Market Approach Methods for Intangible Asset Property Tax Valuations

Aaron M. Rotkowski and Robert F. Reilly, CPA

Many valuation analysts (and corporate taxpayers and tax counsel) immediately think of either income approach or cost approach valuation methods when it comes to the analysis of commercial intangible assets. However, experienced analysts realize that, when sufficient sale or license transactional data are available, the market approach can provide a compelling analysis of the value of a taxpayer's intangible assets. This discussion summarizes the generally accepted methods, procedures, and data sources related to the market approach valuation of intangible assets. And, this discussion presents an illustrative example of the market approach valuation of a corporate taxpayer's intangible asset for property tax purposes.

INTRODUCTION

Both taxpayer and taxing authority valuation analysts ("analysts") are called on to value commercial intangible assets for ad valorem property tax compliance and controversy purposes. Analysts may value intangible assets both when:

1. the assets are subject to property taxation and
2. the assets are exempt from property taxation.

The latter situation occurs commonly with respect to utility-type taxpayers that are assessed on the unit valuation principle (in contrast to the summation valuation principle). Such taxpayers include railroads, airlines, pipelines, telecom companies, cable TV systems, electric companies, water and wastewater companies, and other functionally integrated taxpayers.

The unit valuation principle collectively values the taxpayer assets (tangible and intangible) as a single income-producing unit. However, in some jurisdictions, intangible assets are exempt from property taxation. Therefore, the analyst will value the taxpayer's intangible assets and subtract that value from the total taxpayer unit. The remainder of that subtraction is the value of the taxpayer unit (the tangible asset portion) subject to property taxation. For purposes of this discussion, the phrases intangible asset and intangible personal property are synonymous.

The market approach is used to estimate intangible asset value based on an analysis of the sales or licenses of guideline intangible assets.

First, the analyst decides the criteria for the selection of arm's-length sale or license transactions. The guideline sale or license is often called a comparable uncontrolled transaction (CUT).

Second, after confirming the CUT data, the analyst converts the transactional prices to pricing metrics that can be applied to the taxpayer's intangible asset. Such pricing metrics could include price per revenue, price per income (however defined), price per customer, price per intangible asset unit (for example, per engineering drawing or per line of code), price per population, and price per account balance.

Third, the analyst compares the CUT intangible assets to the taxpayer's intangible asset regarding such factors as relative growth rates, profit margins, returns on investment, market size, position in market, and position in life cycle.

Fourth, based on this comparative analysis, the analyst selects subject-specific pricing metrics derived from the CUT intangible assets.

Finally, the analyst applies the selected pricing metric to the taxpayer's intangible asset to indicate a value.

Although the income approach is often considered in an intangible asset valuation, actual market transaction data can provide compelling empirical evidence of value. Analysts who only apply income approach methods to estimate intangible asset value may ignore important market information. The market approach is applicable to all types of intangible assets when there are sufficient CUT data.

When applying the market approach to property tax valuation assignments, analysts follow a systematic process. This discussion summarizes the quantitative and qualitative procedures of this systematic process. And, this discussion provides an illustrative example of a common market approach valuation method.

COLLECTING, CLASSIFYING, AND VERIFYING DATA

One reason why some analysts are reluctant to apply the market approach in intangible asset property tax valuations is the challenge of collecting and selecting relevant CUT data. The analysis of intangible asset CUT data is difficult because information about the economic factors that influenced the buyer or licensee and the seller or licensor decisions are often not available.

Many CUT data involve complex sale or license transactions. That is, the arm's-length transaction does not involve the sale or license of a single (sometimes called "naked") intangible asset. Rather, the arm's-length transaction involves the sale or license of a bundle of tangible assets and intangible assets.

With regard to intangible asset sale transactions, the transaction may involve the sale of a going concern business enterprise. In such instances, the analyst has to extract intangible-asset-specific pricing metrics from the analysis of a complex transaction.

To apply the market approach, the analyst gathers data on sales, licenses, sale or license contracts, offers, options, and listings of intangible assets that provide meaningful pricing guidance with regard to the taxpayer intangible asset. The transactions should be sufficiently similar to provide meaningful pricing guidance to the analyst.

However, that does not require that the CUT intangible assets be perfectly comparable to the taxpayer intangible asset. Rather, the transactions should be similar enough to the taxpayer asset (from a risk and expected return perspective) to provide meaningful pricing guidance.

The analyst identifies the property rights conveyed in each selected CUT sale or license as completely as possible. The sale or license transaction price often depends on the bundle of rights that are conveyed. With sufficient information, the analyst can make any necessary adjustments to reflect the difference between intangible assets sold or licensed at market rates, and intangible assets sold or licensed at above or below market rates.

The term of a license and the other conditions of the license agreement typically influence the license royalty rate. The license royalty rate influences the license income generated by the CUT intangible assets. The pricing metrics extracted from the CUT licenses influence the taxpayer intangible asset value.

The price of one intangible asset sale/license may differ from the price of an otherwise identical intangible asset sale/license due to different financial arrangements. For example, a trademark licensor may commit to provide advertising, promotion, legal protection, or product development expenditures to maintain or expand the income-producing capacity of a trademark. In a different license for the same trademark, the licensee may accept financial responsibility for all of these marketing, legal, and technological activities.

Another challenge in applying the market approach is that it is difficult to obtain arm's-length license royalty rate data for certain types of intangible assets. Included in the following discussion is a summary of common sources of CUT royalty rate data. Before searching commercial databases for CUT royalty rate data, the analyst considers primary sources of royalty rate information.

The analyst may consult with the taxpayer owner/operator, who may have entered into either inbound or outbound license agreements related to the intangible asset. The taxpayer may also be aware of license agreements of directly competitive intangible assets (that is, intangible assets owned or operated by industry competitors) or sales or licenses of directly competitive intangible assets.

The analyst may have to convert CUT sale or license prices to a cash equivalent value. In a cash equivalent analysis, the analyst investigates CUT sales or licenses where the intangible asset appears to be transferred with nonmarket financing or other nonmarket terms. The analyst considers whether such sale or license price data should be adjusted to reflect more typical market conditions.

CUT sales or licenses that were conducted at nonmarket conditions may have to be normalized to current market conditions as of the analysis date. A normalization adjustment for market conditions may be necessary if intangible asset prices have increased or decreased since the time of the CUT sale or license. Such price changes could occur because market participant perceptions of the economy or the industry have changed.

Normalization adjustments for the conditions surrounding the CUT sale or license may be appropriate to properly reflect market participant motivations. For example, a buyer may pay more than market value for an intangible asset if that asset is needed to capitalize on a unique market condition.

Alternatively, an intangible asset sale may be transacted at a below-market price if the seller needs cash in a hurry. Affiliated corporate entities may record a sale at a nonmarket price to serve specific business purposes. Family members may buy or sell an intangible asset at a nonmarket price to protect a legacy.

For these reasons, the analyst typically confirms that the selected CUT sales or licenses were transacted at an arm's-length price between unrelated parties.

To the extent possible, the analyst investigates the circumstances surrounding the CUT sale or licenses before such transactions are used in a market approach analysis.

ESTABLISHING AND APPLYING PRICING METRICS

In selecting and analyzing CUT sales and licenses, the analyst typically considers the elements of comparison, which generally include all intangible asset attributes. Analysts often consider the following basic elements of comparison when selecting and analyzing CUT sales or licenses transactions:

1. The legal rights of intangible asset ownership conveyed in the guideline transaction

2. The existence of any special financing terms or arrangements (for example, between the buyer or licensee and the seller or licensor)

3. The existence, or absence, of arm's-length sale or license conditions

4. The economic (especially the risk and expected returns) conditions existing in the appropriate secondary market at the time of the guideline sale or license transaction

5. The industry in which the guideline intangible asset was—or will be—used

6. The geographic or territorial characteristics of the sale or license CUTs compared to the taxpayer intangible asset

7. The term or duration characteristics of the sale or license CUTs compared to the taxpayer intangible asset

8. The use, exploitation, or obsolescence characteristics of the sale or license CUTs compared to the taxpayer intangible asset

9. The economic characteristics of the sale or license CUTs compared to the taxpayer intangible asset (for example, who is responsible for continued development, commercialization, or legal protection of the intangible asset)

10. The inclusion of other assets in the sale or license CUT (this element may include the sale or license of a bundle or a portfolio of assets and could include tangible real or personal property, marketing assistance, trademarks, product development, or other contractual rights)

The comparative analysis focuses on similarities and differences between the CUT intangible assets and the taxpayer intangible asset. These factors may include differences in the property rights conveyed, the motivations of buyers and sellers, financing terms, market conditions at the time of sale (the comparative numbers of buyers, sellers, and lenders), size, attributes, and economic characteristics.

One typically useful pricing metric is a pricing multiple computed by dividing the CUT price by some relevant financial or operational variable. For example, the selected pricing metric could be price per customer, price per dollar of revenue generated, price per units produced, price per dollar of earnings before interest and taxes (EBIT) generated, price per drawing, or price per line of code.

Other pricing metrics are based on projections of expected income or market potential. For example, the selected pricing metric could be price per expected future revenue, future customers, future market share, future population served, future EBIT, or future cash flow.

CUT owner/operator income statement variables are sometimes considered in the calculation of pricing metrics. The CUT owner/operator income statement variables that may be used to calculate pricing metrics include the following:

- Price per average selling price
- Price per average unit volume
- Price per net sales
- Price per net income

- Price per gross cash flow
- Price per net cash flow

Occasionally, CUT owner/operator balance sheet data can be used to develop pricing metrics. Such pricing metrics are developed by dividing the CUT price by the CUT owner/operator's balance sheet account balances. The balance sheet variables that may be used to calculate pricing metrics from CUT prices include the following:

- Price to depreciated original cost of CUT company assets
- Price to book value of CUT company assets
- Price to adjusted book value of CUT company assets.

Other market approach procedures for calculating CUT-derived pricing metrics are described below.

Frequency of Use

Value is influenced by whether the intangible asset is an integral part of a process that could not be completed without the intangible asset. For example, an engineering drawing may be used repetitively in the process of designing or operating a manufacturing process.

The engineering drawing value may depend more on the frequency of its use rather than on its replacement cost new. In this example, the engineering drawing value may be measured in terms of a price per use.

Market Potential

Cable television franchise transactions, cellular telephone franchise transactions, and similar services-based intangible assets are sometimes described in terms of price per subscriber, price per home passed, or price per population.

In these situations, the CUT prices may be expressed in terms of the existing customer base, the number of potential customers who could subscribe to the service (like cable TV) without additional cost to reach those customers, and the number of potential customers living within the franchise territory.

The number of potential patients living within the geographic area of a hospital or similar health care facility may also provide a pricing metric related to market potential. These pricing metrics indicate that the CUT prices are a function of both the seller's experience in penetrating the available market and the buyer's potential for market share growth.

MARKET APPROACH VALUATION METHODS

The common intangible asset market approach valuation methods include the following:

1. The sales comparison method
2. The relief from royalty method
3. The comparable profit margin method

Each method is discussed below.

All market approach methods are based on empirical data:

1. The sales comparison method is based on actual sales.
2. The relief from royalty method is based on actual licenses.
3. The comparable profit margin method is based on comparable companies.

All market approach methods are also based on a measure of comparability:

1. The sales comparison method is based on comparable sales.
2. The relief from royalty method is based on comparable licenses.
3. The comparable profit margin method is based on comparable companies.

The first two methods rely on transaction data. The sales comparison method is based on intangible asset sale transactions. The relief from royalty method is based on intangible asset license transactions. Therefore, the first two methods are based on CUT data, making both methods CUT methods.

Although these methods rely on CUT data, the analyst understands that the transactional intangible assets and the taxpayer intangible asset may not be perfectly comparable. Therefore, the analyst applies professional judgment in the selection of CUT data in order to assemble sufficient empirical data to provide meaningful valuation guidance.

The CUT intangible assets should be reasonably similar to the taxpayer asset. They should be used in a reasonably similar industry to the taxpayer's industry and for reasonably similar purposes to the purpose for which the taxpayer asset is used.

However, the analyst can account for any reasonable differences between the CUT intangible assets and the taxpayer asset by the following procedures:

1. Adjusting the CUT sale or license pricing data for any differences in comparability

2. Selecting a subject-specific pricing metric from the range of CUT sale or license prices

When CUT data are analyzed, the sale or license transactions are selected and adjusted for comparability. The CUT data are comparable uncontrolled transactions, not comparable uncontrolled intangible assets. The transactional assets have to be similar enough to the taxpayer asset to provide meaningful valuation guidance.

The first method discussed is the sales comparison method. This method is typically not called the comparable sales method. This is because the analyst does not expect that the transferred intangible assets are perfectly comparable to the taxpayer intangible asset.

The Sales Comparison Method

This discussion describes when this method is most applicable, the quantitative procedures of the method, the data sources used, and the strengths and weaknesses of the method.

Method Application

This method is most applicable when the subject is the type of intangible asset that sells in the marketplace as a separate intangible asset. In other words, such assets transact as naked intangible assets (without any other tangible or intangible assets).

Examples of some intangible assets that sell independently in the marketplace include credit card customer portfolios, bank core depositors, mortgage servicing rights, and mortgage and other loan portfolios. Other examples include FCC spectrum and other licenses. Such licenses are first sold by the government to broadcast and communications companies, then seasoned licenses are sold between owners/operators.

This method is also applicable when there are sufficient arm's-length sales of the subject intangible asset type. Such sales are often transfers of the fee simple interest in the intangible asset. Therefore, this method is most applicable when the subject is a fee simple interest in the intangible asset.

Method Procedures

First, the analyst identifies the comparability criteria selected to search for CUT sale data. The criteria may include the following:

1. Type of intangible asset
2. Industry in which intangible asset is used
3. Size of industry or market in which asset is used

4. How the intangible asset is operated by its owner/operator
5. Size of the owner/operator (buyer or seller)
6. Growth rate of the industry or market
7. Profitability of the industry or market
8. Growth rate of the owner/operator (buyer or seller)
9. Profitability of the owner/operator (buyer or seller)
10. Observation window for sale transaction dates

Second, the analyst searches for arm's-length intangible asset sales that meet the search criteria. The common data sources for sales transactions are described in this section. To the extent possible, the analyst confirms (1) the sales price, (2) that the sales price represents a cash equivalent price, and (3) that the sale transaction was at arm's length. If the transaction sales price is not a cash equivalent price (for instance, there are earn-out provisions or installment payments), the analyst converts the transaction price to a cash equivalency price.

Third, the analyst selects normalized unit pricing metrics. These metrics are used to convert the various sale prices into metrics that can be applied to the taxpayer intangible asset (or the taxpayer). In other words, the analyst converts each absolute dollar sale price into a dollar per unit pricing metric.

Examples of unit pricing metrics follow:

1. Price per revenue generated by the intangible asset
2. Price per income (however defined) generated by the intangible asset
3. Price as a multiple of recorded book value of the intangible asset
4. Price per number of customers or accounts served by the intangible asset
5. Price per number of population in the intangible asset service area
6. Price per number of intangible asset size units (per lines of code, number of patient beds, number of files or records, and so on)

Fourth, the analyst calculates all of the sale prices in terms of the price per unit metric (let's say price per account). The analyst performs a statistical analysis of the pricing data, which could include price range, price mean, price median, price mode, price quartiles, and so on.

Fifth, the analyst selects a subject-specific pricing metric extracted from the CUT-derived pricing

metrics and applies the subject-specific pricing multiple to the taxpayer's corresponding financial or operational data.

Finally, the analyst adjusts the value indication for any differences in ownership interest between the CUT sales and the taxpayer intangible asset. Such differences in ownership interest could include differences in the level of marketability or ownership control.

Data Sources

First, the analyst investigates if there were any CUT sales involving the taxpayer and whether the taxpayer is aware of any CUT sales related to competitor companies.

Second, the analyst considers both public document and private (subscription or other) data sources for information regarding sale transactions of intangible assets. A list of such public data sources is provided in Exhibit 1. A list of private data sources is provided in Exhibit 2.

Strengths and Weaknesses

When sufficiently similar CUT data are available, this method provides meaningful valuation guidance. When a sufficient quantity of CUT data is available, this method provides meaningful valuation guidance. The analyst exercises professional judgment to assess whether there are a sufficient number of CUT transactions to apply this method and whether the CUT intangible assets are adequately similar to the taxpayer intangible asset to apply this method.

This method is particularly applicable for intangible asset types that regularly sell separately from other assets. Examples of such naked intangible asset sales are more common in the financial services, publishing, and communications industries.

This method is also applicable when the intended standard of value is fair value, fair market value, or a similar willing buyer/willing seller definition of value. This is because CUTs often indicate the results of negotiations between market participants dealing at arm's length with each other.

There are also situations in which this method is less applicable. The sales comparison method is less applicable when there is not an adequate quantity of CUT data or when the CUT intangible assets are not sufficiently similar to the taxpayer intangible asset. The analyst applies professional judgment in assessing the sufficiency of transactional data and the similarity of the CUT assets to the taxpayer asset.

This method is less applicable when the CUTs involve complex transaction pricing, which may include milestone, contingency, earn-out, progress, or other future payments. Such complex payments should be converted to cash equivalency prices. The method is also less applicable when the analyst cannot confirm the purchase price paid for the CUT intangible asset.

This method is less applicable when the CUT transactions involve portfolios of multiple intangible assets or of both tangible and intangible assets. In such instances, the analyst performs the additional procedure of allocating the CUT sale price among the bundle of transferred assets. This procedure is necessary for the analyst to compare the market price for an individual CUT asset to the individual taxpayer asset.

Finally, this method is less applicable when the intended standard of value is other than fair value or fair market value. This is true if the CUTs are arm's-length market value transactions. However, if the transactions involve investment value or strategic value price implications, then the CUT data can be used to estimate these other standards of value.

Relief from Royalty Method

Like the sales comparison method, this method relies on CUT data. The sales comparison method analyzes CUT sales of similar intangible assets; the relief from royalty method analyzes CUT licenses of similar intangible assets. This section summarizes the application of this method, the typical quantitative procedures, the common data sources, and the methodological strengths and weaknesses.

Method Application

This method is particularly applicable for the type of intangible assets that is typically licensed between a licensor and a licensee, including patents, proprietary technology, trademarks and trade names, copyrights, franchises, licenses, permits, product designs, and chemical formulas.

The relief from royalty method is particularly applicable when the subject bundle of rights is for a limited term, is for a use (and not a fee simple) right, or involves a fractional ownership interest. This application performance is because the typical intangible asset license agreement encompasses a defined (and limited) bundle of rights, in a specific territory, for a specific use, and for a specific period of time. Accordingly, the typical license agreement involves less than a fee simple interest bundle of legal rights.

Securities and Exchange Commission Filings

Various Securities and Exchange Commission (SEC) filings, such as 10-Ks, 8-Ks, and proxy statements, contain information on intangible asset sale and license transactions. This information can include the price or royalty paid in such transactions. SEC filings can be accessed through various subscription databases, such as Morningstar, Capital IQ, Bloomberg, and others. These filings can also be accessed through the free public Electronic Data-Gathering, Analysis, and Retrieval website at www.sec.gov/edgar/searchedgar/webusers.htm.

Company Press Releases

Intangible asset sale and license agreements are sometimes announced in company press releases. These press releases can be searched through the SEC sources mentioned previously and through news article databases, such as Westlaw. An Internet search (Google, Bing, and the like) can also find company press releases, although it is common for many releases to not appear in a simple Internet search for various reasons.

Analyst Reports

Intangible asset sale and license agreements are sometimes discussed in analyst reports. Analyst reports can be accessed through various subscription databases, such as Investext, ThomsonOne, and Capital IQ.

News Articles

Intangible asset sale and license agreements are sometimes discussed in news articles. These articles can be found through searching an article database, such as ABI/INFORM (available through many public libraries), LexisNexis, or Westlaw. Articles can sometimes be found in an Internet search, but this will not give thorough or comprehensive results.

Trade or Industry Journals

Intangible asset sale and license agreements are sometimes discussed in trade journal articles. These articles can be found through searching an article database, such as ABI/INFORM (available through many public libraries), Business & Industry, or Westlaw. Trade journal articles can sometimes be found in an Internet search, but this will not give thorough or comprehensive results.

Scholarly or Academic Publications

From time to time, intangible asset sale and license transactions are studied and discussed in academic journal articles, white papers, presentations, and so forth. Usually there is not a lot of detail on specific transactions, but overall trends and statistics are presented. These publications can sometimes be found through a general Internet search, in particular Google Scholar. The Social Science Research Network is also a good source for this type of information.

Court Case Decisions

When intangible asset sale or license transactions become involved in litigation, the details of these transactions are sometimes presented in the written court documents. Legal databases such as Westlaw or LexisNexis are the best source for finding this information.

Method Procedures

Some analysts consider the relief from royalty method to be an income approach method. This is because a projected royalty income is capitalized in order to reach a value indication. Other analysts consider the relief from royalty method to be a cost approach method. The reason is that the cost of the royalty is avoided because the rights associated with the intangible asset are actually owned by the taxpayer. However, this method is commonly referred to as a market approach method because the method relies on market-derived, empirical CUT data.

In this method, the analyst assumes that the taxpayer does not own the intangible asset. Without this ownership, the taxpayer would have to license the intangible asset from a hypothetical licensor. So the taxpayer becomes a hypothetical licensee that licenses the intangible asset from a hypothetical third-party licensor.

In that scenario, the taxpayer or licensee would have to pay a royalty payment to the hypothetical owner or licensor. The royalty payment would be for a use license to use the intangible asset in the taxpayer's business operations.

In reality, the taxpayer does own the intangible asset. Because of that ownership, the taxpayer avoids the cost of having to pay a use license royalty payment to a licensor. However, the intangible asset can be valued by reference to this hypothetical royalty payment that the taxpayer is relieved from making.

The hypothetical royalty payment is often calculated as a market-derived royalty rate multiplied by the taxpayer's revenue. So the application of this method requires an analysis of CUT license royalty rates and a projection of the taxpayer's revenue related to the use of the intangible asset.

In this method, the revenue expected to be generated by the intangible asset (from all sources) during its remaining useful life (RUL) is multiplied by the selected royalty rate. The product of the multiplication is a projection of the royalty expense that the taxpayer is relieved from paying because of its ownership of that intangible asset. This projected royalty expense is capitalized over the intangible asset's RUL. The result of this capitalization process is the intangible asset value indication.

Although the projected royalty stream is most commonly based on a royalty rate multiplied by revenue, it could also be based on a royalty rate multiplied by gross profit, net income, number of units produced, number of units sold, or some other taxpayer metric.

The royalty stream should be the net royalty stream that the taxpayer is relieved from paying. Therefore, if the taxpayer would have to pay for intangible asset development, maintenance, promotion, or legal protection expenses (as part of its licenses agreement), then these expenses should be subtracted from the royalty stream projection. The objective of the analysis is to measure the net benefit to the taxpayer from not having to license the intangible asset.

So when analyzing the CUT data, the analyst should consider which party would be responsible for these intangible asset maintenance expenses: the taxpayer/licensee or the hypothetical owner/licensor.

In the relief from royalty method, the analyst typically performs the following procedures:

1. Select and document the criteria to be used for selecting the CUT license agreements; such criteria could include type of intangible asset, type of taxpayer, type of industry in which the asset is used, size of the market in which the asset is used, and dates and term of the license agreements.

2. Assess the terms of each selected CUT license agreement with consideration of the following:

   ■ The description of the bundle of legal rights for the CUT licensed property

   ■ The description of any maintenance or other expenditures required for the CUT intangible property (for example, product development, advertising, product promotion, or legal protection)

   ■ The effective date of the CUT license agreement

   ■ The termination date of the CUT license agreement

   ■ The degree of exclusivity of the CUT license agreement

3. Assess the current status of the taxpayer industry and the associated relevant market and prospective trends.

4. Estimate an appropriate market-derived capitalization rate for the subject royalty stream; the capitalization rate considers the risk of the royalty income projection and the RUL of the taxpayer intangible asset.

5. Apply the market-derived capitalization rate to the royalty income projection in order to conclude a value indication.

Data Sources

The analyst surveys a number of public and private data sources to locate CUT license agreement data. Exhibit 3 provides a list and description of common intangible asset license agreement data sources.

Strengths and Weaknesses

This method has particular application for the types of intangible assets that are commonly licensed between licensors and licensees. This method is also applicable when there are a sufficient number of CUT license agreements related to sufficiently similar intangible assets.

The strengths and weaknesses method is especially applicable when the intended standard of value is fair value, fair market value, or a similar willing buyer/willing seller definition of value. This is because it is based on actual arm's-length transactions (licenses) between independent parties. It is applicable when the analyst has access to taxpayer financial projections, especially revenue projections. It is also particularly applicable when the analyst has developed an estimate of the intangible asset's RUL.

This method is less applicable in the following cases:

■ In the analysis of intangible assets that are not typically licensed between a licensor and a licensee, such as an assembled workforce

■ When there is not a sufficient quantity of CUT license agreements or if the licensed intangible assets are not sufficiently similar to the taxpayer intangible asset

■ When the analyst does not have access to the taxpayer financial projections or cannot estimate the intangible asset's RUL

■ When the analyst does not have sufficient information about which CUT party (licensor or licensee) is responsible for the intangible asset maintenance and protection expenses

Comparable Profit Margin Method

Due to data constraints, the comparable profit margin method is less commonly used than other market approach methods. However, when sufficient data are available, this method provides meaningful valuation guidance. As with other market approach methods, the analyst exercises professional judgment in the selection of the comparability criteria to identify and apply guideline companies.

ktMINE

ktMINE is an interactive intellectual property database that provides direct access to license royalty rates, actual license agreements, asset purchase agreements, and detailed agreement summaries. The database contains over 13,000 intellectual property license agreements and asset purchase agreements. The intellectual property license database is updated frequently. Agreements are searchable by industry or keyword, among other parameters. The full text of each intellectual property license or purchase agreement is available. It is available at www.bvmarketdata. com.

Royalty ConnectionTM

Royalty ConnectionTM provides online access to intellectual property license royalty rate and other license information on all types of technology, patents, trade secrets, and know-how. The data are aggregated from arm's-length sale and license transactions, litigation settlements, and court-awarded royalty order from 1990 to the present. The intellectual property database is frequently updated. Users can search by industry, product category, or keyword. The information provided includes the consideration paid for the intellectual property license and any restrictions (such as geographic or exclusivity). It is available at www.royaltyconnection.com.

RoyaltySource

AUS Consultants produces a database that provides intellectual property license transaction royalty rates. The database also contains information on intellectual property sale transactions. The database can be searched by industry, technology, or keyword. The information provided includes the license royalty rates, name of the licensee and the licensor, a description of the intellectual property licensed (or sold, if applicable), the transaction terms, and the original sources of the information provided. Preliminary results are available online, and a final report is sent to the subscriber via e-mail. It is available at www.royaltysource.com.

RoyaltyStat, LLC

RoyaltyStat is a subscription-based database of intellectual property license royalty rates and license agreements, compiled from SEC documents. It is searchable by Standard Industrial Classification (SIC) code or by full text. The results can be viewed online or archived. The intellectual property transaction database is updated daily. The full text of each intellectual property license agreement in the database is available. It is available at www.royaltystat. com.

Licensing Economics Review

AUS Consultants publishes this monthly newsletter, which contains license royalty rates on selected recent intellectual property transactions. The December issue each year also contains an annual summary of intellectual property license royalty rates by industry.

License Royalty Rates

Gregory J. Battersby and Charles W. Grimes annually author this book, which is published by Aspen Publishers. This reference tool provides intellectual property license royalty rates for 1,500 products and services in 10 different licensed product categories: art, celebrity, character and entertainment, collegiate, corporate, designer event, music, nonprofit, and sports.

Intellectual Property Research Associates

Intellectual Property Research Associates produces three books that contain information on license royalty rates for patents, trademarks, and copyrights. The books are *Royalty Rates for Trademarks & Copyrights*, *Royalty Rates for Technology*, and *Royalty Rates for Pharmaceuticals & Biotechnology*. These books are updated periodically.

This section summarizes the method application, the method procedures, the common data sources, and the strengths and weaknesses of the comparable profit margin method.

Method Application

This method is most applicable when the taxpayer has one extraordinary intangible asset and other ordinary intangible assets. In other words, one intangible asset stands out as the reason for the taxpayer's success. That intangible asset may be a patent, copyright, trademark, product design or formula, distribution method, or trade secret. This method is most applicable when the taxpayer can identify one intangible asset as the reason for its excess profitability.

This method is also applicable when there are a sufficient number of competitors that do not enjoy the benefit of the extraordinary intangible asset. Such competitors generally provide the same products or services as the taxpayer but have a generic (or, at least, not a stand-out) patent, copyright, franchise, license, trademark, product design or formula, distribution method, or trade secret.

In the application of this method, the competitors can be individually identified guideline companies or the group of companies that operate in the same Standard Industrial Classification (SIC) code as the taxpayer.

First, the analyst identifies a benchmark group of competitors. Second, the analyst identifies that the taxpayer earns a higher profit margin than the benchmark group. Third, the analyst associates the excess profit margin with the intangible asset. And, finally, the analyst uses the excess profits to derive the indicated value of the intangible asset.

Method Procedures

First, the analyst performs a functional analysis of the taxpayer. Based on this functional analysis, the analyst identifies the extraordinary intangible asset as the principal reason for the taxpayer's profitability. The taxpayer can operate numerous intangible assets, but one intangible asset should be identified as the extraordinary, or stand-out, asset.

Second, the analyst identifies a measure of income to use as a comparison between the taxpayer and the benchmark group of companies. Often, EBIT is selected as the comparative income measure. This measure is usually expressed as a profit margin (EBIT divided by revenue).

However, other profit margin metrics are sometimes used (EBIT divided by total assets or EBIT divided by owners' equity). Sometimes comparative income measures are used (for example, comparative revenue, product average selling price, gross or net income, or gross or net cash flow).

Third, the analyst selects the benchmark group of companies. The benchmark group can be individual guideline companies or an industry sector or entire SIC code group of competitors. The benchmark group typically includes:

1. companies that compete directly or indirectly with the taxpayer and
2. companies that operate a generic form of the intangible asset compared to the taxpayer's stand-out intangible asset.

Fourth, the analyst quantifies the excess profits (however measured) that the taxpayer earns compared to the benchmark group. The analyst converts that excess profit measure into an annual excess income stream.

Fifth, the analyst projects that excess income stream over the intangible asset's RUL. That RUL could be a finite period or a perpetuity period. The analyst then applies a discount rate or capitalization rate to that excess income stream. The present value of the excess income stream indicates the intangible asset value.

Data Sources

Exhibit 4 is a list of data sources that analysts may use to identify guideline publicly traded companies to serve as the benchmark group. Exhibit 5 is a list of common data sources that analysts may use to identify and research industry segments and SIC code categories to serve as the benchmark group.

Strengths and Weaknesses

The comparable profit margin method is more applicable when there is one intangible asset that makes the taxpayer unique. An example of such an intangible asset is a trade secret, a manufacturing process, or a product formulation that is different from what is normally used in the industry.

This method is applicable when there is a well-defined benchmark group of companies that compete with the taxpayer, particularly when the benchmark companies do not own extraordinary intangible assets. Common examples of such benchmark companies include generic food, clothing, or pharmaceutical product manufacturing companies. Such benchmark companies compete against branded food, clothing, and pharmaceutical product manufacturing companies.

This method is less applicable when the success of the taxpayer is associated with multiple intangible

assets or when the selected benchmark companies also own some degree of extraordinary intangible assets. For example, this situation occurs when the taxpayer owns the most prominent trademark in the industry, and the benchmark companies also own trademarks that are not as prominent as the taxpayer's trademark.

This method is also less applicable when there are an insufficient number of benchmark companies or when the benchmark companies are not sufficiently similar to the taxpayer. This situation occurs when there are numerous significant differences between the benchmark companies and the taxpayer and not just a difference in one intangible asset.

INTANGIBLE ASSET ILLUSTRATIVE VALUATION EXAMPLE

Taxpayer Corporation ("Taxpayer") is a designer and manufacturer of high-end women's apparel products. Taxpayer owns a design studio and an apparel manufacturing and warehouse facility. The property tax assessment date in the relevant taxing jurisdiction is January 1, 2013. The analyst valued the taxpayer's total unit of operating assets using an income approach valuation method. The analyst capitalized the Taxpayer's operating income and concluded a total unit value of, say, $100 million.

However, intangible assets are exempt from property taxation in the subject taxing jurisdiction. So, the analyst has to value any Taxpayer intangible assets and subtract that value from the Taxpayer's total unit value. The remainder (or residual) of that subtraction will be the value of the Taxpayer assets (real estate and tangible personal property) that are subject to property taxation.

One of the intangible assets that Taxpayer owns is a trademark and trade name. As part of the Taxpayer property tax valuation, the analyst estimates the value of this intangible asset.

Companies like Taxpayer regularly license their trademarks to other manufacturers. In fact, Taxpayer has entered into a number of outbound license agreements during the past few years. For that reason, the analyst decided to use the market approach and the relief from royalty method to value the Taxpayer trademarks.

The following list provides some commonly used general industry research sources. For some industries, there are also industry-specific sources available from trade associations, independent publishers, and periodicals.

Occupational Safety & Health Administration

The U.S. Department of Labor, Occupational Safety & Health Administration website provides SIC codes. Codes can be searched by keyword, or the SIC code "tree" can be viewed and browsed.

U.S. Census Bureau

The U.S. Census Bureau NAICS website provides a searchable database of NAICS codes. NAICS codes are a more recent classification system than SIC codes. Therefore, they can be better for newer industries, such as some high-tech industries.

FirstResearch

FirstResearch is an industry research database that was developed to provide information for sales people. It provides an overview, valuation multiples, growth rates, and information on how to analyze a company in a particular industry. Information is updated quarterly. It is available at www.firstresearch.com.

IBISWorld

IBISWorld is one of the largest independent publishers of U.S. industry research. Research includes information on major companies in the industry, growth rates, key financial data, and outlook for the industries. The research covers approximately 700 different market segments. Some international reports are also available. Information is updated quarterly for most industries and less frequently for some. It is available at www.ibisworld.com and also through other database aggregators.

S&P Industry Surveys

S&P Industry Surveys are available on approximately 50 industry sectors. The reports provide global industry information as well as information on the U.S. industries. Major companies are discussed, and detailed information on the recent past as well as an outlook for the future is provided. A glossary of specialized terms is provided. Also, comparable financial information on major companies in the industry is provided. The information is updated twice a year. These surveys are available from various sources, including S&P NetAdvantage and Alacra.com.

ABI/Inform

Articles from U.S. and international general interest and trade publications may be searched. This database is available at most libraries and through database aggregators such as Alacra.com.

Bloomberg Industries

This component of the Bloomberg database provides industry data, interactive charting, and written analysis from a team of industry experts. Contact information for each industry expert is provided so that an analyst can follow up with questions if needed. More information is available at www.bloomberg.com/professional/.

MarketResearch.com

This database provides access to industry and market research reports from many different sources. It provides information on products, trends, regions, demographics, industries, and companies from its collection of over 700 research publishers. More information is available at www.marketresearch.com.

S&P Capital IQ

This database provides access to analyst research as well as some market research reports. Capital IQ uses S&P's industry classifications. These classifications can be helpful in grouping companies in comparable industries. In addition, comparative ratio information is available. More information is available at www.capitaliq.com.

Thomson One

This database provides access to analyst research and market research reports. More information is available at www.thomsonreuters.com.

Westlaw

Articles from U.S. and international general interest and trade publications may be searched. Westlaw also provides access to the Investext analyst research database. More information is available at www.westlaw.com.

Almanac of Financial Ratios, CCH, Inc.

This resource is available in print and e-book formats. The book includes 50 comparative performance indicators and covers all of North America using NAICS data. The information is calculated and derived from the latest available IRS data on nearly 5 million companies. It includes companies in nearly 200 industries. The book is issued annually. More information is available at www.cchgroup.com.

Annual Statement Studies: Financial Ratio Benchmarks and eStatement Studies database, The Risk Management Association

Both the book and the online database contain financial statement ratios and common-size balance-sheet and income-statement line items, arrayed by asset and sales size. Six different asset and sales size categories are presented. The book and database cover over 700 industries, sorted by NAICS codes. The book is issued annually. More information is available at www.rmahq.org.

Ibbotson Cost of Capital, Morningstar

This annual book contains five separate measures of cost of equity, weighted average cost of capital, statistics on sales and profitability, capitalization, beta, equity valuation multiples, enterprise valuation multiples, financial ratios, equity returns, and capital structure. It is organized by SIC code. Quarterly updates are available online at ccrc.morningstar.com.

IRS Corporate Ratios, Schonfeld & Associates, Inc.

This book includes 76 financial ratios that are based on the most recently available income statement and balance sheet data compiled by the IRS. The data focus on the comparison of financial ratios for companies with and without net income. The contrast between profitable and unprofitable companies highlights which ratios are critical in the achievement of financial success. The book is issued annually. More information is available at www.saibooks.com.

The principle of this method is that a taxpayer would be willing to pay a hypothetical third-party owner a royalty payment for the right to use the intangible asset. Because Taxpayer actually owns the trademark, it is relieved from having to make a royalty payment to license the trademark from a third-party licensor.

The analyst performed the following procedures to estimate an arm's-length royalty rate—and the value—associated with the Taxpayer trademark:

- Discussed the intended use of the trademark with Taxpayer management
- Searched for guideline arm's-length license transactions to use in the trademark valuation
- Estimated the appropriate market-based royalty rate for the Taxpayer trademark

- Estimated the Taxpayer trademark required rate of return (present value discount rate)
- Estimated the trademark RUL to apply in the relief from royalty method to conclude an initial value indication
- Adjusted the initial value indication for a tax amortization benefit adjustment (i.e., market participants would expect to benefit from the amortization income tax deductions related to the purchase of the intangible asset)
- Concluded a final value indication for the trademark

The analyst reviewed several databases that report arm's-length intellectual property license

agreements, including the ktMine and RoyaltySource databases. Exhibit 6 presents the analyst's selection of arm's-length trademark or trade name license agreements that pertain to the Taxpayer's lines of women's apparel products.

These trademark license agreements, which relate to high-end women's apparel brands such as Anne Klein, Danskin, Christian Dior, and Donna Karan, indicated an average and a median market-based royalty rate of 6.2 percent and 6.0 percent (of revenue), respectively.

The analyst also reviewed the arm's-length royalty rates that Taxpayer actually earns from outbound licensing of its women's apparel products. As presented in Exhibit 6, these royalty rates ranged from 6.0 percent to 6.5 percent for the C&C Laundry, Gotcha/Girl Star, and Jantzen branded products.

Based on the analyst's assessment of the various trademark or trade name arm's-length license agreements in the marketplace, the analyst concluded a royalty rate of 6.5 percent (of revenue) for the Taxpayer trademark.

The analyst calculated the value of a trademark as the present value of the expected after-tax royalty savings attributed to the trademark. Accordingly, the analyst calculated the relieved royalty payment by applying the selected royalty rate to the projected Taxpayer product line revenue.

The analyst applied the selected royalty rate of 6.5 percent to the projected revenue attributed to Taxpayer branded products for the fiscal years ended January 1, 2014, through January 1, 2019.

The projected revenue, which was based on management's revenue projections (which were determined to be consistent with those of market participants), contemplates a 2 percent annual growth rate in the dollar volume of Taxpayer branded products.

After the year ended January 1, 2019, management expects (as would market participants) to replace the Taxpayer trademark and trade name with a new trademark and trade name. Therefore, the analyst selected 6 years as the RUL for the Taxpayer trademark.

The analyst reviewed the selected CUT license agreements. In these agreements, the licensor was responsible for the intangible asset maintenance and legal expenses. Therefore, the analyst does not need to adjust the relief from royalty payment for any expenses that would be paid by Taxpayer (as the hypothetical licensee).

The analyst adjusted the annual royalty payment for income taxes and discounted the after-tax savings to a present value using a present value discount rate. The present value discount rate reflects the risks inherent in the trademark intangible asset.

The analyst used a present value discount rate of 14 percent, which was the Taxpayer weighted average cost of capital (again, consistent with market participants). This analysis is summarized in Exhibit 7.

Based on the relief from royalty method, the indicated value of the Taxpayer trademark is approximately $15,292,000 prior to the application of the tax amortization benefit factor. The analyst applied a tax amortization benefit factor of 1.19 (based on a 14 percent present value discount rate, a 36 percent income tax rate, and a 15 year amortization period).

Based on the relief from royalty method analysis in this illustrative example, the value of the Taxpayer trademark, including the tax amortization benefit, is $18,200,000 (rounded).

Accordingly, the analyst would adjust the total unit value for the value of this trademark intangible asset (and any other intangible assets) in order to conclude the value of the Taxpayer tangible assets subject to property taxation.

> "When there is a sufficient quantity of sufficiently similar CUT sales or licensees, the market approach provides meaningful analysis conclusions."

SUMMARY

Valuation analysts are often called on to estimate the value of commercial intangible assets for ad valorem property tax compliance or controversy purposes. This analysis is relevant in jurisdictions where intangible assets are subject to property taxation. And, this analysis is relevant in jurisdictions where intangible assets are exempt from property taxation.

This latter analysis is particularly common for taxpayers that are assessed based on the unit valuation principle. The unit valuation principle encompasses the value of all of the taxpayer assets—both tangible and intangible. In those cases, the taxpayer will have to subtract the value of the exempt intangible assets from the taxpayer total unit value in order to conclude the residual value of the tangible assets subject to taxation.

There are generally accepted market approach methods to quantify an intangible asset value for ad valorem property tax purposes. Market approach methods are particularly applicable to certain types of intangible assets. These types of intangible assets are typically sold or licensed separately from other tangible assets and intangible assets.

Exhibit 6
Taxpayer Corporation
Trademark and Trade Name
Selection of CUT License Agreements as of January 1, 2013

Trademark or Trade Name Licensee	Trademark or Trade Name Licensor	Industry in Which the Trademark Is Used	License Agreement Royalty Rate as a % of Revenue	Initial Date of License Agreement	License Agreement Term (Years)
Maxwell Company, Inc.	Anne Klein, B.D.S., Inc.	Women's apparel	6.0	July '12	5
Tandy Brands Accessories, Inc.	Hermes	Women's apparel	5.0	August '11	5
Innovo Group, Inc.	Michael Caruso & Co., Inc.	Women's accessories	6.0	February '12	5
Innovo Azteca Apparel, Inc.	Blondie Rockwell, Inc.	Women's apparel	8.0	February '11	5
Wundies Industries	Danskin, Inc.	Women's apparel	4.5	November '10	10
Novak Brands, Inc.	Christian Dior	Women's apparel	7.5	January '11	5
Fashion Mag Apparel, Inc.	Hachette Filipacchi Presse	Women's apparel	6.0	January '10	10
Yes Clothing Co.	Marbel Sportswear, Inc.	Women's apparel	7.0	April '11	5
Miss Erika, Inc.	McNaughton Apparel Holdings, Inc.	Women's apparel	5.0	August '12	5
Ridgeview Inc.	Ellen Tracey, Inc.	Women's apparel	7.0	December '11	5
Designer Holdings, Ltd.	Donna Karan International, Inc.	Women's apparel	7.0	September '10	10
BIB Ltd.	Mark TM, LLC	Young women's apparel	4.0	November '11	5
Gygnes Designs	Kenzo	Women's apparel	<u>8.0</u>	July '12	5
		Average royalty rate	6.2		
		Median royalty rate	6.0		
Taxpayer Corporation	C&C Laundry	Women's apparel	6.5		
Taxpayer Corporation	Gotcha/Girl Star	Women's apparel	6.0		
Taxpayer Corporation	Jantzen	Women's apparel	<u>6.5</u>		
		Average Taxpayer royalty rates	6.3		
		Median Taxpayer royalty rates	6.5		
		Selected license royalty rate for Taxpayer trademark (as a percent of revenue)	<u>6.5%</u>		

Sources: ktMine and Royalty Source intellectual property license agreement databases.

	Projected Fiscal Years Ended January 1,					
	2014	2015	2016	2017	2018	2019
	$000	$000	$000	$000	$000	$000
Projected product line revenue [a]	84,846	86,543	88,274	90,039	91,480	93,677
Projected revenue growth rate	2%	2%	2%	2%	2%	2%
Arm's-length license royalty rate [b]	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%
Pretax royalty payment relief	5,515	5,625	5,738	5,853	5,970	6,089
Income taxes at 36% [c]	1,985	2,025	2,066	2,107	2,149	2,192
After-tax royalty payment relief	3,530	3,600	3,672	3,746	3,821	3,897
Present value factor at 14% [d]	0.9366	0.8216	0.7207	0.6322	0.5545	0.4864
Present value of royalty payment relief	3,306	2,958	2,647	2,368	2,118	1,895
Total present value of royalty payment relief	15,292					
Tax amortization benefit factor	1.19					
Indicated value of Taxpayer trademark	18,197					
Taxpayer trademark value (rounded)	18,200					

Footnotes:

[a] Revenue estimates based on Taxpayer management projections.

[b] Royalty rate based on analyst's assessment of CUT trademark license agreements, as presented in Exhibit 6.

[c] Based on Taxpayer effective income tax rate.

[d] Estimated Taxpayer weighted average cost of capital.

When there is a sufficient quantity of sufficiently similar CUT sales or licensees, the market approach provides meaningful analysis conclusions. The analyst applies professional judgment to conclude CUT selection and adjustment criteria and to conclude whether the market-derived CUT data are sufficient (and sufficiently similar) to rely on.

This discussion summarized the generally accepted market approach intangible asset valuation methods and considered the analytical strengths and weaknesses of each method. It also described common data sources for each method. And, it presented an illustrative example of a market approach intangible asset valuation.

Aaron Rotkowski is a manager in our Portland, Oregon, practice office. Aaron can be reached at (503) 243-7522 or at amrotkowski@willamette.com

Robert Reilly is a managing director of the firm and is resident in our Chicago office. He can be reached at (773) 399-4318 or at rfreilly@willamette.com.

This article was adapted from Chapter 16 of Guide to Intangible Asset Valuation *(AICPA, 2013).*