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15 Differences between Unit Valuations, Summation Valuations, and Business Valuations

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Discussion Outline

- This discussion considers both the conceptual and the practical differences between three different (but related) types of valuation analyses.
- These three types of valuations are performed for different purposes and with different objectives.
- There are different generally accepted valuation approaches and methods applicable for each type of analysis.
- The most important difference is: the different types of analyses value different bundles of ownership interests.
- Therefore, the value conclusions of the different types of analyses should be different (but reconcilable).
- There are analytical differences – and valuation variable selection differences – in the application of these three different types of analyses.
- There are common misconceptions about unit principle valuation analyses and value conclusions.

Conceptual and Practical Differences

- There are both conceptual and practical differences between unit valuations, summation valuations, and business valuations.
- These differences primarily relate to the specific bundle of ownership interests that are encompassed in each type of valuation.
- Practically, these differences impact the selection of the valuation variables used in each type of valuation.
- Business valuations value the taxpayer company debt and equity securities. Business valuations include the value of both:
 - all of the taxpayer operating assets (working capital, tangible assets, intangible assets) in place on the valuation date, **and**
 - all future growth opportunities (i.e., the PV of NCF from future tangible assets and future intangible assets that are not yet in place on the valuation date)

Conceptual and Practical Differences (cont.)

- Unit valuations value all of the taxpayer company operating assets (working capital, tangible assets, intangible assets) in place on the valuation date.
- Summation valuations value only a specified bundle of taxpayer company operating assets (the individual assets that are valued and “summed”) in place on the valuation date. The bundle of assets may include specified tangible assets and specified intangible assets.
- These conceptual and practical differences are particularly relevant to industrial and commercial taxpayer company valuations performed for property tax purposes.

Summary of Conceptual and Practical Differences

- A business valuation includes:
 - all of the taxpayer company operating assets in place
 - the expectation of future income from all of the future taxpayer company operating assets that may be added to the operating assets in place; these future assets can be created by:
 - expansionary capital expenditures (future tangible assets)
 - development of new products, services, technologies, customers, business lines (future intangible assets)
 - merger and acquisition activity (purchased assets)
- A unit principle valuation includes:
 - all of the taxpayer operating assets in place
 - that includes all tangible assets in place, identifiable intangible assets in place, and working capital in place
 - these asset categories are typically called “property”

Summary of Conceptual and Practical Differences (cont.)

- A summation principle valuation includes:
 - the specifically identified asset categories that are separately identified, individually valued, and then “summed” together to reach the value conclusion
 - the valuation will identify what categories of assets in place (what “property”) are included in the summation

Valuations Prepared for Property Tax Purposes

- Both the taxpayer property owner/operator and the taxing authority have to value industrial and commercial property for property tax purposes.
- These property valuations may be performed for property tax planning, compliance, or controversy purposes.
- Taxpayer properties in certain industries are commonly valued based on the unit principle of property valuation.
- These industries typically include:
 - telecom
 - electric
 - airline
 - railroad
 - pipeline
 - CATV
 - gas distribution
 - water & wastewater distribution
 - health care
 - mining and extraction
 - entertainment venues
 - oil and gas refinery

Valuations Prepared for Property Tax Purposes (cont.)

- These unit principle valuations may be prepared for either state or local property tax assessment purposes.
- These taxpayer industries may be subject to unit principle valuation due to statutory authority, administrative ruling, or judicial precedent.
- Sometimes taxpayer properties may be subject to unit principle valuation because of practical considerations:
 - The properties are physically, functionally, and economically integrated
 - It is difficult to separate property rental income from operating business income
 - The subject property would sell as a single unit of operating assets
 - The comparable properties have sold as single units of operating assets

Valuations Prepared for Property Tax Purposes (cont.)

- Most other taxpayer industry property types are assessed based on the summation principle of property valuation.
- Many taxpayers and taxing authorities do not understand all of the subtle differences between unit principle valuations and summation principle valuations.
- In addition, many taxpayers and taxing authorities do not understand all of the subtle differences between unit principle valuations and business valuations.

The Differences between Business Valuations, Unit Valuations, and Summation Valuations Are Not Unique to Property Tax

- The issues of specifically identifying the subject bundle of assets (or bundle of property) arise in many valuation purposes.
- The conceptual and practical issues related to the treatment of “assets in place” versus “future assets” also arise in many valuation purposes.
- These valuation purposes include:
 - Condemnation and eminent domain
 - What assets should be included in the “just compensation” paid when a municipality takes a water company, wastewater company, or other utility?

The Differences between Business Valuations, Unit Valuations, and Summation Valuations Are Not Unique to Property Tax (cont.)

- Bankruptcy/solvency analyses
 - What assets should be included in the debtor company solvency analysis?
 - What secured creditors have a security claim on which debtor company assets?
- Secured lending collateral valuations
 - Secured lenders can only place liens on the debtor company property pledged as collateral
 - Goodwill (and other “future” assets) are not property on which a secured lender can claim a security interest
- Federal taxation intercompany transfer pricing
 - Can U.S. taxpayer corporations transfer goodwill (and other “future” assets) as intangible property to a foreign taxing jurisdiction?
 - The TCJA added a statutory change to IRC Section 936 to include goodwill and going-concern value as intangible property for Sections 367 and 482 intercompany transfer purposes
- The point is that business valuation vs. unit valuation vs. summation valuation issues are not unique to property taxation.

What Is a Unit Principle Valuation?

- A unit principle valuation of a taxpayer property
 - values all of the taxpayer operating assets
 - values all of the taxpayer operating assets in place as of the valuation date
 - values all of the taxpayer assets operating collectively as part of a going-concern business enterprise
 - values all of the taxpayer assets collectively – as a single aggregate bundle of operating assets
 - values all of the taxpayer assets as if all of the assets would sell at one time, as a single total asset sale transaction, and as part of the sale of a going-concern business enterprise
- For purposes of this presentation, the words “asset” and “property” are considered to be synonymous.

What Is a Unit Principle Valuation? (cont.)

- Technically, “asset” is an accounting term. An asset is a general ledger account debit balance recorded on a balance sheet.
- Technically, “property” is a legal term. Property is something you own that has a specifically identified bundle of legal rights associated with it.
- The typical taxpayer company operating assets in place on the valuation date include:
 - working capital accounts
 - real estate and real property
 - tangible personal property
 - identifiable intangible personal property
 - other investment assets

What Is a Unit Principle Valuation? (cont.)

- Not all of these operating asset categories may be subject to property tax in the subject state or local taxing jurisdiction. The matter of what asset categories are subject to property taxation is a legal matter.
- Depending on the specific valuation variables applied in the analysis, some unit principle valuations may also include:
 - intangible value in the nature of goodwill
 - intangible attributes

What Makes a Property Valuation a Unit Principle Valuation?

- Regardless of what title the analyst calls the analysis, a property valuation is a unit principle valuation when:
 - in the income approach methods (whether yield capitalization or direct capitalization)
 - the income subject to capitalization is business enterprise operating income (i.e., income from the sale of goods or services) and not property rental income (i.e., income from the lease of RE or TPP)
 - the income subject to capitalization includes some income from future assets not yet in place on the valuation date, including (1) future tangible assets (i.e., capx in excess of depreciation expense) and (2) future intangible assets (i.e., income from future customers, future technologies, future M&As, etc.)
 - the capitalization rate is based directly on stock market pricing data or stock market-derived rate of return data
 - the capitalization rate is based on stock market prices that are affected by intangible influences, investor expectations of future assets, expected future M&A activity, etc.

What Makes a Property Valuation a Unit Principle Valuation? (cont.)

- in the market approach methods (whether comparable sales transaction or stock & debt)
 - the income subject to the selected pricing multiples includes business enterprise operating income (i.e., income from the sale of goods or services)
 - the pricing multiples are extracted from the sale of going-concern business entities
 - the pricing multiples are extracted from publicly traded stock prices (that are affected by intangible assets, intangible influences, investor expectations, etc.)
- in the cost approach methods (whether HCLD, RCNLD, or RPCNLD)
 - economic obsolescence is measured collectively for all of the RE and TPP
 - the economic obsolescence income metric comes from business enterprise operating income
 - the comparative benchmark metrics are based on capital market rate of return/capacity data or industry average rate of return/capacity data – where either of which are based on guideline public companies

When Is It Appropriate to Perform a Unit Principle Valuation?

- It is typically appropriate to perform a unit principle valuation (sometimes called a utility principle valuation in the professional literature) in the following circumstances:
 - The subject property is physically integrated
 - The subject property crosses multiple taxing jurisdictions
 - The HABU of the property assumes one physical unit that crosses many jurisdictions
 - The subject property is functionally integrated
 - There is a continuous process flow where physical components cannot function independently
 - The subject property is economically integrated
 - The taxpayer cannot produce financial statements for a smaller unit

When Is It Appropriate to Perform a Unit Principle Valuation? (cont.)

- The subject property components operate as a going-concern business operation
- The subject unit business derives income from the sale of goods or services – and not from property rental income
- The subject unit includes intangible property as well as tangible property
- The property income depends materially on the operation of both the intangible property and the tangible property
- The comparable sales data involve the sales of going-concern business entities
- The obsolescence (functional or economic) observed in the property can best be measured on an aggregate (versus an individual asset) basis
- There is a statutory authority, administrative ruling, or judicial precedent requirement to value the subject taxpayer property using the unit valuation principle

A Going-Concern Valuation Is Not the Same as a Unit Principle Valuation

- Some taxing authorities state that they are required to assess property “as a going concern” or on “a going-concern basis.”
- Some taxing authorities claim that this requirement allows them to include intangible assets as part of the taxable unit.
- Valuing property as a going-concern is not the same thing as valuing a going-concern business enterprise.
- Value as a going concern (or value on a going-concern basis) is a premise of value. A premise of value describes the hypothetical set of transactional circumstances under which property will change hands.
- The going-concern premise of value assumes that, when it is transferred, the asset will be in use and capable of generating income.

A Going-Concern Valuation Is Not the Same as a Unit Principle Valuation (cont.)

- A going-concern business enterprise (or a going-concern business or a going concern) is an appraisal subject.
- A going-concern business enterprise describes the total bundle of assets being valued including (1) all tangible assets and all intangible assets and (2) all assets currently in existence on the valuation date and all assets the business owners expect to create in the future.
- Valuing a bundle of property on a going-concern basis (or as a going concern) is not the same thing as valuing the taxpayer company's total going-concern business enterprise.
- Valuation analysts can apply the summation valuation principle on a going-concern basis.
- Analysts can value individual RE parcels or TPP assets on a going-concern basis.

A Going-Concern Valuation Is Not the Same as a Unit Principle Valuation (cont.)

- For example, an individual rental unit (e.g., a garden apartment complex) or an individual aircraft or locomotive can be valued on a going-concern basis.
- The income approach capitalization of rental income assumes that the apartment or the airplane is operating in use, on a going-concern basis.
- All cost approach components (both cost metrics and depreciation/obsolescence metrics) assume the apartment or the airplane is operating in use, on a going-concern basis.
- The market approach comparable sales data indicate guideline apartments/airplanes that were sold from a going-concern seller to a going-concern buyer – to operate in use, on a going-concern basis.
- The market approach comparable sales data should exclude any sales of property at auction, in liquidation, or otherwise not involving going-concern market participants.

A Going-Concern Valuation Is Not the Same as a Unit Principle Valuation (cont.)

- Finally, there is an individual (and quantifiable) intangible asset called “going-concern value.”
- The individual going-concern intangible asset (or the related goodwill intangible asset) is not the same thing as valuing RE or TPP as a going concern – or on a going-concern basis.
- Analysts can value an apartment or an airplane on a going-concern basis without also valuing the individual going-concern value intangible asset of the taxpayer business enterprise that owns the apartment or the airplane.

Identifiable Intangible Assets in the Unit Principle Valuation

- Unit principle valuation conclusions include all taxpayer company operating assets – both tangible assets and intangible assets.
- Some taxing jurisdictions exclude intangible assets from property taxation.
- Some taxing jurisdictions exclude specifically identified intangible assets. Some taxing jurisdictions exclude all intangible assets. Some taxing jurisdictions include only intangible property in place on the valuation date.
- How does the taxpayer, the taxing authority, or the analyst identify these excluded intangible assets?

Identifiable Intangible Assets in the Unit Principle Valuation (cont.)

- In the U.S., the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) topic 805 includes two criteria for the recognition of an identifiable intangible asset:
 - The separability criteria
 - The contractual-legal criteria

In international GAAP, the IASB identifiable intangible asset recognition criteria are identical to the U.S. GAAP recognition criteria.

- The separability criterion means an intangible asset is identifiable if it is capable of being separated or divided from the acquired business and sold, transferred, licensed, rented, or exchanged (regardless of whether the acquirer has any interest to do so).

Identifiable Intangible Assets in the Unit Principle Valuation (cont.)

- An identifiable intangible asset can be sold, transferred, licensed, rented, or exchanged in combination with a related contract, asset, or liability.
- The contractual-legal criterion means an intangible asset is identifiable if it arises from a contractual or other legal right (regardless of whether those rights are transferable or separable from the acquired business).
- It is noteworthy that, under U.S. GAAP, intangible assets are only recorded on an acquirer's balance sheet after they have been purchased in a transaction recognized as a "business combination." For the most part, under U.S. GAAP, internally developed intangible assets are not recorded on a taxpayer company's balance sheet.

Intangible Assets are Included in a Unit Principle Valuation

- ASC 805-20-55 provides a noncomprehensive list of intangible assets that the FASB considers to have the characteristics to meet at least one of the two “identifiable” recognition criteria.
- The following list provides the ASC 805-20-55-13 categories of identifiable intangible assets:
 - Marketing-related intangible assets
 - Customer-related intangible assets
 - Artistic-related intangible assets
 - Contract-related intangible assets
 - Technology-related intangible assets

Intangible Assets are Included in a Unit Principle Valuation (cont.)

- According to ASC 805, goodwill is recorded as an intangible asset on the acquirer's balance sheet.
- However, the FASB has determined that goodwill is not considered to be an identifiable intangible asset.
- Therefore, acquired goodwill is not independently valued. Rather, acquired goodwill is "measured" (as the residual amount of all of the other asset values subtracted from the total purchase transaction consideration).

Representative Listing of Intangible Assets

- Marketing-related intangible assets

ASC 805-20-55-14 through 19 provide the following examples of marketing-related intangible assets:

- Newspaper mastheads
- Trademarks, service marks, trade names, collective marks, and certification marks
- Trade dress
- Internet domain names
- Noncompetition agreements

Representative Listing of Intangible Assets (cont.)

- Customer-related intangible assets

ASC 805-20-55-20 through 28 provide the following examples of customer-related intangible assets:

- Customer lists
- Customer contracts and related customer relationships
- Noncontractual customer relationships
- Order of production backlogs

Representative Listing of Intangible Assets (cont.)

- Artistic-related intangible assets

ASC 805-20-55-29 provides the following examples of artistic-related intangible assets:

- Plays, operas, ballets
- Books, magazines, newspaper, and other literary works
- Musical works such as composition, song lyrics, and advertising jingles
- Photographs, drawings, and clip art
- Audiovisual material including motion pictures, music videos, television programs

Representative Listing of Intangible Assets (cont.)

- Contract-related intangible assets
 - ASC 805-20-55-31 through 37 provide the following examples of contract-based intangible assets:
 - License, royalty, standstill agreements
 - Advertising contracts
 - Lease agreements
 - Construction permits
 - Construction contracts
 - Construction management, service, or supply contracts
 - Broadcast rights
 - Franchise rights
 - Operating rights
 - Use rights
 - Servicing contracts
 - Employment contracts

Representative Listing of Intangible Assets (cont.)

- Technology-related intangible assets

ASC 805-20-55-38 provides the following examples of technology-based intangible assets:

- Patented or copyright software
- Mask works
- Unpatented technology
- Databases
- Trade secrets

GAAP Valuation Guidance

- Analysts who perform unit principle valuations for property taxation purposes may benefit from a review of the following U.S. GAAP fair value measurement guidance:
 - FASB ASC topic 820: *Fair Value Measurement*
 - FASB ASC topic 805: *Business Combinations*
 - FASB ASC topic 350: *Intangibles – Goodwill and Other*
 - FASB ASC topic 360: *Plant, Property, and Equipment*
 - FASB ASC topic 718: *Compensation – Stock Compensation*
 - FASB ASC topic 852: *Reorganization*

What Is Goodwill?

- For GAAP accounting purposes, goodwill is recorded on the acquirer's balance sheet as an intangible asset (but not as an identifiable intangible asset).
- For GAAP accounting purposes, goodwill is mathematically "measured" as a residual amount. Goodwill is not "valued" by reference to fair value measurement valuation approaches or methods.
- From both an accounting perspective and a general valuation perspective, goodwill is the present value of expected future income that cannot be associated with any tangible asset or intangible asset in place on the valuation (acquisition) date.
- The present value of expected future income from any tangible assets or intangible assets in place would be included in the valuation of those identifiable assets.

What Is Goodwill? (cont.)

- Therefore, for GAAP purposes, goodwill is “measured” as a residual. All other expected future income has been assigned to identified (and valued) tangible assets and intangible assets.
- Therefore, for legal purposes, goodwill is not “property.” The expected future income to be generated by unidentifiable future assets does not possess a sufficient bundle of legal rights to qualify as property.
- For purposes other than GAAP (e.g., for family law, federal gift and estate tax, international transfer tax, bankruptcy, shareholder appraisal rights, and other purposes), goodwill can be valued by the application of generally accepted valuation approaches and methods (and not as a residual calculation).

Intangible Influences Are Not Intangible Assets

- There are intangible influences that affect the stock prices of public companies.
- These intangible influences are not intangible assets.
- That is because these intangible influences are not assets.
- Intangible influences do not meet either of the ASC topic 805 intangible asset recognition criteria. And, intangible influences do not meet the legal bundle of rights criteria to be considered property.
- However, intangible influences do impact the value of public company stock prices. And, intangible influences may impact the value of taxpayer tangible assets or identifiable intangible assets.

Intangible Influences Are Not Intangible Assets (cont.)

- Examples of some of these intangible influences include:
 - liquidity of public stock markets
 - small denomination investment required
 - portfolio diversification
 - limited liability to the investor
 - no reinvestment call to the investor
 - appreciating (versus depreciating) investment
 - tax attributes of the stock investment
 - tax attributes of the public company
 - expected future tangible assets
 - expected future intangible assets
 - expected future M&A activity
 - present value of growth opportunities (“PVGGO”)

Conceptual Differences – Analysis Purpose and Objective

- The objective of a unit principle valuation is to estimate a defined value for all taxpayer company operating assets in place as of the valuation date.
- Depending on the taxing jurisdiction, the taxpayer total operating assets may not equal the taxpayer taxable operating assets.
- Depending on the taxing jurisdiction, taxable assets may include:
 - all assets
 - all assets minus certain intangible assets only
 - all assets minus all intangible assets
 - all tangible assets (RE and TPP) only
 - certain tangible assets (certain RE and TPP) only

Conceptual Differences – Analysis Purpose and Objective (cont.)

- Unit principle valuations are performed primarily (but not exclusively) for property tax purposes.
- The objective of a summation principle valuation is to estimate a defined value for certain specified bundles of tangible assets (typically RE and TPP) in place as of the valuation date.
- The summation principle valuation may include all of the taxpayer tangible assets – or some of the taxpayer tangible assets.
- Summation principle valuations are performed for a variety of transaction, taxation, financing, business planning, and controversy reasons.

Conceptual Differences – Analysis Purpose and Objective (cont.)

- The objective of a business valuation is to estimate a defined value for a specified business ownership interest on the valuation date
- Depending on the business valuation assignment, the specified business ownership interest may include:
 - total invested capital (total interest-bearing LTD plus total equity)
 - total equity (all equity accounts)
 - common equity (common equity only)
 - one class of equity (e.g., all class B nonvoting common stock)
 - one block of equity (e.g., a 20% ownership interest in the class B nonvoting common stock)

Conceptual Difference – The Balance Sheet

- A business valuation focuses on the “right hand side” of the company’s balance sheet – the liability and equity accounts.
- Both a unit principle valuation and a summation principle valuation focus on the “left hand side” of the company’s balance sheet – the asset accounts.
- A fundamental accounting principle is:

$$\text{total assets} = \text{total liabilities} + \text{total equity}$$

- This accounting definition does not always work if the valuation subject includes only the tangible assets and intangible assets in place as of the valuation date.

Conceptual Difference – The Balance Sheet (cont.)

- This accounting definition only works if the valuation analysis includes all of the following:
 - working capital accounts
 - other assets (e.g., investments in subsidiaries, DFIT)
 - intangible influences (including the PV of future assets not yet in place)
- If any of the above assets or influences are not subject to property tax, then the balance sheet accounting principle (that applies in a business valuation) may not apply in a property tax valuation.

**Typical Taxpayer Company
Statement of Financial Position
Presented on a Current Value Basis
As of 1/1/18 (\$ in \$ millions)**

ASSETS		LIABILITIES AND OWNERS' EQUITY	
Current Assets (A):		Current Liabilities (G):	
Cash	50	Accounts Payable	50
Receivables	50	Salaries Payable	20
Inventory	<u>100</u>	Accrued Expenses	<u>30</u>
Total Current Assets	<u>200</u>	Total Current Liabilities	100
Net Plant, Property, and Equipment (B):		Long-Term Debt (H):	
Land	100	Bonds Payable	100
Buildings	200	Notes Payable	199
Machinery and Equipment	<u>300</u>	Mortgages Payable	<u>200</u>
Total Plant, Property, and Equipment	600	Total Long-Term Debt	400
Intangible Assets (C):		Other Liabilities (I):	
Patents	100	Pension Liabilities	200
Computer Software	100	Post-Retirement Health Obligations	100
Trademarks	100	Deferred Income Taxes – Credits	<u>100</u>
Trade Secrets	100	Total Other Liabilities	400
Goodwill	<u>200</u>		
Total Intangible Assets	600	Total Liabilities (J)	900
Other Assets (D):		Owners' Equity (K):	
Unconsolidated Subsidiary Investments	200	Preferred Stock	100
Deferred Income Taxes – Debits	<u>200</u>	Common Stock (includes the value of (investment liquidity, diversification, limited liability, intangible PVGO, income tax attributes, etc.)	0
Total Other Assets	400		<u>1,000</u>
Intangible Attributes (E)	<u>200</u>	Total Equity	1,100
Total Assets (F)	<u>2,000</u>	Total Liabilities and Owners' Equity (L)	<u>2,000</u>

Conceptual Differences – Value Indications

- Total asset value:

\$2,000 (F)

- Total business value:

\$1,500 = \$400 long-term debt (H) plus
\$1,100 total equity (K)

- Total liabilities and equity:

\$2,000 (L) = \$1,500 business value (H and K) plus
\$100 current liabilities (G) plus
\$400 other liabilities (I)

- Total unit value (assume unit = total operating assets in place):

\$1,800 = \$2,000 total assets (F) minus
\$200 intangible attributes (E)

Conceptual Differences – Value Indications (cont.)

- Total taxable unit value (assume the taxable unit = tangible assets only)

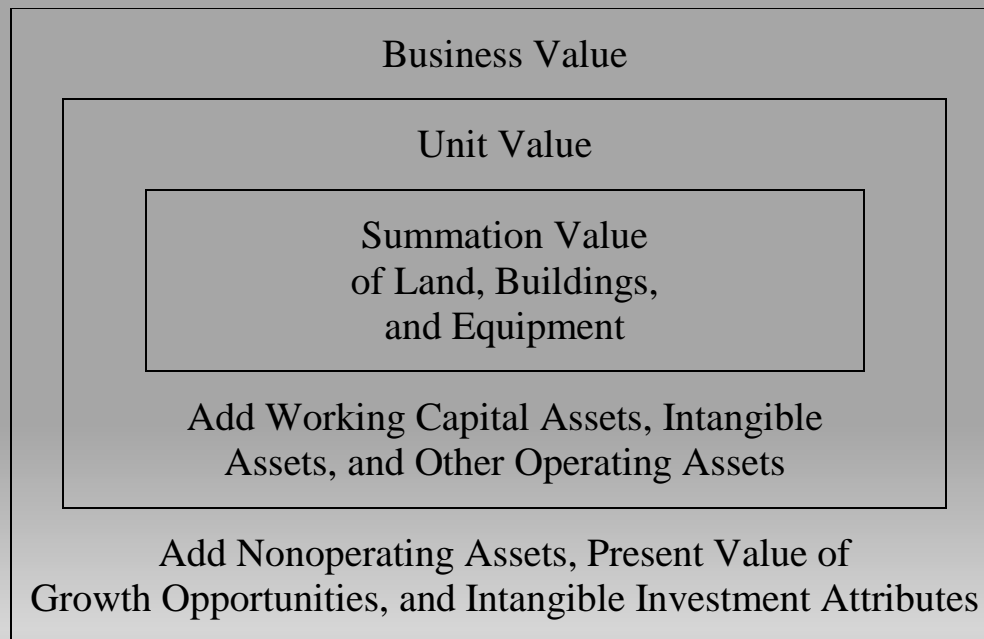
$$\begin{aligned} \underline{\$600} &= \$1,800 \text{ total unit value (F - E) minus} \\ &\quad \$200 \text{ working capital assets (A) minus} \\ &\quad \$600 \text{ intangible assets (C) minus} \\ &\quad \$400 \text{ other assets (D)} \end{aligned}$$

- Total summation value (assume the value of the total tangible assets)

$$\begin{aligned} \underline{\$600} &= \$100 \text{ land plus} \\ &\quad \$200 \text{ buildings plus} \\ &\quad \$300 \text{ personal property} \end{aligned}$$

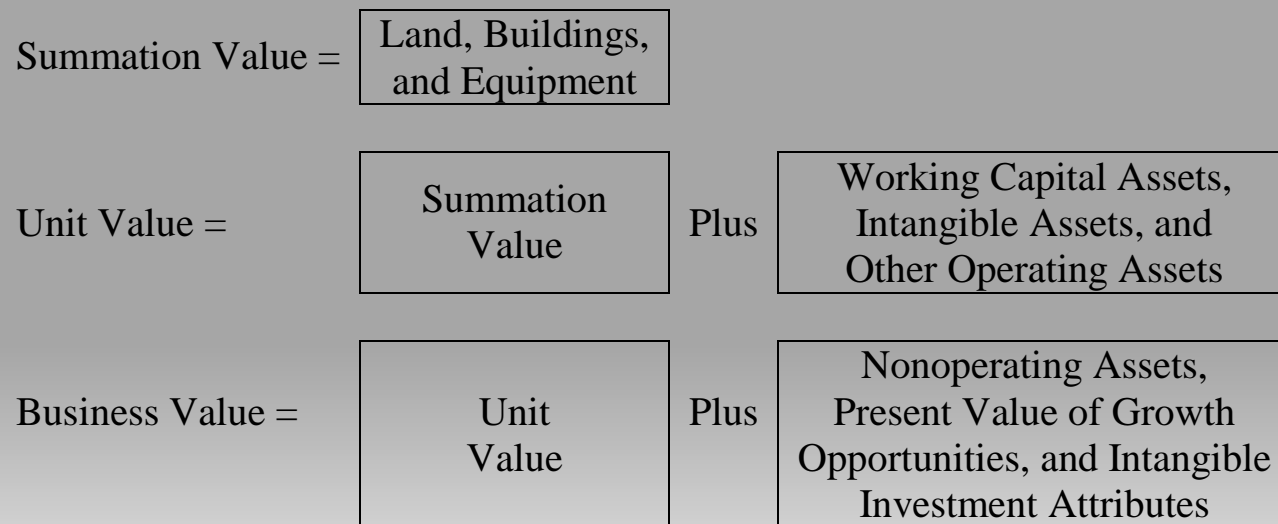
Conceptual Differences – Business Value, Unit Value, and Summation Value

Typical Taxpayer Company
Relationship of Business Value, Unit Value, and Summation Value



Conceptual Differences – Business Value, Unit Value, and Summation Value

Typical Taxpayer Company
Relationship of Various Ownership Interests in Business Value, Unit Value, and Summation Value



15 Analytical Differences to Consider

- Let's consider that there are (at least) 15 analytical differences between unit valuations, summation valuations, and business valuations.
- These differences affect the valuation procedures performed.
- These differences affect the valuation variables selected.
- And, these differences affect the values concluded.

Analytical Difference #1 – Bundle of Assets

- Each type of valuation encompasses a different bundle of ownership interests.
- There should be a different value conclusion for a business value, a unit value, and a summation value.
- A business value includes all of the expected future income from:
 - all tangible assets in place
 - all intangible assets in place
 - all expected future tangible assets
 - all expected future intangible assets
 - PVGO

Analytical Difference #1 – Bundle of Assets (cont.)

- A unit value includes all of the expected future income from:
 - all tangible assets in place
 - all intangible assets in place
- A summation value includes all of the expected future income from:
 - specified tangible assets in place
 - specified intangible assets in place

Analytical Difference #2 – Approaches and Methods

- There are different generally accepted business valuation, unit valuation, and summation valuation approaches and methods.
- The names of some of the different analytical approaches and methods sound the same – but the analytical procedures performed and the valuation selected variables will be different.
- Therefore, the value indications concluded from the different analytical approaches should be different.

Generally Accepted Unit Valuation Approaches and Methods

- There are generally accepted unit valuation and methods
- Cost approach
 - Replacement cost new less depreciation (“RCNLD”)
 - Reproduction cost new less depreciation (“RPCNLD”)
 - Historical cost less depreciation (“HCLD”)
- Market approach
 - Stock and debt method
 - Comparable sales method
- Income approach
 - Yield capitalization method
 - Direct capitalization method

Generally Accepted Unit Valuation Approaches and Methods (cont.)

- There are generally accepted valuation procedures applied within each method
- There is a body of literature that documents these generally accepted unit valuation approaches and methods

Generally Accepted Summation Valuation Approaches and Methods

- There are generally accepted summation valuation approaches and methods
- Cost approach
 - Replacement cost new less depreciation method (RCNLD)
 - Reproduction cost new less depreciation method (RPCNLD)
- Market approach
 - Direct sales comparison method
- Income approach
 - Yield capitalization method
 - Direct capitalization method

Generally Accepted Summation Valuation Approaches and Methods (cont.)

- There are generally accepted valuation procedures that are applied within each method
- There is a body of literature that documents these generally accepted summation valuation approaches and methods

Generally Accepted Business Valuation Approaches and Methods

- There are generally accepted business valuation approaches and methods
- Asset-based approach
 - Asset accumulation method
 - Adjusted net asset value method
- The asset-based approach to business valuation is not the same analysis as the cost approach to property valuation
- Market approach
 - Guideline publicly traded company method
 - Guideline merged and acquired company (also called precedent transaction) method

Generally Accepted Business Valuation Approaches and Methods (cont.)

- Income approach
 - Yield capitalization (commonly called DCF) method
 - Direct capitalization method
- There are generally accepted valuation procedures that are applied within each method
- There is a body of literature that documents these generally accepted business valuation approaches and methods

Generally Accepted Intangible Asset Valuation Approaches and Methods

- Cost approach methods
 - Replacement cost new less depreciation method (“RCNLD”)
 - Reproduction cost new less depreciation method (“RPCNLD”)
 - Trended historical cost less depreciation method (“THCLD”)
- Market approach methods
 - Relief from royalty method (“RFR”)
 - Comparable uncontrolled transactions method (“CUT”)
 - Comparable profit margin method (“CPM”)

Generally Accepted Intangible Asset Valuation Approaches and Methods (cont.)

- Income approach methods
 - Differential income (with/without) method
 - Incremental income method
 - Greenfield method
 - Profit split method (or residual profit split method)
 - Disaggregated method
 - Distributor method
 - Residual (or excess) income method
 - Capitalized excess earnings method (“CEEM”)
 - Multiperiod excess earnings method (“MEEM”)

Generally Accepted Intangible Asset Valuation Approaches and Methods (cont.)

- There are generally accepted procedures that are applied within each method
- There is a body of literature that documents these generally accepted intangible asset valuation approaches and methods

Analytical Difference #3 – Level of Income Included

- The amount of – and the type of – income will be different in a business valuation, a unit valuation, and a summation valuation.
- In a business valuation, each income approach method includes all of the following:
 - All operating income
 - All nonoperating income
 - All of the operating income comes from a business entity providing goods or services
- In a unit valuation, each income approach method includes the following:
 - All operating income only
 - All of the operating income comes from a business entity providing goods or services
- In a summation valuation, each income approach method includes the following:
 - Income generated from the property rental of RE and TPP only

Analytical Difference #4 – Duration and Direction of Income Projection

- The duration/term – and the directional change – of the income will be different in a business valuation, a unit valuation, and a summation valuation.
- In a business valuation, each income approach method assumes the following:
 - Income will be generated into perpetuity
 - Income will be generated from current assets and place and from incremental/growth assets
 - So, income is expected to increase beyond the capacity of assets currently in place
 - Income may be generated by assets acquired in an acquisition
 - There is a perpetuity period terminal value with LT income growth exceeding the inflation rate (because capx exceeds depreciation expense)

Analytical Difference #4 – Duration and Direction of Income Projection (cont.)

- In a unit valuation, each income approach method assumes the following:
 - Income will be generated into perpetuity
 - Income will be generated from the assets in place and direct replacement assets only
 - So income will not increase beyond the capacity of the assets in place
 - There is a perpetuity period terminal value with LT Income growth less than or equal to the inflation rate (where capx equals depreciation expense)
- In a summation valuation, each income approach method assumes the following:
 - Income will be generated over the remaining life of the primary or principal asset in the specified bundle of assets
 - Income will generate from the assets in place only
 - So income will not increase beyond the capacity of the assets in place
 - There may be no terminal value – or a terminal value based on a limited remaining useful life (“RUL”) projection period

Analytical Difference #5 – Long-Term Growth Rate

- The expected income long-term growth (“LTG”) rate will be different in a business valuation, a unit valuation, and a summation valuation.
- The business value business operating income LTG rate includes income from:
 - all assets in place
 - replacement assets (i.e., direct replacements for retiring assets)
 - expansionary capx assets
 - potential M&A transactions
 - new products, new services, new business lines
 - the LTG rate includes both inflation growth and real growth

Analytical Difference #5 – Long-Term Growth Rate (cont.)

- The unit value business operating income LTG rate includes income from:
 - all assets in place
 - direct replacement (for returning) assets only
 - the LTG rate is typically the expected inflation rate
 - the LTG rate typically excludes any real growth
- The summation value property rental income LTG rate includes income from:
 - assets in place only
 - the LTG rate typically includes inflation only – over the expected RUL of the specified bundle of tangible assets (usually RE and TPP) and/or intangible assets in place

Analytical Difference #6 – Capital Expenditures

- Business valuations include capx (and depreciation expense) both (1) for direct replacement (of retirements) assets and (2) for incremental or expansionary assets.
- Unit valuations include capx (and depreciation expense) for direct replacement (of retirements) assets only
- Summation valuations include maintenance capx only (and depreciation expense) only for the specified bundle of assets in place (usually RE and TPP)

Analytical Difference #7 – Discount Rate and Direct Capitalization Rate

- In a business value, typically the discount rate is the taxpayer company WACC (applied to present value NCF).
- In a business value, typically the direct capitalization rate is the taxpayer company WACC minus the company's expected LTG rate in total business NCF.
- In a unit value, typically the discount rate is the taxpayer company WACC adjusted for the lower LTG in NCF related to assets in place only
- In a unit value, typically the direct capitalization rate is the growth-adjusted WACC minus the unit's expected LTG rate in NCF related to assets in place only.
- In a summation value, typically the discount rate is based on the band of investment method, considering mortgage interest rates and property investor returns on investment.

Analytical Difference #8 – Pricing Multiples

- In all market approach valuation analyses, the pricing multiples should be consistent with:
 - the level of income analyzed
 - the subject property expected RUL
 - the subject income expected LTG rate
- In a business value and a unit value, the pricing multiples are extracted from either:
 - guideline publicly traded companies
 - guideline M&A transactions

Analytical Difference #8 – Pricing Multiples (cont.)

- The business value selected pricing multiples should be based on:
 - relative growth rates
 - relative profit margins
 - relative returns on investment
 - relative risk attributes
 - relative size of companies
- The unit value selected pricing multiples should be based on the same above-listed factors; but the unit value selected pricing multiples should be lower due to lower expected income, margins, returns, LTG – due to (1) the inclusion of business operating income only and (2) lower expected unit (compared to business) income LTG rates.
- The summation value pricing multiples are not extracted from public companies or from M&A transactions. The selected pricing multiples are extracted from the sales of comparable bundles of RE and TPP.

Analytical Difference #9 – Market Approach Income

- The level of income that the selected pricing multiple is applied to is different in a business valuation, a unit valuation, and a summation valuation.
- In a business value, the income used in the market approach includes both all operating income and all nonoperating income.
- In a unit value, the income used in the market approach includes the operating income generated from the unit assets only.
- In a summation value, the income used in the market approach only includes the net operating income generated from the property rental of RE and TPP.

Analytical Difference #10 – Cost Approach

- The business valuation asset-based approach is not the same analysis as the property valuation cost approach.
- The business value asset-based approach may be used to value:
 - total taxpayer company assets
 - total taxpayer company invested capital (all LTD plus all equity)
 - total taxpayer company equity
- The basic principle of the asset-based business valuation approach is:
 - the current value of total (tangible and intangible) company assets minus
 - the current value of total (recorded and contingent) company liabilities equals
 - the current value of total company equity

Analytical Difference #10 – Cost Approach (cont.)

- In a business valuation, one common component of any asset-based approach is the valuation of the company goodwill. Goodwill is typically valued using one of these generally accepted intangible asset income approach valuation methods:
 - CEEM
 - MEEM
- In a unit valuation, the cost approach may be used to value either:
 - total tangible assets only
 - total tangible assets and total intangible assets
- In a unit valuation, the functional obsolescence and economic obsolescence metrics are calculated on an aggregate (i.e., total unit) basis

Analytical Difference #10 – Cost Approach (cont.)

- In a summation valuation, the cost approach is used to value:
 - identified bundles of RE and TPP only
- In a summation valuation, the functional obsolescence and economic obsolescence metrics are calculated on a property-by-property basis.

Analytical Difference #11 – Different Cost Measurement Metrics

- The cost approach is not a generally accepted business valuation approach.
- The cost approach may be used to value individual categories of tangible asset or intangible asset property categories in an asset-based approach business valuation.
- In a cost approach component of an asset-based approach business valuation, the cost approach is applied on a summation principle (i.e., property-by-property) basis.
- In a unit valuation, the most common cost approach method is HCLD – with both functional obsolescence and economic obsolescence calculated on an aggregate (or total unit) basis.
- In a summation valuation, the most common cost approach methods are RCNLD or RPCNLD – with physical deterioration, functional obsolescence, and economic obsolescence calculated on a property-by-property basis.

Analytical Difference #12 – Expected RUL

- In a business valuation, typically the analyst uses the company's financial accounting RULs and depreciation rates (for both tangible assets and intangible assets) in any cost approach component of an asset-based approach analysis.
- In a unit valuation, typically the analyst starts with the tangible asset HCLD – thereby adopting the company's RULs and depreciation rates. In addition, the analyst performs functional obsolescence and economic obsolescence analyses on an aggregate (i.e., total unit) basis.
- In a summation valuation, the analyst typically assigns an RUL and a depreciation rate to each component of the bundle of RE and TPP. Also, the analyst measures functional obsolescence and economic obsolescence on a property-by-property basis.

Analytical Difference #13 – Obsolescence Measures

- In the business valuation asset-based approach, obsolescence is measured for all tangible assets and intangible assets that are valued by the application of the cost approach.
- In the business valuation (asset-based approach analysis), obsolescence is measured collectively (i.e., in the aggregate).
- Economic obsolescence is typically measured by the capitalization of income loss method. All valuation variables (income metric, discount rate, LTG rate) are consistent with the variables applied in the income approach valuation analysis.
- In the unit valuation, obsolescence is measured collectively (i.e., in the aggregate).

Analytical Difference #13 – Obsolescence Measures (cont.)

- Economic obsolescence is typically measured by the capitalization of income loss method. All valuation variables (income metric, discount rate, LTG rate) are based on the unit valuation variables.
- In the summation valuation, obsolescence is typically measured at the individual property-by-property RE and TPP level.

Analytical Difference #14 – Reconciliation

- To reach a valuation synthesis and conclusion (“VSC”) in each type of valuation, the analyst weights each of the value indications based on:
 - the quantity and quality of available data for each analysis
 - the analyst’s confidence level in each valuation method and each value indication
- In a business valuation, the analyst assigns most weight to the valuation approaches that are typically relied on by market participants:
 - the income approach
 - the market approach

Analytical Difference #14 – Reconciliation (cont.)

- In a unit valuation, the analyst will consider the composition of the subject taxpayer unit bundle of assets and the subject taxpayer industry to assign weights to each value indication.
- In a summation valuation, the analyst will assign weights to each value indication based on the specific types of the subject RE and TPP.

Analytical Difference #15 – Bundles of Assets Included in the VSC

- In the VSC process, the analyst assigns weights to each value indication that reflect the different bundles of assets included in the different types of valuations.
- In the business valuation, the analyst considers how market participants would price the subject bundle of taxpayer company debt and equity securities.
- In the unit valuation, the analyst considers how market participants would price the subject taxpayer company tangible assets and intangible assets.
- In the summation valuation, the analyst considers how market participants would price the subject taxpayer RE and TPP only.

Other Analytical Differences – Professional Standards, Professional Literature, and Types of Valuation Analysts

- Different valuation professional standards apply to business valuations, unit valuations, and summation valuations.
- These different professional standards relate to both:
 - the development of the valuation analysis
 - the reporting of the valuation analysis
- Different valuation professional organizations (“VPOs”) promulgate the different professional standards and practices related to business valuations, unit valuations, and summation valuations.
- Different types of valuation analysts (with different sets of technical skills and different sets of professional training, testing, licensing, and credentialing) perform business valuations, unit principle valuations, and summation principle valuations.

Unit Principle Valuation Common Misconceptions

- A unit principle valuation is not the same as a business valuation.
- A unit value is not necessarily equal to a business value.
- A unit value is not necessarily equal to a business value minus intangible assets.
- The total taxpayer company assets do not necessarily equal the value of the taxpayer tangible assets plus the value of the taxpayer intangible assets.
- Total taxpayer company assets include (1) working capital accounts, (2) other assets (e.g., DFIT, unconsolidated investments), and (3) intangible influences.
- Intangible assets are not the same as intangible influences. One reason for this statement is that intangible influences are not assets at all.
- The taxpayer company stock and debt does not equal the taxpayer company total equity and total liabilities.

Unit Principle Valuation Common Misconceptions (cont.)

- The taxpayer company stock and debt equals the taxpayer company equity plus long-term, interest-bearing debt only.
- A business value includes both operating assets and nonoperating assets.
- A unit principle valuation does not necessarily mean a centrally assessed property.
- Many local assessors apply unit valuation principles to value certain types of locally assessed property.
- The subject valuation analysis is a unit principle valuation if:
 - the income considered in the analysis is derived from providing goods or services
 - the discount/capitalization rates or the pricing multiples are derived directly from capital market data

Unit Principle Valuation Common Misconceptions (cont.)

- The above statement is true regardless if the valuation analysis is called a local assessment, a summation valuation, a property valuation, a real estate appraisal, etc.
- In unit principle valuations, taxpayers and analysts – and taxing authorities – should not use taxpayer company business plans or financial projections without performing rigorous due diligence and making normalization adjustments. These prospective financial information (“PFI”) documents are applicable for business valuations.
- For unit principle valuation purposes, these PFI documents often need to be normalized or adjusted (for valuation variables related to LTG rate, capx, future assets, acquisitions, etc.).

Summary and Conclusion

- This discussion considered the conceptual and the practical differences between three different types of valuation analyses.
- These three different types of valuations are performed for different purposes and for different objectives.
- There are different generally accepted approaches and methods for each type of valuation.
- The most important difference is: the different types of analyses value different bundles of ownership interests.
- Therefore, the value conclusions should be different (but reconcilable) between a business valuation, a unit principle valuation, and a summation principle valuation.

Summary and Conclusion (cont.)

- There are analytical differences – and valuation variable selection and application differences – between these three different types of valuation analyses.
- There are many common misconceptions about unit principle valuation analyses and value conclusions.