

The Use and Misuse of Transaction Data in Valuations

Prepared for Property Tax Purposes

**BY AARON M. ROTKOWSKI, RICHARD G. SMITH,
AND JOHN C. RAMIREZ**

Property tax assessors or administrators sometimes rely on transactional data (e.g., the transaction purchase price or the purchase price allocation) to estimate the fair market value of a company's taxable unit for property tax purposes. This may or may not be appropriate depending on the circumstances. In order to determine if it is reasonable to rely on transaction data for property tax purposes, the property tax assessor or administrator should have a clear understanding of the differences between the purchase price/purchase price allocation and the fair market value used for property tax purposes. This article explains the key differences between (1) a transaction purchase price or purchase price allocation and (2) the fair market

value of a taxpayer company's taxable assets for property tax purposes.

Introduction

Property tax assessors or administrators (hereafter referred to as assessors) often use market information from mergers or acquisitions as evidence of the fair market value of a taxpayer company's taxable unit. Assessors may rely on the purchase price to estimate the fair market value of the acquired company, or they may rely on the purchase price allocation performed following the acquisition.

It may be appropriate to rely on certain transaction data to estimate the fair market value; however, there are several potential problems with making this comparison. For example, the purchase

Aaron M. Rotkowski is a manager with Willamette Management Associates in Portland, Oregon. Aaron is an accredited senior appraiser (ASA) and a certified business appraiser (CBA) and holds the chartered financial analyst (CFA) designation. Aaron's practice focuses on business and stock valuations for taxation planning and compliance, economic damages claims analysis, and employee stock ownership plan (ESOP) transactions and ERISA compliance.

Richard G. Smith is a partner in the Boise, Idaho, office of Hawley Troxell Ennis & Hawley LLP, where he is chairman of the firm's tax group. His practice emphasizes representation of taxpayers in tax disputes in state and federal courts as well as before tax commissions and boards of tax appeals throughout the United States. Rick is a member of the Idaho, Washington, and Montana state bars and also is a certified public accountant.

John C. Ramirez is a senior associate at Willamette Management Associates in Portland. John focuses his practice on business valuation for property taxation and litigation purposes including bankruptcy, dissenting shareholder rights claims, and intellectual property valuation analyses.

price may not be relevant if it represents investment value, and not fair market value. Additionally, the purchase price allocation may not be relevant because the purchase price allocation (if performed) represents a fair value standard of value rather than a fair market value standard of value.

This article addresses whether the purchase price represents the fair market value of an acquired business enterprise and summarizes the valuation differences between the estimation of fair value of a taxpayer company's taxable unit for purchase accounting purposes and the estimation of its fair market value for property tax purposes. Assessors can consider the issues addressed in this article to determine how relevant transaction data are to the fair market value of a taxpayer company's taxable unit.

For purposes of this discussion, when we refer to a purchase accounting fair value analysis, we are referring to a valuation prepared for compliance with generally accepted accounting principles (GAAP) in the United States. In particular, we are referring to the provisions of GAAP that relate to the fair value measurement of acquired assets for purposes of the purchase method of accounting. When we refer to a property tax fair market value analysis, we are referring to a valuation prepared for state ad valorem taxation purposes. In particular, we are referring to a property tax valuation prepared using the unit valuation principle for centrally assessed taxpayers.

For the reasons discussed throughout this article, it is our opinion that it is not appropriate to assume—without conducting the appropriate analyses—that (1) a transaction price represents fair market value or (2) a valuation conducted for purchase accounting purposes produces the same results as a fair market value valuation conducted for unit principle property tax compliance purposes.

Unit Valuation Methods

This article applies to companies that are assessed using unit valuation methods. The unit method is commonly used to value utilities, railroads, telecommunication companies, and other companies that are centrally assessed for property tax purposes by a state taxing authority rather than by local assessors.

The unit valuation methods value all of a taxpayer's operating assets collectively (as a single unit). The total bundle of taxpayer operating assets is valued in aggregate as one integrated going-concern business enterprise. Application of the unit method often starts with the valuation of the business enterprise, using some combination of the cost, income, or market approach valuation methods. Then, the value of nonoperating assets and exempt property is deducted.

Applicable Standards of Value

Within the valuation analyst's lexicon, the definition of value is referred to as the *standard of value*. One important distinction between (1) a transaction price, (2) a purchase allocation, and (3) a property tax fair market value analysis is that each value indication (typically) represents a different standard of value. A transaction price may represent investment value. A valuation conducted for GAAP purchase accounting purposes represents fair value. And, for ad valorem tax purposes, nearly all states require that taxpayer property be valued at fair market value (or at some conceptually similar standard of value).

The differences between these standards of values are not merely semantic; rather, they indicate differences in how the valuation analyst applies generally accepted valuation approaches, methods, and procedures. As a result, different standards of value can produce a different quantitative value conclusion for the same bundle of acquired assets.

The following sections define these three relevant standards of value.

Fair Value for Purchase Accounting Purposes

The standard of value used by both accounting and valuation professionals for purchase accounting purposes is fair value, as described in *Accounting Standards Codification (ASC) 820, Fair Value Measurements and Disclosures* (FASB 2011). Transactions may be accounted for under the purchase method of accounting, as described in *ASC 805, Business Combinations* (FASB 2010). ASC 805 requires that the purchase price of the acquired assets be allocated to the target company based on the fair value of those acquired assets. According to ASC 820, fair value is defined as:

The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The transaction is a hypothetical transaction from the perspective of a market participant that holds the asset or owes the liability. Therefore, the objective of a fair value measurement is to determine the price that would be received to sell the asset or paid to transfer the liability at the measurement date (an exit price). (FASB 2011, ASC 820-10-35-2)

Fair Market Value for Property Tax Purposes

A common definition of fair market value is: the price paid in a transaction between a hypothetical willing seller and a hypothetical willing buyer, neither being under any compulsion to buy or sell and both having reasonable knowledge of the relevant facts. Many states use different terms to describe their statutory valuation standard, such as “actual value” or “true cash value.” However, these different terms are typically defined to mean fair market value.

Investment Value

Another standard of value typically used for asset acquisitions is investment value.

According to *The Appraisal of Real Estate* (Appraisal Institute 2009):

Investment value represents the value of a specific property to a particular investor. As used in appraisal assignments, investment value is the value of a property to a particular investor based on that person’s (or entity’s) investment requirements. In contrast to market value, investment value is value to an individual, not necessarily value in the marketplace. (p. 28–29)

If the acquiring company in a transaction expects to realize synergies or other benefits that are not shared by other buyers in the marketplace, then the transaction price may represent investment value.

Transaction Prices and Fair Market Value

In a unit principle valuation for property tax purposes, assessors sometimes rely on a transaction price as the fair market value of the taxpayer company’s tangible and intangible assets. There are four potential problems that assessors should be aware of if they intend to compare transaction prices to fair market value for property tax purposes.

First, transactions typically involve shares of stock and the assumption of debt rather than the direct purchase of the taxable unit. The stock and debt securities enjoy attributes of value, such as liquidity, that are not necessarily shared by the large unit of operating property itself.

Second, the aggregate stock and debt value includes all property of the acquired company, not just the operating property that is subject to assessment. Extracting the value of only the taxable property from this total can be a difficult process.

Third, the transaction purchase price may include value considerations that are not appropriate to ad valorem taxation. For instance, the purchase price

may include the present value of future growth opportunities that cannot be realized without the acquisition of additional assets after the assessment date. Those assets are not subject to property taxation, since they have not yet been acquired. For example, in *Union Pacific Railroad v. State Board of Equalization* (1989), the court held that the taxpayer was not required to produce information from its strategic plan regarding future income from its future property.

Fourth, transactions are often completed at investment value, use value, or some other standard of value that is different from fair market value. In the ad valorem tax context, however, only the estimate of fair market value is relevant.

Investment value is not consistent with the definition of fair market value. For this reason, investment value, in most instances, should not be included in a fair market value analysis (Pellegrino 2008). This is because “from a common sense approach, the synergistic buyer will always be willing to pay more than a financial buyer because the synergistic buyer has personal and unique advantage that the financial buyer does not have” (Hood, Jr. 2010). The “personal and unique” advantage mentioned in this quote could include, for example, the ability of the strategic buyer to reduce corporate overhead expenses. A buyer with a “personal and unique advantage” is not a hypothetical buyer, which is the buyer that must be considered under the fair market value standard of value.

However, even with a synergistic buyer, there may be some situations in which the investment value of a particular asset is not materially different from the fair market value of the asset. And, in these situations, the transaction price may be relevant for property tax purposes. For example, when two electric utilities merge, one would not expect the valuation of the generating assets, transmission assets, or customer relationships

to be different for fair value purchase accounting purposes than for fair market value property tax compliance purposes, even if there are other synergies involved in the transaction. For other intangible assets, the answer may be different. For example, if the buyer plans to use its own computer software systems for the combined company, then the software intangible asset might have a lower value in a fair value valuation prepared for purchase accounting purposes than a fair market value valuation prepared for property tax compliance purposes.

As the preceding examples illustrate, it is particularly important that assessors evaluate the transaction terms and motivations of the parties to a transaction to determine the usefulness of the data derived from a transaction. These motivations should be analyzed in order to make comparisons between (1) the purchase price and (2) the fair market value of the taxpayer company’s taxable unit for property tax purposes.

Fair Value versus Fair Market Value

The preceding section raised four potential problems with relying on a transaction purchase price to estimate the fair market value of a taxable unit for property tax purposes. This section discusses the differences that should be considered when comparing the (1) fair value valuations of individual asset groups for purchase accounting purposes and (2) fair market value valuations of those assets for unit valuation property tax purposes. These differences can be summarized as follows:

1. Differences in the assumed buyer and the assumed seller
2. Differences in the assumed unit of account (i.e., the appraisal subject unit)
3. Differences in the assumed highest and best use of the unit of account

4. Differences among the valuation approaches and methods relied on.

By analyzing and understanding these four differences, assessors can determine how relevant (if at all) a fair value valuation for purchase accounting purposes is to a property tax fair market value analysis.

Differences in the Assumed Buyer and the Assumed Seller

The first difference between fair value (as defined in ASC 820 [FASB 2011]) and fair market value concerns who are the assumed buyer and the assumed seller. The assumed buyer and the assumed seller in a fair value valuation for purchase accounting purposes are different than the assumed buyer and the assumed seller in a fair market value unit valuation for property tax purposes. The major difference is that the assumed buyer in a fair value valuation can include a strategic buyer, while the assumed buyer in a fair market value valuation does not include a strategic buyer.

In a fair value valuation, the assumed buyer can include strategic buyers because ASC 820 (FASB 2011) defines the assumed buyer and the assumed seller as “market participants.” And, according to ASC 820, market participants are defined as buyers and sellers in the principal (or most advantageous) market for the target asset or liability (ASC 820-10-55-27).

By contrast, a fair market value valuation is based on a transaction between a hypothetical willing seller and a hypothetical willing buyer, neither being under any compulsion to buy or sell and both having reasonable knowledge of the relevant facts. In other words, “Fair market value assumes conditions as they actually exist and a hypothetical buyer and seller, with no special, unique motivations or circumstances” (Pratt 2005, 148).

Strategic buyers, on the other hand, often can be identified by the following motivations:

- Interest in targets with synergistic operations and/or technology (e.g., increased revenue through pricing power, no material marginal increase in selling costs, reduction of combined overhead, or product improvement by addition of intellectual property)
- Unwillingness to maintain current management and company overhead
- Interest in improving their own cash flows rather than capital gain
- Ability to justify a dilutive acquisition.

The fact that strategic buyers can benefit from the existence of synergies is an important consideration. A strategic buyer that expects to benefit from synergies will be willing to pay more than a buyer that cannot (i.e., a financial buyer). If the purchase accounting valuation includes a market approach and the assumed buyers in the market approach include strategic buyers, then the concluded asset value may represent investment value—and not fair market value. And, as such, the transaction price may be overstated.

Assessors should analyze the purchase price allocation assumptions to determine if the assumed buyer of the subject asset is a synergistic buyer and whether the assumed transaction price includes value related to synergies. (It should be noted that if the *fair value* of an asset in a purchase price allocation exceeds the *fair market value* of the same asset, then the incremental value may be allocated to goodwill for accounting purposes.)

The existence of synergies or special investment considerations on the part of the buyer may not preclude reliance on a merger price, for example, as evidence of fair market value. If the entire extra increment of synergistic value is included in goodwill, then the purchase account-

ing allocation may still provide evidence useful in the property tax context.

A careful analysis of (1) the purchase price and (2) the purchase allocation should be performed to determine if transaction-related data and evidence are appropriate for a property tax fair market value analysis.

Differences in the Assumed Unit of Account

The second difference between fair value (as defined in ASC 820 [FASB 2011]) and fair market value involves the assumed unit of account (i.e., what is being valued). The unit of account can be the integrated assemblage of the taxpayer corporation operating assets (i.e., the total unit). Or, the unit of account can be individual real estate and personal property assets of the taxpayer corporation. The unit of account is the lowest level at which (1) the valuation analysis is performed and (2) the valuation conclusion is reached.

Under the fair value standard for purchase accounting purposes, the unit of account is defined as: “that which is being measured by reference to the level at which an asset or liability is aggregated (or disaggregated)” (FASB 2011, ASC 820-10-20). In other words, the unit of account for fair value accounting purposes is the general ledger account for each individual asset (both tangible and intangible) of the acquired business enterprise. This fair value concept of the unit as general ledger account is analogous to the summation valuation principle. Under the summation valuation principle, each individual asset component of a company is valued separately and then summed to estimate the value of the taxpayer’s total property. This summation valuation principle is different from the unit valuation principle.

Under the unit valuation principle, the unit of account is the entire business entity, viewed on a unitary basis, i.e., as

an integrated business enterprise without functional or geographic division of the whole (Janata 2004, 583). This integrated business enterprise/total taxpayer unit collectively includes all of the tangible assets and all of the intangible assets of the taxpayer business enterprise.

By definition, the assumed unit of account is always different for (1) companies that are assessed using unit valuation methods and (2) assets valued in a purchase. Assessors should analyze the extent that differences in the assumed unit of account may lead to a different value conclusion.

If summation valuation methods (such as those used for purchase accounting valuations) and unit valuation methods are applied consistently (i.e., using the same standard of value), both the summation valuation methods and the unit valuation methods should theoretically reach the same total value conclusion for the subject taxpayer corporation assets. However, if different standards of value are used, then summation valuation methods and unit valuation methods can result in *different values* for the same bundle of taxpayer corporation assets. This result occurs primarily because of differences in (1) the measurement of obsolescence and (2) the assumed highest and best use of the unit of account.

The measurement of obsolescence, in a unit valuation analysis, is conducted at the taxpayer overall unit level while in a summation valuation analysis, obsolescence is often only measured at the individual asset level. Consider, for example, a railroad company with a unique and inefficient track structure. A valuation analyst who analyzed one mile of the subject track would not necessarily discover that the railroad company’s track structure was unique and inefficient. This conclusion might only be evident after analyzing the taxpayer’s total rail system. In this example, an analysis of the total unit may reveal obsolescence that is not revealed in an analysis of the unit’s individual assets.

The assumed highest and best use of the unit of account also can produce a difference in results between a unit valuation analysis and a summation valuation analysis. Under the unit valuation principle, all of the subject's operating assets, collectively, are assumed to contribute to the total business enterprise value (Janata 2004). Thus, all of the taxpayer's operating assets are valued collectively, assuming one overall highest and best use for the total unit of taxpayer assets. Conversely, under the summation valuation principle, a value is estimated for each individual component of the taxpayer asset or property assuming a separate highest and best use for each individual asset account. Thus, under the summation valuation principle, the valuation analyst determines the highest and best use for each taxpayer company unit of account—and not for the total unit.

The account-by-account summation valuation is appropriate (and, in fact, required) for fair value accounting/GAAP compliance purposes. By contrast, the summation principle of value is usually not appropriate for centrally assessed taxpayers that are valued by the unit method for property tax purposes. First, a summation valuation is not necessary unless the analyst needs to value the specific components of the unit in addition to valuing the total unit itself. Second, if individual asset accounts have a different highest and best use than the unit, then a matching issue—or “apples and oranges” problem—is created. When individual asset accounts in a summation principle valuation have a different highest and best use than the business enterprise, then a summation principle fair value valuation may not be relevant to a fair market value valuation for property tax purposes. However, when the highest and best use of the individual asset accounts is the same as the highest and best use determined in a unit principle valuation, then the account-by-account summation principle valuation used for purchase accounting may have relevance

for property tax purposes. This concept is discussed in greater detail in the next section.

The difference in the assumed unit of account—individual asset types (for financial accounting purposes) versus business enterprise (for centrally assessed property tax purposes)—is a primary conceptual difference between fair value analysis for accounting purposes and fair market value unit valuation for property tax purposes.

Differences in the Assumed Highest and Best Use of the Unit of Account

The third difference between fair value (as defined in ASC 820[FASB 2011]) and fair market value relates to the assumed highest and best use of the unit of account. As the forthcoming examples illustrate, this difference is one of the easiest to identify in a comparison of a fair value analysis for accounting purposes and a fair market value unit valuation for property tax purposes.

Under the fair value standard of value for purchase accounting purposes, the concluded highest and best use of the subject asset is defined as “the use of an asset by market participants that would maximize the value of the asset or the group of assets within which the asset would be used” (FASB 2011, ASC 820-10-20). In other words, the highest and best use is determined at the individual asset—or the individual asset unit of account—level. This means that a taxpayer's various asset accounts could each have a different highest and best use.

Under the fair market value standard for property tax purposes, the highest and best use is determined at the total business entity level. This means that for a centrally assessed taxpayer, the highest and best use of all of its assets is typically the current use of all of the assets combined within the taxpayer's business entity (i.e., value in use)—and not a highest and best use for each individual asset account which considers possible alternative uses (i.e., value in exchange).

The difference in the assumed highest and best use of the unit of account can lead to significantly different value conclusions for the same taxpayer bundle of assets. For example, consider a golf course valued for property tax purposes under the unit principle. For property tax purposes, the highest and best use of the taxpayer land would be a golf course business enterprise—and not some alternative use such as residential housing development land—because the highest and best use of the taxpayer unit is “value in continued use” (Janata 2004, 436).

By contrast, the fair value of the land in the taxpayer golf course would be its value in use (as a golf course) or its value in exchange (assuming some alternative use, such as residential housing development), whichever was greater (FASB 2011, ASC 820-10-55-54).

Following are two situations that combine the concepts of unit of account and highest and best use. One situation illustrates the differences that can occur between fair value and fair market value. The other situation shows no significant differences between the two standards of value.

The first example involves a merger of companies in the railroad industry. A purchase accounting for this hypothetical merger may require an examination of the land account. The appropriate unit of value would be the distinct parcels of land in that account. For the urban parcels of railroad land, the highest and best use might be a highly valuable commercial use, such as for downtown office buildings, rather than in their continued use as part of the railroad operation. When these urban parcels are valued in this use and then added to other railroad parcels valued according to their highest and best use in a summation method fair value analysis, the resulting fair value is likely much greater than the fair market value

of all the land when valued as part of the operating unit in a fair market valuation.

The second example is a merger of two telecommunication companies. A purchase accounting for this hypothetical merger may require an examination of the real property account. Telecommunication company real property typically constitutes central offices that would be considered special purpose buildings because of the high ceilings and reinforced floors necessary to handle the heavy equipment. In this case, the highest and best use of the central-office structures would be the same as that for the unit as a whole because of the special purpose nature of these buildings. Therefore, in this example, fair value may approximate fair market value.

Generally, the greater the differences between the highest and best use of the subject assets when considered individually and the assets when considered as a group, the greater the difference in value will be between the fair value for purchase accounting purposes and the fair market value for property tax purposes.

Differences between the Valuation Approaches and Methods Relied On

The fourth difference between fair value (as defined in ASC 820 [FASB 2011]) and fair market value is the valuation approaches and methods relied on. Assessors should determine if different valuation methods were relied on in the purchase allocation of the subject assets than those that must be used in a fair market value valuation for property tax purposes. Any differences in the valuation methods may lead to a different valuation conclusion for the taxpayer company’s total unit.

Under the fair value standard, as enunciated in ASC 820 (FASB 2011), the market approach, income approach, and cost approach may be used by the valuation analyst, depending on the circumstances of the subject valuation

(ASC 820-10-35-28). However, ASC 820 prioritizes the valuation approaches and methods that the valuation analyst should rely on to conduct a fair value valuation for purchase accounting purposes.

As promulgated in ASC 820 (FASB 2011), the fair value hierarchy gives “the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3)” (ASC 820-10-35-37). Under this GAAP-related valuation guidance, the valuation analyst is directed to rely principally upon the market approach in a fair value valuation performed for purchase accounting purposes. However, if there is no market for the property being valued, then the analyst may use other methods.

On the other hand, in a fair market value unit valuation for property tax purposes, the valuation analyst is not bound by the same fair value valuation—approach hierarchy specified for GAAP-related valuations. Therefore, in the unit valuation, the valuation analyst may have more discretion to exercise judgment in selecting the appropriate valuation approaches or methods.

Naturally, the extent to which these differences are significant depends on the valuation methods that would be used in the fair value analysis compared to those the valuation analyst would choose for estimating fair market value. Returning to the telecommunications company example, the market approach is generally preferred for fair value accounting; however, no real market exists for used network equipment. Therefore, this large category of telecommunications property would likely be valued using a cost approach, which is also the preferred approach for estimating the fair market value of this type of property.

Assessors should analyze whether the valuation methods relied on in purchase accounting are the appropriate methods

to rely on in a property tax fair market value analysis. If they are not, then the purchase accounting valuation may result in a different quantitative value conclusion than a fair market value valuation prepared for property tax purposes.

Summary and Conclusion

This article presents several differences between (1) a transaction price, (2) a purchase allocation for GAAP compliance purposes, and (3) a fair market value valuation for property tax purposes. As the differences discussed throughout this article show, transaction data may or may not be relevant for property tax purposes. If transaction data are relevant, these data will almost certainly require some adjustment before they can be applied in a fair market value valuation for property tax purposes.

By understanding the differences between these three indications of value, assessors can determine if transaction data are relevant for a fair market value valuation for property tax purposes. And, if the assessor determines that transaction data are relevant, then the assessor can analyze the differences discussed herein to determine how transaction data can be used in the ad valorem property tax process (e.g., what adjustments need to be made to the purchase price or purchase price allocation, if any).

Assessors should be mindful that it is not appropriate to rely on a transaction price or valuation prepared for purchase accounting purposes in estimating the fair market value of taxpayer corporation property for property tax purposes without first analyzing and understanding any differences that exist between the various value indications. There are many differences between the fair value standard of value (under ASC 820 [FASB 2011]), the investment value standard of value, and the fair market value standard of value. These differences can lead to materially different value conclusions.

References

- Appraisal Institute. 2009. *The appraisal of real estate*, 13th ed. Chicago: Appraisal Institute.
- FASB. 2010. *Accounting standards codification 805, Business combinations*. Norwalk, CT: Financial Accounting Standards Board.
- FASB. 2011. *Accounting standards codification 820, Fair value measurements and disclosures*. Norwalk, CT: Financial Accounting Standards Board.
- Hood, Jr., P.L. 2010. Must synergistic buyers be considered in fair market value analysis? *Valuation Strategies* July/August:29–33.
- Janata, J.F. 2004. *Property taxation*, 3rd ed. Atlanta: Institute for Professionals in Taxation.
- Pellegrino, M. 2008. Misusing fair market value. *Valuation Strategies* March/April:13–48.
- Pratt, S.P. 2005. *The market approach to valuing businesses*, 2nd ed. New York: John Wiley & Sons.
- Union Pacific Railroad v. State Board of Equalization*, 776 P.2d 267 (Cal. 1989).