



# 45th Annual Taxation Conference APPRAISAL for AD VALOREM TAXATION

of Communications, Energy and  
Transportation Properties

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**Identification, Valuation, and Extraction  
of Exempt Intangible Personal Property  
Part II – Extraction of Intangible Assets**

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# Robert F. Reilly

**ROBERT F. REILLY** has been a managing director of Chicago-based Willamette Management Associates (WMA) for the last 25 years. WMA is a business valuation, forensic analysis, and financial opinion services firm. Before joining WMA, Robert was a valuation partner for the Deloitte & Touche accounting firm.

Robert's practice focuses on the valuation of businesses, securities, and intangible assets (including intellectual property) for transaction, financing, taxation, accounting, controversy, and other purposes.

Robert is a certified public accountant, chartered global management accountant, certified management accountant, chartered financial analyst, enrolled agent, and accredited tax advisor. He is accredited in business valuation and certified in financial forensics. He is a certified business appraiser, certified valuation analyst, certified valuation consultant, certified review appraiser, certified real estate appraiser, accredited senior appraiser, and state-certified general appraiser (in several states).

Robert has served as a member of the American Institute of Certified Public Accountants (AICPA) forensic and valuation services executive committee (FVSEC), consulting services executive committee (CSEC), and business valuation committee (BVC). He is an inductee in the AICPA valuation "hall of fame." He has chaired the AICPA annual business valuation conference. And, he has twice received the AICPA "volunteer of the year" award.

Robert has co-authored 12 valuation textbooks, including *Guide to Intangible Asset Valuation* (revised edition published by the AICPA in 2014), *The Practical Guide to Bankruptcy Valuation* (published by the American Bankruptcy Institute in 2013), and the *Guide to Property Taxation* (published in 2008). He has authored numerous book chapters, including several chapters in the recently published Institute of Professionals in Taxation (IPT) text *Property Taxation*, 4<sup>th</sup> edition. He has authored over 300 articles that were published in various accounting, taxation, or valuation journals. Robert has served as an editor or editorial referee for numerous professional journals. Robert currently serves on the editorial boards for *Valuation Strategies*, *The American Bankruptcy Institute Journal*, *Construction Accounting and Taxation*, and *Financial Valuation and Litigation Expert*.

# Marshall P. Mungle

**Marshall Mungle is the manager of property tax for ONEOK, Inc., in Oklahoma City, OK. ONEOK is a diversified energy company involved in the production, marketing, processing, gathering, storage, and transmission/distribution of natural gas. He was formerly with the ad valorem tax division of the Oklahoma Tax Commission and is a past member of the Wichita Workshop Planning Committee. Mr. Mungle graduated from Oklahoma State University and also has over 20 years of experience in the commercial real estate field.**

# Discussion Outline

- Discussion premise
- Intangible asset property tax extraction considerations
- Alternative reasons to extract intangible asset value
- Basic property appraisal—accumulation procedures
- Basic property appraisal—extraction procedures
- Common exempt property extraction procedures
- Methods for intangible asset extraction from the total value
- Direct subtraction method illustrative example
- Income allocation method illustrative example
- Royalty rate method illustrative example
- Summary and discussion

# Discussion Premise

- **The attendee is already familiar with generally accepted unit valuation approaches, methods, and procedures.**
- **The attendee is already familiar with the concepts of—and the procedures for—extracting assets that are exempt from the centrally assessed unit value. Such assets may include: locally assessed property, over-the-road vehicles, pollution abatement equipment, or intangible personal property (if exempt in the subject jurisdiction).**

## Discussion Premise (cont.)

- **The attendee has a basic familiarity with generally accepted intangible asset valuation approaches, methods, and procedures.**
- **The terms “intangible personal property” and “intangible asset” (and the terms “property” and “assets”) are perfectly synonymous in this discussion.**

## Discussion Premise (cont.)

- **The word “intangible” is used as an adjective and not as a noun (as in intangible asset, intangible attribute, intangible influence, etc.).**
- **The issue of whether or not intangible assets are exempt from property taxation in a specific jurisdiction is a legal issue.**
- **The issue of whether any particular intangible asset is exempt in a specific jurisdiction is a legal issue.**

# Discussion Premise (cont.)

- **The issue of what is (and what is not) an intangible asset is both a legal issue and an economic issue.**
- **The issue of how to extract intangible asset value (or any exempt property value) from the total unit value is both a legal issue and an economic issue.**



## Discussion Premise (cont.)

- **This presentation assumes that all intangible personal property (IPP) is exempt from property taxation in a hypothetical taxing jurisdiction: the State of Taxem.**
- **This presentation assumes that the total taxpayer unit values include the value of any taxpayer IPP.**

## Discussion Premise (cont.)

- **The unitary taxpayer real estate (RE) and tangible personal property (TPP) are subject to property tax in the State of Taxem.**
- **The appropriate standard of value in Taxem is fair market value (or its equivalent).**
- **Even if IPP is taxable in a subject jurisdiction, then both the taxpayer and the assessor would want to value the intangible assets (so the IPP can be appropriately taxed).**

# What is an Intangible Asset?

- It should be an asset, and it should be intangible
- FASB Statement of Financial Accounting Concepts No. 6 (CON 6) provides guidance as to what is an “asset”
  - It must provide probable future economic benefits
  - The owner/operator must be able to receive the benefit and restrict others from access to the benefit
  - The event that provides the right to receive the benefit has occurred

# What is an Intangible Asset? (cont.)

- **“Intangible” means something that lacks physical substance**
  - For an intangible asset, “intangible” means that the economic benefit of the asset does not come from its physical substance
  - Intangible asset value is based on the rights and privileges to which it entitles the owner/operator

# FASB ASC Topic 805

## Identifiable Intangible Assets

- **FASB ASC 805-30-20 Glossary:**

- **Identifiable Intangible Assets**

The acquirer recognizes separately from goodwill the identifiable intangible asset acquired in a business combination. An intangible asset is identifiable if it meets either (1) the separability criterion or (2) the contractual-legal criterion described in the definition of “identifiable.”

# FASB ASC Topic 805

## Identifiable Intangible Assets (cont.)

- **FASB ASC 805-30-20 Glossary:**

- **Identifiable**

An asset is identifiable if it meets either of the following criteria:

1. It is separable, that is, capable of being separated or divided from the entity and sold, transferred, licensed, rented, or exchanged, either individually or together with a related contract, identifiable assets, or liability, regardless of whether the entity intends to do so.
2. It arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.

# FASB ASC Topic 805

## Identifiable Intangible Assets (cont.)

- **FASB ASC 805-30-20 Glossary:**
  - **Intangible Assets**  
Assets (not including financial assets) that lack physical substance. (For GAAP purposes, the term intangible assets refers to intangible assets other than goodwill.)

# Illustrative Industry: Health Care Industry

## Examples of Typical Intangible Assets

- Medical, dental, and other professional licenses
- Certificates of need
- Patient relationships
- Patient files and records (manual and electronic)
- Electronic medical records computer software
- Medical and administrative staff trained and assembled workforce
- Office systems, procedures, and manuals
- Position or “station” procedures and manuals
- Facility operating licenses and permits
- Physician (and other professional employment agreements)
- Physician (and other professional noncompetition agreements)
- Executive (and other administrator) employment agreements
- Executive (and other administrator) noncompetition agreements
- Administrative services agreements
- Medical (and other professional) services agreements
- Facility or function management agreements
- Equipment and other supplier purchase agreements
- Service marks and service names
- Joint venture agreements
- A professional’s personal goodwill
- An entity’s institutional goodwill
- Equipment use or license agreements
- Medical
- (other professional) staff privileges
- Joint development or promotion agreements
- Affiliation agreements



# Generally Accepted Intangible Asset Valuation Approaches and Methods

- **Cost approach methods**
  - **Reproduction cost new less depreciation method**
  - **Replacement cost new less depreciation method**
  - **Trended historical cost less depreciation method**
- **Market approach methods**
  - **Relief from royalty (RFR) method**
  - **Comparable uncontrolled transactions (CUT) method**
  - **Comparable profit margin (CPM) method**
- **Income approach methods**
  - **Differential income (with and without) method**
  - **Incremental income (before and after) method**
  - **Profit split (or residual profit split) method**
  - **Residual (or excess) income method**

# Intangible Asset Extraction in the Subject Taxing Jurisdiction

- **Are intangible assets exempt from property taxation in your taxing jurisdiction?**
  - **The answer depends on the relevant statutory authority, judicial precedent, and administrative rulings**

# Intangible Asset Extraction in the Subject Taxing Jurisdiction (cont.)

- **What is an exempt intangible asset in your taxing jurisdiction?**
  - **The answer depends on the relevant statutory authority, judicial precedent, and administrative rulings**
  - **State and local taxing authorities are not bound by GAAP or federal income tax authority**

# Intangible Asset Extraction in the Subject Taxing Jurisdiction (cont.)

- **Does the assessor's unit valuation include the value of the taxpayer intangible assets?**
  - That depends on the unit valuation approaches and methods used
  - That depends on the individual unit valuation variables selected

# Intangible Asset Extraction Considerations

- Many jurisdictions exempt some or all IPP from property taxation
- Intangible assets include both IPP and intangible real property
- To the extent that such exemptions apply, they typically apply to taxpayer properties that are assessed using either
  - summation (individual property) valuation methods  
or
  - unit (collective property) valuation methods

# Intangible Asset Extraction Considerations (cont.)

- **Therefore, taxpayers (or their advisors) should:**
  - **determine if the assessor's total unit assessment includes the value of exempt intangible assets**
  - **identify the exempt intangible assets**
  - **value the exempt intangible assets**
  - **extract the value of the exempt intangible assets from the total unit value assessment**

# Types of Property that May Encompass Intangible Assets in a Unit Valuation

- **Some of property types that may encompass intangible assets of the total property value include:**
  - **hospitality (e.g., hotels, restaurants)**
  - **health care (e.g., nursing homes, hospitals)**
  - **retail (e.g., regional shopping malls)**
  - **sports (e.g., arenas, race tracks)**
  - **service properties (e.g., CATV, marinas)**
  - **utility properties (e.g., telecom, electric, water/wastewater)**
  - **transportation properties (e.g., railroads, airlines)**
  - **extraction (e.g., mines, quarries)**
  - **oil and gas (e.g., refineries, pipelines)**
  - **complex processing (e.g., chemical processing, food processing)**

# Why These Property Types May Encompass Intangible Assets in the Unit Valuation

- For these property types, it may be difficult for the assessor to separate the property RE and TPP rental income from the business operating income
- These property types often sell as going-concern businesses



# Why These Types of Property May Encompass Intangible Assets in the Unit Valuation (cont.)

- **Unless the assessor (or the taxpayer) makes an effort to extract the taxpayer intangible assets, property assessments based on income approach, market approach, and (to some extent) cost approach methods may capture:**
  - real estate,
  - tangible personal property, and
  - intangible assets.

# When Are Intangible Assets Included in the Unit Valuation?

- **For summation method property tax valuations, intangible assets may be included in the assessment**
  - **in the income approach when**
    - **either operating business income (and not property rental income) is used or operating business cost of capital (WACC) components are used in the yield cap method or in the direct cap method**

# When Are Intangible Assets Included in the Unit Valuation? (cont.)

- **in the sales comparison approach when**
  - **market-derived pricing metrics are extracted from the sales of operating business properties**
- **in the cost approach when**
  - **there is economic obsolescence and**
  - **the economic obsolescence analysis does not assign a fair rate of return to the taxpayer intangible assets**

# When Are Intangible Assets Included in the Unit Valuation? (cont.)

- **For unit method of property tax valuations, intangible assets may be included in the assessment**
  - **in the income approach when**
    - **either operating business income (and not property rental income) is used or operating business cost of capital (WACC) components are used in the yield cap method or in the direct cap method**

# When Are Intangible Assets Included in the Unit Valuation? (cont.)

- in the sales comparison approach when
  - pricing multiples are extracted from the sales of going-concern businesses
  - pricing multiples (or direct capitalization rates) are extracted from public company stock market data
- in the cost approach when
  - there is economic obsolescence and
  - the economic obsolescence analysis does not assign a fair rate of return to the taxpayer intangible assets

# Effect of Intangible Assets on Cost Approach Economic Obsolescence

- **Hypothetical Alpha Company fact set**
  - Alpha RE and TPP – based on a cost approach RCNLD analysis **\$10,000,000**
  - Alpha IPP – based on a cost approach RCNLD analysis **\$4,000,000**
  - subject unit net operating income (NOI) **\$1,000,000**
  - required return on investment (ROI)/cost of capital **10%**

# Effect of Intangible Assets on Cost Approach

## Economic Obsolescence (cont.)

- Simplified test for identifying economic obsolescence—not considering the Alpha intangible assets

required ROI **10%**

actual ROI  $\frac{\text{NOI}}{\text{RE} + \text{TPP RCNLD}} = \frac{\$1,000,000}{\$10,000,000} = \underline{\underline{10\%}}$

income shortfall/economic obsolescence 0%

value of Alpha unit RE and TPP \$10,000,000

(i.e., based on \$10,000,000 RCNLD)

# Effect of Intangible Assets on Cost Approach

## Economic Obsolescence (cont.)

- Simplified test for identifying economic obsolescence—  
considering the Alpha intangible assets

required ROI **10%**

actual ROI  $\frac{\text{NOI}}{\text{RE} + \text{TPP} + \text{IPP RCNLD}} = \frac{\$1,000,000}{\$14,000,000} = \underline{\underline{7.1\%}}$

income shortfall/economic obsolescence =

$(10\% - 7.1\%) \div 10\% = \underline{\underline{29\%}}$

value of Alpha unit RE and TPP \$7,100,000

(i.e., based on \$10,000,000 RCNLD – 29% economic obsolescence)



# Alternative Reasons to Extract Intangible Value

- **Purchase price allocations—fair value accounting**
- **Purchase price allocations—federal income tax accounting**
- **Intercompany intangible property transfers—federal income tax**
- **Bankruptcy—different secured creditor interests**
- **Securitization and collateralization financings**
- **Infringement, breach of contract, and other economic damages**

# Basic Property Appraisal Accumulation Procedures

- Let's assume the appraisal of a locally assessed industrial or commercial property using the cost approach
- The typical cost approach appraisal procedures follow:

land value	\$1,000,000	– based on sales comparison approach analysis
+ improvement value	<u>5,000,000</u>	– based on RCNLD method analysis
= total property value	<u>\$6,000,000</u>	– based on cost approach

# Basic Property Appraisal Accumulation Procedures (cont.)

- **Alternatively, let's assume the appraisal of a locally assessed residential property. The residence is a typical 3-bedroom, 3-bathroom, 2-car attached garage house.**
- **Unlike other properties in the neighborhood, this house has an additional 3-car detached garage and a built-in swimming pool.**
- **A sales comparison approach analysis indicates the typical comparable property sells for \$500,000.**

# Basic Property Appraisal Accumulation Procedures (cont.)

- The typical property appraisal procedure follows:

	house and land value	\$500,000	– based on comparable sales comparison approach
+	value of detached garage	100,000	– based on RCNLD
+	value of built-in pool	<u>100,000</u>	– based on RCNLD
=	total property value	<u>\$700,000</u>	

# Basic Property Appraisal Extraction Procedures

- Let's assume the appraisal of another locally assessed residential property. The residence is a typical 4-bedroom, 3-bath house. All other houses in the neighborhood have an attached 2-car garage. The subject house only has a 2-car carport.
- The typical property appraisal procedure follows:

house and land value	\$600,000	- based on sales comparison approach
(assuming attached garage)		
- value of attached garage	100,000	- based on RCNLD
+ value of attached carport	<u>25,000</u>	- based on RCNLD
= total property value	<u>\$525,000</u>	

# Basic Property Appraisal Extraction Procedures (cont.)

- **Let's assume a centrally assessed industrial property valuation. The total reconciled unit value is \$100,000,000. The value of a locally assessed office building (included in the unit value) is \$6,000,000. The value of over-the-road vehicles is \$4,000,000. The value of exempt pollution control equipment is \$10,000,000.**

# Basic Property Appraisal Extraction Procedures (cont.)

- The taxable unit value is typically calculated as follows:

	<b>\$100,000,000</b>	<b>total unit value – based on reconciled income, market, and cost indicators</b>
–	<b>6,000,000</b>	<b>locally assessed property – based on sales comparison approach</b>
–	<b>4,000,000</b>	<b>OTR vehicles – based on HCLD (NBV)</b>
–	<b><u>10,000,000</u></b>	<b>pollution abatement equipment – based on HCLD (NBV)</b>
=	<b><u>\$80,000,000</u></b>	<b>value of taxable unit</b>

# Conclusion of Property Appraisal Examples

## Basic Property Value Relationship

- **Basic property accumulation procedures**

value

basic property value

+

+

value

additional property value

=

=

value

total property value



# Conclusion of Property Appraisal Examples

## Basic Property Value Relationship (cont.)

- **Basic property extraction procedures**

value

total property value

-

-

value

exempt property value

=

=

value

taxable property value

# Conclusion of Property Appraisal Examples

## Basic Property Value Relationship (cont.)

- **The additions and subtractions are always made on a reconciled value to reconciled value basis—and not on a valuation approach indication to valuation approach indication basis.**

# Intangible Asset Extraction Procedures

- There are two primary procedures to extract intangible asset values from the total taxpayer (operating property) unit values
  - Direct subtraction method
  - Transfer price (income allocation) method
- There is a secondary procedure that is appropriate if the market approach relief from royalty method can be used to value the intangible asset:
  - Royalty rate method

# Intangible Asset Extraction Procedures (cont.)

- **The direct subtraction method is the easiest to understand:**
  - Synthesized value of total taxpayer unit (based on any/all unit valuation approaches)**
  - minus: Synthesized value of all identifiable intangible assets (based on any/all valuation approaches)**
  - equals: Residual value of taxpayer RE and TPP (and possibly some goodwill/going concern value)**

# Intangible Asset Extraction Procedures (cont.)

- **The transfer price (income allocation) method assumes the following:**
  - **The subject operating entity (i.e., the taxpayer unit) is split into two separate entities:**
    - **One operating company entity operates the taxpayer RE and TPP**
    - **One holding company entity holds the taxpayer intangible assets and licenses those intangible assets (at an arm's-length price—or ALP) to the operating company entity**

# Intangible Asset Extraction Procedures (cont.)

- In the royalty rate method, a fair ALP (or transfer price) for the use of the intangible asset is calculated as a royalty rate.
- The royalty rate is typically expressed as a percent of the taxpayer revenue.
- The hypothetical royalty expense is calculated as (1) taxpayer revenue multiplied by (2) intangible asset royalty rate.

# Intangible Asset Extraction Procedures (cont.)

- **The royalty expense is subtracted from the taxpayer NOI as a license fee—as if the taxpayer/licensee licensed the particular intangible asset from a third-party licensor.**

# Intangible Asset Extraction Procedures (cont.)

- **The remaining (after royalty expense) income is used to calculate the value of the taxpayer unit of taxable assets, as follows:**
  - **income approach – after-royalty income is capitalized**
  - **market approach – after-royalty income is multiplied by market-derived pricing multiples**
  - **Cost approach – after-royalty income is considered in the economic obsolescence analysis**



# Intangible Asset Extraction Procedures (cont.)

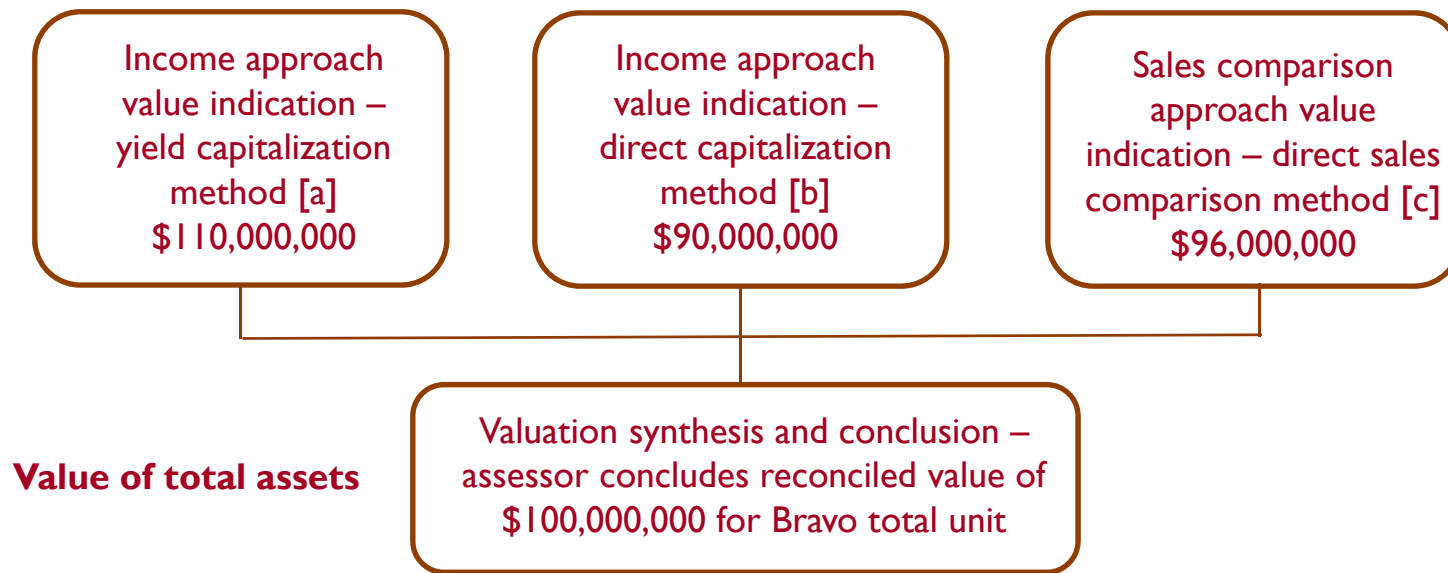
- **The concluded unit value is “net of” the value of the intangible asset. In other words, the intangible asset value is already extracted from this concluded unit value.**

# Intangible Asset Extraction Procedures (cont.)

- **Let's construct a simple hypothetical example:**
  - **The Bravo Telecom Company (“Bravo”) is assessed at \$100,000,000**
  - **The Taxem assessor used several income approach methods and sales comparison approach methods to reach that assessment**
  - **Internally developed computer software is an important intangible asset at Bravo**
  - **Intangible assets are exempt from property taxation in Taxem**
  - **The analyst values the Bravo computer software at \$16,000,000**
  - **To simplify the example, let's ignore all other exempt intangible assets**

# Bravo Total Unit Value Conclusion

## Taxem assessor valuation of Bravo total unit



Notes:

[a] Based on present value of Bravo total net cash flow

[b] Based on direct capitalization of Bravo total net operating income

[c] Based on comparable sales of other telecom companies and market-derived income pricing multiples

# Bravo Computer Software Valuation

## Cost Approach – RCNLD Method

<u>Computer Software System</u>	<u>Estimated Software Development Effort—in Person Months</u>	<u>Elapsed Time to Develop Replacement Software—in Calendar Months</u>	<u>Full Absorption Cost per Person Month</u>	<u>Indicated RCNLD Method Component \$000</u>
AS/400	453	29	\$14,585	6,610
Telecom operations	99	25	14,585	1,430
Tandem	330	16	14,585	4,820
Unisys	123	5	14,585	1,790
Pioneer	<u>181</u>	41	14,585	<u>2,640</u>
Total direct and indirect costs component (rounded)	1,186	24		17,290
Plus: Developer's profit, at 16%				<u>2,770</u>
Equals: Subtotal				20,060
Plus: Entrepreneurial incentive, based on 2 years lost income				<u>3,120</u>
Equals: Total replacement cost new				23,180
Less: Functional obsolescence, based on software replacement plans				<u>3,690</u>
Equals: Subtotal				19,490
Less: Economic obsolescence, at 19%, based on income shortfall analysis				<u>3,700</u>
Equals: Computer software RCNLD				<u>15,790</u>
Bravo computer software value (rounded)				<u>\$16,000</u>

# Bravo Extraction of Intangible Asset Value – Direct Subtraction Method

## Direct subtraction analysis

	<b>\$100,000,000</b>	<b>synthesized value of Bravo total unit</b>
<b>less:</b>	<b><u>16,000,000</u></b>	<b>value of Bravo computer software</b>
<b>equals:</b>	<b><u>\$84,000,000</u></b>	<b>residual value of Bravo taxable RE and TPP (assuming no other intangible assets)</b>

# Bravo Extraction of Intangible Asset Value – Direct Subtraction Method (cont.)

**Value of total taxpayer unit**

Reconciled total unit value  
\$100,000,000

**– Value of intangible assets**

Cost approach value indication –  
RCNLD method  
\$16,000,000

**= Value of tangible assets**

Valuation synthesis and conclusion –  
residual value of \$84,000,000  
for Bravo taxable assets

# Bravo Extraction of Intangible Asset Value – Income Allocation Method

## Transfer price (income allocation) analysis

1. **\$16,000,000** value of Bravo computer software  
**×12.5%** fair rate of return on Bravo  
computer software

**\$2,000,000** annual transfer price (a.k.a. capital charge or license royalty) for the use of the computer software

# **Bravo Extraction of Intangible Asset Value – Income Allocation Method (cont.)**

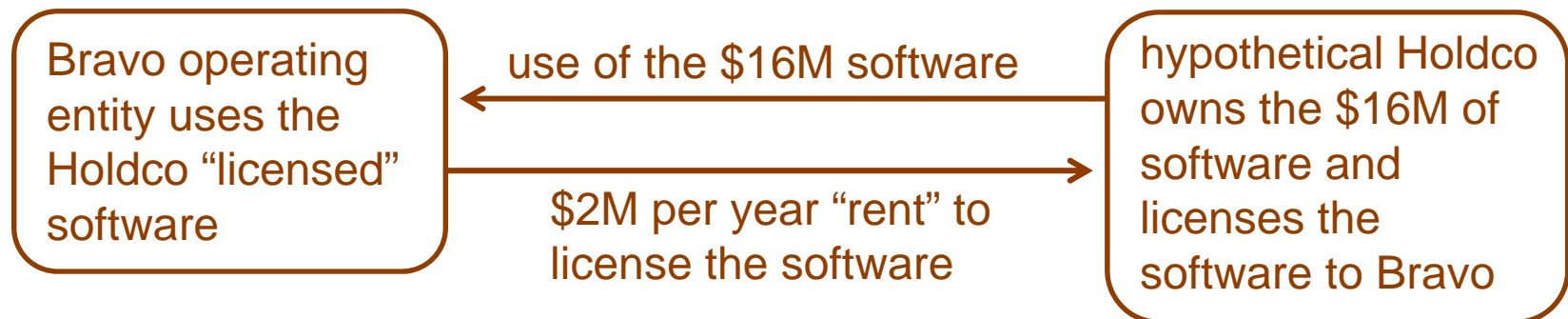
- 2. The fair rate of return can be the taxpayer WACC or some other industry/taxpayer ROI measure**
- 3. The \$2,000,000 transfer price (or economic rent) is subtracted from the Bravo net operating income or net cash flow included in any income approach analysis or any sales comparison approach analysis**



# **Bravo Extraction of Intangible Asset Value – Income Allocation Method (cont.)**

- 4. The Bravo income is reduced by the “rent” of the software, so the Bravo value is reduced by the value of the software**
- 5. This income allocation is illustrated on the following slide**

# Bravo Extraction of Intangible Asset Value – Income Allocation Method (cont.)



hypothetical  
Bravo operating  
company owns all  
of the taxable RE  
and TPP only

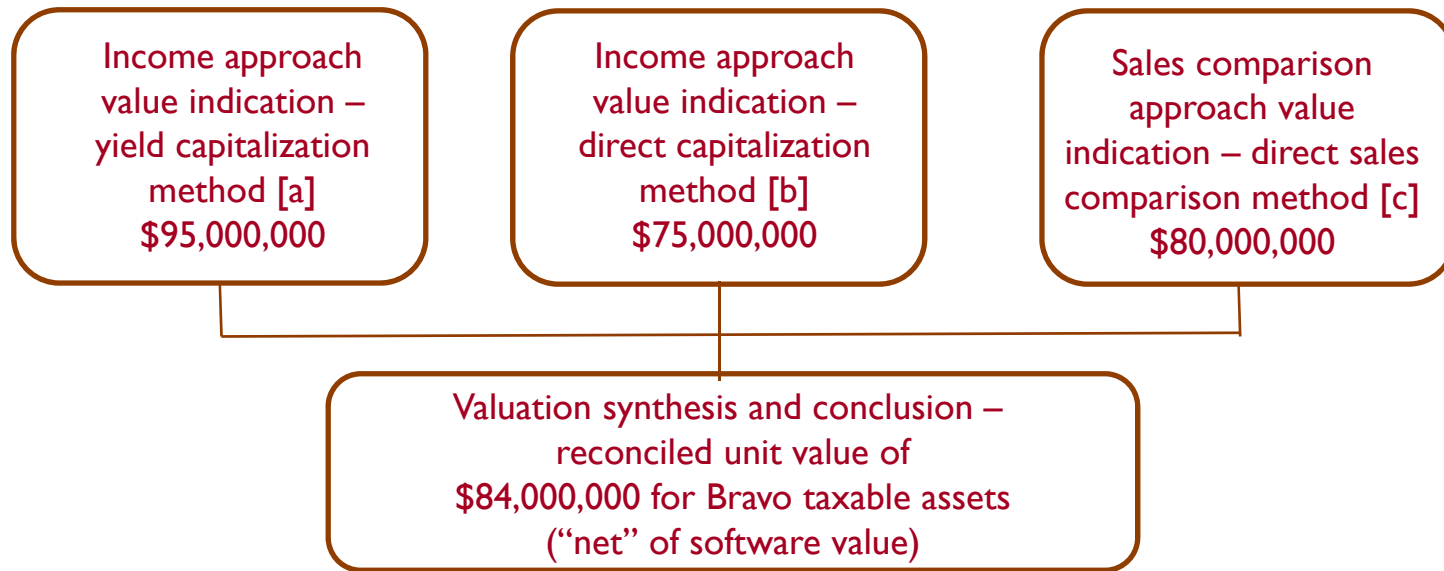
hypothetical Holdco  
intangible asset holding  
company owns (and  
licenses) all of the  
exempt intangible assets  
to the Bravo operating  
company

# **Bravo Extraction of Intangible Asset Value – Income Allocation Method (cont.)**

- **Based on “rent” of the software from the hypothetical Holdco intangible asset holding company, the Bravo operating company income (e.g., net cash flow, net operating income, EBIT, or EBITDA) is reduced by \$2,000,000 per year.**
- **The taxpayer applies the same Bravo total property unit valuation approaches and methods that the Taxem assessor used, but with lower (by \$2,000,000) income metrics.**

# Bravo Extraction of Intangible Asset Value – Income Allocation Method (cont.)

## Revised valuation of Bravo total unit of taxable assets



Notes:

- [a] Excludes net cash flow related to a fair return on the Bravo software.
- [b] Excludes net operating income related to a fair return on the Bravo software.
- [c] Excludes EBITDA related to a fair return on the Bravo software.

# Bravo Extraction of Intangible Asset Value – Income Allocation Method (cont.)

- **No additional adjustments are needed to extract the Bravo exempt intangible asset value from the total Bravo taxable asset unit value. This is because the intangible asset-related income is already excluded from the total unit value.**

# Bravo Extraction of Intangible Asset Value – Royalty Rate Method

## Royalty rate method analysis

- Let's assume the Bravo annual revenue is \$100,000,000.
- Let's assume that the analyst concluded a 2% (of revenue) royalty rate for the software. This conclusion was the result of a market approach relief from royalty rate valuation analysis.

# Bravo Extraction of Intangible Asset Value – Royalty Rate Method (cont.)

- **This 2% royalty rate was based on the analysis of empirical data regarding the arm's-length licenses of guideline intangible assets between independent parties.**
- **The analyst would use the 2% software royalty expense as an annual expense in any income approach, cost approach (economic obsolescence), or market approach unit valuation.**

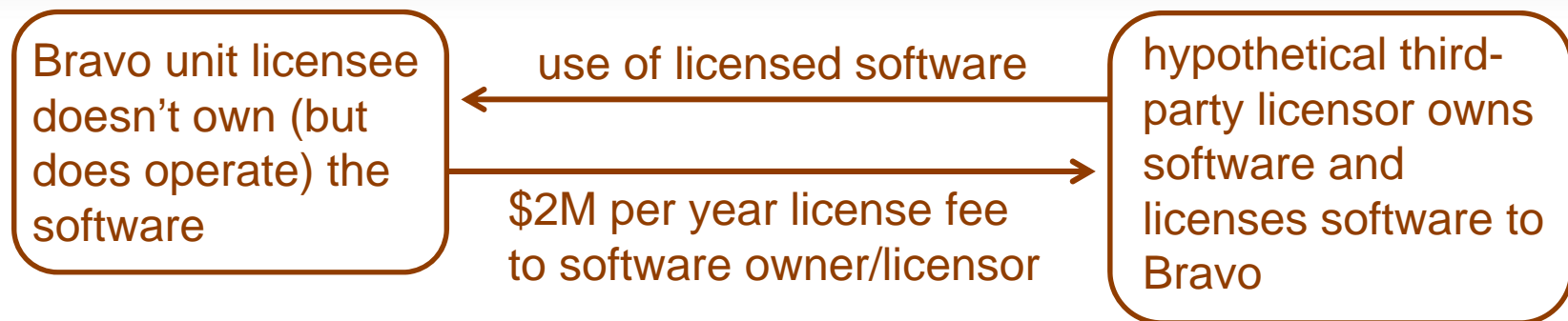
# Bravo Extraction of Intangible Asset Value – Royalty Rate Method (cont.)

- For the Bravo example, the software annual royalty expense would be:

$$\begin{aligned} & \$100,000,000 \text{ revenue} \times 2\% \text{ royalty rate} = \\ & \quad \$2,000,000 \text{ annual royalty expense} \end{aligned}$$



# Bravo Extraction of Intangible Asset Value – Royalty Rate Method (cont.)

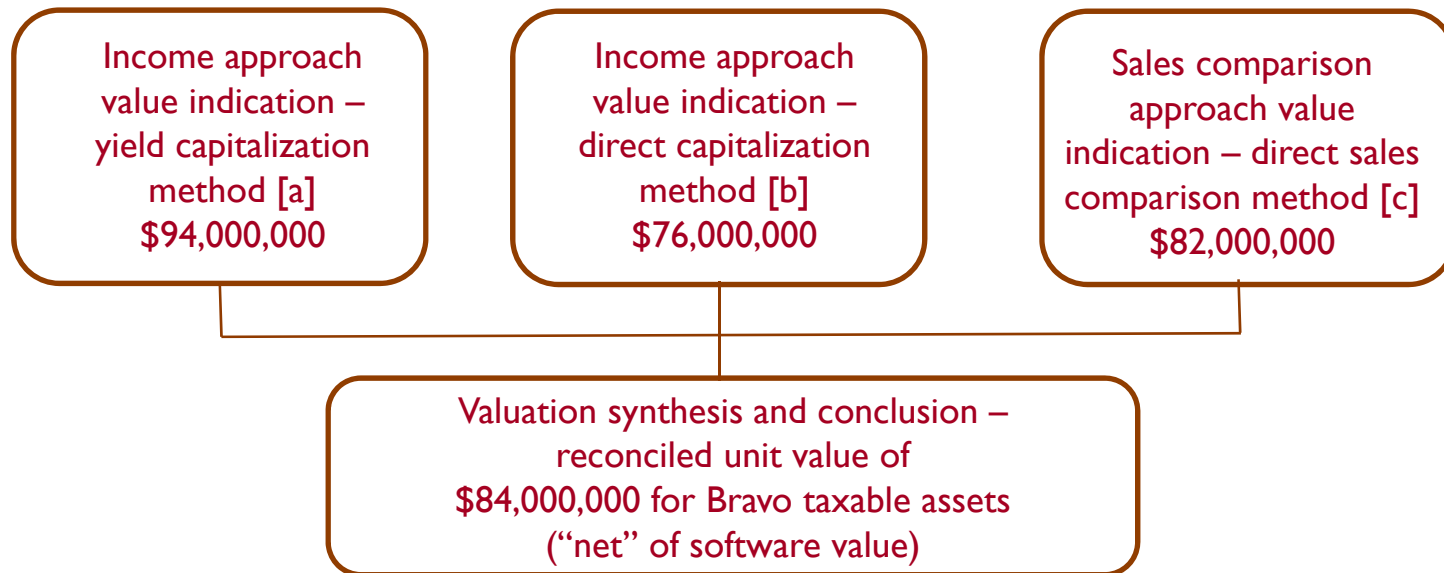


hypothetical  
Bravo operating  
company owns all  
of the taxable RE  
and TPP—and  
licenses the  
software

hypothetical third-party  
licensor owns (and  
licenses) all of the  
exempt software to the  
Bravo operating  
company/licensee

# Bravo Extraction of Intangible Asset Value – Royalty Rate Method (cont.)

## Value of total unit of taxable assets with Bravo as hypothetical software licensee



Notes:

[a] Excludes net cash flow related to a \$2,000,000 royalty payment for the Bravo software license.

[b] Excludes net operating income related to a \$2,000,000 royalty payment for the Bravo software license.

[c] Excludes EBITDA related to a \$2,000,000 royalty payment for the Bravo software license.

# Extraction of Exempt Intangible Assets – Final Considerations

- **When the total taxpayer unit value is based on business operating income, operating business discount/capitalization rates, or operating business sale pricing multiples, then extract the value of any exempt identifiable intangible assets by using**
  - the direct subtraction method
  - the transfer price (income allocation) method
  - the royalty rate method (when royalty data are available)
- **To avoid the intangible asset extraction issue, value the subject taxpayer unit so as to exclude the value of any exempt intangible assets.**

# Extraction of Exempt Intangible Assets – Final Considerations (cont.)

- **To exclude exempt intangible assets from the total taxpayer unit valuation, be sure to use:**
  - **property rental income only (not operating business income)**
  - **property-specific discount/capitalization rates (not operating business discount/capitalization rates)**
  - **sales of in-place (but not in-use) properties only (i.e., nonoperating unitary businesses)**

# Extraction of Exempt Intangible Assets – Final Considerations (cont.)

- **Alternatively, to exclude exempt intangible assets in the unit valuation:**
  - **rely on cost approach valuation methods—and include RE and TPP only in the cost components analysis—but be careful to consider the value of the taxpayer intangible assets in any economic obsolescence analysis**

# Extraction of Exempt Intangible Assets – Final Considerations (cont.)

- **Analysts (and taxpayers and assessors) can use the same procedures used to value intangible assets for financial accounting purposes to value and extract exempt intangible assets for property tax purposes.**
- **The assessor, the taxpayer, or the taxpayer's analyst can conclude the value of the total taxpayer unit.**

# Extraction of Exempt Intangible Assets – Final Considerations (cont.)

- **If intangible assets are exempt from taxation in a jurisdiction and the total unit value includes the value of intangible assets, then the taxpayer, assessor, or analyst should identify, value, and extract the exempt intangible assets.**

# Summary and Conclusion

- **Intangible asset property tax considerations**
- **Alternative reasons to extract intangible asset value**
- **Generally accepted intangible asset valuation approaches and methods**
- **Basic property appraisal procedures for asset accumulation and asset extraction**
- **Methods for intangible asset extraction from the total unit value**



# Summary and Conclusion (cont.)

- **Intangible asset direct extraction method illustrative example**
- **Intangible asset income allocation method illustrative example**
- **Intangible asset royalty rate method illustrative example**
- **Questions and discussion**