Developing Unit Principle Valuations during COVID-Impacted Economic Uncertainty

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Discussion Outline

- Review of unit principle valuation “first principles”
- Review of unit principle valuation approaches and methods
- COVID-impacted economic uncertainty is a risk factor
- How we deal with risk factors in unit principle valuations
- Defining the appraisal problem—researching valuation variables
- Selecting cost approach valuation variables
- Selecting income approach valuation variables
- Selecting market approach valuation variables
- Developing the valuation synthesis and conclusion
- Documenting the unit principle valuation analysis
- Analyst guidelines and caveats
- Summary and conclusions, questions and discussion

Abbreviations and Vocabulary

- Let's use the following abbreviations in these slides:
  - UPV means unit principle valuation
  - SPV means summation principle valuation
  - EU means economic uncertainty; EU includes COVID-related economic uncertainty and other types of unexpected macroeconomic uncertainty
  - VPO means valuation professional organizations (and the professional standards that they promulgate)

Abbreviations and Vocabulary (cont.)

- Let's use the terms property and asset as synonyms in these slides. Although, technically, property and assets are not always synonyms.
  - "Property" is a legal term. The owner/operator owns and protects property under state law.
  - "Assets" is an accounting term. The owner/operator records assets on a balance sheet.
  - While there is a lot of overlap of these two "circles" on an imaginary Venn diagram,
    - Not all property is recorded as an asset on a GAAP-basis balance sheet and
    - Not all assets that are recorded on a balance sheet are considered to be property under every state's laws.

Review of First Principles

- For property tax purposes, the purpose of the valuation is to conclude the defined standard of value of the taxpayer's taxable property in compliance with:
  - Statutory authority
  - Administrative rulings
  - Judicial precedent
- Most jurisdictions apply a market-based standard of value; the specific definition of the statutory standard can vary by jurisdiction

Review of First Principles (cont.)

- Most—but not all—jurisdictions apply a value in continued use premise of value
  - A premise of value is not the same as a standard of value
  - A going-concern or a continued use premise of value is not the same as valuing a going-concern business enterprise
  - A market-based standard of value (such as fair market value) assumes a sale—but a sale of property in continued use between one owner/operator and another owner/operator
  - Most jurisdictions—and most VPO standards—require consideration of HABU with regard to the premise of value
- Different jurisdictions tax different categories of property, such as:
  - Real property only
  - Real property and TPP only
  - Real property, TPP, and intangible personal property

Review of First Principles (cont.)

- Some jurisdictions exempt from taxation some, all, or no intangible personal property
- Most jurisdictions tax only property in existence as of the assessment date
  - This principle excludes future property, not yet in existence
  - This principle excludes investment attributes that are not property rights
- While the components of the taxable property bundle varies by jurisdiction, it is the taxpayer assets that are subject to taxation. That is:
  - The taxpayer business enterprise is not subject to taxation
  - The taxpayer securities (stock and debt instruments) are not subject to taxation
  - Property tax is not a taxpayer income tax

First Principles – the UPV

- In a UPV, the appraiser values:
  - All of the taxpayer operating property collectively—as a single unit (or bundle) of assets
  - All of the taxpayer property that is in place on the assessment date
  - All of the taxpayer property operating together, in continued use, as part of a going concern (but not the taxpayer's business enterprise)
  - All of the taxpayer property as if all of the operating assets would sell together in an asset sale transaction from one owner/operator to another owner/operator

First Principles – the UPV (cont.)

- The UPV typically concludes the total value of all
  - Working capital accounts
  - Real estate and real property
  - Tangible personal property
  - Identifiable intangible personal property
  - Goodwill
  - Regulatory assets (if any)
  - Other investment assets (if any)
- Unless correctly adjusted, the calculated unit value may equal the taxpayer's business value and imay nclude:
  - Intangible investment attributes
  - Future tangible and intangible assets
  - PVGO – unidentified future growth opportunities

First Principles – the UPV (cont.)

- If some categories of assets—or some components of business value—are not taxable in the subject jurisdiction, then the appraiser may have to adjust the unit value in order to exclude those values.

First Principles—UPV and SPV

- Taxing authorities typically apply a summation principle valuation (SPV) to appraise locally assessed property
- Taxing authorities typically apply an SPV to appraise individual real estate or TPP
- Applying an SPV, each item (or, at least, each category) of real estate and TPP is appraised individually
- The summation of all of the values of all of the real estate and TPP items (or categories) equals the value of the taxpayer's taxable property
- This is important: the value of the taxpayer's total property does not change whether the property is appraised based on a UPV or an SPV

First Principles—UPV and SPV (cont.)

- If properly applied, the UPV and the SPV will both conclude the same value for the same bundle of taxpayer property
- This same value conclusion principle assumes the same standard of value, the same premise of value, and the same subject bundle of taxable property

First Principles—Why Apply the UPV?

- Some jurisdictions require the application of the UPV to centrally assessed property
- The UPV is more efficient than the SPV when the taxpayer property:
  - Is physically, functionally, and economically integrated
  - Crosses over taxing jurisdictions
  - Physically moves
  - Would sell as one single bundle in one single transaction
  - Does not generate separate rental income for each item
  - Cannot be associated with a separate cap rate for each item
- However, the appraiser may have to adjust the UPV to exclude nontaxable property—or value components—in order to make the UPV unit of taxable property equal to the SPV bundle of taxable property

First Principles—UPV Does Not Mean Centrally Assessed

- Not all UPV properties are centrally assessed properties
- Many jurisdictions apply the UPV to certain industries:
  - Airlines
  - Railroads
  - Telecom
  - Interstate pipelines
  - Electric transmission or distribution
- Many local assessing authorities effectively apply the UPV to locally assessed properties:
  - Electric generation
  - CATV
  - Gas distribution
  - Water & wastewater
  - Intrastate water pipelines
  - Mining & minerals
  - Theatres & entertainment
  - Stadiums & racetracks
  - Resorts & country clubs
  - Marinas
  - Oil & gas refineries
  - Hotels & hospitality
  - Hospitals
  - Nursing homes
  - Other health care

First principles—What Makes an Appraisal a UPV?

- Income approach
  - Income subject to capitalization is derived from providing goods and services
  - Income is not property rental income
  - Discount/cap rates are calculated from capital market data
  - Discount/cap rates are not extracted from the sale of comparable properties
  - Income is assumed to continue in perpetuity
  - Income assumes replacement assets
- Market approach
  - Considers guideline sales of going-concern business enterprise transactions
  - Applies guideline data related to publicly traded stock & debt instruments
  - Extracts pricing multiples from M&A transactions or capital markets

First principles—What Makes an Appraisal a UPV? (cont.)

- Cost approach
  - Economic obsolescence is calculated on an aggregate (not on a property-by-property) basis
  - Economic obsolescence analysis considers capital market data (for example: a CILM analysis that compares the unit ROI to the unit cost of capital)
- If the appraiser (that is, the local assessor) performs the above-listed procedures, then the appraisal is a UPV

Generally Accepted UPV Approaches and Methods

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

UPV and Previous Pandemics

- Many appraisers have lived—and worked—through previous pandemics:
  - 1918 H1N1 virus (Spanish flu)
  - 1957/58 H2N2 virus (Asian flu)
  - 1968 H3N2 virus (Hong Kong flu)
  - 2009 H1N1 pandemic (H1N1pdm09 virus) (swine flu)
- Many appraisers have lived—and worked—through other pandemics and epidemics
  - SARs (other than CoV)
  - MERS (2012)
  - Cholera (1970s)
  - HIV (1980s)

EU and Pandemics

- Pandemics are one cause of EU.
- Pandemics cause economic disequilibrium in one or more countries
  - Of an unpredictable (uncertain) magnitude
  - For an unpredictable (uncertain) period of time
- Typically, appraisers (and epidemiologists) cannot predict when there will be an economic (and health) recovery after a pandemic. Therefore, there is EU.
- There are many, many, many other causes of EU:
  - Political
  - Macroeconomic
  - Natural disaster

EU and Pandemics (cont.)

- Many appraisers have lived—and worked—through other causes of EU. Just a few examples include:
  - Arab oil embargo (mid-1970s)
  - Iran hostage crisis (1979)
  - High inflation rates (late 70s-early 80s)
  - 9/11 World Trade Center/Pentagon (2001)
  - Mid-east wars (last 20 years)
  - 2008-2009 financial crisis

How Can We Deal with Pandemic EU?

- Calm down
- Relax
- EU is just one component of risk
- We deal with risk in developing a UPV all the time
- At its most fundamental level, there are two principal components of any valuation analysis:
  - Measuring expected return
  - Measuring risk
- When risk and expected return are in equilibrium, we can conclude a market price for the appraisal subject
- We know how to analyze risk—including EU
- Risk is our business!

Analyzing EU in the UPV

- Typically, we analyze the following data in the development of the UPV
  - Past taxpayer/property performance
  - Industry reports—historical and prospective
  - Company and stock sale data
    - Subject company
    - Guideline public companies
    - Industry
  - Capital market-derived cost of capital data
- Typically, the past provides supportable indications of the future
- During periods of extreme EU, the past is not a supportable indication of the future
  - At least not of the near-term future
  - The past may still be informative with regard to LTG rates

EU and Disequilibrium in Markets

- EU causes disequilibrium in markets
  - Macroeconomic markets
  - Capital markets
  - Industry markets
  - Individual company markets
- EU can impact each of these markets in a different way—and to a different degree
- Some EU-caused market changes (different for each market) may be:
  - Short-term
  - Medium-term
  - Long-term
  - Permanent

EU and Disequilibrium in Markets (cont.)

- In analyzing the UPV impact of the EU, for each above-listed markets, appraisers have to:
  - Identify the changes caused by the EU
  - Identify the impact of the changes
  - Identify if the changes are ST, MT, LT, permanent
  - Identify where to incorporate those changes into the UPV
- For the same taxpayer, the impact of the EU may differently affect the:
  - Business enterprise value
  - UPV
  - Tangible and intangible property value
  - Tangible property value

How Does EU Affect the Taxpayer/Unit?

- Appraisers typically consider the following 10 areas in which EU can impact the taxpayer company and/or the taxable unit:
  - Economic
  - Political/government
  - Demographic
  - Psychographic (social/cultural)
  - Legal/regulatory
  - Technological
  - Industry (consider success factors)
  - Competitive
  - Environmental (such as green trends)
  - International (if applicable)

How Does EU Affect the Taxpayer/Unit? (cont.)

- Depending on the taxpayer/industry, EU can have the following impacts on each of these areas:
  - Positive
  - Negative
  - Neutral
- Depending on the taxpayer/industry, the EU impact on each of these areas can be:
  - ST
  - MT
  - LT
  - Permanent

How Does EU Affect the Porter Factors?

- Michael Porter would recommend categorizing the previous list of 10 areas into the following strategic considerations:
  - The bargaining power of customers
  - The bargaining power of suppliers
  - The threat of new market contracts
  - The threat of substitutes
- The appraiser may analyze the impact of EU on each of these Porter "forces" with regard to the taxpayer company and/or the taxable unit.
- Appraisers typically consider each of these "forces" by developing a SWOT analysis.

How Does EU Affect the Porter Factors? (cont.)

- One way to assess the impact of EU on the taxpayer/unit is to compare the results of:
  - The SWOT analysis from several years ago (pre-COVID) to
  - The SWOT analysis today (post-COVID).
- It is considered a best practice for an appraiser to perform a SWOT analysis (and, perhaps, a comparative SWOT analysis) in the development of the UPV.

How Does EU Affect the Functional Analysis?

- A functional analysis considers the following factors related to the taxpayer company and/or taxable unit
  - Assets employed
  - Risks assumed
  - Functions performed
- A functional analysis is not the same as—but is related to—a SWOT analysis
- One way to assess the impact of EU on the taxpayer/unit is to compare the results of:
  - The functional analysis from several years ago (pre-COVID) and
  - The functional analysis today (post-COVID)
- It is considered a best practice for an appraiser to perform a functional analysis (and, perhaps, a comparative functional analysis) in the development of the UPV.

How Does EU Affect Supply and Demand?

- The appraiser will typically identify the key success factors for the taxpayer company and/or taxpayer industry.
- The appraiser will consider how these success factors have changed due to EU—that is, pre-COVID compared to post-COVID.
- The appraiser will typically evaluate the elasticity of demand for the taxpayer product or service.
- Elasticity of demand is a function of how essential the taxpayer product or service is.
- Elasticity of demand also relates to:
  - How competitive the market supply is
  - The availability of suitable substitute products and services

How Does EU Affect Supply and Demand? (cont.)

- The EU impact on supply and demand factors can be:
  - ST
  - MT
  - LT
  - Permanent
- It is considered a best practice for an appraiser to perform an elasticity of demand analysis (and, perhaps, a comparative analysis) in the development of the UPV.

EU and Taxpayer Company Strengths and Weaknesses

- In assessing how EU will impact the taxpayer company and/or taxable unit, the appraiser will typically evaluate the internal strengths and weaknesses of the subject taxpayer company.
- The appraiser will typically assess these factors:
  - The adaptability/flexibility of management and of the workforce in general
  - The company's technological prowess
  - Whether the company is an early or late adapter (or an innovator) of industry trends
  - The company's reputation and marketing expertise
  - The company's financial strength, and risk management abilities, including:
    - Reserve funds
    - Access to capital
    - Liquidity ratios
    - Debt to equity ratio (financial leverage)
    - Break-even analysis (operational language)
    - Cost/volume/profit relationships

EU and Taxpayer Company Strengths and Weaknesses (cont.)

- It is considered a best practice for an appraiser to perform a taxpayer company strengths and weaknesses analysis (and, perhaps, a comparative analysis) in the development of the UPV.

Income Approach Valuation Variables

- UPV (business operating) income is more sensitive to EU than is summation principle (property rental) income
- UPV capitalization rates (extracted from capital market data) are more sensitive to EU than are summation principle capitalization rates (extracted from comparable property sales)

Income Approach Valuation Variables (cont.)

- The income considered in the UPV is expected future operating income
- In periods of COVID-impacted EU:
  - This income projection should not be based on historical averages
  - This income projection should not be based on regression analysis
  - This income projection should not be based on historical industry trends
  - This income projection should be based on management's projections that incorporate the expected impact of COVID on the subject unit in the subject industry as of the valuation date
  - This income projection should consider the entire time period until the industry—and the taxpayer/unit—return to pre-COVID normalcy

Income Approach Valuation Variables (cont.)

- The UPV discount rate should consider the current risk of achieving the management-prepared financial projections
  - The risk-free rate should be a current rate
  - The beta should be short-term and not long-term
  - The equity risk premium should be short-term and not long-term
  - The size premium should be a current premium
  - The CSRP should consider the impact of COVID on the taxpayer’s customers, suppliers, employees, etc.
- The expected LT growth rate and the terminal value capitalization rate should reflect only permanent changes in the industry—and the taxpayer/unit—caused by COVID

Income Approach Valuation Variables

- There is an implicit bias incorporated in every management-prepared (or appraiser-prepared) financial projection.
- This implicit bias is typically unconscious. It does not imply any wrongful intentions.
- Financial projections can either be upward-biased (sometimes called optimistic) or downward-biased (sometimes called pessimistic).
- Sometimes, company managements prepare financial projections that are easy to achieve or difficult to achieve.
- After a period of EU, the implicit bias relates to: When will the company operations return to a state of normalcy?
- Based on various due diligence procedures, the appraiser should attempt to identify any implicit bias in the financial projections.

Income Approach Valuation Variables (cont.)

- The appraiser typically compensates for any projection bias in the risk-adjusted discount rate.
- The appropriate UPV discount rate should be adjusted for projection performance risk—as well as for:
  - General economic/capital market risk
  - Diversifiable industry risk
  - Nondiversifiable company risk
- That is, the discount rate should reflect the risk of achieving the financial projections—as well as the risk of the taxpayer company and/or the taxable unit.

Cost Approach Valuation Variables

- Cost metrics (replacement cost new, reproduction cost new, or original cost) may not be materially impacted by COVID
- Physical deterioration may not be materially impacted by COVID
- Functional obsolescence may be impacted by COVID
  - Excess capacity will result in excess capital costs
  - Changes in operating procedures may result in excess operating costs

Cost Approach Valuation Variables (cont.)

- Economic obsolescence should reflect the impact of COVID and of other EU
  - The current period actual return metrics should reflect 2021 and/or expected 2022 results of operations—and not a long-term return metric average
  - The benchmark return metrics—or the required return metrics—should reflect a world without COVID (and other causes of EU).
  - That benchmark may be either:
    - A return metric extracted from many years ago (before the EU and before COVID)
    - A future return metric expected for many years in the future (post-COVID)
    - A current yield or direct capitalization rate that includes all of the risk of the COVID or other causes of EU

Cost Approach Valuation Variables (cont.)

- Economic obsolescence calculations should include consideration of both:
  - Decreased current period income from economic, industry, and taxpayer/unit trends
  - Increased required returns due to the risk of COVID and other causes of EU

Market Approach Valuation Variables

- Market approach UPV methods include:
  - The comparable sales transaction (or guideline M&A) method
  - The stock & debt method
- Pre-COVID M&A transactions may not be relevant to a post-COVID UPV. Stale transaction pricing multiples may not reflect the post-COVID economic reality and EU.
- Post-COVID M&A transactions should be carefully analyzed—and adjusted—for buyer-specific synergies, distressed company sale transactions, pricing earnouts, and other contract-specific terms.
- Corporate acquirers buy the future—and not the past. Transaction pricing multiples should be applied to the taxpayer/unit expected future income—and not the taxpayer/unit historical income.

Market Approach Valuation Variables (cont.)

- Capital market (stock and debt method) pricing multiples should also be applied to the taxpayer/unit expected future income—not the taxpayer/unit historical income. In other words, consider applying ex-ante pricing multiples and not ex-post pricing multiples.
- Current capital market pricing multiples appear to be fulsome (that is, overstated—compared to historical norms)—because the current period income for many industries/companies is depressed.

Market Approach Valuation Variables (cont.)

- Current capital market pricing multiples reflect the value of publicly traded stocks—not the value of the taxpayer/unit operating property. Publicly traded stocks are:
  - Perfectly liquid (liquidity avoids price fluctuation risk)
  - Purchased in small investments (typically 100 share round lots)
  - Purchased as part of a diversified investment portfolio
  - Expected to appreciate (not depreciate) in value over time
  - Not subject to capital calls
  - Subject to limited investor liability

Market Approach Valuation Variables (cont.)

- In contrast, taxpayer company and/or taxable unit operating assts are:
  - Perfectly illiquid
  - Purchased in large investments—as an entire business entity
  - Totally undiversified
  - Expected to depreciate (and need to be replenished) over time
  - Subject to capital calls
  - Subject to unlimited investor liability
- Therefore, stock and debt method value indicators may not provide credible value indications for a taxpayer's unit of operating assets.
- For all of these reasons, in a COVID or other EU environment, the appraiser may decide not to assign much weight to the market approach value indications when developing the UPV.

Valuation Synthesis and Conclusion

- In a COVID or other EU environment, income approach value indications typically are assigned the most weight.
- In any UPV, investors are buying risk-adjusted expected future income. Typically, this expected future income is best represented in the income approach.
- In a COVID or other EU environment, cost approach value indications typically are assigned less weight.
- In any UPV, cost approach analyses focus primarily on the past, while investors focus primarily on the future.
- In a COVID or other EU environment, market approach value indications typically are assigned little or no weight.

Valuation Synthesis and Conclusion (cont.)

- In any UPV, M&A transaction pricing multiples may be either (1) stale or (2) reflect the most financially successful industry participants—and ignore all other M&A candidates that did not sell.
- In any UPV, stock and debt method capital market pricing multiples reflect the price that diversified investors will pay for small investments in perfectly liquid stocks.
- These pricing multiples may not reflect the price that industry participants will pay for an entire taxpayer company-size investment in perfectly illiquid and perfectly undiversified operating property.

Caveats regarding EU and the UPV

1. Caveat: The COVID or other EU impact on the taxpayer UPV is temporary.

   Consideration: The COVID or other EU impact on the taxpayer company or taxable unit property value is real—and material—as of the valuation date.

2. Caveat: Taxpayer unit value will rebound in the future.

   Consideration: The taxpayer's unit value is impacted by COVID or other EU on the valuation date. When the taxpayer's unit value increases in the future, that increase will be reflected in the future property assessment.

Caveats regarding EU and the UPV (cont.)

3. Caveat: There is a COVID vaccine available. Things are returning to normal.

   Consideration: When the economy, the industry, and the taxpayer company have all returned to normalcy, then that value increase will be reflected in the future property assessments.

4. Caveat: COVID (or other EU) impacts all taxpayers in all industries.

   Consideration: Economic obsolescence (EO) can be national, regional, industry-wide, or taxpayer-specific. In all cases, the taxpayer company and/or taxable unit value is impacted by the EO caused by COVID (or some other EU).

Caveats regarding EU and the UPV (cont.)

5. Caveat: The COVID (or other EU) impact is not unique to this taxpayer company or this taxable unit.

   Consideration: No UPV impact (increased inflation rates, increased income tax rates, increased interest rates, physical deterioration, functional obsolescence, economic obsolescence) has to be unique to an individual taxpayer company or taxable unit.

6. Caveat: The appraiser should explain what factors caused the taxpayer company and/or taxable unit EO.

   Considerations: The COVID pandemic—or some other specifically identified EU—caused the EO.

Caveats regarding EU and the UPV (cont.)

7. Caveat: The appraiser should explain how the EO impacted the taxpayer company and/or taxable unit.

   Consideration: COVID—or some other specifically identified EU—caused the taxpayer's decreased revenue, decreased customers, decreased income, decreased cash flow, increased risk, and increased yield/direct capitalization rates.

8. Caveat: The federal government already bailed out the subject industry or the subject taxpayer company with a PPP loan or some other incentive program.

   Consideration: That economic benefit, if any, is already included in the 2020 and 2021 taxpayer company results of operations. In addition, such COVID-related government incentive programs are not expected to continue into the future.

Caveats regarding EU and the UPV (cont.)

9. Caveat: M&A transaction pricing multiples have rebounded recently.

   Consideration: This statement is not true in every industry. This statement is true in certain industries for the most financially successful companies that actually sold. Recent M&A transactions have reflected expected synergies from strategic buyers. Such M&A prices may not reflect market value. M&A pricing multiples currently appear to be robust (that is, high)—because the acquired company income may be depressed

Caveats regarding EU and the UPV (cont.)

10. Caveat: The stock market (e.g., DJIA) has rebounded and is reporting record high levels.

    Consideration: This statement is not true for all industries. Even so, stock market indices reflect taxpayer stock values—and not taxpayer property values. Stocks are liquid, diversified, small, and limited lability investments. Taxpayer unit properties are illiquid, undiversified, large, and unlimited liability investments. Stock market indices provide limited information about taxpayer unit property values.

Documenting and Reporting the UPV

- There are two final procedures regarding the selection of valuation variables in the UPV:
  - Documenting the development of, selection of, and application of the EU-impacted variables and
  - Reporting the development of, selection of, and application of the EU-impacted variables.
- The documentation procedures are performed in the UPV work papers.
- The reporting procedures are also performed in the UPV report.

Documenting and Reporting the UPV (cont.)

- Both the UPV work papers and the UPV report should include documentation of:
  - The data gathering process
  - The selection and rejection of data sources
  - All due diligence procedures performed (including any management interviews)
  - The quantitative and qualitative factors leading up to the selection of the EU-impacted valuation variables
    - The development of the valuation variables for each UPV method
    - The documentation of the valuation variables for each UPV method
    - The application of the valuation variables for each UPV method
- As a best practice, many UPV appraisers have adopted the documentation and reporting procedures described in:
  - The *Mandatory Performance Framework* and
  - The *Application of the Mandatory Performance Framework*

Documenting and Reporting the UPV (cont.)

- These guidelines were developed for the Certified in Entity and Intangibles Valuation (CEIV) credential developed by the Corporate and Intangibles Valuation Organization, LLC.
- These guidelines are only “mandatory” for CEIV credential holders when performing fair value measurement valuations. However, these guidelines do provide “best practices” with regard to the documentation and reporting of the EU-impacted valuation variables selection in a UPV performed for property taxation purposes.

EU and UVP Guidelines

- It is the economic uncertainty of COVID that impacts the taxpayer UPV, including:
  - General economic uncertainty
  - Capital market uncertainty
  - Industry uncertainty
  - Property-specific uncertainty
- Another word—and a more precise word—for EU is: risk
- In the income approach, COVID (and other EU) risk is reflected in:
  - The income projection, for the discrete projection period and for the terminal projection period
  - The components of the discount rate and capitalization rate

EU and UVP Guidelines (cont.)

- In the cost approach, COVID (and other EU) risk is reflected in:
  - The actual income return measures considered in the EO measurement
  - The required income return measures considered in the EO measurement
- In the market approach, COVID (and other EU) risk is reflected in:
  - The measure of income (historical vs. prospective) considered in the analysis
  - The selection and adjustment of recent guideline transaction pricing multiples
  - The selection and adjustment of current capital market pricing multiples
  - Consideration of the applicability of transactional data or capital market data

EU and UVP Guidelines (cont.)

- In the valuation synthesis and conclusion, COVID (and other EU) risk is reflected in:
  - The applicability and weighting of each UPV approach value indication

Summary and Conclusion

- Developing the UPV in a period of EU
- UPV first principles
- Appraisers are always developing the UPV in periods of EU
- Cost approach valuation variables and EU
- Income approach valuation variables and EU
- Market approach valuation variables and EU
- UPV synthesis and conclusion
- Documenting and reporting the UPV
- Analyst caveats and guidelines
- Questions and discussion