tax.

M&A Transaction Prices vs FMV

3. M&A transaction price may include considerations that are not appropriate for property tax purposes, such as the present value of future growth opportunities and exempt intangible assets.
 4. M&A transaction price typically represents investment value, fair value, or some other standard of value – and not the FMV standard of value.
- For these reasons, M&A transaction prices may not be relevant for unit principle valuation purposes.
 - Before applying the transaction data in any market approach analysis, the analyst should evaluate the terms and motivations of the parties to the M&A transaction to determine the usefulness of the transaction price data.

M&A Transaction Prices vs FMV

- M&A transactions often occur for synergistic reasons. Below are examples of expected synergies derived from acquisitions:
 - “We project that the [acquisition of Northern Utilities, Inc., and Granite State Transmission, Inc., by Until Corporation] will produce annual system-wide synergy savings of approximately \$5.6 million.”¹
 - “The benefits that we expect to achieve as a result of [the acquisition of RJS Power by Talen Energy Corporation] will depend, in part, on our ability to realize anticipated growth opportunities, cost savings and other synergies.”²
- M&A transactions that include synergies may not be appropriate for estimating FMV.

1. Until Corporation SEC Form S-3 filed December 3, 2008.

2. Talen Energy Corporation SEC Form 10-K for the fiscal year ended December 31, 2015.

M&A Transaction Prices vs FMV

- FMV is defined with regard to “a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm’s length in an open and unrestricted market.”¹
- IV is defined as “[t]he specific value of a property to a particular investor or class of investors based on individual investments requirements; distinguished from market value, which is impersonal and detached.”²
- IV is often greater than FMV because a particular buyer may expect synergistic benefits from an acquisition.

1. ASA Business Valuation Standards (Washington: American Society of Appraisers, 2009), 27.

2. *The Appraisal of Real Estate*, 14th ed. (Chicago: The Appraisal Institute, 2013), 63.

Why Ignore M&A Transactional Data in Unit Principle Valuations?

- M&A transactions often occur for synergistic reasons.
- M&A transactions are often complex and include multiple locations or businesses.
- M&A transactions may be (1) stock deals, (2) asset deals, (3) or stock and debt deals.
- M&A transactions may include contingent payments.
- M&A transactions may include post-organizational pricing adjustments.
- M&A transactions may have income tax considerations that are not present in the subject taxable unit.

Why Ignore M&A Transactional Data in Unit Principle Valuations?

- M&A transactions often include components that may be nontaxable including:
 1. intangible assets,
 2. net working capital, and
 3. other contract rights such as seller non-competition agreements.
- M&A transaction details are often confidential; public disclosures may not provide sufficient data to establish general comparability or the magnitude of any adjustment necessary to create sufficient comparability for unit principle valuation purposes.
- If the analyst is not able to verify the terms of the M&A transactions, or reconcile any differences between the transactions and the subject taxable unit, the market approach sales comparison method should be given little or no weight.

Thought Leadership Summary and Conclusion

- Analysts need to apply the appropriate standard of value premise of value in a unit principle valuation.
- There are numerous alternative standards of value and premises of value.
- Often, FMV is not the same as FV or as IV.
- FV measurements for GAAP accounting purpose are not necessarily the same thing as FMV valuations for property tax purposes.
- It is inappropriate for analysts to rely on FV measurements in unit principle valuations without understanding and reconciling any differences between FV and FMV.

Thought Leadership Summary and Conclusion

- Analysts sometimes rely on M&A transactional data to estimate the FMV of a subject taxable unit.
- M&A transactional data can represent investment value, FV, or FMV.
- Significant differences may exist between the standard of value and premise of value in M&A transaction prices, FV purchase price allocations, and FMV analyses, including:
 - Buyer and seller
 - Unit of account
 - HABU
 - Unit vs. summation principle
 - Cost assumptions
 - Other differences
- M&A transaction prices and FV purchase accounting data may not represent FMV and may not be relevant for unit principle valuation purposes.

Questions and Discussion