



Separating Intangible Assets from Real Property in Real Estate Appraisals

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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 AICPA forensic and valuation services executive committee (FVSEC), business valuation committee (BVC), and consulting services executive committee (CSEC). He is an inductee into the AICPA business 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 of 12 valuation textbooks including *Guide to Intangible Asset Valuation* (revised edition published by the AICPA in 2014) and the *Practical Guide to Bankruptcy Valuation* (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*, 4th 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*.

Discussion Outline

- Discussion premise
- Identification of intangible asset
- Alternative reasons to value intangible assets
- Intangible asset and real estate appraisal considerations
- Generally accepted intangible asset valuation approaches and methods
- Intangible asset extraction considerations
- Alternative reasons to extract intangible asset value

Discussion Outline (cont.)

- Basic property appraisal—accumulation procedures
- Basic property appraisal—extracting procedures
- Generally accepted methods for intangible asset extraction from the total property value
- Direct subtraction method illustrative example
- Income allocation method illustrative example
- Royalty rate method illustrative example
- Summary and discussion

Discussion Premise

- The attendee has a basic familiarity with generally accepted intangible asset valuation, approaches, methods, and procedures
- The terms “intangible personal property” and “intangible asset” are perfectly synonymous in this discussion
- 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 included in an industrial or commercial property real estate appraisal is specific to both the subject property and the subject appraisal

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 from the total real estate property value is both a legal issue and an economic issue.
- In the typical acquisition accounting purchase price allocation, the residual amount is the goodwill value.

That formula is:

- Total purchase price (business value)
- RE value
- TPP value
- Identifiable intangible asset value
- = Residual goodwill

Discussion Premise (cont.)

- In the typical industrial and commercial real estate appraisal, the residual amount is the RE and TPP value. That formula is:

Total real estate property value

- Identifiable intangible asset value

= Residual RE and TPP value (and some goodwill)

- In either case, the valuation analyst values the identifiable intangible assets

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

Intangible Asset Attributes

■ An intangible asset should have the following attributes:

- It is subject to a specific identification and recognizable description
- It is subject to legal existence and legal protection
- It is subject to the rights of private ownership, and that private ownership should be transferable
- There is some tangible evidence or manifestation of the existence of the intangible asset
- It is created or it comes into existence at an identifiable time or as the result of an identifiable event
- It is subject to being destroyed or to a termination of existence at an identifiable time or as the result of an identifiable event

■ There should be a specific bundle of legal rights associated with the intangible asset

What is Not an Intangible Asset?

- There are intangible attributes or intangible influences that may affect the value of intangible assets or tangible assets
- These attributes or influences are not assets

What is Not an Intangible Asset? (cont.)

■ Examples include:

1. High market share
2. High profitability or high profit margin
3. Lack of regulation
4. A regulated (or protected) position
5. Monopoly position (or barriers to entry)
6. Market potential
7. Breadth of customer appeal
8. Mystique
9. Heritage
10. Competitive edge
11. Life-cycle status
12. Uniqueness
13. Discount prices (or full prices)
14. Positive image
15. First to market
16. Technological superiority
17. Consumer confidence or trustworthiness
18. Creativity
19. High growth rate
20. High return on investment
21. Size
22. Synergies
23. Economies of scale
24. Efficiencies
25. Longevity

Real Property Intangible Attributes

- There are also intangible attributes that influence the value of industrial, commercial, residential, and mixed-use real estate
- These attributes are not intangible assets
- These attributes typically cannot be separated from the value of the subject real estate
- Examples include:
 1. view
 2. neighborhood
 3. proximity to transportation
 4. proximity to downtown
 5. easements, rights of way
 6. access
 7. zoning
 8. air, water, etc., rights
 9. subsurface rights
 10. construction, development permits
 11. leases, tenants
 12. favorable rental rates

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.)

Examples of Intangible Assets: FASB ASC 805

■ Marketing-related intangible assets

- Trademarks, trade names, service marks, collective marks, certification marks
- Trade dress (unique color, shape, package design)
- Newspaper mastheads
- Internet domain names
- Noncompetition agreements

■ Customer-related intangible assets

- Customer lists
- Order or production backlog
- Customer contracts and related customer relationships
- Noncontractual customer relationships

Examples of Intangible Assets: FASB ASC 805 (cont.)

■ Artistic-related intangible assets

- Plays, operas, and ballets
- Books, magazines, newspapers, and other literary works
- Musical works such as compositions, song lyrics, and advertising jingles
- Pictures and photographs
- Video and audiovisual material, including motion pictures or films, music videos, and television programs

Examples of Intangible Assets: FASB ASC 805 (cont.)

■ Contract-based intangible assets

- Licensing, royalty, and standstill agreements
- Advertising, construction, management and service or supply contracts
- Lease agreements (whether the acquirer is the lessee or the lessor)
- Construction permits
- Franchise agreements
- Operating and broadcast rights
- Servicing contracts such as mortgage servicing contracts
- Employment contracts
- Use rights such as drilling, water, air, timber cutting, and route authorities

Examples of Intangible Assets: FASB ASC 805 (cont.)

■ Technology-based intangible assets

- Patented technology
- Computer software and mask works
- Unpatented technology
- Databases, including title plants
- Trade secrets, such as secret formulas, processes, and recipes

Examples of Intangible Assets: Internal Revenue Code Section 197

■ Goodwill

■ Going-concern value

■ Any of the following intangible items:

- Workforce in place including its composition and terms and conditions (contractual or otherwise) of its employment
- Business books and records, operating systems, or any other information base (including lists or other information with respect to current or prospective customers)
- Any patent, copyright, formula, process, design, pattern, knowhow, format, or other similar item
- Any customer-based intangible
- Any supplier-based intangible
- Any other similar item

Examples of Intangible Assets: Internal Revenue Code Section 197 (cont.)

- **Any license, permit, or other right granted by a governmental unit or an agency or instrumentality thereof**
- **Any covenant not to compete (or other arrangement to the extent such arrangement has substantially the same effect as a covenant not to compete) entered into in connection with an acquisition (directly or indirectly) of an interest in a trade or business or substantial portion thereof**
- **Any franchise, trademark, or trade name**
- **Other Internal Revenue Code sections (e.g., Sections 482 and 936) include other lists of intangible assets**

Types of Property that May Encompass Intangible Assets in the Real Estate Appraisal

■ Some of the 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)

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 agreement
- 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

General 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/without) method
- Incremental income (before/after) method
- Profit split (or residual profit split) method
- Residual (or excess) income method

Common Reasons to Value Intangible Assets

- Transaction pricing and structuring
- Financing securitization and collateralization
- Federal and state tax planning and compliance
- Management information and strategic planning
- Bankruptcy and reorganization
- Forensic analysis and dispute resolution
- Intercompany use and ownership transfers
- Financial accounting and fair value reporting
- Corporate governance and regulatory compliance
- License, joint venture, development opportunities

Common Reasons to Extract Intangible Assets from Real Estate Appraisal 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

Common Reasons to Extract Intangible Assets from Real Estate Appraisal Value (cont.)

- Business function—equity allocation to alternative investors
- Business dissolution—asset allocation to alternative investors
- Real estate mortgage financing—collateral value
- Ad valorem property tax assessments and appeals (exempt intangible assets)

Intangible Asset Extraction Considerations

■ Industrial and commercial property owners (and their advisors) should:

- determine if the real estate appraiser's total real estate property value includes the value of intangible assets
- identify the intangible assets included in the property value
- value the intangible assets
- extract the value of the intangible assets from the total real estate appraisal value

Why Certain Property Types May Encompass Intangible Assets in the Real Estate Appraisal

- For many industrial and commercial property types, it may be difficult for the appraiser to separate the property RE and TPP rental income from the business operating income
- These industrial or commercial property types often sell as going-concern businesses
- Unless the appraiser (or the property owner) makes an effort to extract the intangible assets, real estate appraisals 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 Real Estate Appraisal?

■ For industrial or commercial property valuations, intangible assets may be included in the real estate appraisal

- 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
- 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 property intangible assets

Are Intangible Assets Included in the Subject Real Estate Appraisal?

- **Does the industrial or commercial real estate appraisal include the value of any intangible assets?**
 - That depends on the real estate appraisal approaches and methods used
 - That depends on the individual real estate valuation variables selected

Effect of Intangible Assets on Cost Approach Economic Obsolescence

■ Hypothetical Alpha property 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 property 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 property intangible assets

required ROI				10%
actual ROI	$\frac{\text{NOI}}{\text{RE} + \text{TPP RCNLD}}$	$\frac{\$1,000,000}{\$10,000,000}$	=	<u>10%</u>
income shortfall/economic obsolescence				<u>0%</u>
value of Alpha property RE and TPP (i.e., based on \$10,000,000 RCNLD)				<u>\$10,000,000</u>

Effect of Intangible Assets on Cost Approach

Economic Obsolescence (cont.)

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

required ROI 10%

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

income shortfall/economic obsolescence =

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

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

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

Basic Property Appraisal Accumulation Procedures

- Let's assume the real estate appraisal of an industrial or commercial property using the cost approach
- The typical cost approach real estate 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 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 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 real estate 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 an industrial facility property valuation. The total real estate appraisal value is \$100,000,000. The value of an office building (included in the industrial property value) is \$6,000,000. The value of the facility over-the-road vehicles is \$4,000,000. The value of the facility pollution control equipment is \$10,000,000.

Basic Property Appraisal Extraction Procedures (cont.)

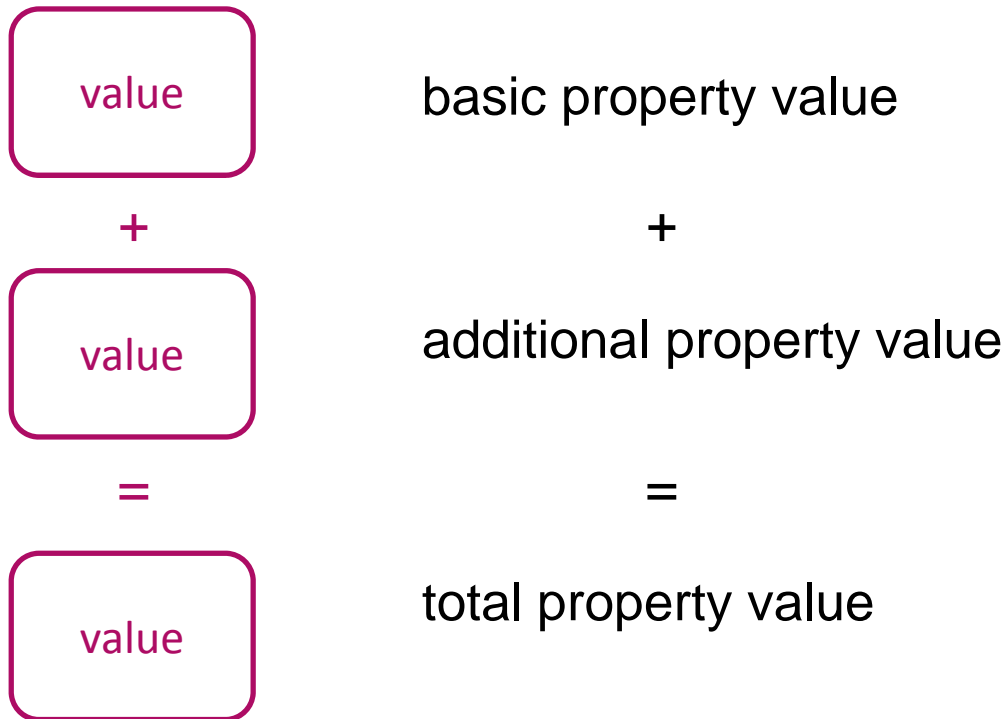
■ The industrial property real estate value is typically calculated as follows:

\$100,000,000	total property value – based on reconciled income, market, and cost indicators
– 6,000,000	office building component property – based on sales comparison approach
– 4,000,000	OTR vehicles – based on HCLD (NBV)
– <u>10,000,000</u>	pollution abatement equipment – based on HCLD (NBV)
= <u>\$80,000,000</u>	value of industrial property component real estate

Conclusion of Property Appraisal Examples

Basic Property Value Relationship

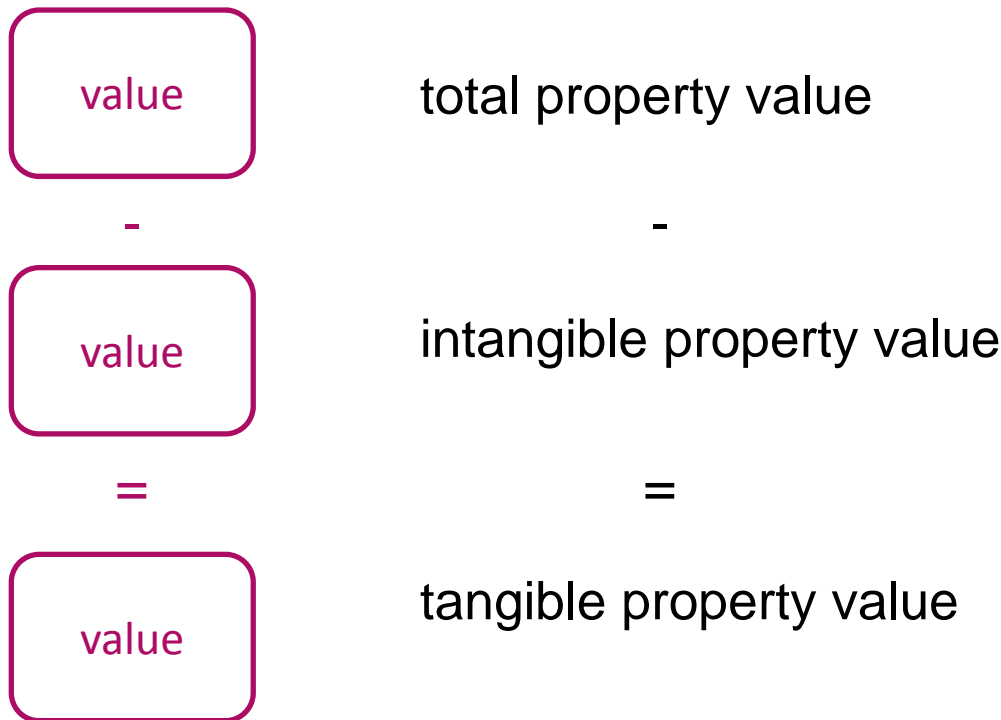
■ Basic property accumulation procedures



Conclusion of Property Appraisal Examples

Basic Property Value Relationship (cont.)

Basic property extraction procedures



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 operating property real estate 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 real estate property (based on any/all real estate appraisal approaches)

minus: Synthesized value of all identifiable intangible assets (based on any/all valuation approaches)

equals: Residual value of industrial or commercial property 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 total industrial or commercial property unit) is split into two separate entities:
 - One operating company entity operates the tangible RE and TPP only
 - One holding company entity holds the 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 operating property total revenue.
- The hypothetical royalty expense is calculated as (1) property total revenue multiplied by (2) intangible asset royalty rate.
- The royalty expense is subtracted from the operating property NOI as a license fee—as if the property owner/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 industrial and commercial property 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
- **The concluded industrial or commercial property value is “net of” the value of the intangible asset. In other words, the intangible asset value is already extracted from this concluded real estate property value.**

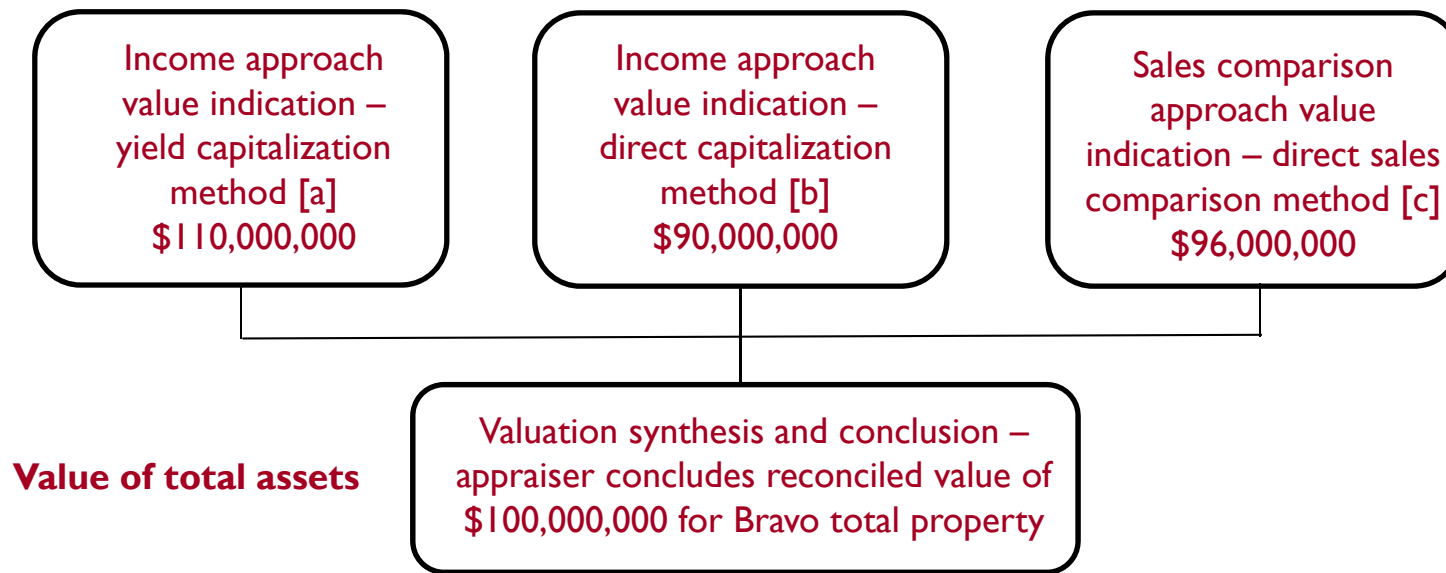
Intangible Asset Extraction Procedures (cont.)

■ Let's construct a simple hypothetical example:

- The Bravo Electric Generation Station (“Bravo”) total real estate is appraised at \$100,000,000
- The appraiser used several income approach methods and sales comparison approach methods to reach that property appraisal
- Internally developed computer software is an important intangible asset at Bravo
- The property owner wants to separate the intangible asset value from the industrial property value
- The analyst values the Bravo computer software at \$16,000,000
- To simplify the example, let's ignore all other intangible assets

Bravo Total Property Value Conclusion

Real estate appraisal of Bravo total property value



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 electric generation plants and market-derived income pricing multiples

Bravo Computer Software Valuation

Cost Approach – RCNLD Method

<u>Computer Software System</u>	Estimated Software Development Development Effort—in <u>Person Months</u>	Elapsed Time to Develop Replacement Software—in <u>Calendar Months</u>	Full Absorption Cost per Person <u>Month</u>	Indicated RCNLD Method Component <u>\$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

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

Bravo Extraction of Intangible Asset Value – Direct Subtraction Method

Value of total property unit

Reconciled total property 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 tangible assets

Bravo Extraction of Intangible Asset Value – Income Allocation Method

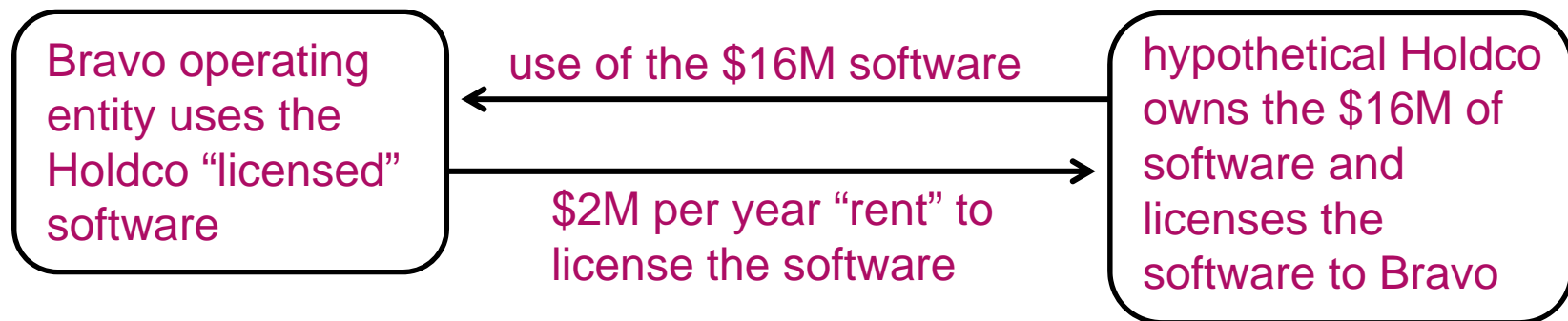
Transfer price (income allocation) analysis

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 property owner WACC or some other industry 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
4. The Bravo income is reduced by the “rent” of the software, so the Bravo total property 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 electric
generation plant
RE and TPP only

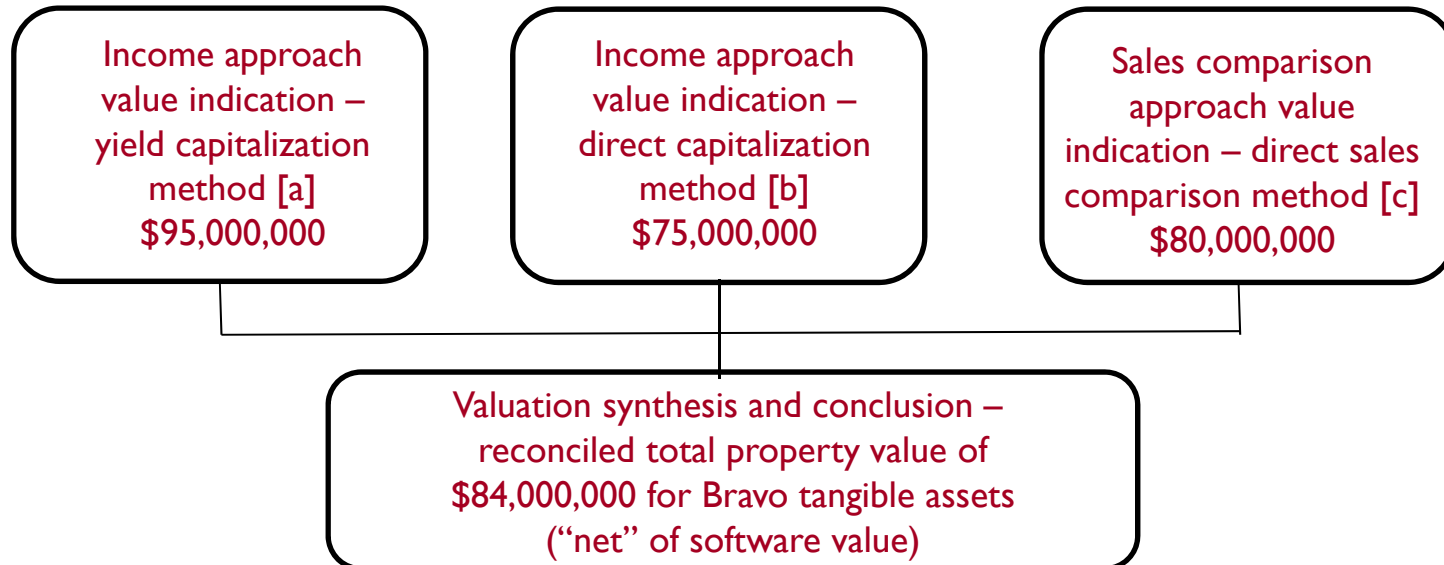
hypothetical Holdco
intangible asset holding
company owns (and
licenses) all of the
intangible assets to the
Bravo operating
company

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 property owner operating company income (e.g., net cash flow, net operating income, EBIT, or EBITDA) is reduced by \$2,000,000 per year.
- The analyst applies the same Bravo total property appraisal approaches and methods that the real estate appraiser used, but with lower (by \$2,000,000) income metrics.

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

Revised appraisal of Bravo total property value



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 intangible asset value from the Bravo total tangible asset property value. This is because the intangible asset-related income is already excluded from the total property value.**

Bravo Extraction of Intangible Asset Value – Royalty Rate Method

Royalty rate method analysis

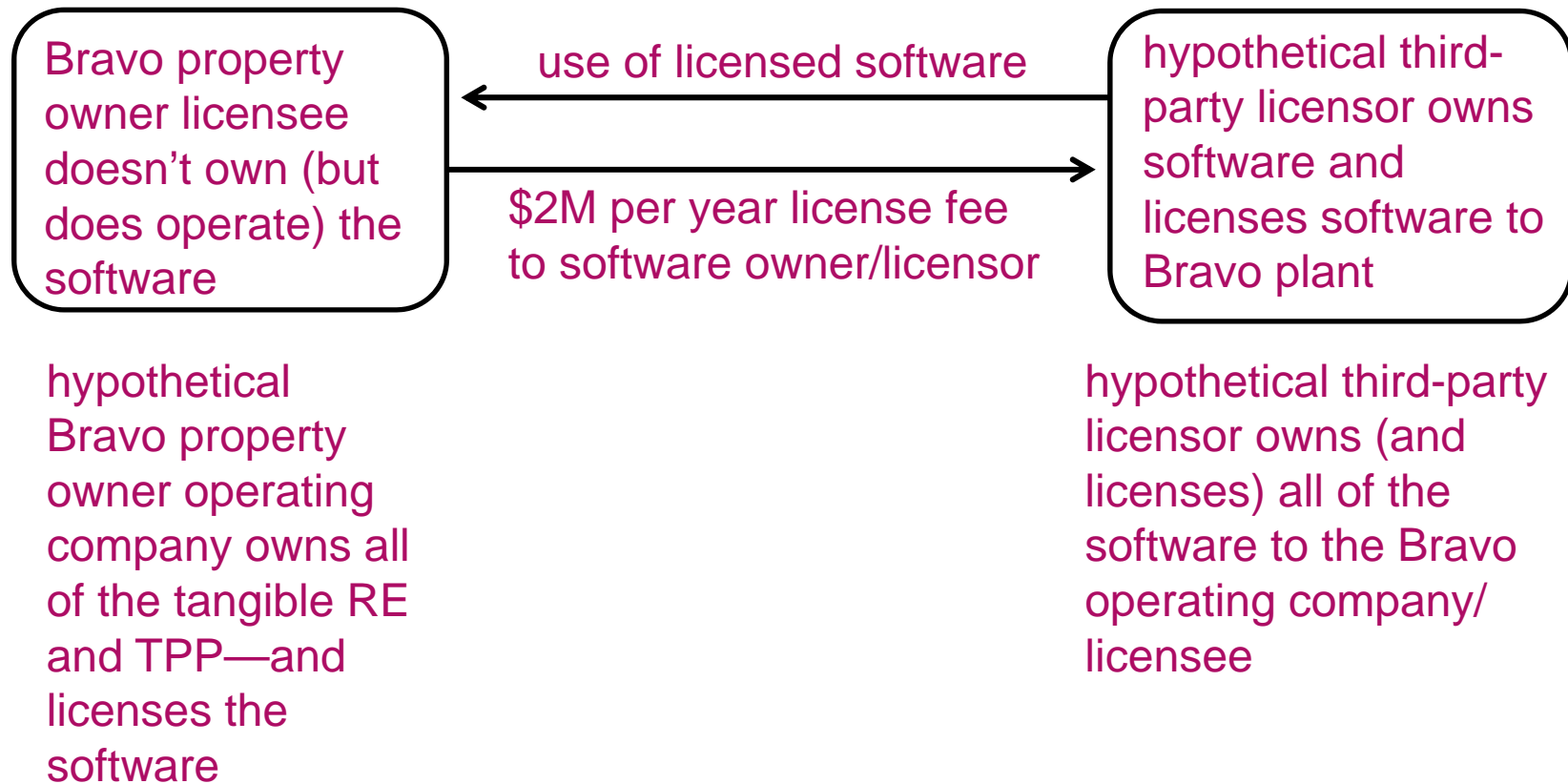
- Let's assume the Bravo electric generation plant annual revenue is \$100,000,000.
- Let's assume that the analyst concluded a 2% (of revenue) royalty rate for the software. This conclusion was the result of a market approach relief from royalty rate valuation analysis.
- This 2% royalty rate was based on the analysis of empirical data regarding the arm's-length licenses of guideline intangible assets between independent parties.

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

- The analyst would use the 2% software royalty expense as an annual expense in any income approach, cost approach (economic obsolescence), or market approach property appraisal.
- For the Bravo example, the software annual royalty expense would be:

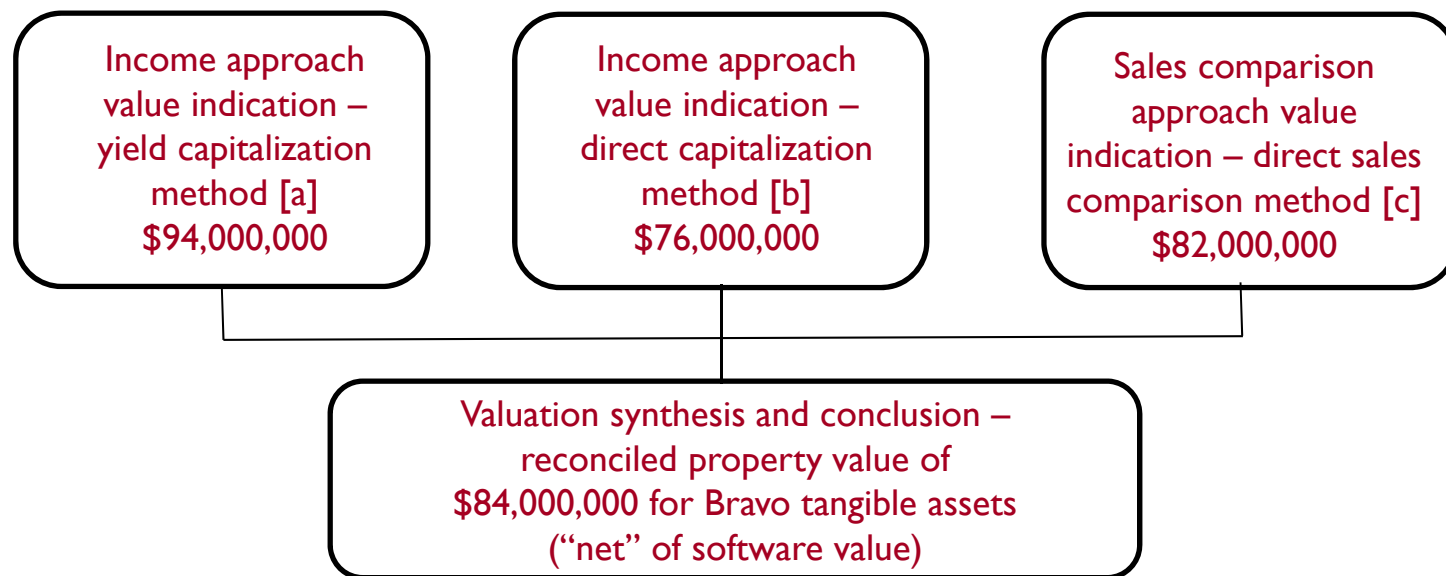
$$\begin{aligned} & \$100,000,000 \text{ plant revenue} \times 2\% \text{ royalty rate} = \\ & \quad \$2,000,000 \text{ annual royalty expense} \end{aligned}$$

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



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

Value of total tangible 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 industrial or commercial property value is based on business operating income, operating business discount/capitalization rates, or operating business sale pricing multiples, then extract the value of any identifiable intangible assets by using
 - the direct subtraction method
 - the transfer price (income allocation) method
 - the royalty rate method (when royalty data are available)

Extraction of Exempt Intangible Assets – Final Considerations

- To avoid the intangible asset extraction issue, value the subject industrial or commercial property so as to exclude the value of any intangible assets.
- To exclude intangible assets from the total industrial or commercial property appraisal, 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 business properties)

Extraction of Exempt Intangible Assets – Final Considerations

- **Alternatively, to exclude exempt intangible assets in the industrial or commercial property appraisal:**
 - 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 intangible assets in any economic obsolescence analysis
- **Analysts (and appraisers and property owners) can use the same procedures used to value intangible assets for financial accounting purposes to value and extract intangible assets for real estate appraisal purposes.**
- **The appraiser can conclude the total industrial or commercial property value.**

Extraction of Exempt Intangible Assets – Final Considerations

- If intangible assets are to be excluded from the total property value that includes the value of intangible assets, then the analyst should identify, value, and extract the intangible assets.

Summary and Conclusion

- Identification of intangible assets
- Generally accepted intangible asset valuation approaches and methods
- Alternative reasons to extract intangible asset value from total real estate appraisal property value
- How and when industrial or commercial real estate appraisals include intangible asset values
- Basic property appraisal procedures for asset accumulation and asset extraction
- Methods for intangible asset extraction from the total industrial or commercial property 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