The Identification and Valuation of Taxpayer Commercial Intangible Assets for Gift and Estate Tax Purposes

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The valuation of intangible assets is relevant in two federal gift tax instances: (1) the taxpayer directly gifts an intangible asset or intellectual property ownership interest and (2) the taxpayer gifts a closely held business, professional practice, joint venture, or similar business interest where the business entity owns or operates a commercial intangible asset. Similarly, the valuation of intangible assets is relevant in two federal estate tax instances: (1) the decedent owns a fee simple interest or a fractional ownership interest in an intangible asset or intellectual property and (2) the decedent owns an equity interest in a closely held business, professional practice, joint venture, or other business entity that owns or operates a commercial intangible asset. There are also numerous federal income tax instances that call for the valuation (or the fair transfer price) of a taxpayer intangible asset. Nonetheless, in these gift and estate (and income) tax situations, the value of the subject commercial intangible asset often becomes an area of controversy between the taxpayer and the Internal Revenue Service.

Introduction

The meaning of the term "intangible asset" is immediately understood by the experienced valuation analyst. However, individual and corporate taxpayers, Internal Revenue Service ("Service") and other taxation authorities, lawyers and judges, and other interested parties to the federal gift and estate tax process may not be as familiar as the valuation analyst with the identification and valuation of intangible assets.

Therefore, all of these interested parties to the federal gift and estate tax process should be aware that there is a generally accepted definition of the term "intangible asset" within the valuation profession.

Of course, there are specific statutory, judicial, or administrative definitions for the term intangible asset. These definitions may apply for particular legal, accounting, regulatory, taxation, and other purposes. Therefore, the valuation analyst (and the other interested parties to the gift and estate tax process) should always be cognizant of the context and the circumstances in which the term "intangible asset" applies.

There are numerous reasons why the valuation analyst may be asked to identify and value a taxpayer intangible asset within the gift and estate (and income) tax environment. Some of the more common gift and estate (and income) tax reasons include the following:

1. gift and estate tax reporting compliance, when commercial intangible assets (a) are the subject of the taxpayer's gift or (b) are included in the decedent's estate
2. income tax reporting compliance, when commercial intangible assets are involved in a charitable contribution, an intercompany transfer, an acquisition purchase price allocation, a like-kind exchange, a contribution to a business entity in exchange for equity, a distribution from a business entity in exchange for equity, etc.
3. when the commercial intangible assets are the subject of the negotiation of the subject tax liability between the Service and the taxpayer (or the taxpayer's representative)
4. when the commercial intangible assets are the subject of the administrative appeal of the subject tax liability by the taxpayer
5. when the commercial intangible assets are the subject of the litigation over the subject tax liability between the taxpayer and the Service

First, this discussion summarizes the process that the valuation analyst typically follows in the identification of taxpayer commercial intangible assets within the federal gift and estate tax process. Second, this discussion summarizes the generally accepted approaches, methods, and procedures that the valuation analyst may use to quantify the value of the individual or corporate taxpayer intangible assets for federal gift and estate tax purposes.

Taxpayer Business Enterprise Assets

From an economics perspective, an asset is anything that (1) can be owned and (2) has value. If the individual or corporate taxpayer owner/operator cannot own a subject economic phenomenon, then it is not an asset. If the subject economic phenomenon exists and can be owned—but it has no value, then it is not an asset.

So, for an intangible asset to meet the first threshold test of existence (i.e., in order for an intangible to be an asset), it should (1) be subject to private ownership and (2) have value.

For a variety of accounting, legal, and other reasons, the valuation analyst will often group all taxpayer business enterprise assets into the following four primary asset categories:

1. tangible real estate
2. intangible real property
3. tangible personal property
4. intangible personal property

Therefore, for any asset categorization purpose, one way to identify any type of taxpayer business enterprise asset (tangible or intangible) is to locate that asset in one of the four boxes presented in Figure 1.

Figure 1
The Four Categories of Taxpayer Business Enterprise Assets

	Realty Assets	Personalty Assets
Tangible Assets	Tangible Real Estate	Tangible Personal Property
Intangible Assets	Intangible Real Property	Intangible Personal Property

Real Estate Assets

Most parties to the federal gift, estate, or income tax process are familiar with the real estate category of assets. First, real estate is tangible. The fact that real estate is tangible means that the value of real estate comes from its physical elements. The fact that real estate is realty means that it is not moveable.

Real estate is either physically part of the earth (e.g., land) or it is physically attached to the earth (e.g., buildings). Therefore, real estate is (practically) immobile and the value of real estate comes from the owner's ability to occupy, traverse, build on, drill into, or otherwise physically interact with this tangible asset.

Examples of taxpayer real estate are easy to identify: land, land improvements, buildings and permanently affixed structures, building improvements, and so forth.

Tangible Personal Property Assets

Most parties to the federal gift, estate, or income tax process are also familiar with the tangible personal property category of assets. First, like real estate, tangible personal property is tangible. Again, that means that the value of tangible personal property comes from its physical elements.

The fact that tangible personal property is personal means that it is moveable. Personal property can be moved from one location (i.e., from one piece of real estate) to another location (i.e., to another piece of real estate). The value of tangible personal property comes from the owner's ability to physically interact with this tangible asset.

Examples of taxpayer tangible personal property are also easy to identify: industrial machinery and equipment, trucks and transportation equipment, office furniture, computer and laboratory equipment, and so on.

Real Property Assets

Most parties to the federal gift, estate, or income tax process are at least generally familiar with the intangible real property category of assets. This is because legal interests in real estate are often subdivided and transferred. Real property assets are the transferable legal interests in tangible real estate.

The value of a real property asset does not come from the ownership of the tangible real estate asset itself. This is because a separate party (e.g., a landlord, a lessor, or a licensor) actually owns the tangible real estate.

However, the subject real property asset owner actually owns the right to use, occupy, cross over, extract from, etc. the subject real estate. The actual real property asset is an intangible asset. The value of intangible real property comes from the legal rights associated with that intangible asset—and not from the ownership of the physical asset itself.

Examples of taxpayer real property assets include: leases, occupancy permits, building permits, surface rights,

air rights, mining rights, water extraction rights, drilling rights, and so forth.

These intangible assets are often documented in a license, lease, easement, or other contract. The tangible evidence of the intangible real property right is the document (e.g., the contract). The contract is an asset; it can be owned. The contract has a tangible element; it is a written document.

However, the value of the contract does not depend on the physical aspects of the contract document (i.e., the actual physical paper). Rather, the value of the intangible real property contract depends on the legal rights (and economic expectations) associated with the contract document.

Intangible Personal Property Assets

More sophisticated parties to the federal gift, estate, or income tax process are also familiar with intangible personal property. As mentioned above, real property interests are, in fact, intangible assets. However, some less experienced observers automatically think of the intangible personal property category of assets when they consider the term intangible assets.

That definition of intangible asset (i.e., intangible personal property only) is actually too limited from a valuation perspective. This is because this definition excludes the intangible real property category of intangible assets. However, it will not necessarily invalidate this explanation of intangible assets to limit this discussion to intangible personal property.

The value of intangible personal property comes from the legal rights, the intellectual property content, and/or the expected economic benefits that are associated with that intangible asset. Nonetheless, like all assets (both tangible and intangible), intangible personal property (1) can be owned and (2) has value.

Taxpayer Intangible Assets

The experienced valuation analyst often groups all intangible personal property assets into four categories. Sometimes, this intangible personal property categorization process may have accounting, taxation, regulatory, or legal significance. Often, this categorization process just makes sense from a valuation perspective. This is because the four different categories of intangible personal property assets (although fundamentally similar) have slightly different economic attributes.

These four categories of intangible personal property assets are: (1) financial assets, (2) general intangible assets, (3) intellectual property, and (4) intangible value in the nature of goodwill These four categories of intangible personal property are described below.

Financial Assets

The first category of intangible personal property assets includes financial assets. Virtually all parties to the federal gift, estate, or income tax process are familiar with financial assets. While the inexperienced valuation analyst may not think of this first category of intangible personal property as an intangible asset, this category may be the most illustrative example of an intangible asset.

Common examples of individual or corporate taxpayer financial assets include: cash, accounts and notes receivable, stocks and bonds, and other negotiable investment securities. When the subject financial assets owner is a taxpayer, these intangible assets are recorded as "current assets" for either personal or business financial statement purposes.

As mentioned above, a financial asset may be the most conceptually clear example of an intangible asset. Let's consider the example of cash—in the form of a $100 bill. If the $100 bill is owned by a corporation taxpayer, it is recorded as cash, that is, a current asset, on the taxpayer financial statement balance sheet. If the $100 bill is owned by an individual taxpayer, it is still recorded as cash—that is, a current asset—if the individual taxpayer prepares a personal financial statement.

There would likely be no question at all that the $100 bill (1) is an asset and (2) has value. However, the value of the $100 bill does not result from the actual paper note. Rather, the value of the $100 bill results from the fact that the intangible asset owner has the legal right to exchange the paper instrument for goods and services. The value of this $100 bill intangible asset comes from the expected economic benefits it can provide to the intangible asset owner.

Commercial Intangible Assets

The second category of intangible personal property assets includes most other commercial intangible assets. The economic attributes and common subcategorizations of these discrete (or individual) commercial intangible assets will be presented below. Because this is a broad, catch-all category, most taxpayer intangible personal property assets may be classified as general commercial intangible assets.

Intellectual Property

The third category of intangible personal property assets is called intellectual property. Intellectual property intangible assets are distinguished by their special legal recognition and, therefore, their specific legal rights.

There are four types of intellectual property in this third category:

1. trademarks and trade names
2. patents
3. copyrights
4. trade secrets

Intangible Value in the Nature of Goodwill

The fourth category of intangible personal property assets includes intangible value in the nature of goodwill. The experienced valuation analyst typically considers intangible value in the nature of goodwill to be a separate (or fourth) category of intangible assets for various accounting, taxation, and other financial reporting purposes.

As indicated above, the individual or corporate taxpayer intangible asset owner should be able to list and describe each of the other types of intangible assets: (1) financial asset instruments, (2) general commercial intangible assets, and (3) intellectual property.

Intangible value in the nature of goodwill is often considered to be a residual intangible asset. That is, for valuation purposes, goodwill is often considered to be the intangible value component of a taxpayer business enterprise (of whatever legal form) that cannot be specifically assigned to (or identified with) any of the other above-mentioned three types of intangible assets. This is true for both (1) an individual taxpayer's professional or celebrity goodwill and (2) a corporate taxpayer's institutional or business enterprise goodwill.

Nonetheless, like each of the other three categories of intangible personal property, goodwill (1) can be owned and (2) can have value. While goodwill is an intangible asset, goodwill is not as easy to identify or to analyze as the other three categories of intangible personal property.

Exhibit 1 presents a list of many of the individual or corporate taxpayer intangible assets that may be subject to valuation. These intangible assets may be valued for taxation purposes or for other purposes. It is noteworthy that Exhibit 1 does not present an exhaustive list of personal or commercial intangible assets.

Categories of Business Enterprise Assets

In summary, from a valuation perspective, there are four primary categories of taxpayer business enterprise assets. Each of these four primary categories of taxpayer business enterprise assets may have several subcategories.

Two of the primary asset categories represent tangible assets, the value of which comes directly from their physical elements. Two of the primary asset categories represent intangible assets, the value of which does not come from their physical elements.

Two of the primary asset categories are immobile, so they relate to real estate. Two of the primary asset categories are moveable, so they relate to personal property. Therefore, several subcategories of the intangible personal property asset category exist. These intangible personal property assets are commonly referred to as intangible assets.

Figure 2 expands the listing and relationships of the four primary categories of taxpayer business enterprise assets that were introduced in Figure 1.

Figure 2
The Four Categories of Taxpayer Business Enterprise Assets With Illustrative Examples

	Realty Assets	Personalty Assets
Tangible Assets	land building components building structures	machinery and equipment trucks and autos computers office equipment
Intangible Assets	leaseholds easements and rights of way mining and mineral rights	financial assets general intangible assets intellectual property goodwill intangible value

The following discussion summarizes how the experienced valuation analyst may identify, analyze, and value the intangible personal property category of assets within a gift, estate, or income tax compliance, appeal, or litigation context.

In particular, the discussion focuses on how individual taxpayers, corporate taxpayer executives, financing sources, public corporation securities investors, and other capital market participants understand and analyze the economics of (and, particularly, the value of) commercial intangible assets.

Reasons to Analyze Commercial Intangible Assets

In addition to the federal gift, estate, and income tax reasons mentioned above, there are numerous other reasons why the valuation analyst may be asked to value taxpayer intangible assets.

Generally, these other reasons may be aggregated into the following categories:

1. transaction pricing and structuring
2. intercompany use and ownership transfers
3. financial accounting and reporting
4. state and local ad valorem property taxation planning and compliance
5. financing collateralization and securitization
6. litigation claims and dispute resolution

Exhibit 1
List of Common Intangible Assets That May Be Owned or Operated by an Individual or Corporate Taxpayer

Advertising campaigns and programs
Agreements
Airport gates and landing slots
Appraisal plants (files and records)
Awards and judgments (legal)
Bank customers—deposit, loan, trust, credit card, etc.
Blueprints and drawings
Book and other publication libraries
Brand names and logos
Broadcast licenses (radio, television, etc.)
Buy-sell agreements
Certificates of need for health care institutions
Chemical formulations
Claims (against insurers, etc.)
Computer software (both internally developed and externally purchased)
Computerized databases
Contracts
Cooperative agreements
Copyrights
Credit information files
Customer contracts
Customer lists
Customer relationships
Designs, patterns, diagrams, schematics, technical drawings
Development rights
Distribution networks
Distribution rights
Drilling rights
Easements
Employment contracts
Engineering drawings and related documentation
Environmental rights (and exemptions)
FCC licenses related to radio bands (cellular telephone, paging, etc.)
Favorable financing
Favorable leases
Film libraries
Food flavorings and recipes
Franchise agreements (commercial)
Franchise ordinances (governmental)
Going-concern value (and immediate use value)
Goodwill—institutional
Goodwill—personal
Goodwill—professional
Government contracts
Government programs
Governmental registrations (and exemptions)
Historical documents
HMO enrollment lists
Insurance expirations
Insurance in force
Joint ventures
Know-how and associated procedural documentation
Laboratory notebooks
Landing rights (for airlines)
Leasehold estates
Leasehold interests
Licenses—professional, business, etc.
Literary works
Litigation awards and damage claims
Loan portfolios
Location value
Management contracts
Manual (versus automated) databases
Manuscripts
Marketing and promotional materials
Masks and masters (for integrated circuits)
Medical (and other professional) charts and records
Mineral rights
Musical compositions
Natural resources
Newspaper morgue files
Noncompete covenants
Nondiversion agreements
Open to ship customer orders
Options, warrants, grants, rights—related to securities
Ore deposits
Patent applications
Patents—both product and process
Permits
Personality contracts
Possessory interest
Prescription drug files
Prizes and wards (related to professional recognition)
Procedure ("how we do things here") manuals and related documentation
Production backlogs
Product designs
Property use rights
Proposals outstanding, related to contracts, customers, etc.
Proprietary processes—and related technical documentation
Proprietary products—and related technical documentation
Proprietary technology—and related technical documentation
Regulatory approvals (or exemptions from regulatory requirements)
Retail shelf space
Royalty agreements
Shareholder agreements
Solicitation rights
Subscription lists (for magazines, services, etc.)
Supplier contracts
Technical and specialty libraries (books, records, drawings, etc.)
Technical documentation
Technology sharing agreements
Title plants
Trade secrets
Trained and assembled workforce
Trademarks and trade names
Training manuals and related educational materials, courses, and programs
Use rights—air, water, land

7. management information and strategic planning
8. corporate governance and regulatory/contractual compliance
9. bankruptcy and reorganization analysis
10. license, joint venture, and other development or commercialization opportunities

Exhibit 2 presents a list of many of the specific reasons why a valuation analyst may value a taxpayer's intangible asset. It is noteworthy that Exhibit 2 does not present an exhaustive list of the reasons (taxation-related or otherwise) to value commercial intangible assets.

Each of the above-listed categories represents several different reasons why the valuation analyst would be asked to analyze commercial intangible assets. For each of these intangible asset analyses, the valuation analyst may consider one or more of the following related (but subtly different) quantitative objectives:

1. to estimate a defined value associated with the specified ownership interest in the taxpayer intangible asset
2. to measure the appropriate royalty rate or intercompany transfer price associated with the use of the taxpayer intangible asset
3. to quantify the expected remaining useful life (RUL) of the ownership or operation (or associated rate of change in the value of) the taxpayer intangible asset
4. to determine the amount of lost profits or other economic damages associated with a damages event suffered by the taxpayer intangible asset

This discussion focuses on the first category of these commercial intangible asset analyses—that is, to estimate a defined value for the subject taxpayer intangible asset. Nonetheless, there are numerous similarities in many of the generally accepted approaches, methods, and procedures that the experienced valuation analyst may use in the performance of all four categories of commercial intangible asset analyses.

The Intangible Asset Categorization Process

For federal gift, estate, or income tax purposes, the valuation analyst will often group individual intangible assets into distinct categories. This intangible asset categorization process is useful for both intangible asset identification and valuation purposes.

The commercial intangible assets included in each category are generally similar in nature and in function. The commercial intangible assets included in each category often possess similar economic characteristics. Also, taxpayer intangible assets are typically grouped in the same category when similar valuation methods apply to that intangible asset category.

One common valuation analyst categorization of taxpayer commercial intangible assets is as follows:

1. technology-related (e.g., proprietary technology, patents, technical know-how)
2. customer-related (e.g., customer lists, customer contracts)
3. contract-related (e.g., exclusive rights agreement, favorable supplier contracts, technology sharing agreements, franchise agreements)
4. data-processing-related (e.g., computer software, automated databases)
5. human-capital-related (e.g., a trained and assembled workforce, noncompete covenants, employment agreements)
6. marketing-related (e.g., advertising materials, marketing brochures and materials)
7. location-related (e.g., leasehold interests, mineral or mining exploration rights)
8. license-related (e.g., operational or environmental licenses or permits, pollution control permits)
9. artistic-related (e.g., literary works and other compositions)
10. engineering-related (e.g., engineering drawings and schematics, blueprints, proprietary documentation)
11. intellectual-property-related (e.g., patents, trademarks, copyrights, and trade secrets)
12. goodwill-related (e.g., goodwill and going-concern value).

The above list presents a common valuation analyst categorization of commercial intangible assets. This intangible asset categorization is presented for illustrative purposes only. This intangible asset categorization does not represent any particular financial accounting, income tax, legal, or other authority.

It is noteworthy that the intangible asset categorization presented above does not affect the value conclusion with regard to the taxpayer intangible asset. In other words, the economic attributes of a taxpayer intangible asset will not change based on how that intangible asset is categorized.

In addition to the above list of categories, there are also common financial accounting and income tax accounting intangible asset categorizations. For example, the Financial Accounting Standards Board (FASB) Statement of Accounting Standard (SFAS) No. 141R identifies the following five categories of intangible assets for GAAP purchase accounting purposes:

Exhibit 2
Common Taxation and Other Reasons to Value Commercial Intangible Assets

1. Transaction pricing or structuring reasons
   - Pricing the sale of an individual intangible asset or a bundle of two or more intangible assets.
   - Pricing the license of an individual intangible asset or a bundle of two or more intangible assets.
   - Equity allocations in a de novo business enterprise or joint venture when different investors contribute different tangible assets and intangible assets.
   - Asset allocations in the liquidation of a seasoned business enterprise or joint venture when different investors receive tangible assets or intangible assets in exchange for their equity ownership.
2. Intercompany use and ownership transfers
   - Transfers of intangible assets between wholly-owned subsidiaries (or other business units) of a consolidated business enterprise.
   - Transfers of intangible assets between less than wholly-owned subsidiaries (with different minority shareholders) of a consolidated business enterprise.
   - Cost accounting allocations and inventory pricing when in-process goods are transferred between entities with varying intangible asset ownerships in a consolidated business enterprise.
3. Financial accounting and fair value reporting
   - Business acquisition purchase price allocations among all required assets.
   - Goodwill and other intangible asset impairment testing.
   - Post-bankruptcy fresh start accounting for all tangible and intangible assets.
4. Taxation planning and compliance
   - Business acquisition purchase price allocations among all acquired assets.
   - Depreciation and amortization accounting for purchased tangible and intangible assets.
   - Charitable contribution deductions of donated intangible assets.
   - Intercompany transfer pricing of intangible assets owned by cross border subsidiaries of a multinational corporation.
   - State and local ad valorem property tax appeals related to exempt intangible assets.
5. Financing collateralization and securities
   - Use of cash flow–based intangible assets as collateral on corporate debt/financings.
   - Sale/leaseback or sale/licenseback financing of corporate intangible assets.
6. Bankruptcy and reorganization
   - Use of intangible assets as secured creditor debt collateral.
   - Use of intangible assets as debtor in possession (DIP) secured debt collateral.
   - Sale or license of intangible assets as spinoff opportunity.
   - Use of corporate intangible assets in assessment of solvency or insolvency.
7. Litigation claims and dispute resolution
   - Intellectual property royalty rate analysis in infringement claims.
   - Breach of contract or noncompete agreement damages claims.
   - Condemnation, expropriation, eminent domain, dissipation of corporate assets claims.
8. Management information and strategic planning
   - Formation of intellectual property joint venture, joint development, joint commercialization agreements.
   - Negotiation of inbound or outbound intellectual property (or other intangible asset) use, development, commercialization, or exploitation agreements.
9. Corporate governance and regulatory compliance
   - Custodial inventory of owned and licensed intangible assets.
   - Assessment of insurance coverage of intangible assets.
   - Defense against infringement, torts, breach of contract, and other wrongful acts.
   - Defense against dissipation of corporate assets allegation.
10. Commercialization and development opportunities
    - Identification of license, spin-off, joint venture, and other commercialization opportunities.
    - Negotiation of license, spin-off, joint venture, and other commercialization opportunities.

1. marketing-related (e.g., trademarks, trade dress, newspaper mastheads, internet domain names, noncompetition agreements)
2. customer-related (e.g., customer lists, order or production backlog, customer contracts and related customer relationships, noncontractual customer relationships)
3. artistic-related (e.g., plays, operas, ballets; books, magazines, newspapers, other literary works; musical works such as compositions, song lyrics, advertising jingles; pictures, photographs; video and audiovisual material, including motion pictures or films, music videos, televisions programs)
4. contract-related (e.g., licensing, royalty, standstill agreements; advertising, construction, management, service or supply contracts; lease agreements (whether the acquiree 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)
5. technology-based (e.g., patented technology; computer software and mask works; unpatented technology; databases, including title plants; trade secrets, such as secret formulas, processes, recipes)

This SFAS No. 141R list of the intangible assets would also be applicable for various GAAP fair value accounting valuation purposes. SFAS No. 141R provides a different categorization of intangible assets than the categorization recognized by the Service for business acquisition purchase accounting purposes. That income-tax-related intangible asset categorization is presented in Internal Revenue Code Section 197.

The Section 197 intangible asset categories are presented below:

1. goodwill
2. going-concern value
3. any of the following 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, know-how, format, or other similar item
   - any customer-based intangible
   - any supplier-based intangible
   - any other similar item

As illustrated above, there are numerous alternative ways to categorize intangible assets. Each of these different categorizations reflects the priorities and objectives of the accounting, tax, or other organization making the categorization.

The important point is that both the valuation profession and various governmental and regulatory authorities recognize the existence of commercial intangible assets. And, each of these parties has developed an intangible asset categorization process to help it organize and analyze these commercial intangible assets.

Commercial Intangible Asset Economic Attributes

This discussion introduces the economic attributes that the experienced valuation analyst considers in the process of determining the existence of taxpayer intangible assets. Of course, before an intangible asset can be valued, it has to be (1) identified and (2) analyzed. This discussion describes some of the economic attributes that help the valuation analyst to determine that a taxpayer intangible asset in fact exists.

In order for a taxpayer intangible asset to exist, (1) it should be an asset and (2) it should be intangible. An asset is anything that (1) can be owned and (2) has value. For an intangible asset, its value comes from its intangible characteristics (i.e., its bundle of legal rights). In contrast, for a tangible asset, its value comes from its physical or corporeal characteristics.

Some of the economic characteristics or attributes that are necessary for qualification as an intangible asset include the following:

1. The intangible asset should be subject to a specific identification and a recognizable description.
2. The intangible asset should be subject to legal existence, recognition, and protection.
3. The intangible asset should be subject to the right of private ownership, and that private ownership should be legally transferable.
4. There should be some tangible evidence or manifestation of the existence of the intangible asset (e.g., a contract, a license, a registration document, a listing of customers, a set of financial statements, etc).
5. The intangible asset should be created or come into existence at an identifiable time or as the result of an identifiable event.
6. The intangible asset should be subject to being destroyed or to a termination of existence at an identifiable time or as the result of an identifiable event.

In other words, there should be a specific bundle of property rights associated with the existence of any intangible asset. An asset that possesses many, or all, of the above economic characteristics or attributes will typically qualify as an intangible asset.

The inexperienced valuation analyst may assume that the above attributes mean that an intangible must be able to be sold separately—that is, without any other asset. However, that assumption would be a fundamental mistake.

The intangible asset ownership interest should be able to be sold or otherwise transferred. However, the subject intangible asset may be sold (1) as part of a bundle of intangible asses or (2) as part of a bundle of both tangible assets and intangible assets.

There is no valuation principle, literature, or course material that indicates that the intangible asset must be able to be sold separately from any other assets.

Other economic characteristics or attributes that may affect the value of a taxpayer intangible asset include the following:

1. high market share
2. high profitability
3. lack of regulation
4. regulated (or protected) market position
5. monopoly position (or barriers to entry)
6. market potential
7. breadth of customer/consumer appeal
8. heritage or longevity
9. competitive edge
10. life cycle status
11. uniqueness
12. ability to influence market prices
13. assemblage
14. liquidity (or illiquidity)
15. operational control (or lack of control)

These economic phenomena do not meet the economic attributes or characteristic tests to qualify as a commercial intangible asset. For example, a high market share may affect the value of a taxpayer intangible asset, such as a trademark. However, the economic attribute of a high market share itself is not a commercial intangible asset.

Commercial Intangible Asset Identification Summary

The above discussion introduced the broad category of assets known as intangible assets. As discussed above, definitions that limit intangible assets to only intangible personal property are narrow when viewed from a valuation perspective.

The experienced valuation analyst defines intangible assets as assets that are intangible and that are subject to (1) identification, (2) legal existence and protection, and (3) the right of private ownership.

The above discussion also presented the numerous federal gift and estate tax (and other) reasons why the valuation analyst may be asked to value individual or corporate taxpayer commercial corporation intangible assets. The above discussion described the intangible asset categorization process used by the valuation analyst and by various governmental and regulatory authorities to help them organize and analyze commercial intangible assets.

Finally, the above discussion summarized the economic attributes necessary for an asset to qualify as an intangible asset. And, the above discussion summarized the additional economic attributes that determine whether or not a taxpayer intangible asset has a determinable value.

Commercial Intangible Asset Generally Accepted Valuation Approaches and Methods

There are numerous methods and procedures that may be appropriate for the valuation of taxpayer commercial intangible assets. Due to the fundamental similarities and differences of these valuation methods and procedures, they are categorized into the three generally accepted valuation approaches.

These three generally accepted intangible asset valuation approaches are based on fundamental economic principles. The three generally accepted intangible asset valuation approaches are: (1) the cost approach, (2) the market approach, and (3) the income approach.

The three generally accepted intangible asset valuation approaches encompass a broad spectrum of microeconomics principles and property investment dynamics. Each of the three generally accepted valuation approaches has the same objective: to arrive at a reasonable indication of a defined value for the taxpayer intangible asset. Accordingly, analytical methods and procedures that are based on the same economics principles are grouped into the three valuation approaches.

The valuation analyst typically attempts to value the intangible asset using all three generally accepted valuation approaches—in order to obtain a multi-dimensional perspective on the taxpayer intangible asset. However, the individual methods and procedures that are associated with the three valuation approaches may or may not be applicable to the valuation of a particular taxpayer intangible asset.

Consequently, the selection of the valuation methods and procedures used to value a particular taxpayer intangible asset will depend on:

1. the unique characteristics of the subject intangible asset,
2. the quantity and quality of available data,
3. the purpose and objective of the analysis, and
4. the experience and judgment of the valuation analyst.

The objective of using more than one intangible asset valuation approach is to develop mutually supporting evidence for the value conclusion. The valuation analyst's value conclusion is typically based on a synthesis of the value indications derived from each applicable valuation approach and method.

Market Approach Valuation Methods

The market approach is based on the economics principles of competition and equilibrium. These economics principles indicate that, in a free and unrestricted market, supply and demand factors will drive the price of an intangible asset to a point of equilibrium.

The principle of substitution also influences the market approach. This is because the identification and analysis of equilibrium prices for substitute intangible assets will provide pricing evidence with regard to the value for the taxpayer intangible asset.

Market Approach Valuation Principles

The valuation analyst will often attempt to apply market approach methods first in the valuation process. This is because "the market"—that is, the economic environment where arm's-length transactions between unrelated parties occur—is often the best indicator of value.

However, the market approach may not be appropriate for the valuation of certain intangible assets. This is particularly the case if the condition of the taxpayer intangible asset is not sufficiently similar to the intangible assets that are transacting in the marketplace. In that case, the guideline intangible asset transactional prices may not indicate the expected price for the taxpayer intangible asset.

The price of a commercial intangible asset is not necessarily equal to its value. Value is often defined as an expected price. That is, value is the price that an intangible asset would expect to fetch in its appropriate marketplace. In contrast, price represents what one particular buyer paid to one particular seller for one particular intangible asset.

In any particular intangible asset sale transaction, either participant may have been influenced by nonmarket, participant-specific influences. If such influences did occur, and if such influences are not general to the marketplace, then a particular intangible asset transactional price may not be indicative of the expected price of the subject taxpayer intangible asset.

Even if the taxpayer intangible asset was itself bought or licensed, that subject transactional price should not be naively relied upon to indicate an expected future price. This is because this transactional price may have been influenced by nonmarket, participant-specific influences.

The Market Approach Valuation Process

Within the market approach, there are somewhat fewer valuation methods for the valuation analyst to select from as compared to either the cost approach or the income approach. Nonetheless, the practical application of the market approach involves a complex and rigorous analytical process. There is a general systematic process—or framework—to the application of market approach methods to intangible asset valuation.

The basic procedures of this systematic process are summarized as follows:

1. Research the appropriate exchange market to obtain information about sale or license transactions, involving "guideline" (i.e., generally similar) or "comparable" (i.e., almost identical) intangible assets that may be compared to the taxpayer commercial intangible asset—in terms of characteristics such as intangible asset type, intangible asset use, industry in which the intangible asset operates, date of sale, etc.
2. Verify the information by confirming (a) that the data obtained are factually accurate and (b) that the sale or license exchange transactions reflect arm's-length market considerations. If the guideline sale or license transaction was not at arm's-length market conditions, then adjustments to the transactional data may be necessary. This verification procedure may also elicit additional information about the current market conditions for the sale or license of the taxpayer intangible asset.
3. Select relevant units of comparison (e.g., income multipliers or dollars per unit—units such as "per drawing," "per customer," "per location") and develop a comparative analysis for each selected unit of comparison.
4. Compare "guideline" intangible asset sale or license transactions with the subject taxpayer intangible asset using the selected elements of comparison; and adjust the sale or license price of each guideline transaction appropriately to the subject taxpayer intangible asset. If such adjustments cannot be measured, then eliminate

the sale or license transaction as a guideline for future valuation analysis consideration.

5. Reconcile the various value indications produced from the analysis of the guideline sale and/or license transactions into either (a) a single value indication or (b) a range of values. In an imprecise market—subject to varying economics—a range of values may sometimes be a better conclusion for the taxpayer commercial intangible asset than a single value estimate.

The reconciliation procedure is the last procedure of any market approach valuation analysis in which two or more value indications are derived from guideline market data. In the reconciliation procedure, the valuation analyst summarizes and reviews the data and analyses that resulted in each value indication.

The valuation analyst then resolves these value indications into either a range of values or into a single value indication.

It is important that the valuation analyst consider the strengths and weaknesses of each value indication derived, examining the reliability and appropriateness of (1) the market data compiled and (2) the analytical procedures applied.

Cost Approach Valuation Methods

The cost approach is based on the economics principles of substitution and price equilibrium. These economics principles indicate that a willing buyer will pay no more for a fungible intangible asset than the cost to obtain (i.e., either to purchase or to construct) an intangible asset of equal utility.

In other words, a willing buyer will pay no more for a fungible taxpayer intangible asset than the price of an intangible asset of comparable utility. For purposes of this economics principle, utility can be measured in many ways, including functionality, desirability, and so on. Accordingly, an efficient market will adjust the price of all properties (including intangible assets) in equilibrium so that the price the market will pay is a function of the comparative utility of each property.

Within the cost approach, cost is influenced by the marketplace. That is, the relevant cost is often the greatest amount that the marketplace is willing to pay for the fungible intangible asset. This value is not necessarily the actual historical cost of creating the taxpayer commercial intangible asset, and it is not necessarily the sum of the historical costs for which the willing seller would like to be compensated. This is because value is not equal to cost, at least not to cost as measured in the historical accounting sense.

The cost approach is often used by the valuation analyst to estimate the value of an intangible asset that possesses unique characteristics. According to Smith and Parr, in the textbook entitled *Intellectual Property: Valuation, Exploitation, and Infringement Damages*:

> The cost approach is especially useful for appraising highly specialized property, such as a foundry, a reservoir, a steel mill, coal unloading facilities, a nuclear reactor, telephone switching centers, power plants, electric substations, or a satellite earth station. The cost approach is also very useful as a valuation method for certain intangible assets, such as computer software, an assembled workforce, corporate practices, quality control procedures, engineering drawings, assembly practices, purchasing procedures, packaging designs, and distribution networks. It is often used when other valuation methods are not applicable or to allocate values among assets that may have been valued in total by another means.[1]

The conceptual foundation of all cost approach valuation methods relate to the following economics principles:

- The substitution principle—This principle indicates that no prudent buyer would pay more for a fungible intangible asset than the total cost to construct a new intangible asset of equal desirability and utility.
- The supply and demand principle—This principle indicates that shifts in supply and demand (1) cause costs to increase and decrease and (2) cause changes in the supply of different types of intangible assets.
- The externalities principle—This principle indicates that gains or losses from external factors may affect the value of intangible assets. For this reason, external conditions may cause a newly constructed intangible asset to be worth more or less than its cost.

Definition of Intangible Asset Cost

There are several generally accepted cost approach valuation methods. Each of these valuation methods uses a particular definition of cost. The two most common definitions of cost are:

1. reproduction cost new and
2. replacement cost new.

There are subtle, but important, differences in these two different definitions of cost.

Reproduction cost new is the total cost, at current prices, to construct an exact duplicate or replica of the subject taxpayer intangible asset. This duplicate intangible asset would be created using the same materials, standards, design, layout, and quality of workmanship used to create the original intangible asset.

Replacement cost new is the total cost to create, at current prices, an asset having equal functionality or utility of the subject taxpayer intangible asset. Functionality is an engineering concept that means the ability of the taxpayer intangible asset to perform the task for which it was designed. Utility is an economics concept that means the ability of the taxpayer intangible asset to provide an equivalent amount of satisfaction.

The replacement intangible asset would be (1) created with modern methods and (2) constructed according to current standards, state-of-the-art design and layout, and the highest available quality of workmanship.

Accordingly, the replacement intangible asset may have greater utility than the taxpayer intangible asset. If this is the case, the valuation analyst should adjust for this factor in the obsolescence analysis of the replacement cost new less depreciation method.

Moreover, while the replacement intangible asset performs the same task as the subject taxpayer intangible asset, the replacement asset is often "better" (in some way) than the taxpayer intangible asset. The replacement intangible asset may yield more satisfaction than the taxpayer intangible asset. If this is the case, the valuation analyst should adjust for this factor in the obsolescence estimation of the replacement cost analysis.

There are several other definitions of cost that are applicable to a cost approach analysis. For example, some valuation analysts consider a measure of cost avoidance as a cost approach method. This method quantifies either historical or prospective costs that are avoided (i.e., not incurred) by the intangible asset taxpayer owner due to the intangible asset ownership.

In addition, some valuation analysts consider trended historical costs as an indication of value. In this method, actual historical asset development costs are identified and quantified and, then, "trended" to the valuation date by an appropriate inflation-based index factor. Regardless of the specific definition of cost used in the analysis, all cost approach valuation methods typically include a comprehensive and all-inclusive definition of cost.

Intangible Asset Cost Components

The intangible asset cost measurement (whether replacement cost, reproduction cost, or some other measure of cost) should include not only direct costs (e.g., materials) and indirect costs (e.g., engineering and design labor). The intangible asset cost measurement should also include the intangible asset developer's profit (on the direct cost and indirect cost investment) and an opportunity cost/entrepreneurial incentive (to economically motivate the intangible asset development process). And, the intangible asset cost measurement should be reduced by all relevant forms of obsolescence—including economic obsolescence.

The developer's profit is a cost component that is sometimes overlooked in the cost approach analysis. From the perspective of the intangible asset developer, first, the developer expects a return of all of the material, labor, and overhead costs related to the development process. And, second, the developer expects a return on all of the material, labor, and overhead costs related to the development process.

For example, a building contractor expects to earn a reasonable profit on the construction of any residential, commercial, or industrial building. Likewise, an intangible asset developer expects to earn a reasonable profit on the development of the intangible asset.

The developer's profit can be estimated in several procedures. It can be estimated as a percentage return on the developer's investment in material, labor, and overhead. It can be estimated as a percentage markup–or as a fixed dollar markup–to the amount of time involved in the development process. It can also be estimated as a fixed dollar amount.

The valuation analyst sometimes disaggregates the developer's investment into two subcomponents: (1) the amount financed by external financing sources (e.g., banks and other financial institutions) and (2) the amount financed by the intangible asset owner directly. The developer's profit associated with the costs financed by external sources is analogous to construction period interest accrued in the construction of a tangible asset.

Some valuation analysts include this construction period interest in the developer's profit cost category, and some valuation analysts include it in the overhead cost category. Usually, a higher rate of return is assigned to the cost amount financed by the intangible asset owner directly, as compared to the cost amount financed by external financing sources.

The opportunity cost is another cost component that is sometimes overlooked in the cost approach valuation analysis. Nonetheless, opportunity cost is an integral component of the cost approach analysis. The opportunity cost is the amount of economic benefit required to motivate the intangible asset owner to enter into the development process.

With regard to the cost approach, intangible asset developers are sometimes compared to real estate developers (e.g., the developer of a shopping mall or a residential apartment complex). There is an opportunity cost associated with the development process for both the intangible asset developer and the real estate developer. The time

(and resources) they devote to the subject project is time (and resources) they are diverting from another development project.

Likewise, both the intangible asset developer and the real estate developer expect and deserve to be compensated for the conceptual, planning, and administrative efforts associated with putting the entire project together. They both expect to be compensated for the period of time between (1) when they initially begin production of the project and (2) when they realize the full commercial potential of the project.

Perhaps this opportunity cost concept is easier to understand with regard to the real estate developer. From the time the real estate developer first begins to construct the shopping mall until the time all of the retail stores are leased and occupied, the developer is likely to experience negative cash flow. Let's suppose that this time period is two years.

A real estate developer who purchased an already leased shopping mall two years earlier would likely experience positive cash flow during that same two-year period. The foregone cash flow during the two-year development period is one indication of the opportunity cost required to motivate the real estate developer to build a new shopping mall (instead of buying an existing shopping mall).

The same type of opportunity cost is necessary to motivate the intangible asset developer to produce a new patent, trademark, computer program, chemical formulation, food recipe, or other intangible asset. The intangible asset owner should be compensated for the risk of the new development process compared to the relatively low risk of using the last generation of technology, consumer brands, computer software, and so on.

All five subcomponents of cost—material, labor, overhead, developer's profit, and opportunity cost—should be considered as part of a comprehensive intangible asset cost approach analysis. So, while the cost approach is a fundamentally different set of valuation analyses from the income approach, there are necessary economic analyses involved in the cost approach. These economic analyses (which may involve some analysis of the intangible asset income) provide indications of both: (1) the appropriate levels of opportunity cost (if any) and (2) economic obsolescence (if any).

Cost New Less Depreciation

The replacement cost new of an intangible asset is the total cost to create, at current prices, an intangible asset having equal utility to the subject taxpayer intangible asset. However, the replacement asset would be (1) created with modern methods and (2) constructed according to current standards, state-of-the-art design and layout, and the highest available quality of workmanship. Accordingly, the replacement intangible asset may have greater utility than the subject taxpayer intangible asset.

Reproduction cost new is the total cost, at current price, to construct an exact duplicate or replica of the subject taxpayer intangible asset. This duplicate intangible asset would be created using the same materials, standards, design, layout, and quality of workmanship used to create the original intangible asset.

The intangible asset cost new (however measured) should be adjusted for losses in value due to:

1. physical deterioration,
2. functional obsolescence,
3. technological obsolescence (a specific form of functional obsolescence), and
4. economic obsolescence (a specific form of external obsolescence).

It is unlikely for a commercial intangible asset to experience physical deterioration. However, the valuation analyst should consider this concept in a cost approach analysis.

Physical deterioration is the reduction in the value of an intangible asset due to physical wear and tear resulting from continued use. As mentioned above, it is unlikely that an intangible asset will experience physical deterioration.

Functional obsolescence is the reduction in the value of an intangible asset due to its inability to perform the function (or yield the periodic utility) for which it was originally designed. Technological obsolescence is a decrease in the value of an intangible asset due to improvements in technology that make an asset less than the ideal replacement for itself. Technological obsolescence occurs when, due to improvements in design or engineering technology, a replacement intangible asset produces a greater standardized measure of utility production than the actual intangible asset.

Technological obsolescence is typically considered to be a specific form of functional obsolescence. Accordingly, the valuation analyst may capture all of the value influences due to both design flaws and changing technology in one category—and call that functional obsolescence.

Economic obsolescence (i.e., a specific form of external obsolescence) is a reduction in the value of the commercial intangible asset due to the effects, events, or conditions that are external to—and not controlled by—the intangible asset current use or condition. The impact of economic obsolescence is typically beyond the control of the individual or corporate taxpayer. For that reason, economic obsolescence is typically considered incurable.

In any cost approach analysis, the valuation analyst will estimate the amounts (if any) of physical deterioration, functional obsolescence, technological obsolescence, and economic obsolescence related to the taxpayer intangible

asset. In this estimation, the valuation analyst will consider the intangible asset's actual age—and its expected remaining useful life (RUL). Such an age/RUL consideration is an important component of the cost approach.

In the cost approach, the typical formula for quantifying the commercial intangible asset replacement cost new is: reproduction cost new – curable functional and technological obsolescence = replacement cost new.

To estimate the commercial intangible asset value, the following formula is often used: replacement cost new – physical deterioration – economic obsolescence – incurable functional and technological obsolescence = value.

Income Approach Valuation Methods

The income approach is based on the economics principle of anticipation (also called the principle of expectation). In this approach, the value of the taxpayer intangible asset is the present value of the expected economic income to be earned from the ownership/operation of the intangible asset. As the name of this economics principle implies, the willing buyer "anticipates" the "expected" economic income to be earned from the taxpayer commercial intangible asset.

This expectation of prospective economic income is converted to a present worth—that is, the indicated value of the taxpayer commercial intangible asset. This conversion requires the valuation analyst to estimate the investor's required rate of return on the intangible asset generating the prospective economic income. This required rate of return will be a function of many economic variables, including the risk—or the uncertainty—of the expected economic income.

Measures of Commercial Intangible Asset Income

There are numerous alternative measures of economic income that may be relevant to a commercial intangible asset valuation. If properly applied, many different measures of economic income can be used in the income approach to provide a reasonable indication of value.

Some of the common alternative measures of economic income include the following:

1. gross or net revenues
2. gross income (or gross profit)
3. net operating income
4. net income before tax
5. net income after tax
6. operating cash flow
7. net cash flow
8. several others (such as incremental income)

There are many different measures of economic income that may be used in the income approach. Therefore, an important procedure in this valuation approach is for the valuation analyst to ensure that the discount rate or the direct capitalization rate used is derived on a basis consistent with the measure of economic income used.

There are at least as many income approach valuation methods as there are alternative measures of commercial intangible asset economic income.

In addition, all of the different income approach valuation methods may be grouped into two categories: (1) direct capitalization methods and (2) yield capitalization methods.

However, most of these income approach valuation methods may be grouped into five categories of valuation methods. These five categories of valuation methods have similar practical and conceptual considerations.

Income Approach Valuation Methods

These five categories of intangible asset income approach valuation methods are summarized below:

1. Valuation methods that quantify the incremental level of intangible asset economic income—that is, the intangible asset owner/operator will expect a greater level of economic income (however measured) by owning/operating the subject commercial intangible asset as compared to not owning/operating the subject commercial intangible asset.
2. Valuation methods that quantify a decremental level of intangible asset economic costs—that is, the intangible asset owner/operator will expect a lower level of economic costs—such as other required levels of capital costs or operating costs—by owning/operating the subject commercial intangible asset as compared to not owning/operating the subject commercial intangible asset.
3. Valuation methods that estimate a relief from a hypothetical royalty payment—that is, the amount of a royalty payment that a hypothetical third-party intangible asset licensee would be willing to pay to a hypothetical third-party intangible asset licensor in order to obtain the use of—and the rights to—the subject commercial intangible asset.
4. Valuation methods that quantify the difference in the value of the owner/operator overall business enterprise—or similar economic unit—as a result of owning the subject commercial intangible asset (and using it in the taxpayer owner/operator business enterprise)—as compared to not owning the subject intangible asset (and not using it in the taxpayer owner/operator business enterprise).

5. Valuation methods that estimate the value of the subject intangible asset as a residual from the value of the taxpayer owner/operator overall business enterprise (or of a similar economic unit), or as a residual from the value of an overall estimation of the total intangible value of the taxpayer owner/operator business enterprise (or of a similar economic unit).

Direct Capitalization Methods

In a direct capitalization analysis, the valuation analyst (1) estimates a normalized measure of economic income for one period (i.e., one period future to the valuation date) and (2) divides that measure by an appropriate investment rate of return. The appropriate investment rate of return is called the direct capitalization rate.

The direct capitalization rate may be derived for a perpetuity period of time, or the direct capitalization rate may be derived for a specified finite period of time. This decision will depend on the valuation analyst's expectation of the duration of the economic income stream.

Yield Capitalization Methods

In a yield capitalization analysis, the valuation analyst projects the appropriate measure of economic income for several discrete time periods into the future. This projection of prospective economic income is converted into a present value by the use of a present value discount rate.

The present value discount rate is the investor's required rate or return—or yield capitalization rate—over the expected term of the economic income projection.

The duration of the discrete projection period—and whether or not a residual or terminal value should be considered at the conclusion of the discrete projection period—will depend on the valuation analyst's expectation of the duration of the economic income stream.

The result of either the direct capitalization analysis or the yield capitalization analysis is the income approach value indication of the taxpayer commercial intangible asset.

Income Tax Amortization Adjustment

Regardless of whether the yield capitalization method or the direct capitalization method is used, there is one additional income approach procedure that the valuation analyst should consider. That procedure relates to the cash flow effect of the income tax amortization deduction related to an intangible asset that is purchased as part of a taxable business combination.

More often than not, the valuation analyst does not need to make this income tax amortization effect adjustment to the pre-adjusted income approach value indication. However, the valuation analyst should consider whether such an adjustment is appropriate in each intangible asset income approach valuation analysis.

When an intangible asset is purchased as part of the taxable acquisition of a going-concern business, the price of that purchased asset may be amortizable to the acquirer for federal income tax purposes. This amortization deduction is allowed under Section 197. That is why such intangible assets are referred to as Section 197 intangible assets. However, the valuation analyst should realize that:

1. not all commercial intangible assets qualify as Section 197 intangible assets;
2. a Section 197 intangible asset has to be purchased as part of a business acquisition (and not on a stand-alone basis);
3. the business acquisition has to be a taxable transaction, such as a cash for assets transaction under Section 1060 (and not, for example, a Section 368 stock for stock merger); and
4. the intangible asset owner/operator contemplated in the defined standard of value should be a taxpayer that is able to use the amortization-related income tax deduction.

Therefore, before applying the income tax amortization effect adjustment, the valuation analyst should consider: (1) is the subject taxpayer intangible asset a Section 197 intangible asset? and (2) would the subject taxpayer intangible asset normally sell as a Section 197 intangible asset? If the answer to either question is yes, then the valuation analyst may consider applying the income tax amortization effect adjustment.

Section 197 allows the business acquirer to amortize the fair market value (presumably, the price paid) of the purchased intangible asset over a statutory 15-year amortization period. This annual amortization is a deduction that reduces the acquirer's taxable income and, therefore, income tax expense. The value of this amortization deduction is the present value of the income tax expense savings over 15 years, present valued at the present value discount rate used in the income approach valuation analysis. When applicable, this present value of income tax expense savings is added to the pre-adjusted income approach value indication for the intangible asset. The sum of (1) the present value of the income tax savings and (2) the pre-adjusted value indication equals (3) the final income approach value indication for the subject intangible asset.

For example, let's assume that the pre-adjustment income approach value indication for the taxpayer intangible asset is $300. Under Section 197, the annual amortization deduction would be $200 (i.e., $3,000 ÷ 15 years).

Assuming a 40 percent income tax rate, the annual income tax expense savings would be $80 (i.e., $200 × 40 percent). And, assuming a present value discount rate of 20 percent (and a year-end discounting convention), the present value of the 15 annual $80 income tax expense savings is $400 (rounded).

Therefore, after consideration of this income tax amortization effect on the subject intangible asset net cash flow projection, the total income approach value indication for the subject taxpayer intangible asset is $3,400 (i.e., $3,000 unadjusted value + $400 income tax amortization adjustment).

Alternatively, some valuation analysts use an income tax amortization effect factor as a shortcut to the 15-period tax expense savings calculation. The common income tax amortization effect factor formula is:

$$\text{amortization effect factor} = \frac{1}{\dfrac{1-(\text{income tax rate})\times(\text{present value annuity factor})}{\text{amortization period}}}$$

In this formula, the income tax rate should be the same tax rate that was used in the unadjusted income approach analysis. The present value annuity factor is the present value of an annuity of $1 for 15 years at the present value discount rate that was used in the unadjusted income approach analysis. And, the amortization period is always 15 years for Section 197 intangible assets.

For example, let's consider the same taxpayer intangible asset mentioned above. We still assume that the pre-adjustment income approach value indication is $3,000.

Using the amortization effect factor formula, the value adjustment would be as follows:

$$\text{amortization effect value adjustment} = \frac{1}{\dfrac{1-(40\%)(4.6755)}{15\text{ years}}}$$

$$\text{amortization effect value adjustment} = 14\%$$

So, the amount of the amortization effect value adjustment is $400 rounded (i.e., $300 × 14%). And, using the amortization effect factor formula, the total income approach value indication for the subject taxpayer intangible asset is $3,400 (i.e., $3,000 unadjusted value + $400 income tax amortization adjustment).

This income tax amortization effect adjustment (however calculated) is intended to reflect the increment in net cash flow related to the amortization-related income tax expense savings. This net cash flow increment is not reflected in the unadjusted income approach analysis. This adjustment, then, properly reflects the amount of income tax expense that should be included in the income approach valuation analysis.

Since it is an adjustment to income tax expense in the income approach, this adjustment is not applicable to either the cost approach or the market approach. In other words, the income tax amortization effect adjustment should not be considered in intangible asset valuation analyses based on either the cost approach or the market approach.

Summary and Conclusion

This discussion focused on the identification and valuation of taxpayer commercial intangible assets. In particular, this discussion focused on the valuation of commercial intangible assets for federal gift, estate, and income tax compliance, appeal, or litigation purposes. This discussion applies to intangible assets owned or operated by either an individual taxpayer or a corporate taxpayer.

First, this discussion summarized the procedures the valuation analyst may use (and the factors the valuation analyst may consider) to identify the existence of a taxpayer intangible asset.

Second, this discussion summarized the generally accepted valuation approaches, methods, and procedures that the valuation analyst may use to estimate the value of a taxpayer intangible asset.

There are numerous economic and legal attributes that the valuation analyst may consider in the identification of taxpayer commercial intangible assets. And, there are three generally accepted approaches that the valuation analyst may consider in the valuation of taxpayer commercial intangible assets—that is, the cost approach, the market approach, and the income approach.

Each of the three generally accepted valuation approaches has the same objective: to arrive at a reasonable value indication for a taxpayer intangible asset. Within each of the three valuation approaches, there are numerous methods and procedures that may be appropriate for the valuation of commercial intangible assets within a federal gift, estate, or income tax compliance/controversy context.

The selection of the appropriate valuation methods and procedures to value a taxpayer commercial intangible asset is based on (1) the characteristics of the taxpayer intangible asset, (2) the quantity and quality of available data, (3) the purpose and objective of the analysis, and (4) the experience and judgment of the valuation analyst. The final value conclusion for the taxpayer commercial intangible asset is typically based on a synthesis of the value indications derived from each applicable valuation approach and method.

Note:

1. Gordon V. Smith and Russell L. Parr, *Intellectual Property: Valuation, Exploitation, and Infringement Damages* (New York: John Wiley & Sons, 2005, pp. 164-165.

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