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Focus on Reasonable Compensation in Eminent Domain and Expropriation Controversies

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Thought Leadership

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Editor for This Issue: Kevin M. Zanni

2015 Recipient of the Apex Literary Award

Forethoughts

This *Insights* issue focuses on eminent domain, expropriation, and condemnation matters. This issue includes discussions authored by prominent legal experts involved in eminent domain and expropriation to help the reader understand the many complexities of this topic. The topics discussed range from recent judicial decisions involving valuation and damages to best practices in eminent domain and expropriation litigation.

Willamette Management Associates analysts provide valuation and financial advisory services to closely held business owners as well as valuation, damages, and other forensic analyses to both corporate clients and their legal counsel. In our practice, we see eminent domain actions matriculate through many different paths.

In some jurisdictions, an eminent domain matter may be subject to a quick-take action. A quick-take action is generally defined as a formal legal process of the exercise of eminent domain rights in which the government takes possession before the adjudication of compensation. If a quick-take action is probable, depending on the advice of legal counsel, the best course of action may be to engage in a formal valuation process as soon as practically possible.

When a going-concern business is the subject of the "taking," a formal valuation process typically involves the contributions of a (1) real estate appraiser, (2) personal property appraiser, and (3) business valuation analyst. In general, for an analysis prepared in an eminent domain matter, the work products of all three analysts are synthesized in a formal valuation expert report. This combination of work product is performed through the application of an asset-based business valuation approach.

In other jurisdictions, an eminent domain matter may not allow for the application of an asset-based approach. Certain jurisdictions may prescribe the calculation of compensation using a formula-based methodology. Under a formula-based mandate, a business valuation analyst is typically the sole professional involved in the valuation process.

In our practice, we commonly observe that the measurable business loss includes (1) tangible assets, (2) intangible assets, and (3) future earning potential. In other eminent domain matters, in addition to lost asset value, the business owner may suffer economic damages from lost profits. In each case, it is appropriate for the business owner to uncover and receive reasonable compensation.

About the Editor

Kevin M. Zanni

Kevin M. Zanni, ASA, CVA, CBA, CFE, is a manager of Willamette Management Associates, a business valuation, forensic analysis, and financial advisory firm. He resides in our Chicago office.

Kevin's practice includes providing valuation and financial advisory opinion services to publicly traded businesses, closely held businesses, professional sports franchises, professional practitioners, and high net worth individuals. He often works with legal counsel for closely held businesses, publicly traded companies, and multinational corporations.

Kevin provides valuations of businesses, business interests, and securities for transactional, financing, taxation, financial accounting, and litigation support purposes. His taxation-related work includes the valuation of intangible assets for income tax, estate and gift tax, and state and local property tax purposes. Kevin's practice also includes the analysis of intangible asset economic damages related to breach of contract claims and tort claims.

Kevin holds a bachelor of science in business administration, with a major in finance, and a master of arts in international business, both from the University of Florida. While at the University of Florida, Kevin served on the Business Administration College Counsel.

Kevin is an accredited senior appraiser (ASA), a certified valuation analyst (CVA), a certified business appraiser (CBA), and a certified fraud examiner (CFE).

He has written for numerous professional publications, including the National Association of Certified Valuators and Analysts (NACVA) publication *The Value Examiner* and the Commerce Clearing House publication, *Business Valuation Alert*.

Kevin has presented to numerous professional associations including the Institute of Management Accountants and Valparaiso University School of Law. He will present at the upcoming 2015 NACVA Annual Consultants Conference in June 2015. In 2014, Kevin was interviewed twice by the National Public Radio Marketplace program regarding the valuation and sale of the Los Angeles Clippers.

Kevin is a past president of the Chicago Chapter of the American Society of Appraisers. He is a participating member of the NACVA Ideas and Technology Committee and the Practice Development Committee.

Best Practices

Valuing a Going-Concern Location-Specific Business Operation in an Eminent Domain or Expropriation Matter

Kevin M. Zanni

Eminent domain and expropriation actions, whether brought about for reasons such as for the good of the general public or for project-specific procurement objectives, may result in significant damage to a business entity. In certain cases, primarily in businesses that are property-specific or location-specific, the damage may be all-encompassing. For property-specific or location-specific businesses, the reasonable compensation for the "taking" may be greater than the value of the tangible assets. The measurable loss can include (1) tangible assets, (2) intangible assets, and (3) future earning potential. This discussion provides insight into the types of business operations that are most at risk of total loss as a result of an eminent domain action. An illustrative example is presented to show what types of factors are typically considered in the valuation of a location-specific business involved in an expropriation action.

Introduction

When a location-specific, going-concern business is subject to an eminent domain or expropriation action, the result is often the end of the subject business operations. Location-specific business operations may include (1) utilities operations (i.e., water, wastewater, electric, natural gas, and communications); (2) resort/hotel operations (e.g., beachfront, ocean view, ski resort operations, and destination-specific); and (3) customer-specific (e.g., church operations, restaurants, and entertainment and sports-related).

Business success is often predicated on business location. This statement is particularly true for location-specific business operations.

For example, a resort's earnings typically depend on the resort's location. That is, a resort located in Maui on the beach may not be able to be replicated. This is because, in many communities, new building permits are restricted. And, in certain communities, zoning regulations preclude specific building activity.

That preclusion may relate to property designated as protected land or property zoned for a specific type of use—such as residential use versus commercial use. When a business can no longer operate as it had prior to the eminent domain taking, then not only is there a loss of tangible asset value, there is often a loss of intangible asset value as well.

Even in the case of a partial business disruption, whereby a business can relocate its operations, the subject business may have lost a significant amount of profit. This lost profit is easily quantifiable for a discrete period; however, the business damage is often long term in nature. In order to quantify the long-term damage implications, a thorough analysis is required.

To illustrate the lost value of going-concern business operations due to an eminent domain taking action, this discussion presents an illustrative reasonable compensation example. This illustrative example involves a hypothetical water utility business that is subject to an eminent domain taking action by a not-for-profit public entity acquirer.

What makes this illustrative example interesting, more than what would otherwise be the case in the typical going-concern business valuation, is the significant consideration of the (1) hypothetical buyer, (2) regulatory environment, (3) cost of capital, and (4) prominent role of the asset-based approach in the valuation analysis.

Hypothetical Example: Alex-town Water System Background

The Alex-town water system (the "system") is located in upstate New York in Lake County (the "County"). The system serves the city of Alex-town and unincorporated portions of the County.

The Alex-town service area primarily consists of residential and institutional users (e.g., the Prestige Worldwide College). It also provides water to commercial and industrial users. The system serves approximately 15,000 residents and has more than 4,000 retail water connections.

The system is comprised of five ground water wells. The system's water is collected from the ground wells and is then treated at the system's water treatment plant. After treatment to remove contaminants, the water is delivered to the service area through the water distribution system. The water distribution system consists of water mains, tanks, and pumps.

Premise of Value and Purpose of the Analysis

For the purpose of this analysis, we relied on legal counsel to provide us with the appropriate standard, or definition, of value.

In certain cases, the appropriate standard of value may be fair market value or a prescribed formula price based on a charter or other agreement between a business and a public entity (e.g., a township, city, or municipality). In the case of a prescribed formula price, the following example may not be as relevant as it is in a fair market value matter.

However, for the purposes of this illustrative example, let's assume that the standard of value is fair market value.

Fair market value is often defined as the price at which an asset would change hands between a willing buyer and a willing seller, when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, and both parties have reasonable knowledge of the relevant facts. Legal counsel concurred with our definition of fair market value.

For this example, we analyzed the system operating assets based on the premise of value in continued use, as a going-concern business enterprise. The system includes both operating assets and a nonoperating asset. These assets collectively comprise the total system assets.

With respect to the system operating assets, these assets are used in the normal course of business operations. The operating assets directly contribute to the profit or loss of the system business operations. The operating assets typically include the real estate, tangible personal property, and contributory intangible assets of the system business operations.

The system also owns a nonoperating asset. Nonoperating assets may contribute to the profit or loss of the subject business operations, but they are generally nonessential to the on-going business operations.

In this illustrative example, the nonoperating asset could be sold independently from the operating assets, and such a sale would not materially affect the system operations. Nonoperating assets are sometimes referred to as excess assets or investment assets.

Hypothetical Willing Buyers

To estimate the value of system total assets for this example, we considered the likely population of hypothetical willing buyers. Based on the characteristics of (1) the system and (2) the population of buyers who are likely to invest in a water distribution system, in our opinion, the likely population of hypothetical willing buyers of the system includes not-for-profit public entities.

This willing buyer determination is made on a case-by-case basis. In certain cases, the likely buyer is an investor-owned utility (IOU) corporate acquirer.

For this particular example, the conclusion of a not-for-profit willing-buyer acquirer is based, in part, on the following facts:

1. The majority (approximately 85 percent) of water systems that are members of the American Water Works Association in the United States are owned by public entities.[1]
2. According to the U.S. Environmental Protection Agency (EPA), among the privately owned community water systems, the vast majority are run as not-for-profit entities.[2]

3. Based on the New York Utility Regulatory Commission (NYURC) report titled *Annual Report to the Regulatory Flexibility Committee of the New York General Assembly 2013*, National Water System (NWS), an IOU, reported the most operating revenue of any New York water utility operation. However, the system is located in a geographic territory that is far away from the NWS business operations.

   Therefore, a purchase by NWS would be unlikely. This is because NWS does not have a significant amount of assets employed in this geographic area. Therefore, NWS would not be able to leverage its large size to create economies of scale. These economies of scale are essential to NWS business operations in order to provide a return to its shareholders.

4. There are numerous public entities that may acquire the system. Potential public entity buyers include the County or any nearby incorporated municipality (i.e., city, village, town, or township). This group of potential acquirers includes other counties and municipalities that are within/near the area, such as Alex-town.

5. Because the system can be sold to and operated by any municipality in the County, there are many other potential public entity acquirers. These potential acquirers include the city of John-town and the towns of Greg, Peter, Tom, and Roger. All of these potential acquirers own and operate their own water utility operations. None of these public entities that own and operate water utility operations are subject to the regulatory jurisdiction of the NYURC with respect to water rates and charges.

   If the system is purchased by any of these acquirers, the NYURC withdrawal right will also apply to the system.

6. Other groups of potential public entity acquirers include existing and yet-to-be formed joint water agencies, districts, or commissions. Any of the above-mentioned municipal or public entity acquirers could join together to acquire the system. Any of these jurisdictions represents potential public entity buyers of the system.

These considerations suggest that the hypothetical buyers of the system include a not-for-profit public entity or a group of such entities.

In the acquisition of a going-concern business, the market participants with the greatest expected acquisition synergies will typically set the range of market prices. The expected acquisition synergies of a population of willing buyers can be strategic, operational, and/or financial.

"In the acquisition of a going-concern business, the market participants with the greatest expected acquisition synergies will typically set the range of market prices."

By considering the acquisition synergies of various populations (or categories) of business buyers, the valuation analyst may identify the population of likely buyers for the subject operating business assets.

In an actual acquisition offering, many types of buyers may bid for the target entity. However, the market participants with the greatest expected synergies will set the price range that all serious potential bidders will have to match.

In the case of the system, a public entity buyer (1) will not have to pay income tax, (2) will have access to municipal financing, and (3) will not be subject to the same regulatory environment as an IOU buyer.

Therefore, public entity buyers will be able to set the range of market prices in which all potential buyers (i.e., public entities and IOUs) will have to bid. This conclusion is appropriate regardless of the ownership status or the likely intentions of any particular potential buyer (including the actual condemnor).

Regional Outlook

The regional outlook is an important factor that we typically consider in the valuation of a location-specific business. Any hypothetical buyer of the system would be affected by the economic condition of the system geographic area.

The County posted positive job growth in each year from 2008 to 2014. The County gained 3,000 jobs since the beginning of the recession in 2008. Total employment trends are indicating improvement in new job creation.

The County utilities sector experienced significant employment stability in the 2008 to 2014 time period. The utilities sector had no change in both employment and total establishments from 2008 to 2014.

The U.S. Census Bureau reported that New York state had a population of 19.7 million in 2013. That

figure represents a 1 percent increase from the population of 19.5 million in 2012. The population of Alex-town, New York, was 30,000 in 2014, a 2 percent increase from the population of 29,400 in 2013.

The population of the County was 90,000 in 2014. In 2015, the population of the County is projected to be approximately 91,800.

Water Distribution Industry Regulation

The water distribution and wastewater treatment industry is highly regulated. Businesses operating in this industry are subject to both federal and state regulation.

Federal Regulation

Numerous federal drinking water regulations have been in place in the United States since the passage of the Safe Drinking Water Act in 1974.

The Safe Drinking Water Act established criteria and procedures for the EPA to develop national drinking water quality standards. Regulations issued pursuant to the Safe Drinking Water Act set standards on the amount of certain microbial and chemical contaminants and radionuclides allowable in drinking water.

The Safe Drinking Water Act was most recently amended in 1996. Additional water quality standards set by the EPA were implemented over time.

Disinfection by-product limits were lowered in 1998, and these limits took effect in 2002. More stringent surface water treatment performance standards also became effective in 2002. In 2001, the EPA adopted a limit for arsenic in water of 10 parts per billion.

The new limit, which was adopted in 2001 and became effective in 2006, is one-fifth of the previous allowable level. Compliance to the new arsenic limit required investment spending from the water suppliers who did not meet the standard.

The Clean Water Act of 1972 regulates the discharges from drinking water and wastewater treatment facilities into lakes, rivers, streams, and groundwater.

State Regulation

In addition to federal regulation, state commissions also regulate water utilities. These commissions have broad authority to establish rates for service, to prescribe service standards, and to review and approve rules and regulations.

In most instances, long-term financing programs, transactions between water utilities and affiliated interests, reorganizations, and mergers and acquisitions also require state commission approval to proceed. The jurisdiction exercised by each commission is prescribed by state legislation and, therefore, varies from state-to-state.

The regulatory rate-setting process is time consuming. After considering the time required to complete the regulatory process, water utilities file for rate adjustments that will reflect as closely as possible the cost of providing service during the time new rates are intended to be effective. Attempts are also made to offset any adverse financial impact arising from regulatory lag.

For example, some states employ some form of forward-looking test year, such as a future test year, or recognition of known and measurable changes for some period beyond a historical test year.

Such mechanisms result in rates that are more reflective of costs that are likely to be incurred during the period the rates will be in effect. Rate orders may also allow for the recovery of interest expense and depreciation expense related to the interim period from the time a major construction project is placed into service until new rates reflecting the cost of the project become effective.

In New York state, the NYURC is the economic regulator over many of the state's water providers. The NYURC regulates 200 of the 1224 water utilities and 43 of the 1,000 wastewater utilities throughout New York. These NYURC-regulated entities serve approximately 45 percent of the New York population.

Selection and Application of Valuation Methodology

There are various methods for estimating the value of the total operating assets of a going-concern business enterprise. All business valuation methods can be categorized into three generally accepted business valuation approaches.

Valuation analysts use one or more of these three approaches to estimate the value of business operating assets. The objective of using more than one approach is to develop mutually supporting evidence as to the value conclusion.

The three generally accepted business valuation approaches are as follows:

1. The income approach
2. The asset-based approach
3. The market approach

The income, asset-based, and market approaches represent general valuation approaches. The specific methods and procedures that are associated with these approaches may or may not be applicable to the valuation of the system operating assets.

Based on the quantity and quality of available data, and based on the purpose and objective of this analysis, we relied on the following valuation approaches and methods to estimate the fair market value of the system operating assets:

1. The income approach, using the yield capitalization method (often referred to as a discounted cash flow method)
2. The asset-based approach, using the asset accumulation method

Income Approach—Yield Capitalization Method

This valuation method is based on the principle that the value of a business entity is the present value of the future income (as defined) to be derived by the entity. In this analysis, we used net cash flow as the measure of future income.

The yield capitalization method requires (1) a projection of future cash flow and (2) the selection of a present value discount rate that appropriately reflects the risk inherent in the projected cash flow.

There are two components of value that are encompassed in this method: (1) the present value of the expected net cash flow during the discrete projection period and (2) the present value of the terminal period net cash flow.

The present value of the discrete projection period net cash flow is a function of:

1. the projected net cash flow (for this example we use net cash flow to invested capital) and
2. the present value discount rate (weighted average cost of capital).

The present value of the terminal period net cash flow is a function of the projected results in the terminal year capitalized by a direct capitalization rate that is then discounted to the present.

Weighted Average Cost of Capital

The weighted average cost of capital (WACC) is the appropriate present value discount rate to use in the yield capitalization analysis of net cash flow to invested capital.

Investors have alternative opportunities for their investment of current funds that will provide future returns to compensate them for:

1. the time that the funds are not available at the investor's disposal,
2. the expected rate of inflation, and
3. the relative uncertainty of future returns.

The required rate of return on investment is a function of investment risk. Business risk is generally reflected in the calculation of the cost of equity capital, while financial risk is generally considered in the ratio analysis of debt capital to equity capital.

The cost of capital is the rate of return that an investment should yield in order to provide an adequate rate of return to both sources of capital: (1) equity and (2) long-term debt.

Cost of Equity Capital—Using a Build-Up Model

To estimate the cost of equity capital using the build-up model, we summed (1) the risk-free rate of return of 2.5 percent, (2) the general equity risk premium of 6.1 percent, (3) the size-related equity risk premium of 6.1 percent, (4) the industry-related equity risk premium of negative 4.8 percent, and (5) a company-specific risk factor adjustment of 5 percent.

Based on our build-up model calculation, we arrived at a 15 percent cost of equity capital as of December 31, 2014.

Cost of Debt Capital

In a fair market value analysis, the WACC will typically reflect the cost of capital of the likely population of willing buyers.

To estimate the cost of debt capital component, we analyzed municipal bond yields as of December 2014. Specifically, we reviewed municipal bond yield averages as of December 2014, as published in *Mergent Bond Record*.

Based on these data, we selected a cost of debt capital of 4.2 percent. This cost of debt capital is approximately equal to the average municipal bond yield for bonds rated Baa to A by Moody's bond rating service as of December 31, 2014.

We selected bonds that were rated Baa to A primarily because these bonds were on the lower end of the investment grade bond spectrum. We selected the lower level investment grade bond indications because the system (1) is relatively small and (2) had experienced—to a certain extent—some earnings volatility.

Weighted Average Cost of Capital Conclusion

To calculate the system WACC, based on the appropriate capital structure, we weighted (1) the 15 percent cost of equity capital estimate and (2) the 4.2 percent cost of debt capital estimate.

To estimate the appropriate capital structure, we considered the capital structure of the likely population of willing buyers (including public entities).

Public entities typically have a capital structure that is comprised of nearly 100 percent debt capital. This capital structure conclusion is evidenced by the following facts:

1. Public entities do not have equity owners.
2. Public entities do not raise equity capital; they issue debt securities.
3. Based on our research, in nearly all transactions involving the purchase of a water system by a public entity, the acquisitions were typically financed using 100 percent debt capital.

While most transactions involving the purchase of a water utility system by a public entity are financed almost entirely with debt capital, public entities can and do use cash to pay for a small part of the total transaction consideration (e.g., cash deposits, payments of professional advisor fees).

Therefore, to calculate the system WACC, we used a capital structure of 5 percent equity capital and 95 percent debt capital.

This capital structure weighting of (1) 5 percent equity capital and (2) 95 percent debt capital results in (3) a WACC of 5 percent. This WACC calculation is presented in Exhibit 1.

Estimated Value of the Total Operating Assets

For this illustrative example, we applied a 5 percent present value discount rate based on the selected system WACC to the discrete period net cash flow projections to conclude a discrete period present value of $8 million (rounded).

To estimate a terminal period value, we applied the Gordon growth model. The Gordon growth model estimates the value of the expected cash flow beyond the discrete projection period.

This method of estimating a terminal period value is based on the expectations that (1) the system will continue to generate cash flow beyond the last year of the discrete projection period and (2) the net cash flow will increase into perpetuity at a constant rate.

In order to estimate the normalized terminal period net cash flow—the economic benefit to capitalize in the Gordon growth model—we used the projected 2020 net cash flow.

Exhibit 1
Income Approach—Yield Capitalization Method
Weighted Average Cost of Capital Calculation
As of December 31, 2014

Cost of Equity Capital (Build-Up Model):		**Source**
Cost of Equity Capital (rounded)	15%	
Cost of Debt Capital:		
Cost of Debt Capital	4.2%	Average bond yield indiciation of A and Baa Municipal Debt from Moody's Municipal Bond Yield Average, from *Mergent Bond Record*, as of December 2014
Capital Structure:		
Common Equity / Invested Capital	5%	Analyst estimate based on the typical capital structure of a municipal (not-for-profit) public utility acquirer
Long-Term Debt / Invested Capital	95%	
Total Invested Capital	100%	
Weighted Average Cost of Capital:		
System Weighted Average Cost of Capital (rounded)	5%	

We projected that capital expenditures and depreciation expense would be equal to each other. For this example, the normalization adjustment implies that maintenance capital expenditures will be equal to depreciation expense in perpetuity. We projected the terminal net working capital charge to normalize at the level needed to support the expected long-term growth rate, or $3,000.

Based on these calculations, the terminal period cash flow equals $2.5 million. The fiscal year 2020 net cash flow equals $2.55 million (i.e., $2.5 million fiscal 2019 normalized cash flow increased by the expected long-term growth rate of 2 percent).

The indicated terminal period value of $84.9 million is calculated by capitalizing, or dividing, the $2.55 million estimated fiscal year 2020 terminal cash flow by the 3 percent direct capitalization rate.

We estimated the 3 percent direct capitalization rate by subtracting the 2 percent system expected long-term growth rate from the selected 5 percent present value discount rate.

The terminal period present value is calculated by discounting the future terminal value at the 5 percent present value discount rate. The December 31, 2020, terminal period value is equal to a present value of $68.2 million as of December 31, 2014.

We added the present value of the (1) discrete period net cash flow value of $8 million and (2) terminal period net cash flow value of $68.2 million.

Yield Capitalization Method Conclusion

Based on the yield capitalization method, the fair market value of the system total operating assets was $76.2 million (rounded), as of December 31, 2014. We present this calculation in Exhibit 2.

Asset-Based Approach

The asset-based business valuation approach often involves the application of the cost approach to value the tangible personal property owned and operated by that business entity.

The various cost approach valuation methods are based on these economic principles:

1. Substitution—No prudent buyer would pay more for an item of fungible tangible property or contributory property than

Exhibit 2
Yield Capitalization Method
Fair Market Value of Total Operating Assets Summary
As of December 31, 2014

	Years Ending December 31,					Normalized Terminal Period
Discrete Projection Period Valuation Variables	2015 ($000)	2016 ($000)	2017 ($000)	2018 ($000)	2019 ($000)	($000)
Earnings before Interest and Taxes (EBIT)	2,400	2,300	2,381	2,452	2,501	2,501
Depreciation and Amortization Expense	308	318	334	353	368	-
Capital Expenditures	(1,500)	(1,000)	(800)	(800)	(439)	-
Changes in Net Working Capital	(36)	(7)	(5)	(5)	(5)	(3)
Net Cash Flow	1,172	1,611	1,910	2,000	2,424	2,498
Period	0.50	1.50	2.50	3.50	4.50	
Present Value Factor @ 5 Percent	0.9759	0.9294	0.8852	0.8430	0.8029	
Present Value of Cash Flow	1,143	1,497	1,690	1,686	1,946	
Total Present Value of Discrete Period Cash Flow ($000)	7,963					
Terminal Period Value Calculation						
Fiscal Year 2020 Net Cash Flow ($000)	2,548					
÷ Direct Capitalization Rate	3%					
Terminal Period Value ($000)	84,930					
Present Value Factor @ 5 Percent	0.8029					
Present Value of Terminal Period Value ($000)	68,191					
Indicated Fair Market Value of Total Operating Assets (rounded)	76,200					

the total cost to construct one of equal desirability and utility.

2. Supply and Demand—Shifts in supply and demand cause costs to increase and decrease and cause changes in the need for supply of different types of assets.
3. Externalities—Gains or losses from external factors may accrue to tangible property or contributory property. External conditions may cause a newly constructed asset to be worth more or less than its cost.

Types of Cost Approach Methods

There are several cost approach methods to value tangible personal property. Each of these methods uses a similar definition—or type—of cost. Two common cost measurements are:

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

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

The replacement cost new (RCN) of an asset is the total cost to create, at current prices, an asset having equal functionality or utility of the subject asset.[3] However, the replacement asset would be created with modern methods and constructed according to current standards, state-of-the-art design and layout, and the highest available quality of workmanship.

Accordingly, the replacement asset may have greater utility than the subject asset. If this is the case, the analyst should adjust the RCN for depreciation and obsolescence.

We based the cost approach analysis of the system tangible personal property on the replacement cost new less depreciation (RCNLD) method.

The cost (whether measured as replacement cost or reproduction cost) of an asset typically includes (1) all direct costs (e.g., materials), (2) all indirect costs (e.g., construction interest, engineering and design labor), (3) developer's profit (on direct and indirect cost investment), and (4) entrepreneurial incentive related to the development of the asset.

Once the replacement cost new or reproduction cost new is estimated, the cost measurement should be adjusted for losses in value due to all forms of depreciation.

Based on our analysis of the system, we determined that the system owned the following tangible assets: (1) working capital, (2) tangible personal property (i.e., water distribution system including system wells), (3) real property easements, and (4) real estate sites.

We valued the working capital at its accounting book value, for this example. We relied on third-party appraisal professionals to provide the value of tangible personal property, real property easements, and real estate sites.

In addition to the tangible assets we determined that the system had the following intangible assets (1) trained and assembled workforce, (2) system records and reports, and (3) engineering studies and software. Based on management input and on our calculations, we estimated the fair market value of the intangible assets.

The fair market value of system assets prior to

Exhibit 3
Asset-Based Approach—Asset Accumulation Method
Fair Market Value of the System Operating Assets
As of December 31, 2014

System Operating Assets	Value as of 12/31/2014 ($000)
Working Capital (rounded)	2,000
Real Estate and Tangible Personal Property:	
Tangible Personal Property	35,000
Real Property Easements	500
Real Estate Sites	200
Total Real Estate and Tangible Personal Property (rounded)	35,700
Contributory Intangible Personal Property :	
Trained and Assembled Workforce	100
System Records and Reports	700
Engineering Studies and Software	100
Total Intangible Personal Property (rounded)	900
Indicated Value of Total System Operating Assets Not Including Goodwill or Obsolescence	38,600

consideration of goodwill or economic obsolesce is presented in Exhibit 3.

Contributory Value in the Nature of Goodwill/ Economic Obsolescence

Any asset-based approach valuation of a company's operating assets should include an analysis to determine (1) if the company enjoys intangible value in the nature of goodwill or (2) if the company's tangible assets experience economic obsolescence. To estimate value in the nature of goodwill, or the amount (if any) of economic obsolescence, we used the capitalized excess earnings method.

The first procedure in the capitalized excess earnings method is to estimate a prospective normalized level of income associated with the subject system. The second procedure is to estimate the fair rate of return on the assets that are used in the production of the system's income. The third procedure is to estimate an indication of the system's goodwill (or economic obsolescence) by capitalizing the excess earnings (or earnings shortfall). This is the amount of actual income minus the fair rate of return on the tangible personal property and real estate.

In order to apply the capitalized excess earnings method, we used a 5 percent rate of return to estimate the required level of income related to the system (1) working capital, (2) real estate, (3) tangible personal property, and (4) contributory intangible personal property (collectively, the "associated assets"). This rate of return is equal to the system WACC.

We multiplied (1) the required rate of return by (2) the fair market values of the associated assets in order to estimate (3) the required return on the system's assets. We arrived at the required return on the associated assets of $1.9 million.

We based the normalized future period income estimate on the 2015 EBITDA indication of $2.7 million.

From the normalized future period income indication, we subtracted the $1.9 million required return on the system associated assets. This calculation resulted in an excess earnings of $780,000.

Exhibit 4
Asset-Based Approach
Contributory Value in the Nature of Goodwill/Economic Obsolescence
Capitalization of Excess Earnings Method
As of December 31, 2014

System Operating Assets	Value as of 12/31/2014 ($000)	Required Rate of Return	Required Economic Income	Indicated Value of Goodwill ($000)
Working Capital (rounded)	2,000	5%	100	
Real Estate and Tangible Personal Property:				
Tangible Personal Property	35,000			
Real Property Easements	500			
Real Estate Sites	200			
Total Real Estate and Tangible Personal Property (rounded)	35,700	5%	1,785	
Contributory Intangible Personal Property :				
Trained and Assembled Workforce	100			
System Records and Reports	700			
Engineering Studies and Software	100			
Total Intangible Personal Property (rounded)	900	5%	45	
Total Required Return on Real Estate, Tangible Personal Property, and Contributory Intangible Property	38,600		1,930	
Normalized 2015 EBITDA				2,710
Less: Required Return on the Total Operating Assets				1,930
Equals: Excess Earnings/(Income Shortfall)				780
Divided by: Excess Earnings Direct Capitalization Rate				3%
Contributory Value in the Nature of Goodwill/(Economic Obsolescence) (rounded)				**26,000**

The excess earnings of the system assets provides an indication that the system assets are generating more than the required rate of return and, therefore, the system has goodwill value.

To estimate the system's contributory value in the nature of goodwill, first we divided the excess earnings indication of $780,000 (determined in our capitalized excess earnings analysis) by a direct capitalization rate of 3 percent. This direct capitalization rate is equal to (1) the 5 percent system WACC minus (2) the 2 percent system expected long-term growth rate.

Based on the capitalization of excess earnings method, the indicated contributory value in the nature of goodwill adjustment to the RCNLD of the associated assets is $26.0 million (rounded), as of December 31, 2014.

We present this value calculation in Exhibit 4.

Asset Accumulation Method Conclusion

Based on the asset-based approach and the asset accumulation method, the indicated fair market value of the system total operating assets was $65.3 million (rounded), as of December 31, 2014. We present this value conclusion in Exhibit 5.

Total System Assets Summary and Conclusion

In our valuation synthesis, we assigned a 50 percent weighting to the asset-based approach asset accumulation method value indication and a 50 percent weighting to the income approach yield capitalization method value indication.

Based on (1) a 50 percent weighting of the income approach yield capitalization indicated value of $76.2 million and (2) a 50 percent weighting of the asset-based approach asset accumulation method indicated value of $65.3 million, we arrived at a fair market value of the system total operating assets of $70.8 million (rounded), as of December 31, 2014. This fair market value estimate is before consideration of the value of the system nonoperating asset.

Based on our analysis, the indicated fair market value of the system nonoperating asset was $2 million (rounded), as of December 31, 2014.

Example of Fair Market Value Conclusion

Based on the weighted value indication using the income approach and the asset-based approach, and based on our valuation of the system nonoperating asset, the fair market value of the system total assets, as of December 31, 2014, is $72.8 million (rounded).

We present this value conclusion in Exhibit 6.

Exhibit 5
Asset-Based Approach—Asset Accumulation Method
Value Summary
As of December 31, 2014

Operating Asset Category	Indicated Value ($000)
Working Capital (current assets minus current liabilities, not including short-term debt)	2,000
Real Estate and Tangible Personal Property:	
Tangible Personal Property (rounded)	35,000
Real Property Easements	500
Real Estate Sites	200
Total Real Estate and Tangible Personal Property (rounded)	35,700
Contributory Intangible Personal Property:	
Trained and Assembled Workforce	200
System Records and Reports	1,200
Engineering Studies and Software	200
Contributory Value in the Nature of Goodwill (rounded)	26,000
Total Contributory Intangible Personal Property (rounded)	27,600
Fair Market Value of Total Operating Assets (rounded)	**65,300**

Summary and Conclusion

There are many illustrative and hypothetical figures used in the Alex-town example. In fact, Alex-town is a fictional township. However, in our experience, the eminent domain authority, be it a township or city, may offer to the subject business owner an amount of reasonable compensation that is only sufficient to purchase the tangible assets of the subject going-concern business operation.

Because a water utility is a monopoly, if an eminent domain action occurs, the owner is typically forced out of business. In

this case, the loss to the owner is much greater than the tangible asset value. The difference in this illustrative example is $32.2 million (calculated from $70.8 million minus $38.6 million).

The business operations subject to the eminent domain action do not need to be of a monopolistic nature in order to incur total loss. As in the previously mentioned example of the Maui beach resort, the inability to replicate a business operation is essentially a total business taking action by the eminent domain authority.

In that beachfront resort case, as in the water company illustrative example, the amount of the amount of the owner's reasonable compensation should be greater than the amount of the entity's tangible asset value.

Exhibit 6
Alex-town Water System
Fair Market Value of the System Total Assets
Valuation Synthesis and Conclusion
As of December 31, 2014

Valuation Approach and Method	Indicated Value $000	Weight Assigned %
Income Approach		
Yield Capitalization Method	76,200	50
Asset-Based Approach		
Asset Accumulation Method	65,300	50
Fair Market Value of the System Total Operating Assets (rounded)	70,800	
Plus: Fair Market Value of System Nonoperating Asset	2,000	
Fair Market Value of the System Total Assets (Operating Assets plus Nonoperating Asset)	72,800	

Even in situations where a business owner can replicate or replace the subject business operations, the business owner may still suffer lost profits. In this case, several questions should be asked. Such questions may include the following:

1. How long did the business shut its door due to the taking action?
2. What did the business's customers do in the entity's absence?
3. How does the entity's new location compare with the entity's old location?
4. How does the entity's current business performance compare to the entity's prior business performance?

The ultimate reasonable compensation conclusion in an eminent domain taking action may not be decided until the courts are involved. One issue is that the condemning authority may have access to a limited amount of funds in order to pay for the taking of the location-specific business operation.

In that case, the municipal acquirer may be required to obtain the approval of its voters in order to increase the initial taking offer price. In other matters, the municipal acquirer may agree on a price and settle with the owner of the subject business operation. However, it is important that, in an eminent domain action, the business owner (or the business owner's financial adviser) quantifies the appropriate amount of reasonable compensation related to the subject business taking.

Notes:

1. Statistic provided by an email from Deirdre Mueller, product relations manager of the American Water Works Association, dated March 18, 2013.
2. As stated in the U.S. EPA report, *Community Water System Survey Report: Volume 1*, ownership of community water systems are evenly split, although "of the 49 percent of [water] systems that are privately owned, [only] 22 percent are run as for-profit businesses."
3. Functionality is an engineering concept that means the ability of the subject asset to perform the task for which it was designed. Utility is an economics concept that means the ability of the subject asset to provide an equivalent amount of satisfaction.

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Panel Discussion with Condemnation-Focused Attorneys

Kevin M. Zanni

This column presents a roundtable discussion between our Insights *editor Kevin Zanni and a panel of distinguished legal counsel who regularly practice in the eminent domain discipline.*

Introduction

The perspectives of practicing attorneys are often influenced by (1) current and historical judicial decisions and (2) their personal experiences. In order to provide a practitioner's perspective, we discussed the current state of eminent domain and expropriation matters with a panel of practicing attorneys.

Our panel is comprised of Steven J. Quam, a shareholder in the condemnation and eminent domain practice of Fredrikson & Byron, P.A., and Mark A. Easter, a partner with Best Best & Krieger, LLP (BB&K).

Steve Quam is an eminent domain lawyer, focusing on all aspects of the land acquisition process, including condemnation, for major transmission and pipeline projects. Steve has significant experience representing both landowners and taking authorities on condemnation proceedings.

When working with taking authorities (usually utilities or pipeline companies), Steve works with the client to efficiently obtain the right-of-way necessary to construct major linear electric transmission facilities or pipelines.

Steve's work often begins during the regulatory process and extends through the valuation process. When working with property owners, Steve works with the client to develop and present a claim for just compensation. Steve has tried scores of cases to court-appointed condemnation commissioners, juries, and judges.

Mark Easter's practice focuses on public agency acquisitions, including eminent domain and inverse condemnation litigation. Mark is a partner residing in the Riverside, California, BB&K office. He is the leader of BB&K's eminent domain practice group.

Mark has represented public agencies throughout California on a wide variety of public acquisitions, including projects for cities, counties, redevelopment agencies, school districts, special districts, water districts, transportation agencies, and housing authorities.

The *Insights* editorial team developed some questions related to the panel's expertise that should be of interest to our readers. We then presented our questions to our panel. We hope that you find their insights as informative as we did.

Zanni: Please describe your legal practice and your specific subject matter experience.

Easter: I have been a real estate litigator for over 25 years, and for the last 22 years, my focus has been real property acquisition and eminent domain. I primarily represent public agencies.

The scope of my representation spans from the very beginning to the very end of public agency acquisitions, including assisting agencies with site selection, determining what property is needed, selecting appraisers, reviewing appraisal reports, and negotiating with property owners on the front end, through the administrative process of the agency adopting a resolution of necessity for the use of its eminent domain power, and through the entire eminent domain litigation process, including just compensation jury trials and appeals.

I have handled acquisitions of both real estate and going-concern businesses for school districts, water districts, cities, counties, redevelopment agencies, utility districts, and transportation agencies.

Quam: My practice focuses almost exclusively on condemnation matters. Over the past 18 years, I have served as land rights counsel for major linear utility projects in Minnesota, including the Alliance natural gas pipeline (252 miles of right-of-way in Minnesota), the MinnCan petroleum pipeline (304 miles of right-of-way) and CapX2020 (fours high voltage transmission lines with over 600 miles of new right-of-way in Minnesota, North Dakota, South Dakota, and Wisconsin).

In addition, I worked with the Minnesota Twins as they partnered with Hennepin County to acquire the land necessary to construct Target Field in downtown Minneapolis.

During that time, I also represented scores of property owners in condemnation cases that have arisen out of road, sewer, and redevelopment projects.

My partners Mark Savin and Howard Roston have an active owners' practice as well. They represent owners of all kinds, ranging from homeowners affected by temporary easements to national retailers affected by road projects.

Zanni: In what role do you typically provide representation—for the condemning authority or the subject of the eminent domain action? In your experience, how often do these actions go to court?

Easter: I am currently lead counsel for about 50 to 60 separate eminent domain matters. A significant number of those are for a very large transportation project, the widening of the 91 freeway through Corona, California.

The matters I am currently overseeing involve a wide variety of types of properties and businesses, including residential, commercial and industrial properties as well as vacant land, and also businesses such as car dealerships, restaurants, hotels, self-storages, warehouses, fast food restaurants, gas stations, and even museums. In most of these cases, the main dispute is over just compensation—rather than over the right to take.

Quam: The three large linear transmission projects identified above [Alliance, MinnCan, and CapX2020] have taken, or currently take, a large amount of my time. During those periods, 90 percent of my time is spent working for taking authorities. Between linear projects, approximately 70 to 80 percent of my time is spent on landowner cases.

Minnesota uses a commissioner process to initially establish the just compensation that the taking authority must pay to acquire the property rights at issue. Both sides have the right to appeal the commissioners' award to the district court, and a jury trial may be requested.

The percentage of cases that make it through to the commissioners hearing varies significantly depending on the circumstances of the project and the parties involved.

Typically, a small percentage of cases is appealed to district court, and those cases that are appealed are usually settle before a trial is held.

Zanni: How often are you involved in a condemnation matter in a typical year? What types of eminent domain actions are you involved in?

Easter: I am representing the public agency side in almost all of the condemnation actions that I am currently working on. Only two or three of our cases will actually go to trial in a given year. In California, the procedure calls for an exchange of appraisals 90 days before trial.

The majority of our cases settle in that 90-day window between the appraisal exchange and the trial date, and usually after the appraisers have had their depositions taken.

Quam: Each day I come to work, I deal with one or more condemnation matters. For the past five years, I have dealt primarily with condemnation actions related to the CapX2020 transmission line projects.

In connection with those projects, the Fredrikson team has filed petitions that have sought to acquire

easements over more than 700 parcels of land in Minnesota and North Dakota.

In addition, I am involved in condemnation actions brought by the Minnesota Department of Transportation, and various cities and counties. My partner Mark Savin represents a national retailing corporation in condemnation proceedings throughout the United States.

From time-to-time, I consult with Mark regarding cases in other jurisdictions.

Zanni: Please identify and briefly describe the case law that you find useful in condemnation actions.

Easter: In the acquisitions that I work on, usually the largest disputes over just compensation are in cases involving "partial acquisitions."

In these cases, the appraisers often do not disagree significantly on the value of the "whole" property in the before condition, or even the value of the part being acquired, but they do disagree significantly on the damage to the remainder.

A lot of times, property owners claim damages based on a project impairing access to the property in the after condition.

There are a whole series of cases (including *People v. Ayon* (1960) 54 Cal. 2d 217 and *Border Business Park, Inc. v. City of San Diego* (2006) 142 Cal. App. 4th 1538, 1557) that recognize that the government is not required to pay damages for a proper exercise of police power, and that in order for a property owner to be entitled to compensation, an impairment of access must be "substantial."

Many of our severance damages cases involve significant disputes over temporary and permanent impairments of access, and whether those impairments are substantial and legally compensable.

Another decision that we find useful is *Los Angeles County Metropolitan Transportation Authority v. Continental Development Corp.* (1997) 16 Cal. 4th 698, which held that in California, in assessing the after condition value, the issue of project impacts, or severance damages, must be weighed evenly with project benefits, in determining the after condition value.

The *Continental* decision also held that damages cannot be based on speculative, imaginary, or conjectural considerations. We frequently have to file pre-trial motions to seek to exclude damage claims that violate this principal.

Finally, we have many real estate and business owners that seek to claim damages based on the actions of the condemning agency in the years leading up to the actual filing of eminent domain proceedings.

Property and business owners will often claim that because the agency's project was being planned, their business suffered, or they could not find suitable renters, or they simply could not sell their property.

However, *City of Whittier v. Klopping* (1972) 8 Cal. 3d 39 clearly limits a public agency's liability to situations in which it has either (1) unreasonably delayed filing eminent domain proceedings after formally announcing an intent to do so or (2) directly interfered with the owner's property rights, causing a diminution in the value of the property.

In most cases, the actions of the condemning agency do not rise to the level of (1) or (2).

Quam: As part of the CapX2020 project, we have been working with several statutes that are unique to Minnesota. The cases that have interpreted and applied what many would consider ambiguous statutes have provided guidance for the parties moving forward.

As a very general matter, we find case law that recognizes value as it understood by the marketplace

". . . 'market value' as understood for purposes of eminent domain deviates from true transactional real estate value because of political pressures from government authorities."

to be useful. Where this standard is employed, it is possible for both condemning authorities and owners to understand the real costs of property acquisition through eminent domain.

In most jurisdictions, however, "market value" as understood for purposes of eminent domain deviates from true transactional real estate value because of political pressures from government authorities.

So, while eminent domain law varies substantially from state to state, it is now common to see case law that limits compensation for loss of access or loss of visibility even though anyone active in commercial real estate knows how critical access and visibility are to a property's value.

A recent useful case discussing these issues is *Utah Department of Transportation v. Admiral Beverage*, 2011 UT 62, 275 P.3d 802, in which the Utah Supreme Court reversed its own 2007 decision and held that loss of visibility must be valued as the real market would value it and not according to an exclusionary rule.

Zanni: Based on your experience, do you see any current trends developing in condemnation actions (e.g., more actions now than in prior years, types of property subject to condemnation, or other)?

Easter: Ever since the *KELO* decision, the use of eminent domain has been much more closely scrutinized by local officials than it was 10 years ago. Agencies, including the state Department of Transportation, have put procedures in place to insure that every step is taken to address property owner concerns and exhaust every possibility of a voluntary acquisition.

Another trend we are seeing with large transportation projects is the use of the "design-build" approach.

This means that rather than waiting until a project has been completely designed, and the design is approved, before the agency commences with acquisition efforts, the agency initially just gets approval of a design "envelope" for the acquisition of property, so that the acquisition process can begin earlier, with the determination of the specific final design some time later.

This approach has been met with some resistance by attorneys representing property owners who contend, among other things, that if the agency does not yet have an approved design, how can it make findings that a certain property, or a certain portion of property, is necessary for a public project?

Also, we are finding that the casting of the broader design "envelope" is an imperfect process, and that as the design and build process goes forward, the agency still needs to occasionally go back to property owners and ask for right of way interests that did not fall within the original envelope.

The justification for this alternative approach is to get the project completed and online several years earlier. It remains to be seen if that occurs.

Quam: Fredrikson has tracked some changes in eminent domain relating to the frequency with which such actions occur, and the issues that arise in those cases. Eminent domain cases are occurring more frequently.

For example, a search of LexisAdvance shows that there are nearly double the published eminent domain cases in the 2000s (17,025) then there were in the 1990s (10,533), and we are currently on pace to nearly double again.

Issues of access and visibility are occurring more frequently within those cases. A higher percentage of eminent domain cases now contain access issues.

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Mark A. Easter, Esq., is a partner in the Riverside office and leader of the Best, Best & Krieger, LLP, eminent domain practice group. He has represented public agencies throughout California on a wide variety of public acquisitions, including projects for cities, counties, redevelopment agencies, school districts, special districts, water districts, transportation agencies, and housing authorities. He is a graduate of the University of California, Davis, J.D. (1989) and University of La Verne, B.A., magna cum laude. Mark can be reached at (951) 826-8237 or at Mark.Easter@bbklaw.com.

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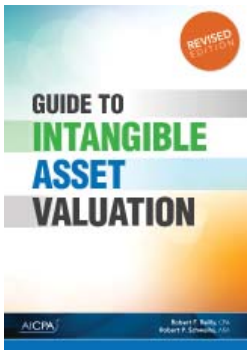
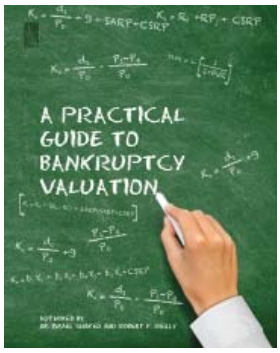
Valuation Textbooks Authored by Robert Reilly and Robert Schweihs





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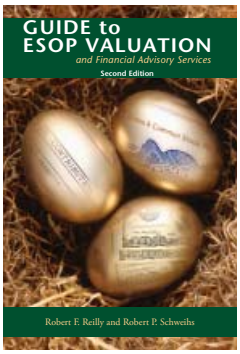

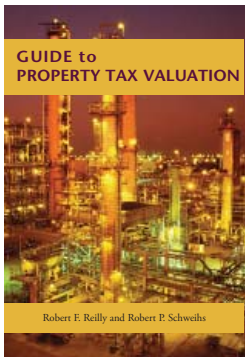

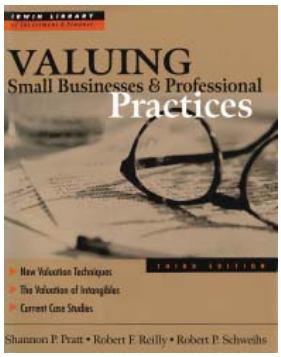

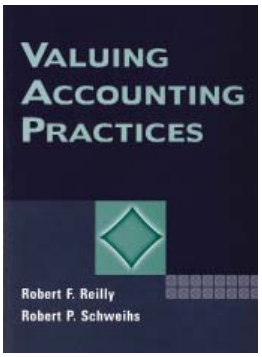

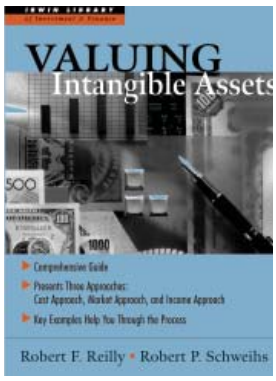

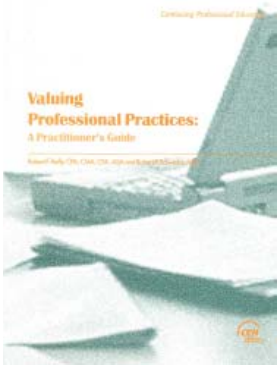

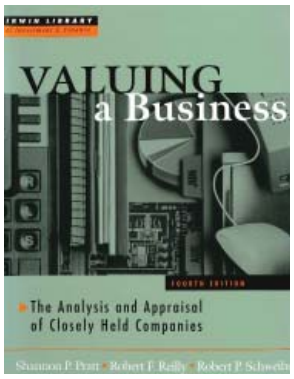

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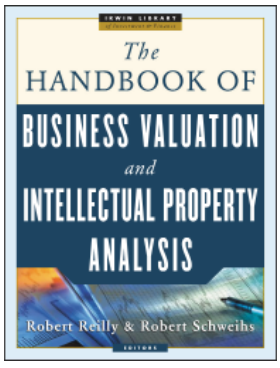

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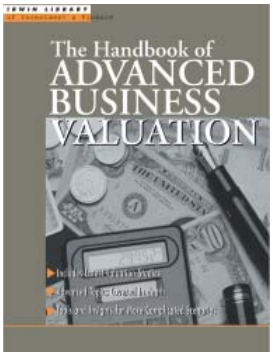

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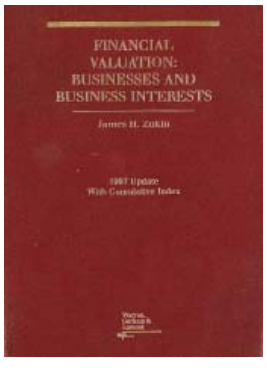

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** Authored with Shannon Pratt
*** Edited by Robert Reilly and Robert Schweihs

Willamette Management Associates

Are Municipal Land-Use Commissions Paying Attention?

G. Wilson ("Rocky") Horde III, Esq., and Hans Clausen, Esq.

Following the U.S. Supreme Court's strongly pro-developer holding in Koontz v. St. John's River Management District, *a seminal 2013 decision on land use, permitting, and inverse condemnation, most real estate developers and their legal counsel anticipated a relaxation in the aggressiveness of municipal permitting and regulatory bodies. Some of those municipal bodies, however, apparently place little importance on judicial rulings and restrictions no matter how "supreme." In the* Koontz *decision, Justice Samuel Alito wrote, "Extortionate demands for property in the land-use permitting context run afoul of the Takings Clause [of the Constitution] not because they take property but because they impermissibly burden the right not to have property taken without just compensation."[1] Notwithstanding the Supreme Court's recent guidance, it seems to be an increasingly common story that a real estate developer reaches a common understanding with a municipal land-use authority concerning the permissibility of a particular development—then, after commencing or completing the development, is met with additional or inconsistent demands from the municipal authority, often in apparent bad faith.*

In Hawaii

An example of municipal authority exercised in apparent bad faith may be found in the far westward reaches of our nation, where four purchasers of small beachfront parcels in Maui County, Hawaii, filed suit against local land-use regulators. The parcels were zoned "hotel-multifamily," a designation that expressly permitted the construction of single-family residences.

The parcels, however, were within a "special management area" under a state statute that imposed permit requirements for "developments."

The definition of "developments" expressly excluded single-family residences from the permit requirements *unless* regulators actively determined that the proposed construction would have a "cumulative impact or a significant environmental or ecological effect on a special management area."

Although the "burden of proof" under the statute was plainly on the regulators to show that the proposed development would harm the environment, local regulators lacked the funds to make such a determination. Therefore, the owners agreed to pay for the assessments, with the reasonable expectation that their modest plans to construct single-family residences would be permitted.

However, the regulators, apparently heeding strong community support for the creation of a public oceanfront park in the area, refused to accept the assessments.

An appellate court reviewing the case noted that:

> Several commissioners advocated . . . a deliberate strategy to preserve the status quo—a *de facto* beach park on the privately-owned lots. As one commissioner explained:
>
> > So if we decide on no action on this thing then the whole beach would remain as it is now and they [the landowners] would not be able to build on the land that they own. Granted, we can't buy it [because of

> insufficient public funds] but if we say no you can't develop it then we then have access to it, at least the beach.
>
> This strategy would "allow the people of Maui to utilize [the] beach area" while preventing property owners from constructing homes. Another commissioner acknowledged that moving forward with the process would result in a loss of the "de facto parking that people are enjoying now" on the private lots. . . . At least one commissioner expressly sought to preserve the public's illegal camping, which had resulted in littering, defecating, and parking on the private beach lots, bemoaning the landowners' resort to hiring security guards to remove the trespassers.[2]

In New Jersey

Regulators in New Jersey apparently refuse to be outdone by their western counterparts. Another long-running dispute between city authorities and a private developer has resulted in a pending petition for certiorari to the U.S. Supreme Court[3] involving similar issues of strong interest to real estate developers generally.

The petitioner is Medford Village East Associates, LLC (MVE), a real estate development company that owns 280 acres of land in Medford, New Jersey.

After more than a decade of litigation against respondent Medford Township (the "Township") concerning the MVE development plans for the land, MVE prevailed in 2004 and was awarded preliminary and final approval for the construction of a retail factory-outlet mall and multiuse project—plans the Township and many members of the public strongly opposed.

Rather than live with its loss in the litigation, the Township invoked its eminent domain authority to take control of the MVE property. The Township also sought to replace MVE with a different developer, Freeco,[4] which planned to construct a 60-unit affordable-housing development on a portion of the land.

Exhausted by its prior (and expensive) legal battles with the Township, MVE opted not to commence new litigation to fight the Township's use of its eminent domain authority, but instead negotiated a settlement agreement with it to allow development of the land.

The agreement modified MVE's original construction plan by eliminating the retail factory-outlet mall, replacing it with significant commercial retail space, a new municipal building (including a public library), and an affordable housing project intended to meet the Township's obligations under New Jersey's *Mount Laurel* doctrine.[5]

Under the settlement agreement, MVE consented to sell its property to the Township in stages for $60 million and additional consideration, including the construction of various improvements necessary to the project as a whole.

The Township agreed to convey portions of MVE's land to various redevelopers, including Freeco, who then would construct the project. The Township's Planning Board approved the settlement agreement and the new development plan.

MVE claims that in a separate agreement with Freeco, the Township "requested assurances as to the Freeco financial ability to perform and assumed the risks with respect thereto."[6]

Soon thereafter, MVE deeded the portion of its land dedicated to the affordable housing project to the Township. The Township conveyed it to the developer. But MVE claimed that it received no compensation whatsoever from the Township for this conveyance, which was made pursuant to the settlement agreement that included the Township's promise of payment.

Then the real trouble began. Freeco thereafter filed for bankruptcy and was ultimately discharged of its duties under the new development plan by a federal bankruptcy court.

The bankruptcy court issued an order allowing the Township to modify the development plans, but only in a way consistent with the property rights and contractual approval powers of MVE (which still retained most of its original land), and only with the planning board's approval of any modifications to the plans.

Important for MVE, Freeco also never constructed significant improvements required for the entire development, as it was supposed to.

MVE claimed that the Township then, in violation of the bankruptcy court's order and its settlement agreement, secretly "administratively modified" the planning board's approved development plan (and the many conditions it mandated)—without notice, any applications, or even a hearing with the public or MVE.

Although 60 affordable housing units were eventually constructed by another developer and are now occupied by qualified residents, the Township allegedly disavowed its agreement with MVE, refused to pay MVE for the land it provided for the project, and refused to compensate MVE for the loss of other valuable consideration resulting from its secret "administrative modification" of the approved plans.

MVE alleged that Freeco's failure to finish the affordable housing project—and the Township's consequent recourse to another developer to finish the work—resulted in "the cost of the improvements set forth in the approved plans [to] exceed the bonded amount by millions of dollars" that the Township is responsible for and that it, in effect, is pushing on to MVE by refusing to comply with the settlement agreement and the new development plan.

In its petition to the Supreme Court, MVE asserted that "[a]s a result [of the Township's secret "administrative modification" of the development plan], MVE received no compensation from the Township for the affordable housing tract, and the remaining portion of its land and the approvals from the Planning Board were substantially devalued. . . ."

MVE estimated the value it lost as a result of the Township actions to be between "$4 [million] to $5 million, in addition to millions of dollars in diminished value of the proposed building lots. . . ."

MVE further claimed that the Township blatantly and intentionally caused this injury "without filing any development application, without any planning board review, hearing or approval, and without the knowledge or approval of MVE."

MVE attempted to seek legal relief in the New Jersey state courts but claims that its arguments unjustly "fell on deaf ears."

The trial court, MVE claimed, overemphasized the fact that the litigation between MVE and the Township had been ongoing for 16 years and summarily concluded that enough was enough and dismissed MVE's claims, without reaching the merits of its legal arguments.

Both the New Jersey intermediate appellate court[7] and its Supreme Court[8] summarily rejected the MVE appeals without any substantive analysis or comment whatsoever.[9]

MVE's legal argument to the U.S. Supreme Court is a very basic one that highlights the Township's alleged culpability: that MVE's right to just compensation under the Fifth Amendment[10] was denied by the Township, which represented to MVE that it would condemn the property and pay it "just compensation" (i.e., the market value of the land in question) as required. MVE transferred ownership of a portion of its property to the Township but was not paid any compensation for it.

MVE stated that "these actions . . . would justify a conclusion that the Township must pay compensation for the taking of the MVE property. . . ."

MVE's chief legal authority was *Lingle v. Chevron USA*,[11] in which the U.S. Supreme Court emphasized a fundamental precept of the federal Constitution's Takings Clause:

> The paradigmatic taking requiring just compensation is a direct government appropriation or physical invasion of private property. . . . [P]hysical takings require compensation because of the unique burden they impose: A permanent physical invasion, however minimal the economic cost it entails, eviscerates the owner's right to exclude others from entering and using [the] property—perhaps the most fundamental of all property interests.[12]

MVE further argued that:

> [T]here is no question that MVE's Property was taken by the Township, and sixty affordable housing units were constructed upon it, without any compensation being paid. After the affordable housing parcel had been taken, the Township unilaterally approved significant and material changes to the approvals, conditions and approved plans secured by MVE through many years of effort and litigation and caused improvements to be constructed on other portions of MVE's Property, pursuant to the modified plans, without MVE's approval and over MVE's objection. In doing so, the Township eliminated millions of dollars in improvements that were to benefit MVE and authorized the installation of other improvements that in part destroyed the value of MVE's proposed building lots that had not yet been conveyed and that were to be sold for millions of dollars.

MVE also emphasized the importance of its appeal based on the "awesome power of the sovereign to take property for public use without the owner's consent" under its eminent domain authority.

MVE's legal arguments extend beyond the Fifth Amendment's Takings Clause to the Township's allegedly blatant violation of MVE's due-process guarantees, which MVE emphasized were infringed "by [the Township's] effecting a diminution in value of MVE's property without notice, without a hearing, and without just compensation."

MVE also accused the Township of violating the bankruptcy court's order, which required the Township:

1. to obtain the necessary planning board approvals for any changes in the new development plan and
2. not to violate MVE's property and approval rights.

And, as a contractual matter, the Township also was not permitted to alter its settlement agreement with MVE without MVE's approval in writing.

MVE also emphasized the U.S. Supreme Court's *Koontz*[13] decision, in which it reaffirmed the "unconstitutional conditions" doctrine as applied to a property owner's Fifth Amendment right to just compensation in the land use context, and held that the government cannot deny a benefit to a developer on a basis that infringes constitutional rights.

"In this case, MVE refused to consent to the modification of its vested property rights, approvals secured after years of hearings, permit applications and state court litigation, in the face of coercive pressure by the Township, followed by a unilateral action to modify those permits to the detriment of MVE. That action constitutes a taking for which MVE is entitled to just compensation, which was denied it by the Township. . . ."

The U.S. Supreme Court's decision on MVE's petition should be issued by June 2015.[14]

Across the Nation

From east to west, land use overreach by cash-strapped governments apparently continues in the face of the judicial strictures mandated by the U.S. Supreme Court.

When those limitations are applied to a questionable exercise of municipal authority via increasingly costly judicial and administrative proceedings, the overall expense to municipal growth and public coffers begs for a more reasoned approach by applicable regulatory bodies at the outset of a proposed project, rather than a stick-up in the interim or, worse, at its conclusion.

Notes:

1. Koontz v. St. John's River Management District, 133 S. Ct. 2586, 2596, 186 L. Ed. 2d 697, 710 (2013).
2. Leone v. County of Maui, 128 Haw. 183, 188, 284 P.3d 956, 961 (Haw. Ct. App. 2012).
3. Docket No. 14-1150. MVE's petition can be found at 2015 U.S. S. Ct. Briefs LEXIS 1129.
4. "Freeco" is a shorthand reference used by the parties to the litigation to describe certain companies owned by developers Carl Freedman and Mitchell Cohen.
5. The doctrine requires authorities to create land-use zones that provide a realistic opportunity for the development of housing affordable to low- and moderate-income households. S. Burlington Cty. NAACP v. Townsh. of Mt. Laurel, 92 N.J. 158, 456 A. 2d 390 (1983).
6. The Township denies this allegation. Its attorney stated that the claim is "meritless" and that "the town never agreed and was never responsible for Freeco's contractual obligation to purchase the property."
7. 2014 N.J. Super. Unpub. LEXIS 624; 2014 WL 1125303.
8. 2014 N.J. LEXIS 1395 & 1396; 220 N.J. 207; 104 A.3d 1076.
9. MVE's recourse for review by the U.S. Supreme Court is mandated by the so-called "Rooker-Feldman doctrine," which generally prevents lower federal courts, including the Circuit Courts of Appeal, from hearing appeals from state courts. Rooker v. Fidelity Trust Co., 263 U.S. 413 (1923); District of Columbia Court of Appeals v. Feldman, 460 U.S. 462 (1983).
10. In relevant part, the Fifth Amendment to the U.S. Constitution provides that "nor shall private property be taken for public use, without just compensation."
11. Lingle v. Chevron USA, 544 U.S. 528, 537,125 S. Ct. 2074, 161 L. Ed. 2d 826 (2005).
12. Citations omitted from quotation.
13. Koontz, supra at note 1..
14. The Township's response to MVE's petition was not yet filed with the Court when this article was written.

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E.L. Thompson Farms, Ltd. v. Aurora County, South Dakota: Milk Cows, Manure, and Management Problems—Utilizing Experts to Maneuver through the Muck of Inverse Condemnation

Richard P. Tieszen, Esq., and Naomi R. Cromwell, Esq.

Legal counsel commonly retain valuation and/or forensic accounting professionals to assist in eminent domain and expropriation disputes. Such engagements may include the valuation of a going-concern business interest or the quantification of economic damages related to the condemnee. This discussion provides insights into an inverse condemnation litigation dispute involving a dairy farm operation in South Dakota. More specifically, this discussion provides an example of how forensic accounting experts and real estate appraisal experts worked together in an inverse condemnation dispute. Many eminent domain controversies require both types of forensic experts.

Introduction

Responding to a study that manure runoff from confined animal facilities within the county was contaminating the source of drinking water for the nearby city of Mitchell, and to increasing concern over the odors caused by large confined animal farms, the County Commissioners of Aurora County, South Dakota, enacted a zoning ordinance.

The ordinance placed a limit of 1,200 animal units (AU) that could be at any one confined animal feeding operation.

E.L. Thompson Farms, Ltd. ("Thompson Farms"), brought an inverse condemnation lawsuit against Aurora County, alleging that the AU limit in the zoning ordinance constituted a regulatory taking.

This lawsuit was filed because the ordinance prevented an expansion of the dairy that Thompson Farms claimed it had planned and invested in prior to the enactment of the ordinance.

The case, which commenced in April 2002, took a long and eventful path over the next 10 years, culminating in a jury trial in July 2012. A judge bifurcated the action in September 2002 to first address liability (whether there was a taking) and only if necessary to address the issue of damages at a second trial.

Whether Aurora County "caused" any damages to Thompson Farms under the regulatory takings doctrines of *Penn Central Transportation Co. v. City of New York*[1] was a primary focus.

Although the dairy operation of Thompson Farms did indeed fail during the period after the AU limit was enacted, Aurora County argued that numerous factors unrelated to the zoning ordinance brought about the dairy's demise.

First, this discussion highlights the facts of this unique inverse condemnation action. Second, this discussion explains the "measure of damages" methods the court directed the parties to utilize. Finally, this discussion describes the experts in forensic accounting and agricultural (dairy farm) appraisal

whose work was useful in establishing causation and damages in this regulatory taking/inverse condemnation saga.

The Facts of the Case

In the mid-1990s, Thompson Farms began planning to expand an existing 350-head dairy. Years earlier, the farm had converted its beef feeding operation to a dairy operation, and the farm also included a crop production operation on its 1,400 acres. Dirt work and work on the dairy lagoon began in September 1996.

Aware that the Aurora County Commission was at the time considering proposed zoning ordinances that would place limits on the number of AUs allowed on any one facility, Thompson Farms wrote a letter to the Commission in September 1996.

The letter confirmed a discussion held two days earlier with the Commission that the Thompson Farms 1,200 head dairy facility would be "grandfathered," but that it must otherwise comply with zoning standards.

Aurora County did not have zoning ordinances in place at the time of the letter. But, thereafter, in October 1996, Aurora County enacted a temporary zoning ordinance that included a requirement that a conditional use permit be obtained for animal feeding operations of more than 800 AUs.

Meanwhile, Thompson Farms was altering its original plans for the dairy's milking parlor. Rather than installing a smaller parlor that could be expanded to accommodate more cows at a later date if needed, as originally planned, it instead installed a larger Rotary 40 milking parlor.

Work on the new dairy buildings was completed and cows were brought in during April 1998.

The people of Aurora County brought an initiated measure calling for a limit of 1,500 AU on any one confined animal facility (1,500 AU equals approximately 1,050 mature dairy cows), which was approved in a special election held in February 1998.

Because the temporary zoning expired after two years, Aurora County enacted comprehensive permanent zoning ordinances in October 1998, following numerous public hearings and much public input.

The permanent zoning ordinances enacted included the 1,500 AU limit at any one facility. The effect was to prohibit any farming operation, including Thompson Farms, from having over 1,500 AUs in any one confined feeding operation.

However, Aurora County honored the Thompson Farms earlier request to be grandfathered, and allowed it to have 1,200 head of mature dairy cows.

In August 2000, Thompson Farms wrote a letter to the Aurora County Commission proposing that the dairy wished to expand its 1,200 head operation above the 1,500 AU limit to 2,000 head, saying it planned to expand as far back as 1996.

During September and October of 2000, the Aurora County Commission studied Thompson Farms' proposal to lift the AU limit, and held several public meetings to gather input on the issue. Also during this same time period, Thompson Farms attempted to sell the dairy, advertising for buyers. And, Thompson Farms began reducing the cow numbers.

The Thompson Farms attorney sent Aurora County a draft federal court complaint for a takings cause of action on January 22, 2001, based upon the 1998 zoning ordinance. The federal action was never commenced.

On January 31, 2001, the dairy's existing holding barn collapsed under the weight of a heavy snowfall, totally destroying the barn. At the time, there were approximately 800 cows in the barn. A significant number were killed or badly injured, and all surviving cows were moved off the farm immediately.

Despite the fact that Thompson Farms was no longer milking any cows, on March 22, 2001, Thompson Farms applied for a building permit to build a "second" barn on the location to accommodate "additional" dairy cattle.

During the trial, Aurora County argued this was nothing more than an attempt to "create" a cause of action.

Aurora County denied the building permit application based upon the zoning ordinance. The Commission decision was appealed to the circuit court, and the court affirmed the Commission.

Thompson Farms did not appeal this decision, and instead commenced separate litigation on the basis of a regulatory taking/inverse condemnation.

The Law on Inverse Condemnation and Regulatory Takings

As a regulatory taking, the legal doctrines under *Penn Central* were applied in this case. In *Penn Central*, the U.S. Supreme Court addressed whether the governmental restrictions imposed on the property owner's use of its property effected a taking of the property within the meaning of the Fifth Amendment of the U.S. Constitution.[2]

The traditional balancing test under *Penn Central* involves factual inquiry focusing on three factors:

1. The character of the governmental action
2. Economic impact of the regulation on the claimant
3. The extent to which distinct investment backed expectations have been interfered with by the regulation[3]

In determining whether the regulation has caused a taking, the court is to look at the nature and the extent of interference with the rights in the parcel as a whole.

Under the first factor, character of the governmental action, it should be established that the governmental action was the cause in fact of the claimant's harm; the liberty interests of the property owner are to be balanced against the government's need to protect the interests of the public.

Under the second factor, economic impact, the regulation must interfere drastically with a property's possible uses to be a "taking."

Finally, under the third factor, extent of interference with investment backed expectations, the claimant must show that the regulation has nearly the same effect as complete destruction of the owner's property rights; it is not a taking simply because the owner is being denied the ability to exploit some property interest.

Court proceedings were held in May 2008 to determine whether the Aurora County AU limit had caused a regulatory taking against Thompson Farms.

The court issued its decision in February 2009, ruling that a regulatory taking had occurred.

The court gave particular weight to the degree of "interference with investment based expectations" factor, opining that Thompson Farms had invested substantial sums of money to modernize and expand its dairy prior to the effective date of the zoning ordinance, yet was "prohibited from obtaining the use of its investment to its full extent when the County denied the request to exceed the 1,500 [AU] limit."

Therefore, the matter proceeded on to a jury trial to determine the amount of damages.

The Measure of Damages

In advance of a trial to determine the amount of damages, the court made a series of rulings as to the measure of damages:

1. **Temporary or permanent taking.**

   Soon after the court ruled on liability, motions were filed and hearings were held to establish how damages would be determined. A threshold issue was whether the regulatory taking had been a "temporary" or a "permanent" taking. The court reasoned that it could not characterize it as "temporary" because the zoning ordinance was still in effect.

   The court continued, explaining that it believed Thompson Farms had been permanently prohibited by the zoning ordinance. Therefore, the taking was ruled a "permanent" taking.

2. **Date of taking.**

   At the same time it was setting a "measure of damages," the court was simultaneously hearing motions to determine the date of taking, which would be necessary in determining damages in this inverse condemnation matter.

Thompson Farms argued that the date of taking was March 22, 2001, the date that it applied for and was denied a building permit. Aurora County pointed out that Thompson Farms had, up to this time, been asserting that it was the adoption of the 1998 zoning ordinance that "took" from, or damaged, Thompson Farms.

Citing *Palazzolo v. Rhode Island*,[4] Aurora County argued that from the 1998 enactment of the zoning ordinance forward, Thompson Farms had been precluded from expansion under the ordinance. Therefore, it was the date of the enactment itself that was the date of taking.

The court ruled that the date of taking in this matter was March 22, 2001, the date the building permit was denied.

3. **Original order on measure of damages: two methods—"fair market value of operation" and "investment equity."**

The court noted that the South Dakota Supreme Court had not yet addressed the measure of damages in a case involving a permanent, regulatory taking.

Thompson Farms argued for a "before and after" calculation of damages, based either upon their equity in the property, or upon the fair market value of the property.

Aurora County argued for a "lost use" calculation taking into account the probability that Thompson Farms' expansion would not have been successful, or alternatively for reimbursement of Thompson Farms' actual expenses.

The court concluded damages should be based on a "before and after" test, as was done by the South Dakota Supreme Court in *Hurley v. State*,[5] a permanent physical taking case.

The court noted that here it would not make sense to base damages on the value of the real property because the physical property itself was not taken; instead, it was the opportunity to use that property to support the dairy operation.

The court settled on two separate methods for measuring damages based on the "before and after" principle; both measures would be available to the jury as alternative measures of damages, and the parties were directed to present evidence as to both methods.

First, the court directed that damages would be measured by considering the fair market value of the dairy operation as a going concern immediately before and after the date of taking, March 22, 2001.

The court explained that "fair market value" is the price that Thompson Farms could have reasonably expected to be paid for the operation had it been sold on the open market.

Among the relevant factors is the probability that Thompson Farms' expansion plans would have been a success, as the probability of success would have weighed heavily in the mind of any prospective buyer in 2001 and affected the price that buyer would have been willing to pay.

Second, the method of damages to be presented to the jury was the value of the Thompson Farms equity before and after the taking.

The court stated its expectation that the parties would present evidence as to the value of the Thompson Farms investment equity prior to the taking, as well as the value, if any, of its equity after the taking.

4. **Revised order: "investment equity" removed; new category of "permanent partial regulatory taking" announced**.

June 22, 2012, less than a month before the jury trial was set to begin, the court revised its prior order on measure of damages.

Thompson Farms made a pretrial motion to eliminate the investment equity measure of damages and to eliminate all evidence of profits and losses except as necessary to determine the fair market value of the real property as a going concern.

The court granted the motion, thereby reversing in part its 2009 ruling on measure of damages, opining that loss of investment equity method would provide an unreliable and inaccurate result bearing no relationship to the actual loss of Thompson Farms.

In the court's discussion on this issue it deliberated that only part of Thompson Farm's overall property rights had been taken; accordingly, the court announced a category new to South Dakota law: that of a "permanent partial regulatory taking."

Aurora County sought clarification from the court to ensure that it would be allowed to present its "measure of damages"

evidence on the "fair market value" method since its experts had utilized aspects of loss of equity in their determinations under the now remaining measure of damages.

Aurora County also sought clarification of another pretrial ruling by the court granting the Thompson Farms motion introducing, for the first time in this matter, the concept of "as affected by the taking" into the methodology for measuring damages.

The Role of the Experts

Developing evidence to present to the jury on the two measures of damages required the significant use of expert testimony by both parties.

Aurora County engaged the services of a forensic accountant to analyze (1) the financial situation of Thompson Farms, (2) the likelihood of success of its claimed expansion plans, and (3) whether the Thompson Farms loss was a result of the Aurora County zoning ordinance (i.e., causation).

Extrapolating from tax and other financial/business records, this accounting expert determined that Thompson Farms had incurred a significant amount of interest-bearing debt in its initial expansion and in operation of the dairy, resulting in the loss of its equity value prior to March 22, 2001, primarily due to its large operating losses.

According to its tax records, the dairy had significant cattle losses totaling $627,200 from 1998 to 2000. By the end of 2000, the dairy had liabilities of over $7 million, nearly $6 million of which was funded through long-term debt. For fiscal year 2000, Thompson Farms incurred interest expense of approximately $500,000.

The forensic accountant determined that Thompson Farms could not take on more debt. If Thompson Farms were to borrow money to finance the estimated $3.3 million expansion cost to reach its target size, its long-term borrowings would be approximately $10.5 million as of March 22, 2001.

The forensic accountant concluded that the likelihood of successful expansion was minimal.

Aurora County also engaged the services of a real estate appraiser experienced in appraising dairy operations. Considerable attention was given to the concept of "going concern" in the context of valuing the dairy under the cost approach, the sales approach, and the income approach.

The dairy farm appraiser ultimately determined that the "cost to cure"—the expense of expanding the dairy to 2,000 head—would exceed the additional value created by such an expansion by nearly $200,000. Therefore, the appraiser's conclusion was that there was no damage caused to Thompson Farms under the "before and after" fair market value measure.

The dairy farm appraiser testified that, for example, the expansion would require extensive construction to increase the manure storage system, additional feed storage would need to be constructed, and additional barns and milk holding tanks would be necessary to handle cows isolated due to health reasons to keep their milk separate from that of the main dairy.

In this appraiser's opinion, the entire dairy operation, other than the oversized Rotary 40 milking parlor, was sized for a 1,100 head dairy, not for a 2,000 head dairy.

The appraiser also explained that, in his view, most buyers, would not like the overall set up of the dairy with its various scattered and older buildings. The high voltage power lines running across the property would also be a negative factor to sale.

In addition, all buyers or investors would have looked at the dairy farm's past earnings, breeding and production records, significant death losses, milk quality, manure management system, and feed handling systems, all of which were problematic at Thompson Farms.

Both of the county experts, the forensic accountant and the dairy farm appraiser, were aware of the poor management performance. This poor performance was corroborated through the testimony provided by several veterinarians who had witnessed first-hand day-to-day problems on the dairy that resulted in, among other things, high rates of dairy cattle losses.

The dairy farm appraiser also analyzed the intangible assets that create "goodwill," such as superior management, excellent credit rating, efficiency of the operation, sufficiency of capital, and a long-standing enviable reputation, and concluded that the "goodwill" value of the dairy, based on earnings capacity and resting upon the excess of net earnings over and above a fair return on the tangible assets, was zero.

Thompson Farms only used a real estate appraiser as its expert. Its appraiser also analyzed the dairy and concluded that the Thompson Farms damages loss under the before and after method analysis was $2.8 million.

Both parties' appraisers determined that the cost of expansion would be slightly more than $3 million, and both experts' numbers as to the "after" value—the value without the AU limitation—were similar.

However, the two experts disagreed as to the "before" values—the value without the AU limitation, with the Thompson Farms appraiser's values under each property valuation approach (cost approach, income approach, and sales approach) being approximately $3 million higher than the values arrived at by the Aurora County appraiser.

The trial on damages spanned seven days. The jury reached a verdict that Thompson Farms had been damaged by the ordinance.

While the Thompson Farms expert opined that damages amounted to $2.8 million, the jury's verdict for $600,000 in favor of Thompson Farms was a number far less than the Thompson Farms claim (and, ironically, approximately the cost of the Rotary 40 milking system that had been installed).

The jury's verdict was also far less than the amount that Thompson Farms stated it was seeking in its 2001 unfiled federal action complaint, of $5.6 million in damages.

Conclusion

Without the experts' analysis of factors affecting causation, as well as damages, the impact of important variables, such as financial distress resultant from dairy cattle loss and too much interest-bearing debt owed to creditors, may not have been uncovered.

In this matter, the Aurora County experts used their financial skills to uncover critical facts in what was a fact-rich lawsuit.

The county experts in this matter simplified and conveyed complex inverse condemnation damages issues that included a court-directed change involving how to measure damages.

This matter provides an example of how forensic accounting experts and real estate experts worked together in an inverse condemnation matter. Typically, condemnation matters often require both types of financial experts.

Notes:

1. Penn Central Transportation Co. v. City of New York, 438 U.S. 104 (1978).
2. "nor shall private property be taken for public use, without just compensation." U.S. Constitution, Amendment V.
3. Penn Central, 438 U.S. at 124.
4. Palazzolo v. Rhode Island, 533 U.S. 606 (2001).
5. Hurley v. State, 134 N.W.2d 782 (S.D. 1965).

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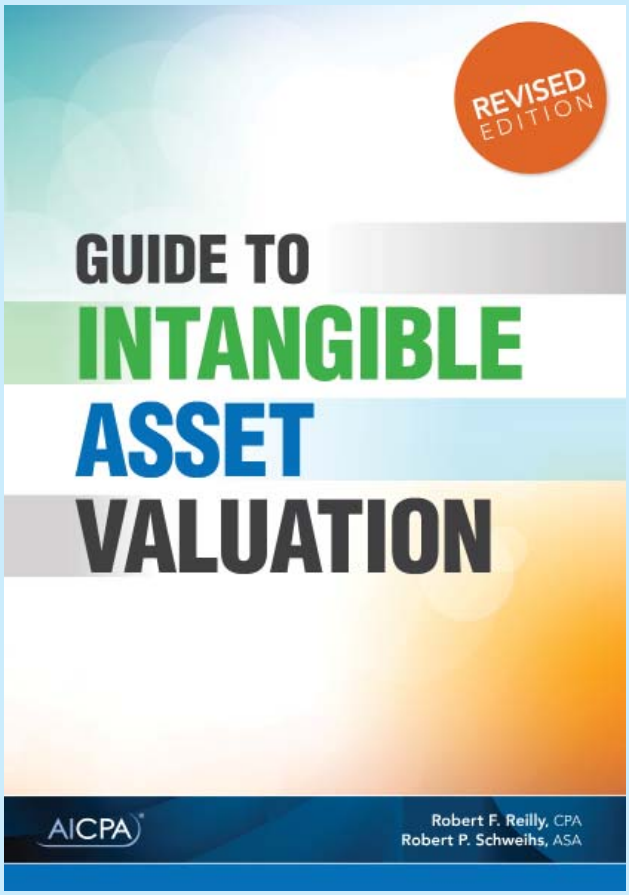
We are pleased to announce the 2014 hardback Revised Edition of . . .

Guide to Intangible Asset Valuation

by Robert F. Reilly and Robert P. Schweihs



This 745-page book, originally published in 2013 by the American Institute of Certified Public Accountants, has been improved! The book, now in hardback, explores the disciplines of intangible asset valuation, economic damages, and transfer price analysis. *Guide to Intangible Asset Valuation* examines the economic attributes and the economic influences that create, monetize, and transfer the value of intangible assets.

Robert Reilly and Bob Schweihs, Willamette Management Associates managing directors, discuss such topics as:

- Identifying intangible assets and intellectual property
- Structuring the intangible asset valuation, damages, or transfer price assignment
- Generally accepted valuation approaches, methods, and procedures
- Economic damages due diligence procedures and measurement methods
- Allowable intercompany transfer price analysis methods
- Intangible asset fair value accounting valuation issues
- Valuation of specific types of intangible assets (e.g., intellectual property, contract-related intangible assets, and goodwill)

Illustrative examples are provided throughout the book, and detailed examples are presented for each generally accepted (cost, market, and income) valuation approach.

Who Would Benefit from This Book

- Litigation counsel involved in tort or breach of contract matters
- Intellectual property counsel
- International tax practitioners
- Property tax practitioners
- Auditors and accountants
- Valuation analysts
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- Multinational corporation executives
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Guide to Intangible Asset Valuation

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Public-Private Partnership and the Taking by Eminent Domain of a Previously Granted Interest in Land: Litigation Pitfalls and the Continuing Impact of *West River Bridge Co. v. Dix*

Nicholas W. Myles, Esq., and Scott A. King, Esq.

It is common for municipalities and governments to grant easements to individuals and business entities. And, it is also common for such authorities to acquire property through eminent domain proceedings. It is less common for a municipality or government to engage in both actions with respect to the same property: grant an interest in land, and thereafter reacquire that same interest through eminent domain. When this situation occurs, the government, and any developer working with the government, should be aware of the potential legal pitfalls of such an action and the defenses that could be raised.

Introduction

A landowner may defend against a taking by claiming that the government is breaching the "contract" in which the government granted the landowner the ownership interest in the land.

A government and a real estate developer may enter into a public-private partnership which entails the taking by eminent domain of a previously granted interest in land in order to facilitate a new development.

In such cases, the landowner may defend against the eminent domain action by arguing that the taking is purely for economic development purposes.

And, the landowner may also argue that the real estate developer is liable for tortious interference with a contract by inducing the government to take the property interest.

These arguments were recently litigated in the matter of *Dayton Office Properties v. City of Dayton, et al.*[1]

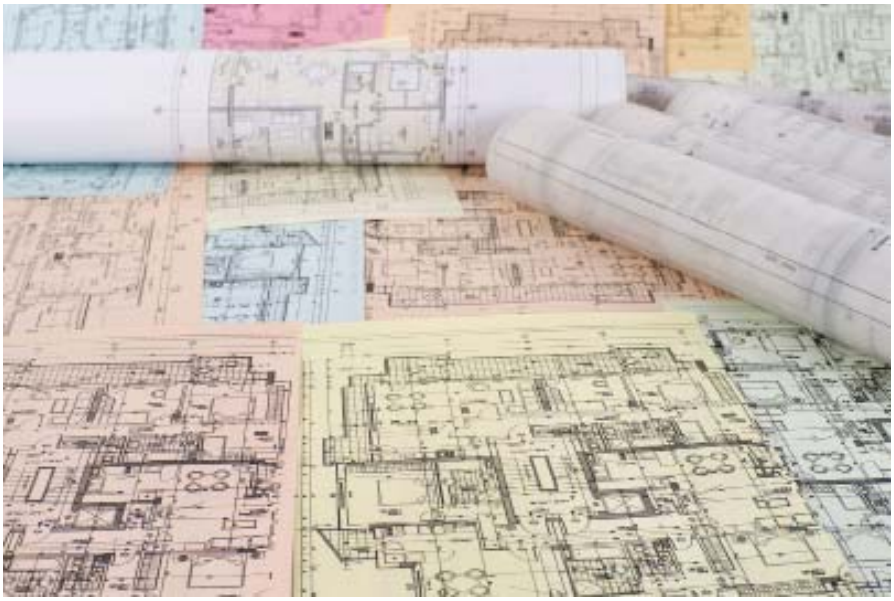
Dayton Office Properties

Dayton Office Properties (DOP) owned land and an office building in downtown Dayton, Ohio. The DOP parcel was originally bisected by a public roadway. In 1996, the City of Dayton executed an easement to the DOP predecessors, for a 90-year term, which closed the portion of roadway bisecting the DOP property.

Under the easement, DOP was permitted to use the closed portion of the road for ingress and egress to its property, but was required to expend monies to landscape and maintain the easement area.

The easement served a purpose for both the City and DOP: the City was able to close a road that created safety concerns at a nearby school, and DOP was able to create a campus-like environment for the tenants in its office building.

Following execution of the easement, DOP expended in excess of $500,000 on landscaping, construction, and infrastructure improvements to close the road and create an entrance to its parking



lot. DOP claimed that its improvements created a park-like setting on its property, and provided a competitive advantage in the downtown office market.

In 2013, 17 years later, the City and a team of developers began discussions to develop vacant land owned by the city that was adjacent to the DOP property. The development was to include office and residential buildings, as well as a new public parking garage that was to be operated by the city.

Part of the discussions included whether the closed road previously running through the DOP property should be reopened and re-connected to a main thoroughfare, as there would otherwise be only one road available to access the development, and traffic would be substantially increased in the area.

The city and the developers then entered into a predevelopment agreement and later a development agreement under which the City would convey to the developers 12 acres of property adjacent to the DOP property, and upon which the developers were to construct a commercial office building, residential units, and a parking garage.

The development agreement required the city to make a good-faith effort to acquire all necessary right-of-ways to complete the infrastructure improvements to the property, which included reopening the closed road which previously bisected the DOP property in order to alleviate the traffic congestion that would be created by the new development.

During the process, the developers approached DOP, seeking to purchase DOP's entire property for incorporation into the new development. However, those negotiations were unsuccessful, and the city eventually notified DOP that it intended to reacquire the easement by eminent domain to reopen the road. The city then enacted zoning ordinances to authorize construction and funding for the project.

The Legal Action

DOP filed a court action against the city and the developers alleging that the city and the developers engaged in a conspiracy to breach the easement and take the DOP property solely for the economic benefit of the development, that the city's threat to use eminent domain was a breach of the easement, and that the developers had tortiously interfered with the easement by inducing the city to breach it.

DOP also claimed that the city had acted improperly in approving zoning ordinances to permit the development.

After the court action was filed, DOP sought a preliminary injunction to prevent the city from instituting eminent domain proceedings and to stop the development from moving forward. DOP argued that, unlike federal law,[2] in Ohio the government cannot use eminent domain to take property from one owner and give it to another for the sole purpose of promoting general economic development, and that there must be a strong public purpose directly benefitting the public.[3]

DOP asserted that the taking of the easement was solely to benefit the project being constructed by the developers, that the taking was in breach of the easement, that DOP had expended substantial monies to improve the area, and that the resulting improvements which had created a unique, campus-like property would be destroyed if the roadway was reopened.

DOP also relied on *Syracuse University v. Project Orange Assoc. Serv. Corp.*[4] In that case, the university had leased land and steam generation plants to a utility provider, with the lease requiring the provider to sell steam power at a reduced rate to the university. When the venture no longer became profitable for the utility provider, the provider attempted to acquire the land and steam generation facilities from the university by eminent domain.

The court held that the utility provider could not use eminent domain to eliminate a contract that it had decided was no longer favorable to its economic interest.

The court commented: "It logically follows that a merely incidental public benefit coupled with a

dominant private purpose will invalidate a condemnor's determination. . . [Here, the utility provider] is virtually the sole beneficiary of the condemnation, and this alone is reason to invalidate the condemnation especially where, as here, the public benefit is incrementally incidental to the private benefits of the condemnation."

DOP contended that, like that case, the city was simply using eminent domain to eliminate a contract that it no longer found convenient.

The Judicial Decision and West River Bridge Co.

The court rejected the DOP arguments, denied its request for a preliminary injunction, and dismissed the claims for breach of contract, tortious interference with contract, and civil conspiracy.

In its decision, the court relied on a 19th century decision from the U.S. Supreme Court, *West River Bridge Co. v. Dix*.[5] In that case, the state of Vermont had granted the West River Bridge Company a 100-year contract to operate a toll bridge.

As development in the area increased 40 years later, the town of Battleboro decided that the toll bridge needed to be replaced with an open highway, so Battleboro sought to acquire the bridge by eminent domain.

The bridge company sued, claiming that a taking of the bridge would impair its contractual rights with Vermont to operate a toll bridge, but the U.S. Supreme Court permitted the taking by Battleboro, finding that implied into every contract is a term that its performance could be ended by the exercise of eminent domain.

The Ohio court relied on *West River Bridge* to find that the city was permitted to reacquire the easement by eminent domain, and that its doing so was not a "breach" of the 90-year term of the easement:

> The power of eminent domain "is, as its name imports, paramount to all private rights vested under the government, and these last are, by necessary implication, held in subordination to this power, and must yield in every instance to its proper exercise." West River Bridge Co., 47 U.S. at 532. For this reason, "into all contracts, whether made between states and individuals or between individuals only, there enter conditions which arise not out of the literal terms of the contract itself" but "are superinduced by the preexisting and higher authority of the laws of nature, of nations, or of the community to which the parties belong." Id. Such conditions "are always presumed, and must be presumed, to be known and recognized by all," are "binding upon all," and "need never, therefore, be carried into express stipulation, for this court add nothing to their force." Id. Every "contract is made in subordination to them, * * *, wherever a necessity for their execution shall occur," and among these "inherent and paramount" conditions "is the right of eminent domain." Id. at 532-533. The invocation of the power of eminent domain "does not impair [any] contract effected by it, but recognizes its obligation in the fullest extent, claiming only the fulfilment of an essential and inseparable condition." Id., at 533.

Applying the foregoing to the case at hand, the court finds that the City has not breached the Easement. The City's execution of the Easement was implicitly conditioned on its right to exercise the power of

> eminent domain, and DOP's predecessors in interest are presumed to have known and recognized as much. Given that the City's retention of its power of eminent domain as an implied term of the Easement, the City's exercise of that power would not constitute a breach.

In addition to relying on the decision in *West River Bridge*, the court relied on two other principles: first, a party entering into a contract with a municipality should determine whether the contract complied with applicable statutes and laws, and must include in its negotiations any potential risk that the contract could be later invalidated or eliminated:

> DOP's predecessors in interest bore the burden to account, however practicable, for the possibility that the City might exercise eminent domain over the Property before the term of the Easement expired. In other words, even if the City could have surrendered its power of eminent domain through contract, DOP's predecessors in interest had the responsibility, "at their peril," to negotiate terms in the Easement for that purpose. . . . The Easement's silence regarding eminent domain should concomitantly be interpreted in favor of the City's reservation of the right to invoke it.

Second, a legislature's actions can only be deemed to bind future legislatures where there is a clear intent to do so, and here, there was no intent expressed in the easement that the city intended to waive its rights to acquire the easement by eminent domain:

> [A]ssuming hypothetically that the City could have waived its right to exercise eminent domain over the Property through its execution of the Easement, any purported waiver would be effective only if the Easement memorialized the City's clearly stated intent to bind future City governments.

Final Judicial Considerations

Finally, the court rejected the DOP argument that the city was improperly attempting to use eminent domain proceedings because the reacquisition of the easement was strictly for economic development purposes.

The court noted that the city was not acquiring the easement in order to transfer the road directly to the developers. Rather, the city intended to retain the property in order to open a street to the public—a valid public purpose justifying a taking through eminent domain proceedings. This conclusion was true even though the city would have an ownership interest in a public garage being constructed as part of the project.

Summary and Conclusion

Dayton Office Properties v. City of Dayton offers insight for developers and governments on how to successfully defend against claims for breach of contract, tortious interference or civil conspiracy when the government seeks to reacquire previously granted interests in land to support a future development.

This case also demonstrates the importance of being knowledgeable regarding how the applicable state law treats the taking of property for economic development purposes.

While each state has a different approach regarding takings, there is an important precept to remember: where an interest in land is being taken by the government and transferred directly to a private developer, there will be higher risk that a court will find that the taking is prohibited because it lacks a valid public purpose and is merely for general economic development.

However, where the taking is merely to support the development and not being used to transfer property to private parties for development, courts, such as the one in *Dayton Office Properties*, are much more willing to find the taking to be proper.

Notes:

1. Dayton Office Properties v. City of Dayton, et al., Montgomery County, Ohio, No. 2014 CV 02554.
2. Kelo v. City of New London, 545 U.S. 469 (2005).
3. City of Norwood v. Horney, 110 Ohio St.3d 353 (2006).
4. Syracuse University v. Project Orange Assoc. Serv. Corp. 897 N.Y.S.2d 335 (N.Y. 2010).
5. West River Bridge Co. v. Dix, 47 U.S. 507 (1848).

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Valuation of Technology-Related Intangible Assets

Robert F. Reilly, CPA

Going-concern business entities may be the subject of an eminent domain or expropriation action. In such an instance, often, both the business entity's tangible assets and the business entity's intangible assets may be subject to the "taking." Therefore, the entity owner should receive reasonable compensation for both the tangible assets and the intangible assets. Many business entities own and operate technology-related intangible assets. This discussion explains—and illustrates—the valuation of technology-related intangible assets within an eminent domain reasonable compensation context.

Introduction

For many legitimate public benefit reasons, a going-concern business entity can become the subject of a condemnation, eminent domain, or expropriation action.

Sometimes, these business entities are just "in the way" of a highway construction, light rail system installation, airport expansion, or other public benefit development. Sometimes, the business entity is a utility-type business that operates by the authority of a government license or municipal franchise. Some common examples of such utility-type businesses include water and wastewater companies. In such instances, the government or municipal authority that issued the franchise has the legal right to "take" (or take over) the subject business entity.

In all of these cases, the government or municipal authority that is exercising its eminent domain rights must pay the business entity owner/operator reasonable compensation for the subject business entity.

In many cases, the agency with eminent domain authority will offer the business entity owner an amount of compensation equal to the value of the entity's real estate and tangible personal property. However, often, the government or municipal authority is "taking" more than the entity's real estate and equipment. Often, the government or municipal agency is taking (or, at least, disrupting) the entity's going-concern business operations.

When a going-concern business enterprise is the subject of an eminent domain or expropriation action, a valuation analyst ("analyst") is often called on to value the entity's technology-related intangible assets.

In such eminent-domain-related reasonable compensation analyses, the analyst can use any of the generally accepted property valuation approaches—that is, the cost approach, market approach, and income approach—to value such technology-related intangible assets.

Analysts may be retained by either the business owner/operator or its legal counsel to perform the technology intangible asset valuation. This is because the business entity subject to the eminent domain action also includes intangible personal property—also called intangible assets.

The subject entity's intangible assets often include technology-related intangible assets.

And, the value of the entity's intangible personal property may be part of the reasonable compensation due to the entity owner as a result of the "taking."

This discussion considers the following topics: (1) the definition of technology-related intangible assets; (2) the distinguishing attributes of technology intangible assets; (3) the typical factors that

affect the technology intangible asset value; and (4) the factors that analysts consider in assessing technology intangible asset value and remaining useful life (RUL).

In addition, this discussion presents an illustrative example of a technology intangible asset valuation related to an eminent domain taking.

Definition of Technology-Related Intangible Assets

For purposes of this discussion, technology-related intangible assets are broadly defined as intangible assets that create proprietary knowledge and processes. This proprietary knowledge or process may be either developed by, or purchased by, the business owner/operator.

In order for a technology intangible asset to have measurable value, it should provide, or have the potential to provide, a competitive advantage or a product differentiation. Any proprietary technology that confers a competitive advantage or product differentiation to the business owner/operator may be a technology intangible asset.

The following intangible assets are typically included in this category:

- Patents
- Patent applications
- Patentable inventions
- Trade secrets
- Know-how
- Proprietary processes
- Proprietary product recipes or formulae
- Confidential information
- Copyrights on technical materials such as computer software, technical manuals, and automated databases

Copyright-related intangible assets, software-related intangible assets, and patents and related intellectual property are included in the technology intangible asset category. However, this discussion focuses principally on know-how, trade secrets, proprietary processes, product recipes and formulas, and confidential information.

Technology-Related Intangible Assets Due Diligence

Whether or not the valuation analysis relates to an eminent domain or expropriation action, the analyst should understand the attributes of the technology-related intangible asset.

The analyst may consider the technology intangible asset attributes through the following due diligence questions:

1. What are the property rights related to the technology intangible asset? What are the functional attributes of the intangible asset?
2. What are the operational or economic benefits of the technology intangible asset to its current owner/operator? Will those operational or economic benefits be any different if the intangible asset is in the hands of a third-party owner/operator?
3. What is the current utility of the technology intangible asset? How will this utility change in response to changes in the relevant market conditions? How will this utility change over time? What industry, competitive, economic, or technological factors will cause the intangible asset utility to change over time?
4. Is the technology intangible asset typically owned or operated as a stand-alone asset? Or is the intangible asset typically owned or operated as (a) part of a bundle with other tangible assets or intangible assets or (b) part of a going concern business entity?
5. Does the technology intangible asset utility (however measured) depend on the operation of tangible assets or other intangible assets or the operation of a business entity?
6. What is the technology intangible asset highest and best use (HABU)?
7. How does the technology intangible asset affect the income of the owner/operator? This inquiry may include consideration of all aspects of the owner/operator's revenue, expense, and investments.
8. How does the technology intangible asset affect the risk (both operational risk and financial risk) of the owner/operator?
9. How does the technology intangible asset affect the competitive strengths, weaknesses, opportunities, and threats of the owner/operator?
10. Where does the technology intangible asset fall within its own technology life cycle, the overall technology life cycle of the owner/operator, the life cycle of the owner/operator industry, and the technology life cycle of both competing technologies and substitute technologies?

These inquiries do not present an exhaustive list of due diligence considerations. However, this due diligence gives the analyst a starting point for understanding the use and function of the technology intangible asset and the attributes that create value in the technology intangible asset.

Technology-Related Intangible Asset Value Attributes

Numerous factors may affect the technology intangible asset value. Industry, product, and service considerations provide a wide range of positive and negative influences on intangible asset value. To the extent possible, the analyst qualitatively and quantitatively considers each of these factors.

Table 1 on the following page presents some of the attributes that the analyst considers in the technology intangible asset valuation. Table 1 also provides an indication of how these attributes may influence the technology intangible asset value.

Not all of the Table 1 factors apply to every technology intangible asset involved in every eminent domain action, and each attribute does not have an equal influence on the technology intangible asset. However, the analyst typically considers each of these factors.

These considerations can be either quantitative or qualitative. They may be either separately documented in the analysis work papers or performed as one component of the overall engagement analysis. These considerations allow the analyst to assess the influence of these factors, either positive or negative, on the technology intangible asset value.

Some of the other factors that the analyst may consider include the following:

1. The legal rights associated with the technology intangible asset
2. The industry in which the technology intangible asset is used
3. The economic characteristics of the technology intangible asset
4. The reliance of the owner/operator on tangible assets or other intangible assets
5. The expected impact of regulatory policies or other external factors on the commercial viability or marketability of the technology intangible asset

Specific Factors to Consider in the Technology-Related Intangible Asset Analysis

The purpose for the analysis may influence the consideration of other individual factors. Factors that may be particularly relevant for one purpose—such as a business entity that is subject to an eminent domain action—may be more or less relevant for another purpose.

Assessing the Technology-Related Intangible Asset

An eminent-domain-related technology-related intangible asset analysis may involve the application of valuation principles and procedures. In the typical intangible asset analysis, the analyst may consider expected future income or estimate a reasonable royalty rate. In addition, the analyst could measure the cost to recreate the expected technology-related intangible asset.

There are a number of factors that the analyst may consider when measuring technology intangible asset value for eminent domain or other controversy purposes. Some of the factors that an analyst may consider in assessing the amount of reasonable compensation related to the technology intangible asset taking include the following:

- The calculation of the amount of income (however defined) that the intangible asset would have earned or contributed but for the eminent domain (or other damages) event (as compared to the amount of income that the intangible asset actually did earn or contribute after the influence of the eminent domain event).
- An analysis of the amount of income (however defined) that the intangible asset owner/operator will earn with the influence of the eminent domain event (as compared to a benchmark or yardstick level of income that the owner/operator would expect to earn without the influence of the eminent domain event).
- A quantification of the amount of income (however defined) decrease that the owner/operator experienced since the eminent domain event, where that decremental income is related to lost market share, lost market penetration, lost unit volume revenue, lost unit selling price revenue, increased production costs, increased selling costs, increased research and development costs, increased capital investment,

Table 1
Attributes That Influence the Value of a Technology-Related Intangible Asset Involved in an Eminent Domain "Taking"

Item	Attribute	Influence on Value	
		Positive	Negative
1	Age—absolute	Newly created, state-of-the-art technology	Long-established, dated technology
2	Age—relative	Newer than competing technology	Older than competing technology
3	Use—consistency	Technology proven or used consistently on products and services	Technology unproven or used inconsistently on products and services
4	Use—specificity	Technology can be used on a broad range of products and services	Technology can be used only on a narrow range of products and services
5	Use—industry	Technology can be used in a wide range of industries	Technology can be used only in a narrow range of industries
6	Potential for expansion	Unrestricted ability to use technology on new or different products and services	Restricted ability to use technology on new or different products and services
7	Potential for exploitation	Unrestricted ability to license technology into new industries and uses	Restricted ability to license technology into new industries and uses
8	Proven use	Technology has proven application	Technology does not have proven application
9	Proven exploitation	Technology has been commercially licensed	Technology has not been commercially licensed
10	Profitability—absolute	Profit margins or investment returns on related products and services higher than industry average	Profit margins or investment returns on related products and services lower than industry average
11	Profitability—relative	Profit margins or investment returns on related products and services higher than competing technologies	Profit margins or investment returns on related products and services lower than competing technologies
12	Expense of continued development	Low cost to maintain the technology as state-of-the-art	High cost to maintain the technology as state-of-the-art
13	Expense of commercialization	Low cost of bringing technology to commercial exploitation	High cost of bringing technology to commercial exploitation
14	Means of commercialization	Numerous means available to commercialize technology	Few means available to commercialize technology
15	Market share—absolute	Products and services using technology have high market share	Products and services using technology have low market share
16	Market share—relative	Products and services using technology have higher market share than competing products and services	Products and services using technology have lower market share than competing products and services
17	Market potential—absolute	Products and services using technology are in an expanding market	Products and services using technology are in a contracting market
18	Market potential—relative	Market for products and services using technology expanding faster than competing technologies	Market for products and services using technology expanding slower than competing technologies
19	Competition	Little or no competition for technology	Considerable established competition for technology
20	Perceived demand	Perceived currently unfilled need for the technology	Little or no perceived need for the technology

increased working capital investment, increasing cost of capital, or some other measure of lost profits.

- An analysis of the loss of the owner/operator's ability to be first-to-market, influence market prices, obtain patent or other legal protection, obtain regulatory approval, fulfill a contract or other commercial commitment, develop a replacement intangible asset, create or develop a replacement or improvement, or commercialize a replacement or improvement technology intangible asset. These analyses may be used to quantify the owner/operator's loss with respect to the eminent domain event.
- A projection of the amount of actual or hypothetical royalty income that the owner/operator will forgo as a result of the eminent domain event. That royalty income relates to the actual or hypothetical outbound license of the intangible asset (but before the intangible asset experiences any of the effects of the eminent domain event).
- The calculation of the amount of damages suffered by the owner/operator to date (for example, from the time the damages event first occurred through the date that the reasonable compensation analysis is performed).
- The calculation of the amount of the expected future damages suffered by the owner/operator (for example, from the eminent domain event date through the expected cessation of the effects of the eminent domain event).
- The estimation of the expected time period (for example, a specified limited period or an unspecified perpetuity period) duration of the damages.
- A consideration of the mitigation efforts of the owner/operator related to the eminent domain event.
- The estimation of the effect of the eminent domain event on the intangible asset's expected RUL.

If sufficient data are available, the analyst typically considers more than one valuation approach or method when eminent-domain-related reasonable compensation is measured as an intangible asset value decrease or a cost to cure.

In a reasonable compensation analysis, the analyst does not limit the examination to the valuation variables data that are available prior to the reasonable compensation analysis date. The analyst should be aware that the estimation of damages may be governed by the legal rules of the jurisdiction in which the eminent domain dispute is pending.

"[Remaining useful life] is a factor that the analyst typically considers in every intangible asset valuation."

The business entity owner/operator reasonable compensation is typically experienced during a distinct period of time. Therefore, the quantification of the intangible asset reasonable compensation may or may not be based on a perpetuity RUL projection.

Estimating the Technology-Related Intangible Asset RUL

RUL is a factor that the analyst typically considers in every intangible asset valuation. RUL considerations influence the analyses that are performed for valuation, reasonable compensation, and other purposes.

The analyst considers either a qualitative or a quantitative RUL analysis whether the analysis involves the income approach, cost approach, or market approach. RUL is a consideration in a technology-related intangible asset valuation performed for any purpose.

In an intangible asset reasonable compensation analysis, the owner/operator damages typically occur for a determinable period of time. The determinable time period affected by the eminent domain event may be different than the intangible asset RUL. When estimating the reasonable compensation amount, the analyst typically considers the damaged intangible asset's RUL.

One common component of the damages claim often relates to the technology intangible asset's RUL. That is, the owner/operator may claim reasonable compensation related to the shortening of the technology intangible asset RUL if that shortening is caused by the eminent domain event. This claim typically alleges that the intangible asset RUL is reduced due to the eminent domain action.

In the technology intangible asset valuation, RUL can influence the value conclusion. This statement is true regardless of which valuation approach is used in the analysis.

In the income approach, for example, the income producing potential of the intangible asset is directly influenced by the technology's RUL.

In the cost approach, the technology RUL typically influences the amount of obsolescence associated with the intangible asset.

In the market approach, both the intangible asset age and the technology RUL may be compared to the selected guideline intangible assets. This comparison is performed so the analyst can determine if (1) any adjustments are required to the guideline sale or license transaction pricing data or (2) a sale or license transaction should be rejected from further consideration (due to lack of age/life comparability) in the market approach analysis.

The analysis purpose (such as eminent domain reasonable compensation) may cause the analyst to consider different factors of intangible asset RUL. The intangible asset RUL is a factor to consider regardless of whether the analysis concludes to a value or reasonable compensation and regardless of the analysis approaches or methods used.

Illustrative Example

Exhibits 1 through 3 present an illustrative valuation of a trade secret intangible asset that is part of an eminent domain action.

The Flintstone Quarry Corporation (FQC) operates a stone quarry and a limestone manufacturing plan in the Town of Bedrock. The quarry and plant are located adjacent to the Bedrock Municipal Airport. The airport is expanding, and it needs the FQC property to construct additional (and longer) runways. The Town of Bedrock used its eminent domain authority to "take" the FQC property.

The Town of Bedrock and the business owner have agreed to the value of the FQC real estate and equipment. However, due to the taking, the FQC will have to close down its business operations. Therefore, the taking also includes the FQC business intangible assets. The town and the business owner cannot agree on the value of the FQC intangible assets—including the FQC technology-related trade secret intangible asset.

Accordingly, the FQC management retained a valuation analyst to measure the value of the company's trade secret—and, if needed, to provide expert testimony with regard to the appropriate amount of intangible-asset-related reasonable compensation.

The FQC trade secret intangible asset relates to the manufacture of a proprietary limestone product. The intangible asset includes the proprietary manufacturing process by which the limestone product is formed.

This example illustrates both a cost approach analysis and an income approach analysis regarding the technology-related intangible asset.

The intangible asset is the manufacturing process (referred to as "the process") of a particular limestone product manufacturing process. This process is documented in a set of engineering drawings and in a process flow chart notebook.

FQC management has elected not to patent this proprietary process for competitive reasons. Both the FQC engineers and legal counsel believe that the process would be patentable. However, if the process became public knowledge through the patent procedure, management is concerned that the company's competitors could reverse engineer an equally effective manufacturing process that does not violate the patent.

FQC management considers this proprietary technology to be a trade secret. All of the engineering and other documentation related to this manufacturing process is protected in a locked cabinet in the process engineering department. Only a select number of engineering and production managers have access to that information, and all of those employees have signed nondisclosure agreements.

FQC management also believes that the process gives the company's limestone product a distinct competitive advantage. This particular limestone product formulation is particularly attractive to customers in the oil and gas refinery industry. FQC marketing personnel stress this product differentiation feature in all of the company's marketing materials and presentations.

The intangible asset subject to the eminent domain action is the trade secret related to the particular product manufacturing process.

Fact Set and Analysis Assumptions

The analysis objective is to estimate the fair value of the trade secret intangible asset as of December 31,

2014. The analysis purpose is to assist a finder of fact in determining the appropriate amount of reasonable compensation due to the FQC owners due to the eminent domain action.

The alternative methods available for manufacturing such a limestone product include various equipment configurations that use different pressure temperatures, and consumable materials components that are used at the FQC plant in the Town of Bedrock. In fact, FQC uses these other processes at its other quarries.

However, the stone at the Town of Bedrock quarry has a unique chemical composition that allows the subject trade secret to be economically feasible. The combination of the FQC Bedrock quarry stone and the trade secret allow the Town of Bedrock plant to produce a unique—and extremely profitable—composition of limestone product.

To exploit the unique composition of rock at the Town of Bedrock quarry, the FQC process engineers developed a unique modification to the standard limestone manufacturing process.

Selection of Valuation Approaches and Methods

In this analysis, the analyst is instructed by the FQC legal counsel that the appropriate standard of value is fair market value. The premise of value is value in continued use. This premise of value is consistent with the valuation assignment and the analyst's assessment of the subject intangible asset's HABU.

There are several approaches and methods that the analyst considered in this valuation. Based on the quality and quantity of available data and the purpose and objective of the analysis, the analyst decided to use two valuation approaches:

1. The cost approach—specifically the replacement cost new less depreciation (RCNLD) method
2. The income approach—specifically the differential income method

Cost Approach

The cost approach typically involves estimating either a reproduction cost new or a replacement cost new. The reproduction cost new equals the cost to construct an exact replica of the technology-related intangible asset. The replacement cost new is the cost to recreate a new intangible asset with an equivalent utility of the subject intangible asset.

The analyst decided to use the RCNLD method of the cost approach to value the process trade secret. The analyst had access to the actual historical

development costs related to the process. This type of historical cost information is not always available.

Because this limestone product manufacturing process trade secret was so important to the company, FQC management tracked the original efforts related to its proprietary process development.

Valuation Variables

The analyst considered the historical efforts (in terms of person-months) of each process engineer, product engineer, scientist, researcher, and manager involved in the development of the trade secret.

After consultation with management, the analyst eliminated any duplicate or unproductive efforts from this person-month estimate. Therefore, the analyst eliminated much of the intangible asset functional obsolescence.

The analyst multiplied the current person-month by the current full-absorption cost related to that personnel position. The product of such a multiplication is the estimate of a replacement cost new (RCN).

Management provided the analyst with information regarding the actual number of hours spent by FQC engineers and scientists on the various aspects of the manufacturing process development.

In applying the RCNLD method, the analyst estimated a full absorption cost related to the employees who developed the process. This full absorption cost included all employee salaries, employee benefits, employment-related taxes, and related company overhead. This full absorption cost also included a component for development period interest related to the intangible asset direct costs.

The analyst calculated each of these full absorption cost components as of the valuation date. Based on this full absorption cost analysis, the analyst concluded the current cost per person-hour for all of the FQC company employee hours actually spent on

the development, testing, and implementation of the process trade secret.

The product of (1) the total number of person-hours actually spent to develop the process and (2) the full absorption cost per person-hour results in (3) an estimate of the RCN for the process trade secret.

To the extent that the intangible asset is less than an ideal replacement for itself, the RCN should be adjusted accordingly. The analyst considered adjustments to the RCN for losses in value due to incurable functional obsolescence and economic obsolescence.

In particular, the analyst considered (1) the intangible asset age and RUL, (2) the intangible asset position within its technology life cycle, and (3) the owner/operator's return on investment related to the intangible asset use.

Exhibit 1 summarizes the RCNLD analysis. The RCN includes direct costs, indirect costs, developer's profit, and entrepreneurial incentive.

The direct costs include the direct salary costs and the related employee benefit cost and employment taxes of the process development team.

The indirect costs include overhead allocation costs paid to outside consultants and development period interest expense.

The developer's profit includes the analyst's estimate of the profit margin that an independent engineering firm would charge to FQC if that engineering firm was retained to develop the proprietary process.

The entrepreneurial incentive is the opportunity cost related to the intangible asset development process.

In this analysis, the analyst quantified this opportunity cost as the difference in the amount of cash flow that FQC would earn with versus without the process. The analyst estimated that incremental cash flow during the period of elapsed time required to replace the process de novo. FQC engineers estimated that the development period required to reproduce the process de novo would be 24 months.

As indicated in Exhibit 1, the RCN for the process was $10,784,000. The analyst concluded that a 10 percent functional obsolescence allowance is appropriate. That 10 percent functional obsolescence allowance results in $1,078,000 of depreciation.

Accordingly, the indicated RCNLD estimate is $9,706,000. This RCNLD estimate is rounded to a fair market value indication of $9,700,000.

Valuation Analysis

As presented in Exhibit 1, the fair market value of the technology intangible asset based on the cost approach, as of December 31, 2014, is $9,700,000.

Income Approach

Using the differential income method, first, the analyst projected the prospective cash flow generated by FQC associated with the use of the process.

Second, the analyst projected the prospective cash flow that would be generated by FQC without the use of the process.

The income approach value indication is based on the difference between the present value indications from the two different operating scenarios (that is, with and without the process in current operation).

Valuation Variables

FQC management provided the analyst with projections of the limestone product unit selling price, unit volume, and market share for the five years after the valuation date. Management also projected the cost of goods sold and the capital expenditure data related to the production of the limestone product. Management prepared a five-year projection of the selling, general, and administrative expenses related to the limestone product line.

After a due diligence review of the financial projections, including interviews with company management, the analyst concluded that these financial projections were reasonable.

Based on the quality and quantity of these prospective financial data, the analyst concluded that the income approach, using a differential income method, provides a supportable value estimate.

This valuation method measures the difference in the income potential of FQC both with and without the operation of the process trade secret. The income potential represents the amount of income that is available to the FQC business owners after consideration of a required level of reinvestment for continued operations and for expected growth.

Based on the prospective financial data available, the analyst selected net cash flow as the appropriate income measure.

For purposes of this valuation, the analyst defined net cash flow as follows.

	Net Sales
Less:	Cost of sales
Less:	Operating expenses
Equals:	Net income before taxes
Less:	Income taxes
Plus:	Depreciation and amortization expense
Less:	Capital expenditures
Less:	Additions to net working capital
Less:	Contributory asset charge
Equals:	Net cash flow

Exhibit 1
Flintstone Quarry Corporation
Limestone Product Proprietary Process
Technology-Related Intangible Asset
Cost Approach
Replacement Cost New Less Depreciation Method
As of December 31, 2014

	Total Person-Hours to Replace the Process	Average Base Cost per Person-Hour	Employee Benefits and Overhead Cost Allocation Factor	Full Absorption Cost per Person-Hour ($)	Replacement Cost New ($)
Type of Process Engineering Research & Testing					
Manufacturing Process Analysis	15,000	75	1.85	139	2,085,000
Product Formulation	8,000	75	1.85	139	1,112,000
Manufacturing Process Development and Testing	10,000	85	1.85	157	1,570,000
Manufacturing Process Drawings and Documentation	8,500	90	1.85	167	1,420,000
Total Direct and Indirect Costs [a]					6,187,000
Plus: Developer's Profit at 15% [b]					928,050
Plus: Entrepreneurial Incentive [c]					3,669,000
Indicated Replacement Cost New (RCN) (rounded) [d]					10,784,000
Less: Functional Obsolescence (at 10% of RCN, rounded) [e]					1,078,000
Equals: Replacement Cost New Less Depreciation (RCNLD)					9,706,000
Indicated Fair Market Value of Technology-Related Intangible Asset (rounded)					9,700,000

Footnotes:

[a] The full absorption cost allocation factor includes a component for development period interest.

[b] The developer's profit represents a fair profit margin that an independent engineering company would charge to a client like FQC to develop a manufacturing process like the process.

[c] The entrepreneurial incentive indicates the incremental amount of net cash flow that the owner/operator of the process will earn during the 24-month process development period--compared to the amount of net cash flow the same owner/operator would earn from using an alternative manufacturing process.

[d] This replacement cost new (RCN) estimate includes all related direct costs, indirect costs, developer's profits, and entrepreneurial incentive.

[e] The analyst concluded that a 10 percent functional obsolescence allowance was appropriate, due to the competitive nature of the subject limestone product. That is, FQC continually updates its manufacturing processes. And, management expects to develop and implement an improved process in a few years. Since this technology-related intangible asset is earning a fair return on investment, the analyst concluded that an allowance for economic obsolescence is not needed.

In this analysis, FQC management projected the product line net cash flow over the intangible asset's RUL. The analyst discounted the net cash flow projection at an appropriate discount rate to conclude a present value. The difference between the present value of the product line net cash flow with the process in operation and without the process in operation equals the indicated value of the intangible asset.

Based on the its industry experience, FQC management expects that it will develop a replacement manufacturing process in about five years. Both FQC and its competitors continuously develop improved products that are produced by improved manufacturing processes.

The FQC process engineering staff is already working on the development of a new and improved process. FQC management expects that the new and improved process will be developed, tested, and implemented within five years. At that time, the current proprietary process will be obsolete and completely replaced by the new and improved process.

This five-year RUL is consistent with the company's historical experience regarding its process technology life cycle and with the competitor industry's historical experience regarding a limestone manufacturing process technology life cycle.

Accordingly, FQC management believes that it will enjoy another five years of competitive advantage in this product category due to its current proprietary process. The analyst selected five years as the process RUL.

The analyst selected the following valuation variables for this analysis:

Scenario I: With the process trade secret in current operation

- Net sales growth rate: 10 percent per year
- Gross margin percentage: 26 percent of net sales
- Other operating expenses: 11 percent of net sales
- Effective income tax rate: 36 percent of pretax income
- Depreciation expense: 1 percent of net sales
- Net capital expenditures: equal to depreciation expense
- Contributory asset charge: $2.2 million per year
- Incremental net working capital: 5 percent of net sales
- Present value discount rate: 15 percent
- RUL estimate: 5 years

Scenario II: Without the process trade secret in current operation

- Expected sales decrement: –10 percent per year
- Other operating expenses: 11.5 percent of net sales
- Incremental net working capital: 7 percent of net sales
- All other valuation variables remain unchanged from scenario I

The contributory asset charge is included to account for the fair rate of return of and on the investment of all the contributory assets that are used or used up in the production of the income associated with the process. The contributory assets include net working capital, tangible operating assets, and the trade name.

The projected decrease in product line sales without the process in operation is based on discussions with management. This projected sales decrease indicates the FQC management estimate of the customer response to the decrease in functional attributes of the company's limestone product without the process trade secret. The negative sales growth rate reflects the FQC management projection of the combined effects of decreased unit selling price and decreased unit volume sales.

Without the product differentiation provided by the process, FQC management estimates that it would have to increase its marketing expense. This marketing expense increase accounts for the one-half of one percent projected increase in other operating expenses.

In addition, FQC management projects that it would have to liberalize its customer credit policy in order to stimulate sales of the less desirable product. Management estimates that it would have to give 60-day credit terms instead of 30-day credit terms.

This expected change in credit policy would affect the company's accounts receivable balances. This change in credit policy would result in an expected change in the company's net working capital investment.

The 15 percent present value discount rate is based on the analyst's estimate of the FQC weighted average cost of capital (WACC). The analyst concluded that this discount rate is appropriate for this analysis based on the selected net cash flow measure of income projected in the analysis and the stated standard of value and premise of value.

Valuation Analysis

As presented in Exhibit 2, the sum of the product line discounted cash flow with the process in operation is $49,500,000.

Exhibit 2
Flintstone Quarry Corporation
Limestone Product Proprietary Process
Technology-Related Intangible Asset
Income Approach
Differential Income Method
Scenario I: With the Process Trade Secret in Operation

Limestone Product Line Projection Variables ($ in 000s):	Year 1	Year 2	Year 3	Year 4	Year 5
Net Sales with the Proprietary Process in Operation	$ 146,912	$ 161,603	$ 177,764	$ 195,540	$ 215,094
Gross Margin	38,197	42,017	46,219	50,840	55,924
Operating Expenses	(16,160)	(17,776)	(19,554)	(21,509)	(23,660)
Earnings before Interest and Taxes	22,037	24,241	26,665	29,331	32,264
Income Tax Expense	(7,933)	(8,727)	(9,599)	(10,559)	(11,615)
Operating Income	14,104	15,514	17,066	18,772	20,649
Depreciation Expense	1,469	1,616	1,778	1,955	2,151
Capital Expenditures	(1,469)	(1,616)	(1,778)	(1,955)	(2,151)
Contributory Asset Charge	(2,200)	(2,200)	(2,200)	(2,200)	(2,200)
Incremental Net Working Capital Investment	(696)	(735)	(808)	(889)	(978)
Net Cash Flow	11,208	12,580	14,058	15,683	17,471
Present Value Discount Factor [a]	0.9325	0.8109	0.7051	0.6131	0.5332
Discounted Net Cash Flow	10,451	10,201	9,912	9,615	9,315
Sum of Product Line Discounted Net Cash Flow (rounded)	49,500				

Footnote:
[a] Assumes a midyear discounting convention.

Exhibit 3
Flintstone Quarry Corporation
Limestone Product Proprietary Process
Technology-Related Intangible Asset
Income Approach
Differential Income Method
Scenario II: Without the Process Trade Secret in Operation

Limestone Product Line Projection Variables ($ in 000s):	Year 1	Year 2	Year 3	Year 4	Year 5
Net Sales with the Proprietary Process in Operation	$ 146,912	$ 161,603	$ 177,764	$ 195,540	$ 215,094
Expected Sales Decrement without Process	(14,691)	(16,160)	(17,776)	(19,554)	(21,509)
Net Sales without the Process in Operation	$ 132,221	$ 145,443	$ 159,987	$ 175,986	$ 193,584
Gross Margin	34,377	37,815	41,597	45,756	50,332
Operating Expenses	(15,205)	(16,726)	(18,399)	(20,238)	(22,262)
Earnings before Interest and Taxes	19,172	21,089	23,198	25,518	28,070
Income Tax Expense	(6,902)	(7,592)	(8,351)	(9,186)	(10,105)
Operating Income	12,270	13,497	14,847	16,331	17,965
Depreciation Expense	1,322	1,454	1,600	1,760	1,936
Capital Expenditures	(1,322)	(1,454)	(1,600)	(1,760)	(1,936)
Contributory Asset Charge	(2,200)	(2,200)	(2,200)	(2,200)	(2,200)
Incremental Net Working Capital Investment	(876)	(926)	(1,018)	(1,120)	(1,232)
Net Cash Flow	9,194	10,371	11,629	13,012	14,533
Present Value Discount Factor [a]	0.9325	0.8109	0.7051	0.6131	0.5332
Discounted Net Cash Flow	8,573	8,410	8,199	7,978	7,749
Sum of Product Line Discounted Net Cash Flow (rounded)	40,900				

Footnote:
[a] Assumes a midyear discounting convention.

Exhibit 4
Flintstone Quarry Corporation
Limestone Product Proprietary Process
Technology-Related Intangible Asset
Income Approach
Differential Income Method
As of December 31, 2014

Sum of the Limestone Product Line Discounted Net Cash Flow:	Exhibit Reference	$ in (000s)
Scenario I: With the Process Trade Secret	2	$ 49,500
Scenario II: Without the Process Trade Secret	3	40,900
Proprietary Process Discounted Net Cash Flow Differential		8,600
Times: Tax Amortization Benefit Value Adjustment Factor (rounded) [a]		1.2
Indicated Fair Market Value of the Technology-Related Intangible Asset (rounded)		$ 10,100

Footnote:
[a] Tax Amortization Benefit Value Adjustment Factor =

$$TAB = \frac{1}{1 - \left(\left(\frac{income\ tax\ rate}{amortization\ period}\right) x\ present\ value\ annuity\ factor\right)}$$

As presented in Exhibit 3, the sum of the product line discounted cash flow without the process in operation is $40,900,000.

The difference between these two income projections indicates a discounted cash flow differential related to the process of $8,600,000.

As presented in Exhibit 4, the unadjusted discounted net cash flow differential is $8,600,000. However, this unadjusted cash flow differential does not consider the fact that this intangible asset would qualify as on Internal Revenue Code Section 197 intangible asset to the typical willing buyer of this intangible asset.

Since this valuation is intended to conclude a market value, the economic benefit related to Section 197 intangible asset tax amortization benefit (TAB) may be considered in the valuation.

An intangible asset that is amortizable for federal income tax purposes provides an income tax expense reduction (that is, a cash flow benefit) to the intangible asset buyer. That cash flow benefit is typically calculated as the present value of the expected reduction in future income tax expense due to the intangible asset amortization tax deductions.

The TAB value adjustment factor calculation follows:

$$TAB = \frac{1}{1 - \left(\left(\frac{income\ tax\ rate}{amortization\ period}\right) x\ present\ value\ annuity\ factor\right)}$$

The analyst applied the TAB value adjustment factor to the present value of the net cash flow differential associated with the intangible asset. The TAB factor was calculated based on:

1. the income tax amortization period for the intangible asset (15 years under Section 197),
2. the market-derived effective income tax rate of 36 percent, and
3. the present value discount rate of 15 percent.

Based on the TAB formula, the TAB value adjustment factor for this analysis is 1.2 (rounded). The discounted net cash flow differential of $8,600,000 times the income TAB value adjustment factor of 1.2 indicates the income approach value of the process.

As presented in Exhibit 4, the fair market value of the technology intangible asset based on the income approach, as of December 31, 2014, is $10,100,000.

Exhibit 5
Flintstone Quarry Corporation
Limestone Product Proprietary Process
Technology-Related Intangible Asset
Valuation Synthesis and Conclusion
As of December 31, 2014

Valuation Approach:	Valuation Method	Value Indication ($ in 000s)	Value Indication Emphasis	Value Conclusion ($ in 000s)
Cost Approach	Replacement Cost New Less Depreciation Method	9,700	50%	4,850
Income Approach	Income Differential Method	10,100	50%	5,050
	Fair Market Value of the Technology-Related Intangible Asset (rounded)			9,900
	Amount of Reasonable Compensation to FQC for the Intangible Asset Taking			9,900

Value Indications and Conclusion

The analyst decided to assign equal weight to the value indications provided by the two valuation approaches.

In synthesizing the results of the cost approach and the income approach, the analyst considered both (1) the quantitative and qualitative assessment of the data underlying each valuation approach and (2) the relevance of each valuation approach based on factors specific to the subject trade secret.

Based on the analyses presented in Exhibits 1 through 4, the fair market value of the FQC technology-related trade secret intangible asset, as of December 31, 2014, is $9.9 million (rounded).

Based on the quantity and quality of the information available for each valuation approach, the analyst applied a weight of 50 percent to each value indication to arrive at a final value conclusion for the trade secret intangible asset.

Accordingly, $9.9 million is the indicated amount of reasonable compensation to the FQC owners for the "taking" of its technology-related intangible asset.

Exhibit 5 presents the final valuation synthesis—and reasonable compensation conclusion—for this illustrative intangible asset valuation.

SUMMARY

Going-concern business entities may be the subject of eminent domain and expropriation actions. In such a case, the business owner/operator should receive reasonable compensation from the governmental or municipal authority with eminent domain powers.

When the entire going-concern business is the subject of the taking, the amount of reasonable compensation may include the value of the entity's tangible assets and the value of the entity's intangible assets. These intangible assets often include the entity's technology-related intangible assets.

When analyzing a technology-related intangible asset, the analyst should consider the purpose and objective of the assignment as well as the relevant factors specific to the technology.

This discussion summarized the typical attributes of a technology intangible asset and the specific factors for an analyst to consider when assessing the technology intangible asset value or reasonable compensation.

Finally, this discussion presented an example of a technology-related intangible asset valuation. The example illustrated a cost approach method and an income approach method used to estimate the fair market value of a technology intangible asset—and the amount of reasonable compensation related to the taking of that intangible asset.

Notes:

1. Treasury Regulation Section 1.482-4(b).
2. Ibid., Section 1.482-4(a).

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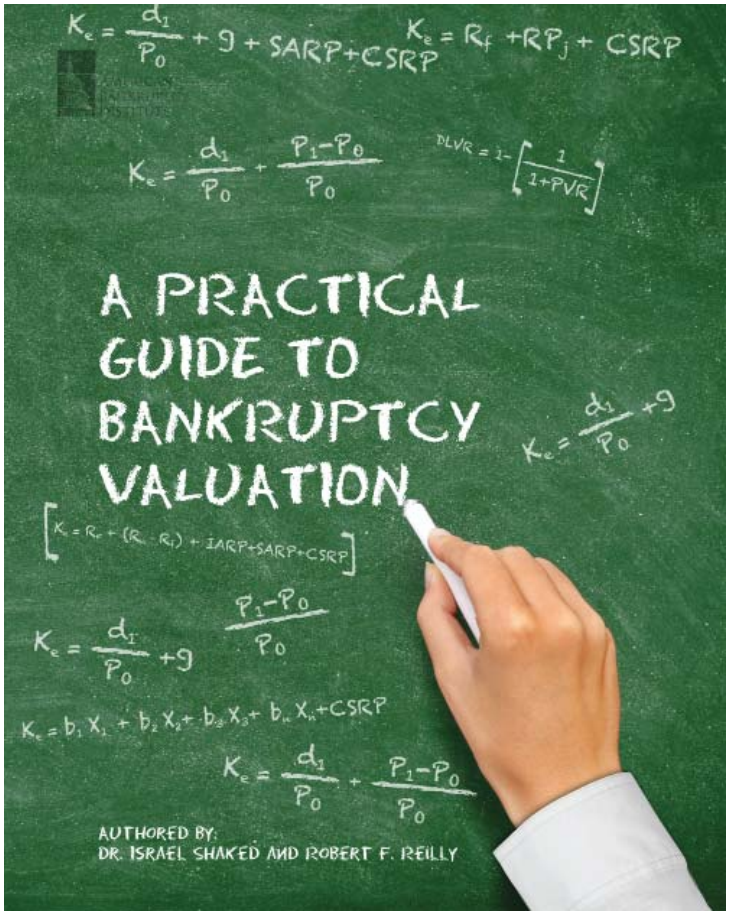

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A PRACTICAL GUIDE TO BANKRUPTCY VALUATION

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Thought Leadership

Issues Related to the Treatment of an NOL Carryforward in Income Approach Valuation Methods

Aaron M. Rotkowski and Robert F. Reilly, CPA

Property tax assessors often value centrally assessed taxpayers using income approach unit valuation methods. Such income approach valuation methods include the direct capitalization method and the yield capitalization method. For taxpayers that have accumulated a net operating loss (NOL) carryforward, some property tax assessors (1) estimate taxpayer normalized net operating income (NOI) based on a 0 percent income tax rate but (2) apply an after-tax (i.e., tax-affected direct capitalization rate in the income approach valuation analysis. This discussion considers if such a 0 percent income tax rate assumption is appropriate in the income approach valuation of a taxpayer unit for property tax valuation purposes. And, this discussion considers if and how the use of such a 0 percent income tax rate assumption may overstate both the value of the taxpayer unit and the value of the NOL tax attribute component of the taxpayer unit.

Introduction

For ad valorem property tax purposes, the total operating assets of centrally assessed industrial and commercial taxpayers is often valued using unit valuation methods. The taxpayer unit value conclusion from the application of unit valuation methods "represents the sum of all of the taxpayer corporation real estate personal property operating assets—both tangible and intangible."[1]

Centrally assessed taxpayers subject to unit valuation methods often include telecommunication companies, railroads, airlines, pipelines, electric power companies, cable TV companies, water and wastewater companies, and other similar utility-type companies. These types of taxpayers are often centrally assessed for property tax purposes. However, similar types of taxpayers may also be locally assessed using unit valuation approaches and methods. These taxpayer companies often own and operate both tangible assets and intangible assets.

Not all taxing jurisdictions tax all categories of taxpayer assets. Some jurisdictions tax real estate only. Some jurisdictions tax tangible personal property only. Many jurisdictions tax tangible assets only (i.e., real estate and tangible personal property)—but not intangible assets (e.g., intangible personal property).

If the centrally assessed taxpayer total value concluded from a unit valuation method includes any value attributed to assets that are not subject to property taxation in the subject jurisdiction, then those nontaxable assets should be separately valued and extracted from the total taxpayer unit value.

This discussion considers the valuation and extraction of a taxpayer NOL tax attribute—and similar income tax attributes—in an income approach valuation analysis performed for property tax purposes. More specifically, this discussion considers the appropriateness of applying a 0 percent income tax rate assumption in the income projection of any income approach valuation.

This discussion focuses on the tax rate assumption applied in a direct capitalization method analysis—that is, where the taxpayer NOI is divided by a direct capitalization rate. However, this discussion

also applies to the tax rate assumption applied in a yield capitalization method analysis—that is, where the taxpayer net cash flow (NCF) is present valued at a yield capitalization rate. This discussion refers to this particular income tax rate valuation variable as the "0 percent tax rate assumption."

For purposes of this discussion, the unit valuation income approach methods include both (1) the direct capitalization method and (2) the yield capitalization method. The valuation formula that is often used in the direct capitalization method is: (1) expected NOI divided by (2) direct capitalization rate equals (3) the taxpayer total unit value.

The valuation formula that is often used in the yield capitalization method is the sum of (1) the present value of the taxpayer expected NCF estimated over a discrete projection period plus (2) a residual value (often estimated using the NCF divided by direct capitalization rate formula) equals (3) the taxpayer total unit value.

The taxpayer NOI in the direct capitalization formula represents the amount of income projected for a single future period. This projected taxpayer NOI should be normalized—or stabilized—in order to represent a typical level of expected income on a forward-looking basis.[2]

This tax rate assumption issue is relevant because some taxing jurisdictions estimate taxpayer NOI assuming a 0 percent tax rate for taxpayers with certain income tax attributes. The taxing jurisdictions that use the 0 percent tax rate assumption often support this procedure by noting the existence of a taxpayer's NOL carryforward (or similar federal income tax attribute). Often, the subject taxpayer has accumulated the federal income tax NOL carryforward due to negative operating income earned during the economic downturn of the last several years.

The taxing jurisdictions that use the 0 percent tax rate assumption often follow one of the following two procedures to estimate the normalized NOI in the income approach valuation:

1. The taxing authority calculates the taxpayer normalized NOI based on some historical average NOI such as a three-year average or a five-year average; and that historical average NOI includes years where the taxpayer used its NOL (or NOL carryback) to eliminate federal income tax expense.
2. The taxing authority calculates the taxpayer NOI based on the near-term projected NOI (such as the next fiscal year projected NOI), which may include the assumed use of the taxpayer NOL carryforward.

Either of these procedures may result in the taxing authority estimating the taxpayer normalized NOI based on a 0 percent (or a similarly low) tax rate.

In an income approach unit valuation, the taxpayer unit value is estimated based on the expected future income that is associated with the total taxpayer unit. Since any income approach valuation methodology is forward-looking, the use of the 0 percent tax rate assumption to estimate normalized NOI indicates that the NOL carryforward (which is also forward looking), and not the NOL carryback (which is backward looking), is included in the taxpayer unit value.

Therefore, the current discussion relates to a taxpayer's NOL carryforward and not an NOL carryback. This is because taxing jurisdictions that use the 0 percent tax rate assumption do not value—or assess property tax on—the taxpayer's NOL carryback.

NOL carryforwards and NOL carrybacks are discussed in the next section.

First, this discussion defines an NOL carryforward and an NOL carryback. Second, this discussion considers if an NOL carryforward (or, for that matter, any income tax attribute) should be categorized as tangible property (and would, therefore, be subject to ad valorem taxation in many taxing jurisdictions). Third, this discussion analyzes the appropriateness of the 0 percent tax rate assumption in a unit valuation analysis intended to reach a market value conclusion. Fourth, this discussion explores the appropriateness of applying an after-tax capitalization rate (whether a direct capitalization rate or a yield capitalization rate) to a pretax income stream. Fifth, this discussion describes the federal income tax statutory limitations on the use of an NOL carryforward and considers the implications of incorporating a taxpayer's NOL carryforward in a direct capitalization unit valuation. Finally, this discussion summarizes the factors that actually affect the market value of an NOL carryforward as an individual taxpayer asset. As will be discussed, an NOL is only one component of a taxpayer's deferred federal income tax (DFIT) asset or liability account.

For illustrative purposes only, this discussion considers the NOL carryforward position of a hypothetical centrally assessed taxpayer ("LossCo"). For purposes of an illustrative analysis, LossCo is a hypothetical taxpayer company with a recent history of operating losses.

In our illustrative example, LossCo:

1. reported a $10 million NOL carryforward as of December 31, 2014, in its audited financial statements;

2. reported $4 million as the NOL component of its deferred federal income tax asset account;
3. reported a net deferred income tax asset (liability) account as a liability (or credit balance) of $1 million; and
4. projected that its taxable income will equal $1 million in 2015.

Even though the NOL carryforward tax attribute component of the deferred income tax asset was positive, the LossCo reported net DFIT asset (liability) account was negative (i.e., a credit balance) as of December 31, 2014.

Definition of an NOL

An NOL:

> occurs for tax purposes in a year when tax-deductible expenses exceed taxable revenues. An inequitable tax burden would result if companies were taxed during profitable periods, without receiving any tax relief during periods of net operating losses. Under certain circumstances, therefore, the federal tax laws permit taxpayers to use the losses of one year to offset the profits of other years.
>
> Companies accomplish this income-averaging provision through the carryback and carryforward of net operating losses. Under this provision, a company pays no income taxes for a year in which it incurs a net operating loss.[3]

Accordingly, if a taxpayer company reports a taxable loss in a given year, it will not pay income taxes in the year that it generated the taxable loss (i.e., the net operating loss). The taxpayer company may (1) carry that NOL back two years and receive a refund for the amount of income taxes paid in those prior years and, if any NOL remains after the two-year carryback period (2) carry any remaining unused net operating loss forward for up to 20 years to offset future taxable income.

The ability of the taxpayer to apply the NOL to prior years is known as the *NOL carryback*, and the ability of the taxpayer to use the NOL to offset future taxable income is known as the *NOL carryforward*.

Like most income tax attributes, an NOL carryforward is not recorded as a separate asset on a taxpayer's financial statements prepared in accordance with U.S. generally accepted accounting principles (GAAP). Rather, an NOL carryforward is a tax attribute that is included as one component in the overall calculation of the deferred income tax asset (or liability) account on a taxpayer's GAAP-based balance sheet.

In addition to an NOL carryforward, differences between the taxpayer company's pretax income (reported in accordance with GAAP) and the taxpayer company's taxable income (reported in accordance with the Internal Revenue Code) also give rise to a deferred income tax asset or a deferred income tax liability. The deferred income tax account is often recorded on the taxpayer's balance sheet as DFIT.

According to the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) topic 740-10-10-3, "Conceptually, a deferred tax liability or asset represents the increase or decrease in taxes payable or refundable in future years as a result of temporary differences and carryforwards at the end of the current year."

These temporary (or timing) differences will result in either taxable amounts (i.e., increases in taxable income) or deductible amounts (i.e., decreases in taxable income) in future years. Examples of temporary differences that are recognized in the typical company's DFIT account are included in Table 1.

We note that the taxing jurisdictions that use the 0 percent tax rate assumption do not attempt to estimate the value of, and assess property tax on, all of the taxpayer tax attributes that comprise the DFIT account. Rather, the use of the 0 percent tax assumption typically estimates only the value of, and assesses property tax on, the taxpayer NOL carryforward tax attribute.

An NOL Carryforward Income Tax Attribute Is Not Tangible Property

Based on individual state statutes, ad valorem property tax may be assessed on a taxpayer's real property (i.e., real estate), personal property, or both categories of property. And, depending on the taxing jurisdiction, the tax may be levied on the value of the taxpayer's (1) tangible property only (with intangible property being exempt from taxation), (2) tangible property and certain intangible property, or (3) all tangible property and all intangible property. In addition, a taxing jurisdiction may specifically designate a particular asset as being exempt from ad valorem property tax.

For purposes of this discussion, let's first assume that the subject taxpayer operates in a taxing

Table 1
Examples of Temporary (or Timing) Differences That Are Recognized in a Typical Taxpayer's DFIT Asset or Liability Account

As noted in this discussion, the DFIT account reported on a taxpayer company's GAAP balance sheet may include (1) the impact of an NOL carryforward and (2) the impact of various temporary income or expense recognition differences.

The following examples of temporary income or expense recognition differences are included in ASC topic 740-10-25-20:

a. Revenue or gains that are taxable after they are recognized in financial income. An asset (for example, a receivable from an installment sale) may be recognized for revenues or gains that will result in future taxable amounts when the asset is recovered.

b. Expenses or losses that are deductible after they are recognized in financial income. A liability (for example, a product warranty liability) may be recognized for expenses or losses that will result in future tax deductible amounts when the liability is settled.

c. Revenue or gains that are taxable before they are recognized in financial income. A liability (for example, subscriptions received in advance) may be recognized for an advance payment for goods or services to be provided in future years. For income tax purposes, the advance payment is included in taxable income upon the receipt of cash. Future sacrifices to provide goods or services (or future refunds to those who cancel their orders) will result in future tax deductible amounts when the liability is settled.

d. Expenses or losses that are deductible before they are recognized in financial income. The cost of an asset (for example, depreciable personal property) may have been deducted for income tax purposes faster than it was depreciated for financial reporting purposes. Amounts received upon future recovery of the amount of the asset for financial reporting will exceed the remaining tax basis of the asset, and the excess will be taxable when the asset is recovered.

e. A reduction in the tax basis of depreciable assets because of tax credits. Amounts received upon future recovery of the amount of the asset for financial reporting will exceed the remaining tax basis of the asset, and the excess will be taxable when the asset is recovered. For example, the tax law may provide taxpayers with the choice of either taking the full amount of depreciation deductions and a reduced tax credit (that is, investment tax credit and certain other tax credits) or taking the full tax credit and a reduced amount of depreciation deductions.

f. Investment tax credits accounted for by the deferral method. Under the deferral method as established in ASC topic 740-10-25-46, investment tax credits are viewed and accounted for as a reduction of the cost of the related asset (even though, for financial statement presentation, deferred investment tax credits may be reported as deferred income). Amounts received upon future recovery of the reduced cost of the asset for financial reporting will be less than the tax basis of the asset, and the difference will be tax deductible when the asset is recovered.

g. An increase in the tax basis of assets because of indexing whenever the local currency is the functional currency. The tax law for a particular tax jurisdiction may require adjustment of the tax basis of a depreciable (or other) asset for the effects of inflation. The inflation-adjusted tax basis of the asset would be used to compute future tax deductions for depreciation or to compute gain or loss on sale of the asset. Amounts received upon future recovery of the local currency historical cost of the asset will be less than the remaining tax basis of the asset, and the difference will be tax deductible when the asset is recovered.

h. Business combinations and combinations accounted for by not-for-profit (NFPs) entities. There may be differences between the tax basis and the recognized value of assets acquired and liabilities assumed in a business combination. There also may be differences between the tax bases and the recognized values of assets acquired and liabilities assumed in an acquisition by a not-for-profit entity or between the tax bases and the recognized values of the assets and liabilities carried over to the records of a new entity formed by a merger of not-for-profit entities. Those differences will result in taxable or deductible amounts when the reported amounts of the assets or liabilities are recovered or settled, respectively.

The textbook *Intermediate Accounting* provides the following additional examples of temporary differences that result in either deferred federal income tax asset or deferred federal income tax liability accounts:

Revenue or gains are taxable after they are recognized in financial income.

- Sales accounted for on the accrual basis for financial reporting purposes and on the installment (cash) basis for income tax purposes.
- Contracts accounted for under the percentage-of-completion method for financial reporting purposes and a portion of related grow profit deferred for income tax purposes.
- Investments accounted for under the equity method for financial reporting purposes and under the cost method for income tax purposes.

Expenses or losses are deductible after they are recognized in financial accounting income.

- Product warranty liabilities.
- Estimated liabilities related to discontinued operations or restructurings.
- Litigation accruals.

Revenue or gains are taxable before they are recognized in financial accounting income.

- Subscriptions received in advance.
- Advance rental receipts.
- Sales and leasebacks for financial reporting purposes (income deferral) but reported as sales for income tax purposes.

Expenses or losses are deductible after they are recognized in financial accounting income.

- Depreciable property, depletable resources, and intangible assets.
- Deductible pension funding exceeding expense.
- Prepaid expenses that are not deducted on the income tax return in the period paid.

Source: Kieso, Weygandt, and Warfield, *Intermediate Accounting*, 15th ed., 1127.

jurisdiction that taxes real estate and tangible personal property (but not intangible personal property). Since this hypothetical jurisdiction only assesses ad valorem property tax on real estate and tangible personal property, we will analyze a taxpayer's NOL tax attribute to determine if it is appropriately categorized as either of these two property types. Next, we define the relevant types of property in our hypothetical taxing jurisdiction.

The following property type definitions are presented from the *Dictionary of Real Estate Appraisal*:

- Real estate is "an identified parcel or tract of land, including improvements, if any."[4]
- Personal property includes "identifiable tangible objects that are considered by the general public as being 'personal'—for example, furnishings, artwork, antiques, gems and jewelry, collectibles, machinery and equipment; all tangible property that is not classified as real estate."[5]
- Tangible property is "property that can be perceived by the senses; includes land, fixed improvements, furnishings, merchandise, cash, and other items of working capital used in an enterprise."[6]

The *Dictionary of Real Estate Appraisal* does not specifically define tangible personal property. And, the *Dictionary of Real Estate Appraisal* definition of tangible property includes both real estate and personal property. Together, the above three definitions provide a helpful understanding of what is—and what is not—real estate and tangible personal property.

Let's also consider the common legal definitions of various categories of property. The following legal definitions are presented from *Black's Law Dictionary*:

- Real property is "[l]and and anything growing on, attached to, or erected on it, excluding anything that may be severed without injury to the land."[7]

- Personal property is "[a]ny movable or intangible thing that is subject to ownership and not classified as real property."[8]
- Tangible property is "[p]roperty that has physical form and characteristics."[9]

These property definitions are consistent with the property definitions included in the *Dictionary of Real Estate Appraisal*.

Based on the above definitions, an NOL carryforward (defined in the prior section of this discussion) is clearly not real estate. This is because an NOL carryforward is not land or a land improvement.

Likewise, an NOL carryforward is not tangible personal property. The *Dictionary of Real Estate Appraisal* definition of tangible property broadly includes cash and "other items of working capital." However, financial assets such as these are not typically regarded as tangible personal property. For example, the valuation textbook *Guide to Intangible Asset Valuation* (*GIAV*) considers cash and other financial assets to be components of intangible personal property.[10]

Even considering the broad definition of tangible property presented in the *Dictionary of Real Estate Appraisal*, an NOL carryforward would not be categorized as tangible property. This is because the above definition of tangible property is limited to property that can be perceived by the senses. There is no physical attribute associated with a taxpayer's NOL tax attribute. That is, an NOL carryforward cannot be seen or touched, unlike a dollar bill (for example), which *can* be seen and touched.

Based on the above considerations, a taxpayer's NOL carryforward tax attribute should not be classified as either tangible real property (i.e., real estate) or tangible personal property.

An understanding of how an NOL carryforward is categorized for financial accounting purposes may be useful to determine if the NOL tax attribute should be subject to property tax in our hypothetical taxing jurisdiction.

For example, if real estate and tangible personal property are the only categories of property that are subject to property taxation in a subject taxing jurisdiction, then the assessment should not include the value of the taxpayer NOL carryforward tax attributes (or any other individual income tax attributes).

Also, if all categories of property are subject to property taxation in a subject taxing jurisdiction, then it is noteworthy that an NOL carryforward as an individual tax attribute is not a property (or asset) of the taxpayer. Rather, an NOL carryforward is just one tax attribute that is a component of the calculation for the taxpayer's DFIT asset or liability account.

And, while the DFIT account may be classified as property, it may have a positive value or a negative value. That is, depending on the interplay of all of the taxpayer's income tax attributes, the taxpayer's DFIT account may be an asset (i.e., have a debit balance) or a liability (i.e., have a credit balance).

To our knowledge, an NOL carryforward balance is not taxable in a jurisdiction that taxes only real estate and tangible personal property. Also, to our knowledge, an individual income tax attribute (without consideration of the taxpayer's overall DFIT account balance) is not taxable property for property tax purposes in *any* taxing jurisdiction.

We note that the determination of which assets are subject to property taxation and which assets are not subject to property taxation is typically found in state statutes. This discussion is not intended to provide a legal interpretation of any particular state statutes.

Rather, this discussion of which assets are subject to property taxation and which assets are not subject to property taxation is presented from a valuation perspective and not from a legal perspective. Taxpayers should consult with legal counsel for legal instructions regarding which taxpayer assets are subject to property taxation in any particular taxing jurisdiction.

The 0 Percent Tax Rate Assumption Results in Investment Value—Not Market Value

Many states assess ad valorem tax based on the taxable asset's fair cash value, market value, true value, or some other similar market-derived standard of value. "All of these definitions have come to mean the price at which a property will sell from a willing seller to a willing buyer, both cognizant of all pertinent facts and neither being under duress."[11]

This value definition is similar to the typical fair market value definition that is used for many other valuation purposes, such as valuations prepared for federal income tax, federal gift or estate tax, bankruptcy, or commercial financing purposes.

The standard of value called investment value, on the other hand, can be defined as "The value of

a property interest to a particular investor or class of investors based on the investor's specific requirements. Investment value may be different from market value because it depends on a set of investment criteria that are not necessarily typical of the market."[12]

When a taxpayer unit valuation is performed using the market value standard of value (or some other similar standard of value), the subject valuation variables (e.g., income and expense, discount rate, and capitalization rate) should represent the requirements of the typical market participants. That is, the market-derived valuation variables should not be the actual financial variables associated either with the subject taxpayer or with the subject property.

It follows that if a particular jurisdiction seeks to estimate the market value of a subject taxpayer unit, then the NOI subject to capitalization should incorporate a market-derived income tax rate. The appropriate market-derived income tax rate is often measured as the typical market participant's marginal income tax rate (e.g., 35 to 40 percent)—or the industry-average income tax rate (again, e.g., 35 to 40 percent).

However, the income tax rate should not be the specific taxpayer's actual tax rate, particularly if that actual tax rate is an extreme tax rate such as 0 percent or 50 percent.

A market-derived income tax rate is the appropriate tax rate to use to estimate NOI in a unit valuation intended to estimate market value. This is because such a market-derived rate represents the income tax rate that market participants would use to estimate the NOI of the subject unit of operating assets.

According to the textbook *Appraisal of Real Estate*, "If an opinion of market value is sought, the income forecast should reflect the expectation of market participants. In an assignment to develop an opinion of investment value, the appraiser may base the income forecasts on the specific ownership or management requirements of the investor."[13]

In addition, and as further explained below, a market-derived income tax rate should be used to estimate the after-tax discount rate or capitalization rate. The selection of both a market-derived NOI estimate and capitalization rate (both calculated from a market-derived income tax rate) are necessary if the unit valuation objective is a market value estimate.

A second concern related to using either a temporary or company-specific income tax rate for property tax valuation purposes is that it does not treat similar taxpayers equally.

According to *Property Taxation*, "Taxes are said to be 'equal and uniform' when no person or class of persons in the taxing district, whether it be a state, county, city, town or village is taxed at a rate different from other persons in the same district upon the same value or the same thing, and where the objects of taxation are the same, by whomsoever owned or whatsoever they may be."[14]

"A market-derived income tax rate is the appropriate tax rate to use to estimate NOI in a unit valuation intended to estimate market value."

The process of applying different income tax rates for different taxpayers (to calculate either NOI or a capitalization rate) results in (1) unit values that are not uniformly or consistently estimated and (2) property tax assessments that are not performed in an equal and uniform manner among taxpayers. The desire for consistency and uniformity is why the generally accepted procedure used to estimate the taxpayer normalized NOI (and the capitalization rate) is to apply a consistent market-derived income tax rate for all similarly situated taxpayers in the jurisdiction.

The use of a 0 percent tax rate assumption (to calculate either the normalized NOI or the capitalization rate) results in an investment value for the subject taxpayer unit. That is, that taxpayer-specific income tax rate assumption results in the value of that taxpayer to that taxpayer.

The use of a taxpayer-specific income tax rate assumption does not result in the value of that taxpayer to a typical market participant. That is, the use of a taxpayer-specific (instead of a market-derived) income tax rate assumption does not result in the market value of the taxpayer unit.

Mismatching the Income Stream and the Capitalization Rate

When applying the direct capitalization methodology of normalized NOI divided by an after-tax direct capitalization rate, the direct capitalization rate and the NOI should be stated on the same income tax basis. That is, both valuation variables in this income approach valuation analysis should be stated on either a pretax basis or an after-tax basis.

Based on the 0 percent tax rate assumption, the income that is capitalized (i.e., the normalized NOI)

is effectively a pretax measure of income. However, the direct capitalization rate is calculated as an after-tax rate of return. Therefore, by using a 0 percent tax rate for the calculation of NOI but not for the calculation of the capitalization rate, the pretax NOI that is capitalized is mismatched to the selected after-tax capitalization rate.

It is not appropriate to capitalize a pretax income stream using an after-tax capitalization rate.[15] The resulting mathematical conclusion is not a meaningful value indication.

According to the textbook *Cost of Capital, Applications and Examples*, "A very common type of error in applying the income approach to valuation is to use a discount or capitalization rate that is not appropriate for the definition of economic income being discounted or capitalized. . . . If the entity being valued is subject to entity-level income taxes, then it is inappropriate to apply the cost of capital estimated by those methods to pretax return flows."[16]

This valuation error—mismatching the tax level of the NOI and the direct capitalization rate—overstates the indicated value of the taxpayer NOI and, consequently, overstates the taxpayer unit value estimated from the income approach. The amount of the value overstatement approximately equals the market-derived tax rate that is appropriate to estimate the taxpayer NOI. That is, if the appropriate taxpayer tax rate is 35 percent, then (1) the taxpayer NOI will be overstated by 35 percent and (2) the concluded income approach taxpayer unit value will also be overstated by 35 percent.

NOL Carryforward Risk Factors

An NOL carryforward (or any similar income tax attribute) may not be subject to property taxation in a taxing jurisdiction that assesses real estate and tangible personal property. However, if a taxing jurisdiction did assess property tax on a taxpayer's NOL carryforward (or similar tax attribute), that jurisdiction should consider all of the risk factors that influence the market value of the NOL.

This discussion only considers the value of a taxpayer's NOL carryforward. This discussion does not consider a taxing authority's statutory right to assess a property tax on a NOL carryforward.

Estimating the value of a taxpayer's NOL carryforward based on the above market value definition requires the analyst to consider the expected sale price of the NOL in a hypothetical transaction. Therefore, the first step in such an analysis is to consider the feasibility of a sale of a taxpayer NOL carryforward.

Although an NOL carryforward is not transferable by itself, an NOL may be a valuable component of a sale of a target company's stock. According to "Don't Ignore a Target's NOLs: The Price and Structure of Your Deal Can Depend on Them," "NOL carryforwards may be of significant value to certain buyers."[17] This journal article suggests, however, that "if the issue [of NOLs] does arise in price negotiations, buyers often argue that the market price for NOLs is 'pennies on the dollar.'"[18]

Three risk factors that may cause the buyer of the taxpayer company to discount the value of an NOL in price negotiations are: (1) regulatory restrictions such as the Internal Revenue Code Section 382 ("Section 382") limitation, (2) the amount and timing of the NOL carryforward economic benefit, and (3) the accuracy of the amount of the reported NOL carryforward.[19] Each of these factors increases the risk that the buyer of the taxpayer company will not be able to entirely benefit from the target company's NOL carryforward.

Factor 1—Regulatory Restrictions

There are several circumstances where a taxpayer company may not be able to fully use its NOL carryforward. The following list includes four restrictions on the use of the NOL carryforward that are described in the article, "Net Operating Losses: How Much Are These 'Assets' Really Worth?":[20]

- Section 269. This section disallows the corporate acquirer's use of an NOL carryforward when an acquisition's principal purpose is income tax avoidance.
- Separate Return Limitation Year (SRLY) Limitations. The SRLY limitations restrict which entity can use the company's NOL carryforward. Generally, the SRLY limitations prevent profitable corporate acquirers from using the NOL carryforward of a loss target company acquiree.
- Section 382. This section imposes an annual limitation amount on the corporate acquirer's use of the target NOL carryforward. The Section 382 NOL use limitation is triggered by ownership changes in the loss target corporation.
- Section 384. This section limits a corporate acquirer from offsetting its NOL against any taxable gain of a target company acquiree.

The above-listed four restrictions relate to the uncertainty surrounding the eventual economic benefit associated with the use of an NOL carryforward based on statutory provisions included in the

Internal Revenue Code and associated Treasury Regulations. As a result of these restrictions, a taxpayer's NOL carryforwards "represent the **potential** future tax savings as the result of past operations and, thus, **may** provide future cash flow benefits in the form of lower future tax costs. However, realization of deferred tax assets is subject to considerable **uncertainty** [emphases added]."[21]

Two of these statutory provisions are particularly relevant in a market value valuation analysis of a taxpayer's NOL carryforward for property tax purposes: (1) the SRLY rules and (2) the Section 382 limitation.

The SRLY Rules

The SRLY rules apply if a corporation with an NOL carryforward is acquired by, and becomes a member of, a consolidated group. In general, "the SRLY rules limit the consolidated group's use of separate return limitation year losses to the amount of income generated by the acquired corporation after it becomes a member of the group (the SRLY limitation)."[22]

This SRLY limitation controls how the corporate acquirer can use the target company NOL carryforward with respect to the acquirer's other subsidiaries. This SRLY restriction decreases the value that the corporate acquirer of the loss company would place on the target company NOL carryforward.

However, Treasury Regulation 1.502-21 states that the SRLY limitation does not apply if the consolidated group is subject to the Section 382 limitation (discussed below). Therefore, in an acquisition of 100 percent of a taxpayer company stock (which would trigger the Section 382 limitation), a corporate acquirer would be more concerned with the application of the Section 382 limitation than with the SRLY rules.

Section 382 Limitation

The Section 382 limitation reduces the value a corporate acquirer would place on a target company NOL carryforward. "In general, the Section 382 limitation limits the extent to which a target corporation that experiences an 'ownership change' may offset taxable income in any post-change taxable year by pre-ownership change NOLs."[23]

The Section 382 NOL use limitation applies after an "ownership change." There are two types of ownership change that can trigger the Section 382 NOL income offset limitation: (1) an ownership change involving one or more 5 percent loss company shareholders and (2) any tax-free reorganization of the loss company (with a few exceptions).

In either case, a 5 percent loss company shareholder must have increased his or her ownership percentage in the loss company by more than 50 percent (over his or her lowest pre-change ownership percentage) within three years of the ownership change event.

When an ownership change occurs, the Section 382 limitation equals (1) the fair market value of the old loss corporation multiplied by (2) the long-term federal tax exempt rate. This limitation on the use of an NOL carryforward applies to any post-change year.

Let's return to our illustrative taxpayer. Let's further assume that 100 percent of the LossCo common stock was sold on the January 1, 2015, assessment date. Let's also assume that (1) the LossCo common stock equity value equals $12 million on the date of the ownership change and (2) the long-term federal tax exempt rate equals 2.3 percent.[24]

Based on these assumptions and the Section 382 limitation, the maximum amount of acquirer company annual income that could be offset in any post-change year is approximately $280,000 ($12 million multiplied by 2.3 percent, rounded).

Since an NOL carryforward has a maximum 20-year carryforward period, no more than $5.6 million (calculated as $280,000 multiplied by 20 years) of the LossCo NOL carryforward would be available for use after an ownership change. This $5.6 million figure represents a $4.4 million permanent reduction compared to the total reported amount of the LossCo NOL carryforward.

However, the amount of the NOL carryforward that is not ultimately used in this example could exceed $4.4 million due to the time value of money. This is because the annual limitations could force the corporate acquirer to delay the use of the LossCo NOL carryforward. The following example illustrates this point.

Let's modify the above scenario and assume that (1) 100 percent of the LossCo common stock was sold for $22 million (instead of $12 million); (2) the Section 382 limitation equals $500,000 (based on the modified sales price); and (3) all other facts are unchanged.

As noted above, the LossCo projected 2015 taxable income is $1 million. Assuming an ownership change did not occur and the Section 382 limitation did not apply, LossCo could use its existing NOL carryforward to reduce all of the projected 2015 taxable income.[25]

If an ownership change took place and the Section 382 limitation did apply (a hypothetical unit sale is an assumption in the market value standard of value), then LossCo could only reduce $500,000 ($22 million multiplied by 2.3 percent, rounded) of

the projected taxable income instead of $1 million without the Section 382 limitation.

Based on these assumptions, (1) without being subject to a Section 382 limitation, LossCo could use $1 million of its NOL carryforward each year for 10 years or (2) if an ownership change occurred and triggered the Section 382 limitation, LossCo could use $500,000 of its NOL limitation each year for 20 years.

Given these two alternative income shelter scenarios, it is obvious that the $1 million/10-year income shelter use is more valuable than the $500,000/20-year income shelter use. The difference between these two income shelter scenarios is that the loss company is moving $500,000 of NOL use from year 1 to year 11, $500,000 of NOL use from year 2 to year 12, and so on until $500,000 of the NOL use is moved from year 10 to year 20.

The $1 million/10-year income shelter is more valuable because an investor/corporate acquirer would always prefer to receive a dollar in year 1 over a dollar received in year 11.

The risk that a loss company will benefit from its existing NOL carryforward is not limited to the existing Treasury Regulations. That is, the company also faces the risk related to future statutory, judicial, or administrative changes in the Internal Revenue Code or related Treasury Regulations. Such changes could alter how a current NOL carryforward balance may be used in the future.

Factor 2—Amount and Timing of Projected Economic Benefit of the NOL

"Perhaps the most significant factor impacting the value of NOL carryforwards is the probable amount and timing of future taxable income."[26] When analyzing this factor, the corporate acquirer will consider the target company (i.e., the loss company) projected taxable income. This amount of taxable income projection will inform the corporate acquirer as to if and when the NOL carryforward may be used.

This taxable income analysis performed by the corporate acquirer will also consider the target company projected taxable income subsequent to the acquisition transaction. This analysis may include consideration of buyer-specific post-acquisition synergies (which may not be relevant in a fair market value analysis) or other buyer-specific projections related to the target company.

For example, the corporate acquirer may consider if the target company will sell certain operating assets after the transaction, or if the target company is expected to be more profitable as a result of the transaction. These factors will affect the corporate acquirer's ability to realize a benefit from the target company NOL carryforward after a transaction.

Because of the time value of money, an NOL carryforward is more valuable the sooner that it can be used. If the target company is not expected to earn a meaningful amount of taxable income for several years after the transaction date, or if the amount of future income is highly uncertain, then the corporate acquirer may not place much value on its ability to benefit from the target company NOL carryforward.

The corporate acquirer will also consider if it can use the target company NOL carryforward to reduce the income of its other subsidiaries or lines of business. In certain situations, "tax law permits the NOLs of the target corporation . . . to be used to offset the future taxable income of not only the target corporation, but also the future taxable income of other members of its consolidated group of corporations (even if they were not consolidated at the time that the loss was originally incurred)."[27]

The SRLY rules discussed above limit how the acquirer corporation consolidated group subsidiaries can use the NOL carryforward of an acquired loss company.

Factor 3—Accuracy of the Reported NOL Balance

The third factor that a hypothetical corporate acquirer of a loss company would be concerned with is the amount and accuracy of the reported NOL carryforward balance. The amount of confidence that the corporate acquirer places in the accuracy of the reported NOL carryforward balance varies with the amount of (1) corporate acquirer due diligence and (2) loss company seller representations, both of which will necessarily include some risk of being inaccurate.

This risk of reported NOL carryforward balance accuracy is due to the fact that the corporate acquirer will have limited time and resources to conduct its due diligence. Also, the loss company seller will not be willing to absorb all of the risk related to the accuracy of the reported NOL balance. An NOL carryforward has up to a 20-year carryforward period, and the loss company seller will not want to be exposed to transaction-related liability for that long of a time period.

The corporate acquirer confidence in the accuracy of the reported NOL will be related to the value it places on the NOL carryforward. That is, the more confident the corporate acquirer is in the quality of the reported NOL balance, the more the acquirer will be willing to pay to acquire the loss company. This risk of uncertainty of the amount of the NOL carryforward balance is mitigated (but not

eliminated) when the target loss company provides audited financial statements.

This uncertainty risk is not eliminated with audited financial statements. This is because the loss company is still subject to an Internal Revenue Service audit. That is, upon audit, the Service may propose adjustments to the amount of the loss company NOL carryforward.

Perpetuity Assumption for the NOL Carryforward

All three previously discussed factors affect the market value of the taxpayer's NOL carryforward and all three factors should be considered in any valuation of the taxpayer NOL-related expected economic benefit.

None of those three factors are specific to the valuation method used to assess the taxpayer's total unit (which may include any value attributed to the taxpayer NOL carryforward). If the taxpayer unit value is estimated using an income approach valuation method that incorporates the 0 percent tax rate assumption, the analyst should also consider if and how the income tax rate selected to estimate the taxpayer NOI accounts for the NOL balance.

In the direct capitalization method, (1) the taxpayer NOI represents normalized income in the period following the valuation date and (2) the direct capitalization rate is typically measured as the discount rate minus the NOI expected long-term growth rate. This valuation method assumes that the taxpayer NOI will increase or decrease in perpetuity at a constant rate of change.[28]

If an income stream based on a 0 percent tax rate is capitalized, the analyst is assuming (either implicitly or explicitly) that the economic benefit of the taxpayer NOL carryforward will be available to the taxpayer in perpetuity.

The actual maximum carryforward period for an NOL is 20 years. Therefore, an NOL carryforward (and the associated economic benefit) has a *finite life*, and not an infinite life.

The direct capitalization valuation method is a perpetual life formula—it treats any economic benefit as a perpetuity economic benefit. And, the economic benefit of a taxpayer NOL carryforward does not have a perpetual life. Therefore, it is inappropriate to capitalize the economic benefit associated with the NOL carryforward when performing the direct capitalization procedure in an income approach unit valuation analysis.

It is a procedural error to incorporate a limited life economic benefit stream (of any nature) into a direct capitalization method analysis.

This error of including a limited life economic benefit in a perpetuity valuation model is demonstrated in *Cost of Capital: Application and Examples*:

> When using a constant growth (i.e., Gordon Growth) model to estimate terminal value at the end of the discrete forecast period, the formula calls for the normalized net cash flow in the terminal year to be grown at the expected long-term growth rate and divided by the capitalization rate. . . . Because the constant growth model assumes growth in perpetuity, any elements of the net cash flow that will not be growing over time or have a **finite life** need to be removed from the net cash flow and **valued separately**. Examples of such finite life items include . . . **[t]ax-loss carryforwards** [emphases added].[29]

The valuation guidance provided in the above-mentioned textbook is based on the fact that income or expense items that will not continue into perpetuity (such as an NOL carryforward economic benefit) should not be capitalized as a perpetuity in an income approach analysis. Rather, such a limited life economic benefit should be valued separately from the taxpayer's unlimited life economic benefits.

Furthermore, according to the textbook *Investment Valuation*, "It is good practice to assume that the tax rate used in perpetuity to compute the terminal value will be the marginal tax rate. . . . To the extent that tax planning or deferral caused this payment [of income taxes] to be very low (low effective tax rates) or very high (high effective tax rates), we run the risk of assuming that the firm can continue to do this in the future if we do not adjust the net income for changes in the tax rates in future years."[30]

The economic benefit that a taxpayer will enjoy from its NOL carryforward is temporary. It is simply inappropriate for an analyst to assume that any loss company will benefit from its NOL carryforward into perpetuity.

To the extent there is any limited life economic benefit, this economic benefit should be valued separately (based on a yield capitalization analysis) and then added to (or subtracted from) the direct capitalization analysis (that was calculated without the specific economic benefit).

Alternatively, the analyst could simply use the yield capitalization method to value the subject taxpayer. In that yield capitalization analysis, the

analyst could consider the specific finite life of each of the taxpayer economic benefits.

An income approach method that capitalizes the entire economic benefit related to the taxpayer NOL carryforward (i.e., a method that assumes a 0 percent tax rate) is not reasonable based on the limited life of any NOL carryforward. This valuation error overstates the taxpayer NOI. And, therefore, such a fundamental valuation error overstates both the concluded taxpayer value and the value of any taxpayer tax attributes (such as an NOL carryforward).

Valuation of a Taxpayer NOL Carryforward

In the valuation of loss companies (i.e., and not just of the loss company's real estate or tangible personal property), the value of an NOL carryforward tax attribute is often estimated using one of two valuation methods.

Using the first NOL tax attribute valuation method:

1. The subject loss company is valued without any consideration of the NOL carryforward
2. The value of the NOL tax attribute is separately estimated.
3. The loss company concluded value equals the sum of the step one value and the step two value.[31]

Using the second NOL valuation method, the loss company is valued using an income approach yield capitalization method. In this analysis, the estimated income tax rate changes over the income projection period until the NOL carryforward is no longer available.[32]

A detailed explanation of these two NOL economic benefit valuation methods is beyond the scope of this discussion. However, we are unaware of any valuation textbook, journal article, judicial decision, or conference presentation that supports the valuation of an NOL carryforward economic benefit using the 0 percent tax rate assumption.

The LossCo NOL Carryforward Economic Benefit

Let's consider the impact (if any) of the NOL carryforward economic benefit on the value of our illustrative loss company taxpayer, LossCo. As previously discussed, the market value of a loss company NOL carryforward is limited by at least three factors: (1) the expected timing and amount of future taxable income, (2) statutory NOL use restrictions, and (3) the risk related to the amount and accuracy of the reported NOL carryforward balance.

A hypothetical corporate acquirer of the LossCo common stock equity would consider each of these three NOL use limitations when determining the value attributable to the subject loss company NOL carryforward.

If the LossCo unit value is estimated (1) using an income approach direct capitalization method; (2) based on after-tax NOI calculated assuming a 0 percent tax rate (due to the LossCo NOL carryforward); and (3) using an after-tax direct capitalization rate, then the concluded value will represent the value of all of the LossCo operating assets, both tangible and intangible.

In addition, the unit value conclusion will include a perpetuity value attributed to the LossCo NOL carryforward. In fact, this concluded LossCo unit value will also overstate the value attributed to the LossCo NOL carryforward tax attribute. This is because the unit value increment does not consider the risk factors or the erroneous perpetuity assumption discussed herein.

Let's assume that (1) the LossCo after-tax NOI is estimated at $1 million, (2) the NOI is calculated assuming a 0 percent income tax rate (i.e., pretax NOL and after-tax NOL are the same in this example), and (3) the direct capitalization rate is estimated at 12 percent. Using these assumed valuation variables, the indicated LossCo unit value is $8.3 million, calculated as $1 million divided by 12 percent.

Let's further assume that the same hypothetical valuation variables as presented in the prior paragraph, except that the LossCo after-tax NOI is estimated using a 35 percent tax rate. Using these revised valuation variables, the indicated LossCo unit value is now $5.4 million, calculated as $1 million multiplied by (one minus the 35 percent tax rate) divided by 12 percent.

The indicated value difference between using the 0 percent tax rate assumption and the 35 percent tax rate assumption is $2.9 million (or a 35 percent value difference). This $2.9 million value component represents the implied LossCo value attributed to the NOL carryforward. Based on this value increment, over one-third of the LossCo total value is created by the LossCo NOL carryforward tax attribute.

That is, using the direct capitalization valuation method the amount of the value attributed to the NOL carryforward tax attribute will equal the difference between (1) the normalized tax rate without the NOL and (2) the normalized tax rate with the impact of the NOL.

The 0 percent tax rate assumption also ignores the other LossCo deferred income tax assets and liabilities that may affect the future LossCo income tax expense. As noted above, an NOL carryforward is just one component of the LossCo net deferred income tax asset (or liability) account.

When all other components of this balance sheet account are considered in the aggregate—including the LossCo NOL carryforward—LossCo actually reported a net deferred income tax liability of $1 million as of December 31, 2014. A deferred income tax liability "represents the increase in taxes payable in future years as a result of taxable temporary differences existing at the end of the current year."[33]

Based on the December 31, 2014, LossCo net deferred income tax liability position, the company may actually receive little or no economic benefit from its NOL carryforward. And, the future LossCo income tax expense may be greater than what would be calculated based on its marginal income tax rate. This risk factor, which is caused by the interaction of all of the LossCo tax attributes (in addition to NOL carryforward tax attribute), is not considered by using the 0 percent tax rate assumption.

Using a 0 percent tax rate assumption to estimate the LossCo unit value results in a substantial value increment being created by the LossCo NOL carryforward tax attribute. This value increment represents over one-third of the total value in the above direct capitalization method example.

This LossCo unit value indication is overstated because (1) it does not consider the tax attribute risk factors described above and (2) it incorrectly assumes that the NOL carryforward has a perpetual life.

Conclusions and Recommendations

Based on the analyses summarized above:

- A taxpayer's NOL carryforward tax attribute (and any other individual income tax attribute) should not be subject to property tax in a jurisdiction that only assesses real estate and tangible personal property.
- A taxpayer's NOL carryforward tax attribute is one of many individual income tax components that comprise the taxpayers deferred income tax asset or liability account; only this deferred income tax account in its entirety should be considered in the taxpayer unit valuation in a jurisdiction where the taxpayer NOL is subject to property tax.
- The use of the 0 percent tax rate assumption results in the investment value of the taxpayer unit, and not the market value of the taxpayer unit. Such a taxpayer-specific tax rate assumption is not a market-derived valuation variable.
- The use of the 0 percent tax rate assumption inappropriately capitalizes a pretax income stream by reference to an after-tax direct capitalization rate.
- The use of the 0 percent tax rate assumption inappropriately concludes that the taxpayer NOL carryforward has an independent market value that is equal to the expected future reduction in the taxpayer income tax expense.
- The use of the 0 percent tax rate assumption inappropriately assumes that the taxpayer company will never pay any income taxes at any time in the future.

". . . analysts (and taxing authorities) should exclude the NOL carryforward tax attribute from the taxpayer unit value conclusion."

The effect of these procedural and conceptual errors, taken individually or cumulatively, is to (1) overstate the taxpayer total unit value and (2) overstate the value of the taxpayer NOL carryforward tax attribute.

Based on these observations, analysts (and taxing authorities) should exclude the NOL carryforward tax attribute from the taxpayer unit value conclusion. This exclusion is particularly appropriate in a jurisdiction that only assesses real estate and tangible personal property.

In order to exclude the value of a taxpayer's NOL carryforward from an income approach unit valuation method, the analyst (and the taxing authority) should calculate the taxpayer's NOI based on a market-derived income tax rate rather than using the 0 percent tax rate assumption. Often, a market-derived income tax rate is the typical market participant's marginal tax rate or an industry average effective income tax rate. However, it is not a taxpayer-specific income tax rate (particularly if the taxpayer-specific income tax rate is aberrational—such as 0 percent).

Alternatively, if the taxpayer NOL carryforward is subject to property tax in the taxing jurisdiction and the taxpayer unit value is estimated using an income approach valuation method, then:

1. the taxpayer NOI should be calculated using a market-derived income tax rate (e.g., 35 percent) in order to estimate the market value of the unit excluding the value of the NOL carryforward and
2. the NOL carryforward should be separately valued based on a generally accepted NOL valuation method with consideration of the tax attribute risk factors and finite carryforward life discussed above.

Even in a jurisdiction that assesses all taxpayer assets, no one individual tax attribute should disproportionately influence the taxpayer total unit value. Rather, the analyst (and the taxing authority) should consider the entirety of the taxpayer's tax attributes. The interaction of all taxpayer tax attributes determines the balance in the taxpayer's deferred income tax asset (or liability) account. And, such a taxpayer deferred income tax asset (or liability) account balance is already presented on the taxpayer's GAAP-based balance sheet.

Notes:

1. Robert F. Reilly and Robert P. Schweihs, *Guide to Property Tax Valuation* (Chicago: Willamette Management Associates, 2008), 19.
2. See, for example, *Guide to Property Tax Valuation*, 23–24.
3. Donald E. Keiso, Jerry J. Weygandt, and Terry D. Warfield, *Intermediate Accounting*, 5th ed. (New Jersey: John Wiley & Sons, 2013), 1132.
4. *Dictionary of Real Estate Appraisal*, 5th ed. (Chicago: The Appraisal Institute, 2010), 159.
5. Ibid., 145–146.
6. Ibid., 193.
7. *Black's Law Dictionary*, 9th ed. (St. Paul, MN: West, 2009), 1337.
8. Ibid.
9. Ibid, 1338.
10. We note that many valuation textbooks consider cash and other financial assets to be a component of intangible personal property. See, for example, Robert F. Reilly and Robert P. Schweihs, *Guide to Intangible Asset Valuation*, revised ed. (New York: American Institute of Certified Public Accountants, 2014), 15.
11. *Property Taxation*, 3rd ed., (Atlanta: Institute for Professionals in Taxation, 2004), 113.
12. *Dictionary of Real Estate Appraisal*, 105.
13. *The Appraisal of Real Estate*, 14th ed. (Chicago: The Appraisal Institute, 2103), 464.
14. *Property Taxation*, 1–2.
15. Shannon P. Pratt and Roger J. Grabowski, *Cost of Capital: Applications and Examples*, 5th ed., (New Jersey: John Wiley & Sons, 2014), 1188.
16. Ibid., 1187–88.
17. Thomas W. Bottomlee, Jason S. Bazar, and Arthur C. Walker, "Don't Ignore a Target's NOLs; The Price and Structure of Your Deal Can Depend on Them," *The M&A Journal* 9, no. 7 (2009).
18. Ibid.
19. Ibid.
20. Anthony H. Catanach Jr. and Shelley C. Rhoads-Catanach, "Net Operating Losses: How Much Are These "Assets" Really Worth?" *Commercial Lending Review* 21, no. 4 (Jul/Aug 2006): 14.
21. Ibid.: 18.
22. Mary Fung, "Calculating the Section 382 Annual Limitation: A More Relevant Task for Consolidated Groups," http://www.us.kpmg.com/microsite/tax/ma_insider/2001-1/stories/article04.htm.
23. Ibid.
24. The long-term tax exempt rate as of May 2015, as stated in Rev. Rul. 2015-8.
25. This example makes the simplifying assumption that the NOL could be used as a deduction for the entire projected LossCo taxable income. The actual amount of the NOL that could be used as an income shelter could be different due to difference between book and tax income, income that cannot be offset by an NOL, or other factors.
26. Bottomlee, Bazar, and Walker, "Don't Ignore a Target's NOLs."
27. Ibid.
28. For a discussion of the direct capitalization method valuation formula, see Pratt and Grabowski, Cost of *Capital: Applications and Examples*, Part 1: Cost of Capital Basics.
29. Pratt and Grabowski, *Cost of Capital: Applications and Examples*, 1196.
30. Aswath Damodaran, *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset*, 3rd ed. (New Jersey: John Wiley & Sons, 2012), 252.
31. Tim Koller, Marc Goedhart, and David Wessels, *Valuation, Measuring and Managing the Value of Companies*, 4th ed. (New Jersey: John Wiley & Sons, 2005), 337–38.
32. Damodaran, *Investment Valuation*, 252–55.
33. Donald E. Kieso, Jerry J. Weygandt, and Terry D. Warfield, *Intermediate Accounting*, 15th ed. (New York: John Wiley & Sons, 2013), 1120.

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Adjusting for Underfunded Pension and Postretirement Liabilities

Christopher W. Peifer

Fewer and fewer companies have pension liabilities recorded on their balance sheets. This is because most employer companies continue to shift retirement programs to defined contribution plans such as 401(k) plans instead of traditional defined benefit pension plans. However, a significant number of companies still provide pension plans for their employees. Since many employer pension plans and other postretirement benefits plans are underfunded, to some degree, the funding status of a company's pension and postretirement benefits should be considered as part of the business valuation process.

Background

The number of companies with active pension plans has steadily decreased over the last several decades. In order to reduce or eliminate pension liabilities, companies will either freeze existing postretirement benefit plans or terminate such plans in favor of defined contribution plans.

The reason for this benefit plan change is to shift the primary responsibility for funding retirement from the employer corporation to the employees.

This change in employee postretirement benefit plans is documented in statistics provided by the Employee Benefit Research Institute (EBRI).

According to the EBRI, between 1979 and 2011, among all workers with access to employer-based retirement plans, the percentage of workers solely participating in defined benefit pension plans declined from 62 percent in 1979, to 7 percent in 2011.

Over the same period, the percentage of workers solely participating in defined contribution plans such as 401(k) plans increased from 16 percent in 1979, to 69 percent in 2011.

And, as a result of companies changing benefit plans, the percentage of workers participating in both defined benefit plans and defined contribution plans increased from 22 percent in 1979 to 24 percent in 2011.[1]

In a Towers Watson study of retirement benefits for Fortune 500 companies, only 34 Fortune 500 companies (7 percent of all Fortune 500 companies) offered a traditional defined benefit pension plan to newly hired salaried employees as of year-end 2013.

This is a substantial decrease from 251 Fortune 500 companies (just over 50 percent) in 1998, which offered traditional defined benefit pension plans.

Over the same period, the number of Fortune 500 companies offering only defined contribution plans to new hires increased from 195 (39 percent) in 1998 to 382 companies (over 76 percent) in 2013.

Between January and September 2014, three of the 34 Fortune 500 companies that had offered traditional defined benefit pension plans closed their plans to new hires and now offer only defined contribution plans.[2]

As the data from EBRI and Towers Watson reflect, defined benefit retirement plans are being supplanted by defined contribution plans.

Although the number of workers participating in corporate pension plans has continued to decrease over the last several decades, a significant number of public and private corporations still have defined benefit pension plans for employees.

These plans include active defined benefit pension plans, and frozen defined benefit pension plans for existing workers that are not available to newly hired employees.

"For many pension plans, the fair value of pension plan assets is less than the projected benefit obligation, resulting in an underfunded pension plan."

Many of these plans are underfunded, to some degree, resulting in the need to address underfunded pension liabilities in the valuation process. Many companies also have underfunded (or completely unfunded) postretirement health care obligations to former employees, which also should be considered in the business valuation process.

The Funded Status of a Pension Plan

For many pension plans, the fair value of pension plan assets is less than the projected benefit obligation, resulting in an underfunded pension plan.

According to New York University professor Aswath Damodaran, the underfunded amount is an unfunded liability of the company, and should be deducted from a company's market value of invested capital in the determination of the market value of a company's equity.[3]

The deduction of unfunded pension liabilities from a company's market value of invested capital should be made on an after-tax basis.[4]

In order to determine pension funding levels, deferred pension and other postretirement benefit amounts are typically estimated by management. These estimates depend on management assumptions that may vary widely between companies.

Employer corporations or pension plan administrators often make general assumptions which may include the following:

1. The length of time employees will work for the company
2. The wages employees will earn while working for the company
3. The life spans of employees in retirement
4. The investment gains and earnings on plan assets set aside to pay pension benefits

Based on these assumptions, corporations estimate the present value of expected future benefits payable to employees. Pension obligations, or projected benefit obligations, are offset by pension plan assets. Pension expense in any given year accounts for the amount of benefits earned by employees in excess of the earnings from pension plan assets.[5]

Many of the assumptions and calculations made to determine the present value of expected future benefits are done by actuaries working with company management. Based on the actuarial assumptions regarding life spans of pension plan participants and the growth of pension plan assets, a company's financial statements reflect the projected benefit obligation, and also the fair value of plan assets.

The difference between the fair value (current market value) of a pension plan's assets available to pay future benefits and the present value of its future obligations indicates the funded status of the pension plan.

Although actuarial assumptions should be reviewed, the valuation analyst typically relies on the subject company and its actuarial consultants to determine the funded status of a pension plan.

With regard to postretirement health care benefit obligations, a company's financial statements are required to reflect the fair value of assets, if any, set aside to cover such obligations. The financial statements also reflect the present value of expected future postretirement health care benefit obligations.

Postretirement health care obligations are often entirely unfunded, with no assets set aside to fund the anticipated health care liabilities of covered retirees, in which case the unfunded amount is equal to the entire present value of expected benefit obligations to cover postretirement health care benefits.

The unfunded amount of the liability should be deducted, net of tax, from a company's market value of invested capital as part of the valuation process. An illustrative example of a defined benefit pension plan funding status and a postretirement benefit liabilities status is discussed below.

Funded Status of Pension Obligations and Postretirement Benefit Liabilities: Dean Foods Company

The Dean Foods Company ("Dean Foods") provides an example of an underfunded pension liability and a completely unfunded postretirement health care benefit liability. Dean Foods retirement plan is a defined benefit pension plan.

In its SEC Form 10-K filing for the fiscal year ended December 31, 2014, the actuarial assumptions used for determining the 2014 net periodic benefit cost of the Dean Foods pension plan included the following:

1. A weighted average discount rate of 4.9 percent to discount future benefit costs to present value
2. Expected return on plan assets of 7 percent
3. A 4 percent rate of increase for employee compensation for the year[6]

Table 1
Dean Foods Company
Funded Status of Pension Plans and Other Postretirement Benefit Liabilities
As of December 31, 2014 (thousands)

	U.S. Pension Plans	Postretirement Benefit Liabilities
Fair Value of Plan Assets	$289,526	$0
Projected Benefit Obligations	$345,766	$39,126
(Under)funded Status	($56,240)	($39,126)

In its SEC Form 10-K filing for the fiscal year ended December 31, 2014, Dean Foods reported the funded status of its pension plans and other postretirement benefit plans. The postretirement benefits are primarily health care benefits provided for former employees.

As has happened with many large U.S. corporations, nearly 90 percent of the Dean Foods U.S. defined benefit pension plan obligations were frozen with regard to future participation or increases in projected benefit obligations.

On the effective date of the freeze, employees were transitioned to a retirement benefit based on the frozen pension benefit and a 401(k) defined contribution plan.[7]

Dean Foods reported its funded status on the 2014 SEC Form 10-K statement, as summarized in Table 1.[8]

As shown in Table 1, the Dean Foods U.S. pension plans were underfunded, and the amount of underfunding was $56.2 million at December 31, 2014. Its postretirement benefit liabilities were completely unfunded in the amount of $39.1 million.[9]

The combined level of underfunding of pension and postretirement benefit liabilities was approximately $95.3 million at December 31, 2014.

Dean Foods faces additional pension liabilities from various multiemployer pension plans in which it participates. As of year-end 2014, three of the four largest multiemployer plans in which Dean Foods participates were at least 80 percent funded, while one plan was less than 65 percent funded.

Dean Foods would face a withdrawal liability if it attempted to withdraw from any of these plans, but since it considered withdrawal to be very unlikely, Dean Foods did not indicate a potential withdrawal liability for any of the multiemployer pension plans.

Dean Foods makes the required annual contributions to the multiemployer pension plans, and did not indicate its withdrawal liabilities from these plans.[10]

Although Dean Foods clearly has some underfunding liability associated with these plans, the 2014 SEC Form 10-K statement did not provide sufficient information to determine a valuation adjustment related to the multiemployer plans.

Valuation Adjustments for Underfunded Pension and Postretirement Liabilities

Once the funded status of pension and postretirement liabilities is known, the valuation analyst can determine the pension liability for valuation purposes.

Employer contributions to defined benefit pension plans are tax deductible, and investment earnings accumulated in pension plans are tax exempt.[11]

Due to the tax benefits to employers of contributions to pension plans for the benefit of their employees, the actual amount subtracted from a company's market value of invested capital in determining its equity value for valuation purposes is the underfunded pension liability net of tax, reflecting the tax savings to the company on lower pretax income after deducting pension contributions expense.

The tax rate utilized in the calculation should be the company's marginal income tax rate. Contributions to postretirement health care plans are also tax deductible for employers, and the postretirement benefit liability subtracted from a company's market value of invested capital should also be net of tax.

Multiplication of the amount of underfunding for pension plan and postretirement benefit obligations by one minus the marginal income tax rate results in the liability amount to be subtracted from a company's market value of invested capital.

Based on the Dean Foods underfunded pension and postretirement liability of $95.3 million, and assuming a marginal income tax rate of 35 percent, this would result in a $61.9 million pension and postretirement benefit liability, net of tax [$95.3 million × (1 – 0.35)].

The historical income statement of the subject company may be adjusted by removing the reported pension expense from the income statement, and substituting in its place the service cost and amortization of prior service cost, which are reported in the notes to the financial statements of the subject company.

The service cost and amortization of prior service cost represent the current value of future payments to retirees. The service cost represents the present value of retirement promises in a particular year, and prior service cost represents additional retroactive benefits to retirees due to amendments to a company's pension plan.

Other items of pension expense (interest cost, expected return on plan assets, and amortization of losses) concern the performance of plan assets as opposed to business operations, and may be adjusted out of a company's expenses.[12]

Adjustments to Guideline Public Companies

In situations where a market approach is applied to a subject company with underfunded pension and postretirement liabilities, specifically the guideline publicly traded company method, appropriate adjustments for underfunded pension and postretirement liabilities of the guideline public companies should be made for earnings consistency across companies.

In this situation, the amount of underfunding, net of income tax at the marginal tax rate, should be treated like debt and added to the market value of equity, preferred stock, and interest-bearing debt in the development of each guideline company's market value of invested capital.

In this way, the invested capital multiples of the guideline companies are adjusted to account for underfunded pension liabilities in order to provide a consistent analysis.

Income statement adjustments, as described above, may also be made to the guideline public companies. These adjustments will affect a company's earnings-based pricing multiples, such as, earnings before interest, taxes, depreciation and amortization (EBITDA), EBIT, and other earnings measures.

What about Overfunded Pension Plans?

Thus far we have discussed underfunded pension plans and their associated liabilities. What about overfunded pension plans? In spite of all the talk about pension deficits, there are some overfunded plans out there.

If we are subtracting the underfunded amount of pension plans as a liability, net of tax, in determining the market value of equity of a company, should we add back the amount of overfunding of pension plans, net of tax, to determine the market value of equity of a company with excess pension plan assets?

Although not often a factor in valuation engagements, valuation analysts may encounter situations where the value of pension plan assets exceeds the company's projected benefit obligation. In such cases, the value of excess pension plan assets may be added, net of tax, to determine a company's market value of equity.

Although excess pension plan assets generally belong to a company's shareholders, and not its pension plan beneficiaries, the potential to reclaim excess pension plan assets poses various issues for corporations.

Most importantly, (1) U.S. companies are subject to a 50 percent tax on excess assets withdrawn from pension funds, so the amount of overfunding which could potentially be added to equity value could be immediately reduced by 50 percent, and (2) companies would likely consider the negative repercussions of withdrawing funds from its pension plan as a strong disincentive to employees.

Since the 50 percent tax rate is really a penalty rate for reclaiming pension assets, it would generally only be applied in determining the value of an excess pension asset when valuing a company in liquidation or a company in the process of terminating its pension plan.

For going concerns, the tax rate applied to excess pension assets should be the subject company's marginal tax rate, since excess pension assets allow companies to lower the level of pension contributions in future years. Therefore, the dollar amount of excess pension assets added to a company's market value of equity for going concern businesses would be calculated as: [excess pension assets × (1 – marginal tax rate)].[14]

Although adverse tax consequences and potential reputational damage for reclaiming overfunded pension plan assets are likely to dissuade companies from reclaiming such assets, excess pension plan

assets should be considered in the business valuation process.

Conclusion

Some may point out that a company's underfunded pension liability can, without further pension contributions by the company, be significantly reduced or even eliminated solely due to financial market gains over time and the resulting increase in value of the company's pension assets.

The next step in this line of thinking is to ignore pension liabilities in the business valuation process. This position is based on the assumption that a pension plan is quasi-perpetual and over time market gains may reduce or eliminate the amount of underfunding in a pension plan.

However, business valuation is a date-specific process. And, the magnitude of a company's underfunded (or overfunded) pension status can be directly considered as of the valuation date.

Additionally, a prolonged period of decline in the stock and bond markets could substantially increase the underfunded status of a pension plan. Due to the uncertainty regarding the future performance of stock and bond markets, it may be best not to assume as part of a valuation that the underfunded status of a company's pension obligations will somehow self-correct over time and can therefore be ignored.

Adjusting a company's market value of equity for underfunded pension and postretirement liabilities is typically done by determining the amount of underfunding, adjusting for tax benefits on pension contributions available to the corporation, and subtracting the underfunded pension liability, net of tax, in determining the market value of equity.

When applying a market approach to a subject company with underfunded pension and postretirement liabilities, guideline public company multiples should be adjusted to account for underfunded pension and postretirement liabilities.

Although pension plans are slowly fading away as companies continue to freeze pension plan obligations or terminate pension plans each year, the need to consider pension assets and liabilities as part of the business valuation process will continue for the foreseeable future.

"Although pension plans are slowly fading away . . . , the need to consider pension assets and liabilities as part of the business valuation process will continue for the foreseeable future."

Notes:

1. "Frequently Asked Questions About Benefits—Retirement Question 14: What Are the Trends in U.S. Retirement Plans?," Employee Benefit Research Institute (www.ebri.org/publications/benfaq/index.cfm?fa=retfaq14).
2. Brendan McFarland, "Retirement in Transition for the Fortune 500: 1998 to 2013," *Towers Watson Insider* (September 2014): 1.
3. Aswath Damodaran, *Investment Valuation—Tools and Techniques for Determining the Value of Any Asset* (New York: John Wiley & Sons, 2012), 441.
4. Tim Koller, Marc Goedhart, and David Wessels, *Valuation—Measuring and Managing the Value of Companies*, 5th ed. (New York: John Wiley & Sons, 2010), 571.
5. Robert W. Ingram, *Financial Accounting: Information for Decisions*, 2nd ed. (Cincinnati: South-Western College Publishing, 1996), 386, 448.
6. Dean Foods Company Form 10-K for the fiscal year ended December 31, 2014, filed with the Securities and Exchange Commission on February 15, 2015, F-40.
7. Ibid.
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9. Ibid., F-46.
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Valuation Treatment of Built-In Gains in a C Corporation

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A built-in capital gains adjustment, if appropriate, is a discount or adjustment in the value of an ownership interest in an entity, typically a C corporation, that has a built-in capital gains tax liability. Corporate income taxes that will be due on the appreciation in the value of assets owned by a business can affect the value of an ownership interest in that business. The valuation analyst can develop an appropriate adjustment to value to offset the impact of capital gains taxes paid on the appreciated assets at some future liquidation event. This discussion demonstrates that, under most circumstances, built-in capital gains taxes in a C corporation (even though payment of those taxes is not due until the asset is sold in the future) reduces the value of the C corporation. Illustrative examples are provided in this discussion. In addition, this discussion summarizes the factors that the analyst typically considers in determining the amount of any value adjustment related to the built-in capital gains in a C corporation.

History of the "BIG" Tax Liability Issue

Prior to the Tax Reform Act of 1986, taxpayers were allowed an election to treat the acquisition of the equity of a C corporation as if it was an acquisition of the assets of the C corporation. The asset-acquisition tax treatment allowed the C corporation buyer to depreciate the acquisition date fair market value (i.e., the "stepped-up basis") of the acquired assets.

In addition, the asset-acquisition tax treatment allowed the seller to recognize the gain on the sale of the C corporation assets at the amount of the purchase price for the transaction.

This federal income tax treatment was referred to as the *General Utilities*[1] doctrine, named after a landmark tax case. The so-called *General Utilities* doctrine allowed the selling shareholders to avoid the payment of double taxation on the "deemed" liquidation of the C corporation assets.

The *General Utilities* doctrine became obsolete as a result of the Tax Reform Act of 1986.

As a result of the discontinuation of the *General Utilities* doctrine, when all of the stock of a C corporation is acquired, normally[2] the income tax basis of the acquired assets is carried forward and no step-up in the basis of the acquired corporate assets is recognized by the stock buyer.

When an asset with unrecognized appreciation is held by a C corporation, then a built-in gains (BIG) tax obligation exists. The BIG tax is not paid by the C corporation until that asset is sold. A BIG tax obligation is common whether the subject C corporation[3] is either an operating company or an investment or holding company.

When valuing C corporations after 1986, the issue of how to treat the BIG tax obligation is frequently encountered by the valuation analyst. The issue presents itself when the valuation analyst conducts an assignment for various purposes, including estate tax purposes.

In federal estate tax matters, the BIG tax issue has been the subject of litigation. Recently, federal courts have increasingly allowed a valuation adjustment to reflect the BIG tax obligation when

determining the business value of a C corporation. However, not all courts have allowed a valuation adjustment equal to 100 percent of the estimated current built-in gains tax liability.

Judicial Precedent

In 1998, the Tax Court recognized the valuation implications of the liability represented by the built-in capital gains tax associated with appreciated capital assets held in a C corporation. The *Estate of Davis*[5] was the first judicial decision to recognize the BIG tax valuation impact following the repeal of the *General Utilities* doctrine.

In *Estate of Davis*, the gift tax value of two 25-share blocks of stock in a company with a total of 97 shares of common stock outstanding and organized as a C corporation was at issue.

The taxpayer's two valuation experts and the Internal Revenue Service ("Service") valuation expert (but not a Service employee) testified that a valuation adjustment was warranted—that is, a willing buyer and a willing seller would have taken the built-in tax liability into account in arriving at a purchase price for the stock.

The dispute in the *Estate of Davis* was over the appropriate amount of the valuation adjustment.

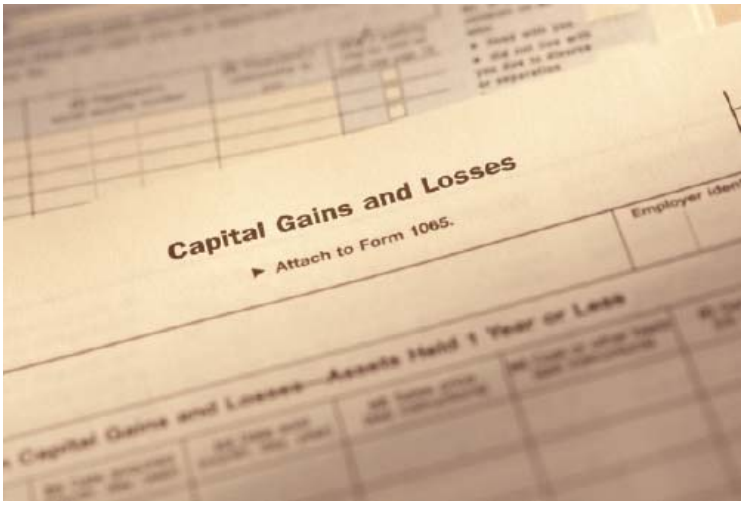
The Tax Court found that the full amount of built-in tax liability ($26.7 million) should not be taken as a valuation discount when there was no evidence that the subject C corporation planned to liquidate or sell any of its appreciated assets.

The Tax Court concluded that it was appropriate to include a BIG tax valuation discount (of $9 million) as a part of the discount for lack of marketability (or DLOM) to be applied in the gift tax valuation of the two blocks of stock.

Shortly after the Davis decision, in *Eisenberg v. Commissioner*,[6] the Second Circuit reversed a memorandum decision of the Tax Court. The Appeals Court found that the Tax Court erred in not considering the BIG tax liability as a valuation adjustment, and the Second Circuit remanded the case back to the Tax Court to decide on the amount of the liability-related valuation adjustment.

The Service has acquiesced to the *Eisenberg* decision "to the extent that it holds that there is no legal prohibition against such a discount."[7]

In 1999, the Tax Court again allowed a valuation discount related to the BIG tax liability. In the *Estate of Jameson*,[8] the decedent owned an interest in a closely held corporation that held timberland as its primary asset.



In its memorandum decision, the Tax Court stated the following:

> We may allow the application of a built-in capital gains discount if we believe that a hypothetical buyer would have taken into account the tax consequences of built-in capital gains when arriving at the amount he would be willing to pay for decedent's Johnco stock. Because Johnco's timber assets are the principal source of the built-in capital gains and, as discussed infra, are subject to special tax rules that make certain the recognition of the built-in capital gains over time, we think it is clear that a hypothetical buyer would take into account some measure of Johnco's built-in capital gains in valuing decedent's Johnco stock.[9]

As the timber was cut and sold, recognition of the built-in gain was certain to occur. According to the Tax Court decision, a hypothetical willing buyer of the subject equity "would take into account Johnco's built-in capital gains, even if his plans were to hold the assets and cut the timber on a sustainable yield basis."

The Tax Court, however, limited the amount of the valuation discount to "an amount reflecting the rate at which they [the BIG taxes] will be recognized, measured as the net present value of the built-in capital gains tax liability that will be incurred over time as timber is cut."

The Fifth Circuit Court of Appeals reversed the Tax Court's *Estate of Jameson*[10] decision. The Appeals Court noted that the Tax Court denied "a full discount for the accrued capital gains liability" based upon internally inconsistent long range timber production assumptions.[11]

". . . the Appeals Court decided that, as a matter of law, the BIG tax liability should be considered as a dollar-for-dollar reduction when calculating the asset-based value."

The Fifth Circuit Court remanded the case back to the Tax Court for a valuation analysis consistent with its opinion that the buyer would either lower the purchase price or sell the interest quickly and redeploy the proceeds elsewhere.

In 2002, the Fifth Circuit applied a dollar-for-dollar valuation discount related to a BIG tax liability. In the *Estate of Dunn*,[12] the Appeals Court decided that, as a matter of law, the BIG tax liability should be considered as a dollar-for-dollar reduction when calculating the asset-based value.[13]

The Appeals Court concluded that the asset-based valuation approach contemplates the consummation of the sale of the subject asset, thereby triggering the BIG tax. In the *Estate of Jelke*,[14] the Eleventh Circuit has adopted the Fifth Circuit's dollar-for-dollar valuation discount procedure.

In 2009, the Tax Court allowed a BIG-tax-related valuation discount based on the assumption that the assets would be sold over time. In the *Estate of Litchfield*,[15] the Tax Court adopted the taxpayer's methodology of:

1. projecting holding periods and estimated sales dates for the corporation's assets,
2. projecting asset appreciation to the estimated sales dates, and
3. discounting the expected future BIG tax back to the valuation date.

In 2010, the Tax Court determined that the BIG tax valuation discount was to be applied in a case where the principal assets of the C corporation were real estate and real property improvements.

In the *Estate of Jensen*,[16] the Tax Court made its own calculation of the size of the BIG tax discount by applying a present value methodology. The Tax Court assumed that the assets would be sold in the future and calculated the appreciated future value of the land and improvements.

The resulting estimated future tax payments were then discounted to a present value using a discount rate equal to the assumed appreciation rate. Ultimately, the Tax Court accepted the taxpayer's BIG discount because the Tax Court's analysis resulted in a BIG tax liability slightly greater than the taxpayer's.

In 2014, the Tax Court decided in *Estate of Richmond*[17] that a BIG tax valuation discount was appropriate for an interest in a corporation that held publicly traded securities. The Tax Court held that the built-in gains discount should be calculated as the present value of paying the tax over a 20- to 30-year turnover period.

Stock Purchase versus Direct Asset Investment

There can be economic disadvantages of acquiring the C corporation stock (with the built-in gain liability) relative to a direct investment in the underlying appreciated assets.

The following section presents an illustrative example of the BIG tax liability economic disadvantages in a stock purchase versus a direct asset investment.

An Illustrative Example of the Economic Disadvantage of BIG in a Stock Purchase versus a Direct Asset Investment[18]

ABC Company ("ABC"), a C corporation, owns one asset: a single marketable security. Based on the public trading price on the valuation date, that marketable security is worth $52 million. There are no ABC liabilities other than the obligation to pay the BIG tax whenever the marketable security is sold.

For simplicity, let's assume that:

1. the ABC tax basis in the underlying security is $0 and
2. the BIG tax rate for a C corporation is 40 percent.

Suzy, the ABC current owner (and the hypothetical willing seller), expects the underlying security to increase in value over time.

As an alternative to buying ABC, Ben (a hypothetical willing buyer) could acquire the identical underlying marketable security at that same market price—that is, $52 million.

If Ben paid $52 million for a 100 percent ownership interest in the ABC stock and then liquidated the corporation, the marketable proceeds after paying the BIG tax would be $31.2 million (i.e., $52 million times (1 – 40 percent)).

Of course, Ben can buy the ABC stock and defer the payment of the $20.8 million BIG tax liability indefinitely. If Ben acquires ABC, from that point forward, Ben will earn investment returns on the total asset value of ABC (i.e., $52 million).

Suzy tells Ben that this scenario has the same effect as an interest-free loan from the government of $20.8 million.

Suzy wants Ben to share with her the economic benefit of the deferral attribute of the C corporation that Ben will be enjoying. That is, Suzy expects Ben to pay some amount greater than $31.2 million for the stock of ABC.

Let's assume that Ben negotiates an even split of the amount of the deferred BIG tax with Suzy by paying Suzy $41.6 million (i.e., $31.2 million plus the BIG tax split of $10.4 million each). In that case, Ben can still defer the payment of the full $20.8 million BIG tax liability indefinitely while earning a return on the full $52 million marketable security value.

Ben pays Suzy $41.6 million cash for the ABC stock. Ben holds on to the ABC stock for many years while enjoying:

1. investment returns on the $52.0 million security value and
2. an interest-free loan on the $20.8 million BIG tax liability.

Who Made the Better Deal?

Should Ben have acquired the value of the underlying marketable security by buying the ABC stock or by making a direct investment in the underlying security?

Let's examine that investment decision by analyzing Ben's investment and Suzy's investment.

For purposes of this analysis, let's assume that Suzy:

1. takes all of the cash received from Ben (i.e., this example will not adjust for the personal income taxes that Suzy would have to pay on the capital gains above her outside basis in the ABC stock) and
2. enters into an interest-bearing loan.

If the after-tax gain on investment is greater for Ben than for Suzy, then acquiring the ABC stock after splitting the amount of the built-in gain with Suzy (and enjoying the "interest-free loan" on the unpaid BIG tax) is a better investment than buying the security directly.

In order to analyze which is the better deal, let's assume that Suzy:

1. takes the $41.6 million in cash that Ben paid,
2. borrows $10.4 million from a lender,
3. buys $52.0 million of that identical security, and
4. holds that security for the same period of time that Ben holds the ABC stock.

Let's assume that Suzy (1) can borrow at the same interest rate that the underlying security is expected to appreciate and (2) can accumulate and defer the principal and interest payments on the debt for the entire holding period.

Let's assume an expected holding period of 10 years and an annual rate of return on the underlying security of 10 percent. Also, let's assume:

1. an income tax rate of 40 percent for corporate income and for ordinary (personal) income and
2. a personal capital gains tax rate of 20 percent.

Finally, let's assume that the underlying security pays no dividends during the entire holding period.

These assumptions are listed in Exhibit 1.

Later, we'll relax these assumptions.

After buying the security for $52 million and holding it for 10 years, let's assume that Suzy sells her interest for $134.87 million. Let's assume that Suzy pays off the loan, recognizes a tax benefit for the interest expense on the loan, and pays all of the personal income taxes on the investment. Suzy's interest is a direct investment and, therefore, Suzy has no BIG tax to pay.

Ben also sells the security for $134.87 million after 10 years. Ben pays $53.95 million in BIG tax ($20.8 million of which existed on the date of acquisition and was deferred: the "tax-free loan"). And, then Ben liquidates the ABC corporation.

Let's assume that Ben pays his personal income tax on the gain from the proceeds related to the liquidation of ABC.

Exhibit 2 presents a comparison of the after-tax proceeds from Ben's investment and from Suzy's investment.

In this situation, Suzy clearly made the better deal. Making the direct investment generated a better after-tax benefit than buying the ABC stock and enjoying the interest-free loan. The conclusion of this analysis is that Ben paid too much for the stock of ABC.

Exhibit 1
Table of the Illustrative Example Assumptions

Income Tax Basis in the Underlying Security	$ 0
C Corporation Income Tax Rate on Built-In Capital Gains = Personal Ordinary Income Tax Rate	40%
Personal Capital Gains Tax Rate	20%
Expected Holding Period (years)	10
Expected Annual Rate of Return on Underlying Single Security (cost of equity)	10%
Future Value Factor for Equity [a]	2.59374
Expected Cost of Debt	10%
Future Value Factor for Debt [b]	2.59374

[a] $1 held for expected holding period of 10 years at expected rate of increase of 10% (i.e., the cost of equity).

[b] $1 held for expected holding period at the expected cost of debt the 10%. The interest is accumulated and unpaid.

Exhibit 2
Ben and Suzy Evenly Split the BIG Tax

	Ben	Suzy
Estimated Asset Value at the End of the Expected Holding Period [a]	$134.87	$134.87
Less: C Corporation Income Tax on the Built-In Gain ("inside") [b]	53.95	
Equals: Sale Proceeds Available to the Owner	80.92	134.87
Less: Total Investment Basis [c]	41.60	52.00
Equals: Taxable Gain on Investment (i.e., personal taxable gain)	39.32	82.87
Less: Personal Capital Gains Tax ("outside") [d]	7.86	16.57
Equals: Pre-Debt After-Tax Sales Proceeds Available to the Owner [e]	73.06	118.30
Less: Original Amount of the Debt [f]		10.40
Less: Accrued and Unpaid Interest Expense during Expected Holding Period		16.57
Plus: Income Tax Benefit from Interest Expense at Personal Ordinary Income Tax Rate [g]		6.63
Equals: After-Tax (and after-debt expense) Proceeds	$73.06	$97.95

[a] $52 million times 2.59374, the future value factor for equity (held for 10 years at 10 percent per year).
[b] For Ben, $134.87 million minus $0 basis times 40 percent, the BIG income tax rate on the "inside" basis.
[c] Purchase price for the underlying security.
[d] Gain on the investment times the BIG income tax rate on the "outside" basis.
[e] Sale proceeds to the owner less the personal capital gains tax.
[f] Original amount borrowed.
[g] Accrued and unpaid interest expense times 40 percent, the ordinary income tax rate.

How Much Should Ben Have Paid for the ABC Stock?

Ben decides that it would be fair to pay Suzy no more than the amount that would put them both in the same after-tax economic position.

Ben makes the same analysis based upon his decision to pay no more than $31.2 million for the ABC stock.

The amount of $31.2 million is the amount of proceeds that Ben would receive if he bought the ABC stock and immediately sold the security and liquidated the C corporation. In other words, Ben assigns a 100 percent, dollar-for-dollar price discount for the BIG tax liability.

There is no reason for Suzy to agree to a price less than that amount. This is because Suzy could sell the security and liquidate the C corporation herself.

As before, let's assume that Suzy takes the $31.2 million in cash that Ben paid, borrows $20.8 million from a lender under the same terms as previously described, buys $52.0 million of that identical security, and holds that security for 10 years.

Exhibit 3 presents a comparison of the Ben and Suzy after-tax proceeds after liquidating their investments after ten years.

The conclusion of this analysis is as follows: the difference narrowed, but making the direct investment generated a better after-tax benefit than buying the ABC stock and enjoying the interest-free loan.

Even at a 100 percent BIG tax discount, buying the ABC stock and holding it is a bad deal for Ben.

Comparing these two scenarios, Ben earned a $2.08 million greater after-tax return ($73.06 million – $70.98 million) by paying Suzy $10.4 million more for the ABC stock in the first scenario.

Obviously, Ben would have generated a greater return by investing that $10.4 million directly in the underlying security.

Typically, the willing buyer would not pay a price greater than the amount after subtracting a 100 percent valuation discount for the BIG tax. And, typically, the willing seller would never accept a price lower than the amount after subtracting a 100 percent valuation discount for the BIG tax.

Let's Relax the Illustrative Example Assumptions

How would this basic analysis conclusion change if a different analysis assumption is applied?

If the underlying security pays dividends during the holding period, the owner of the C corporation will be subject to double taxation on those dividends, if those dividends are distributed, compared to the direct investment scenario.

Therefore, if the underlying security generates cash flow during the holding period, making the direct investment would generate a better after-tax benefit than buying the ABC stock after (1) applying a 100 percent BIG tax discount and (2) enjoying the interest-free loan.

Let's return to the Exhibit 1 analysis assumptions. Let's apply other reasonable assumptions or even a combination of reasonable assumptions.

The analysis conclusion that making the direct investment generated a better after-tax benefit than buying the ABC stock after applying a 100 percent BIG tax discount and enjoying the interest-free loan does not change whenever there is a BIG in the security held by ABC.

Exhibit 3
Ben Subtracts All of the BIG Tax

	Ben	Suzy
Estimated Asset Value at the End of the Expected Holding Period	$134.87	$134.87
Less: C Corporation Income Tax on the Built-In Gain ("inside")	53.95	
Equals: Sales Proceeds Available to the Owner	80.92	134.87
Less: Total Investment Basis	31.20	52.00
Equals: Taxable Gain on Investment (i.e., personal taxable income)	49.72	82.87
Less: Personal Income Tax ("outside")	9.94	16.57
Equals: Pre-Debt After-Tax Sales Proceeds Available to the Owner	70.98	118.30
Less: Original Amount of Debt		20.80
Less: Accrued and Unpaid Interest Expense during Expected Holding Period		33.15
Plus: Income Tax Benefit from Interest Expense at Personal Tax Rate		13.26
Equals: After-Tax (and after-debt expense) Proceeds	$70.98	$77.61

In other words, the analysis conclusion doesn't change whenever:

1. the holding period is greater than zero,
2. the cost of equity is greater than the cost of debt, or
3. the corporate tax rate is greater than the personal capital gains tax rate.

When those factors are set equal to each other, making the direct investment generates an economic benefit that is equal to buying the ABC stock after applying a 100 percent BIG tax discount and enjoying the interest-free loan.

If the underlying asset of ABC was something other than a single marketable security, the analysis would be slightly more complicated. This is because, during the holding period, (1) most other types of assets produce taxable income (similar to dividends) and (2) the original amount invested in most other types of assets is eligible for depreciation or amortization tax deductions.

The taxable income generated during the holding period is taxed twice inside of a C corporation (when compared to a direct investment).

When those other assets are liquidated inside the C corporation, the amount of the depreciation deductions may be subject to depreciation recapture.

A Noncontrolling Ownership Interest in ABC

As demonstrated in this illustrative example, buying a controlling ownership interest in a C corporation after applying a 100 percent BIG tax discount is not an attractive investment compared to a direct investment in the underlying assets. This statement is true regardless of the period of time that the assets are held prior to liquidation.

The controlling ownership interest holder in a C corporation is in a position to exercise the prerogatives of control. One of those prerogatives is the right to decide if and when to liquidate any or all of the assets of the C corporation.

Based on the foregoing, on any valuation date before the date the underlying security is liquidated, the fair market value of a noncontrolling interest in ABC is less than a pro rata percentage of the net asset value of ABC. That is, the value of the underlying security is less the application of a 100 percent BIG tax discount.

From the perspective of a hypothetical willing seller of a noncontrolling ownership interest in ABC, the "tax-free loan" argument is not justifiable.

The tax attributes of a noncontrolling ownership interest in ABC are not particularly attractive to a hypothetical willing buyer. Any cash flow from ABC during the holding period will be subject to double taxation compared to the direct investment alternative.

Upon the sale of the ABC equity (at a point other than after liquidation of the underlying assets), the "outside" basis is taxed at the same personal capital gains rate to which the direct investment is subject.

However, the amount of the 100 percent BIG tax liability will have increased during the holding period at a higher rate than the direct investment rate. Therefore, the noncontrolling ownership interest in ABC becomes less valuable (than the direct investment alternative) as time goes on.

Besides deciding the length of the holding period prior to liquidation of the assets, there are many other prerogatives of control that the owner of the noncontrolling ownership interest in ABC may not enjoy.

For instance, the owner (i.e., from the perspective of either the hypothetical willing seller or the hypothetical willing buyer) will not be in a position to unilaterally:

1. influence the investment philosophy of ABC,
2. decide with whom ABC will conduct business, or
3. challenge the compensation paid to the management of ABC.

During the holding period of the investment in a noncontrolling ownership interest in ABC, the owner (i.e., from the perspective of either the hypothetical willing seller or the hypothetical willing buyer) will not be able to redeploy the funds used to buy the noncontrolling ownership interest.

In contrast to an investment in a noncontrolling ownership interest in ABC, an investor who made a direct investment in the single marketable security owns and controls the investment. That investor can freely change the investment decision as a result of changing market conditions.

In addition, that investor can sell all or a portion of the security at any time. That investor can change the investment philosophy.

In sum, the investor who makes a direct investment in a single marketable security has full control over a readily marketable security.

Factors to Consider

There is not a definitive answer for how to treat BIG in an analysis. It depends on the analyst's judgment based on the specific facts and circumstances.

However, there are certain factors that should be considered, some of which are as follows:

- Carrying value of the BIG tax liability—The BIG tax liability carrying value is equal to the difference between the tax basis and the market value of the assets (the "unrealized gain"), multiplied by the marginal corporate tax rate. See Exhibit 4 below for an illustrative example.
- Historical turnover of the portfolio(s)—The historical turnover of the portfolio or assets may be a good indicator or proxy of the portfolio turnover expectations going forward. All else held equal, the higher the turnover, the faster the BIG tax would be realized. Exhibit 5 presents an illustrative turnover analysis.
- Third-party portfolio manager—A third-party portfolio manager may indicate an actively managed portfolio. All else held equal, an actively managed portfolio typically will realize the BIG tax sooner.
- Noncontrolling interest or a controlling interest—An owner of a noncontrolling interest typically could not control when the capital gains are realized.
- Expected appreciation in underlying assets—It may be necessary to project the expected appreciation in the underlying assets. All else held equal, appreciation in the underlying assets would increase the projected BIG tax liability over time.
- Holding period expectations—An analyst should discuss holding period expectations related to the underlying assets with the subject company management and/or the portfolio manager(s).
- The subject company industry—The nature of the industry can impact the realization of the BIG tax liability. For example, in the timber industry there are certain circumstances where a timber company must recognize built-in capital gains each time it cuts and sells timber.
- The type of entity—Typically, adjustments to value for a BIG tax liability pertain to C corporations or recently converted S corporations. Unlike corporate tax law, partnership tax law provides for adjustments to the tax bases of partnership assets if the partnership has made an Internal Revenue Code Section 754 election (754 election).

In general, a 754 election allows adjustments to be made to a partner's share of the

Exhibit 4
Carrying Value of Built-In Capital Gains Tax

	6/30/2012 Tax Basis	6/30/2012 Market Value	Unrealized Gains		Carrying Value Built-In Capital Gains Tax
					40%
Portfolio 1					
Managed By: Columbia	22,289,191	25,652,769	3,363,577	40%	1,345,431
Portfolio 2					
Managed by: JP Morgan	17,983,256	24,069,086	6,085,830	40%	2,434,332
Portfolio 3					
Managed by: Goldman Sachs	7,865,577	9,393,987	1,528,410	40%	611,364
Portfolio 4					
Managed by: UBS	24,060,496	28,159,264	4,098,768	40%	1,639,507
Total Investments	72,198,521	87,275,106	15,076,585		**6,030,634**

tax basis of the partnership assets, referred to as the "inside basis," so that it is equal to the tax basis of his partnership interest, referred to as the "outside basis."

If no 754 election has been made, no adjustments can be made to the inside bases of partnership assets unless mandatory adjustments are required under Sections 743(a) and 734(b).[19]

BIG tax in partnerships could be avoided by a 754 election at the time of sale of partnership assets. If such a 754 election is in effect and the property is sold, then the basis of the partnership's assets (the inside basis) is raised to match the cost basis of the transferred.

For S corporations it is possible to minimize or eliminate the BIG tax when the stock of the S corporation is liquidated in the same tax year as the liquidation of the underlying asset. For these instances, the investor would not seek a discount from the net asset value for the BIG tax.

- The valuation approach/method—Typically, the BIG tax liability adjustment is made to the adjusted net asset value (ANAV) method indicated value as part of an asset-based valuation approach.

The ANAV valuation method subtracts the fair market value of the total liabilities from the fair market value of the total assets to arrive at a total equity value before consideration of the BIG tax. The total equity value derived from ANAV method is then reduced for the fair market value of the BIG tax liability, if any.

Treatment of BIG Tax in a Valuation

The review of the recent judicial precedent indicates that federal courts have consistently allowed a valuation adjustment for the built-in capital gains tax contingent liability.

The issue for judicial determination does not appear to be whether a BIG tax valuation adjustment should be allowed. Rather, the issue for judicial determination is how much of a valuation adjustment should be allowed with regard to the built-in gains tax.

There are three generally accepted methods that are used to estimate the BIG tax liability:

1. Carrying value model
2. Present value with appreciation model

Exhibit 5
Equity Turnover Analysis

Average Equity Security Balance	2011 Average Market Value	2010 Average Market Value
Portfolio 1	35,132,581	39,138,375
Portfolio 2	21,678,406	16,453,317
Portfolio 3	9,017,743	7,583,275
Portfolio 4	26,544,255	22,056,997

Proceeds	2011	2010
Portfolio 1	35,009,382	39,551,402
Portfolio 2	7,995,656	5,327,655
Portfolio 3	2,169,213	1,929,368
Portfolio 4	9,038,109	5,303,426

Portfolio Turnover Calculation [a]	2011	2010	Average
Portfolio 1	99.6%	101.1%	100.4%
Portfolio 2	36.9%	32.4%	34.6%
Portfolio 3	24.1%	25.4%	24.7%
Portfolio 4	34.0%	24.0%	29.0%

[a] Portfolio turnover equals proceeds divided by average investment balance.

3. Present value without appreciation model

The BIG tax liability is a reduction to the net asset value (i.e., the total equity) of the subject company.

Carrying Value Model

The carrying value model is a simple calculation equal to the following formula: (market value of assets – the tax basis of assets) × the corporate capital gains tax rate. See Exhibit 4 for an illustrative example of the carrying value built-in gains tax model.

Present Value with Appreciation Model

The present value with appreciation model is based on the present value of the projected annual realized gains over an expected holding period. The expected holding period relies on a normalized portfolio turnover. The projected annual realized gains is based the unrealized built-in capital gains as of the valuation date increased by an expected growth rate.

The expected growth rate is based on the expected annual increase in the built-in capital gains as the assets appreciate over time. See Exhibit 6 for an illustrative example.

The present value with appreciation model results in the same indicated value as the carrying value model because the expected appreciation in the BIG offsets the present value discount rate. This is the case when the appreciation rate is equal to the present value discount rate. In instances where the appreciation rate is lower than the discount rate, the indicated value will be lower than the carrying value.

Present Value without Appreciation Model

The present value without appreciation model is based on the present value of the projected annual realized gains over an expected holding period. The expected holding period relies on a normalized portfolio turnover.

The projected annual realized gains are based on the unrealized built-in capital gains as of the valuation date without any increases by an expected growth rate.

Effectively, this model assumes that the assets are not expected to appreciate. And, therefore, the built-in capital gains will not increase over the holding period (i.e., an expected growth rate of 0 percent). See Exhibit 7 for an illustrative example.

The present value without appreciation model results in a lower value (approximately 9 percent lower) than the other two models. This model should only be used if the underlying assets are not expected to appreciate over time.

"The most appropriate model to use in estimating the BIG tax liability may be the present value with appreciation. . . ."

Given that most investments and real estate are expected to appreciate over time, this model may result in a fundamentally flawed result that erroneously understates the fair market value of the corporate BIG tax liability.

Summary and Conclusion

The issue of how to treat the BIG tax obligation is frequently encountered by the valuation analyst. This issue presents itself when the valuation analyst conducts an assignment for various purposes, including estate tax purposes.

In federal estate tax matters, the BIG tax issue has been the subject of litigation. Recently, federal courts have increasingly allowed a valuation adjustment to reflect the BIG tax obligation when determining the business value of a C corporation. However, not all courts have allowed a valuation adjustment equal to 100 percent of the estimated current built-in gains tax liability.

There are many factors a valuation analyst may consider in an analysis of a BIG tax liability, including the following:

1. The carrying value
2. Historical turnover
3. Third-party manager
4. Controlling or noncontrolling
5. Expected appreciation
6. holding period
7. The subject industry
8. The type of entity
9. The valuation approach/method

The most appropriate model to use in estimating the BIG tax liability may be the present value with

Exhibit 6
Present Value of Built-In Capital Gains Tax Liability—With Asset Appreciation

	6/30/2012 Built-in Capital Gains	Normalized Portfolio Turnover [a]	Years to Realize Gains (Rounded)	Annual Realized Gains
Portfolio 1	3,363,577	100%	1	3,363,577
Portfolio 2	6,085,830	35%	3	2,028,610
Portfolio 3	1,528,410	25%	4	382,102
Portfolio 4	4,098,768	30%	3	1,366,256
Total Built-In Capital Gains	15,076,585			

Multiplied by Estimated Corporate Tax Rate

	Year	Annual Realized Gains With Growth of 5.5% [b]	Present Value Factors @5.5% [b]	Present Values
Portfolio 1	1	3,548,574	**0.9479**	3,363,577
		3,548,574		3,363,577
Portfolio 2	1	2,140,183	**0.9479**	2,028,610
	2	2,257,894	**0.8985**	2,028,610
	3	2,382,078	**0.8516**	2,028,610
		6,780,155		6,085,830
Portfolio 3	1	403,118	**0.9479**	382,102
	2	425,290	**0.8985**	382,102
	3	448,681	**0.8516**	382,102
	4	473,358	**0.8072**	382,102
		1,750,446		1,528,410
Portfolio 4	1	1,441,400	0.9479	1,366,256
	2	1,520,677	0.8985	1,366,256
	3	1,604,314	0.8516	1,366,256
		4,566,392		4,098,768
Present Value of Total Built-In Capital Gains				15,076,585
Multiplied by Estimated Corporate Tax Rate				40%
Present Value of Built-In Capital Gains Tax Liability (growth in unrealized gains)				**6,030,634**

[a] Based on the equity turnover analysis summarized on Exhibit 5.
[b] Based on the geometric mean of the capital appreciation of large company stocks from 1926 to 2011.
Source: Ibbotson SBBI 2012.

Exhibit 7
Present Value of Built-In Capital Gains Tax Liability—Without Asset Appreciation

	6/30/2012 Built-In Capital Gains [a]	Normalized Portfolio Turnover [b]	Years to Realize Gains (Rounded)	Annual Realized Gains	Present Value of Gains @ 5.5% [c]
Portfolio 1	3,363,577	100%	1	3,363,577	3,188,225
Portfolio 2	6,085,830	35%	3	2,028,610	5,473,054
Portfolio 3	1,528,410	25%	4	382,102	1,339,326
Portfolio 4	4,098,768	30%	3	1,366,256	3,686,068
Total Built-In Capital Gains	15,076,585				13,686,674
Multiplied by Estimated Corporate Tax Rate					40%
Present Value of Built-In Capital Gains Tax Liability (no growth in unrealized gain)					**5,474,670**

[a] See Exhibit 4

[b] Based on the equity turnover analysis summarized on Exhibit 5

[c] Based on the geometric mean of the capital appreciation of large company stocks from 1926 to 2011. Source: Ibbotson SBBI 2012.

appreciation, which can be the same as the carrying value (as illustrated in this discussion). The failure to consider appreciation in a present value model could be a fundamental flaw.

Notes:

1. General Utilities & Operating Co. v. Helvering, 296 U.S. 200 (1935).
2. Under certain circumstances, it makes economic sense for the buyer and seller to agree to a Section 338(h)(10) election, which allows for the basis of the acquired assets to be stepped up. For example, it makes sense if the C corporation has sufficient net operating losses to shield the tax on the gain of the sale of the assets (if those NOLs would not be available in the future to the buyer).
3. Other legal entities treat the BIG tax liability differently than C corporations. For example, when a noncontrolling (i.e., LP) interest in a partnership is acquired, the GP will often allow for a Section 754 election to be made. This allows the partnership to account for the acquisition of that interest at its purchase price, thus allowing that partner to avoid the double taxation up to the amount of the purchase price when assets are eventually sold.
4. Updated from Robert P. Schweihs, "Valuation Adjustment for Built-In Capital Gains in a C Corporation," Willamette Management Associates *Insights* (Summer 2012): 25–27.
5. Estate of Davis v. Comm'r, 110 T.C. 530 (1998).
6. Eisenberg v. Comm'r, 155 F.3d 50 (2d Cir. 1998).
7. AOD 1999 001.
8. Estate of Jameson v. Comm'r, 77 T.C.M. (CCH) 1383 (1999).
9. Id. at 1396.
10. Estate of Jameson v. Comm'r, 267 F.3d 366 (5th Cir. 2001).
11. Earning a 14 percent gross annual rate of return while requiring a 20 percent rate of return.
12. Estate of Dunn v. Comm'r, 301 F.3d 339 (5th Cir. 2002).
13. The court did not apply the same reduction when determining value under the income-based approach.
14. Estate of Jelke v. Comm'r, 507 F.3d 1317 (11th Cir. 2007).
15. Estate of Litchfield v. Comm'r, T.C. Memo. 2009-21 (January 29, 2009).
16. Estate of Jensen v. Comm'r, T.C. Memo 2010-182 (August 10, 2010).
17. Estate of Helen P. Richmond, Amanda Zerbey v. Commissioner, T.C. Memo 2014-26 (February 11, 2014)
18. Schweihs, "Valuation Adjustment for Built-in Capital Gains in a C Corporation": 27–31.
19. http://www.cpa2biz.com/Content/media/PRODUCER_CONTENT/Newsletters/Articles_2011/CPA/Jun/PartnershipBasis.jsp

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Estate of Giustina v. Commissioner

Christopher M. Silvetti

In matters argued before the U.S. Tax Court, valuation professionals are frequently asked to provide opinions related to the value of closely held businesses and of fractional ownership interests in closely held businesses. This discussion relates to a recent appeal of a U.S. Tax Court decision involving such valuation issues. The case in question is Natale B. Giustina v. Commissioner. *In this case, the Tax Court's selection of the method for valuing a fractional ownership interest in a closely held business was appealed to the United States Court of Appeals for the Ninth Circuit. The Appeals Court reversed the decision and remanded it back to the Tax Court for further consideration.*

Introduction

The Giustina family was involved in timberland harvesting and growing business operations dating back to the early 1900s, when family ancestors emigrated from Italy to the United States.

At inception, the family business was operated as a construction company. The construction company was created to aid in the rebuilding effort after the 1906 San Francisco earthquake. In 1910, the company operations moved from San Francisco, California, to Portland, Oregon.

In 1917, the company purchased a lumber mill in Molalla, Oregon. In the 1920s, the company moved to Lane County, Oregon, where it operated an additional lumber mill near Dexter, Oregon. In an effort to expand its land base ownership, over the following years, the company acquired timberland and mills in the Eugene, Oregon, vicinity.

These timberland acquisitions built the foundation for future company operations. The Giustina family had a longstanding history of acquiring and harvesting large tracts of land in the Eugene, Oregon, area.

On January 1, 1990, the Giustina Land and Timber Company Limited Partnership ("the Partnership") was formed. The partnership agreement provided the general partners with complete control over the Partnership, including the rights to sell the Partnership's land and harvested products.

The partnership agreement stipulated that a general partner could only be approved or removed by limited partners owning at least two-thirds of the limited partnership.

The stated purpose of the Partnership, as provided by the partnership agreement, was to operate a sustained yield timber harvesting company, with the goal of passing Partnership ownership to future family generations. The partnership agreement also stated that the Partnership would continue doing business until December 31, 2040.

Case Background

Natale B. Giustina passed away on August 13, 2005, with a 41.128 percent limited partnership interest, ("Subject Interest"), in the Partnership.

At that time, the Partnership employed 15 full-time employees and was primarily engaged in the growing, harvesting, and selling of forestry products. The Partnership's primary holdings consisted of 47,939 acres of timberland in the Eugene, Oregon, area.

The United States Tax Court ("Tax Court"), as cited in the *Estate of Natale B. Giustina v. Commissioner*, determined the value of the Subject Interest. In order to make its determination, the Tax Court considered the following evidence as provided by the estate's expert and the Internal Revenue Service (the "Service") expert.

The Estate Expert's Position

The estate expert and the Service expert agreed that the total value of the timberland was worth $142,974,438 on a marketable, controlling ownership interest basis. This value included a 40 percent discount that was intended to address the time needed to sell the land.

The estate expert used three generally accepted valuation approaches and presented four generally accepted valuation methods to value the Partnership.

Based on an asset-based approach, and using an asset accumulation method, the estate expert concluded a value of $51,100,000 for the Partnership on a marketable, noncontrolling ownership interest basis. The estate expert selected a 10 percent weighting to apply to the asset-based approach indication to arrive at the fair market value conclusion for the Partnership on a marketable, noncontrolling value.

The estate expert presented two income approach methods:

1. The direct capitalization method
2. The capitalization of distributions method

The application of the direct capitalization method resulted in a marketable, noncontrolling value of $33,800,000 for the Partnership. The estate expert selected a 30 percent weighting to apply to the direct capitalization method indication in order to arrive at the fair market value conclusion for the Partnership on a marketable, noncontrolling value basis.

In Tax Court, the estate expert testified, "The optimal strategy to maximize the value of the Partnership would be to sell the timberland and get $143 million today, whereas continuing operations would only generate $52,100,000," using the capitalization of distributions method, the third generally accepted valuation method used in the estate expert's analysis.

The estate expert selected a 30 percent weighting for the capitalization of distributions method indication in order to arrive at the fair market value conclusion for the Partnership on a marketable, noncontrolling value basis.

For the fourth and final method, the estate expert presented a valuation using the guideline publicly traded company method to arrive at $59,100,000 on a marketable, noncontrolling basis. The estate expert selected a 30 percent weighting for the guideline publicly traded company method indication in order to arrive at the fair market value conclusion for the Partnership on a marketable, noncontrolling value basis.

Based on the selected weightings, the estate's expert concluded that the total value of the

Partnership was $48,610,000, on a marketable, noncontrolling value basis.

In order to arrive at a nonmarketable, noncontrolling value, the estate expert selected a 35 percent discount for lack of marketability. Therefore, the concluded value of the 41.128 percent interest in the Partnership was $12,995,000.

The Service Expert's Position

The Service expert used three generally accepted valuation approaches and presented three generally accepted valuation methods to value the Partnership.

Based on an income approach, discounted cash flow method, the Service expert concluded that the Partnership was worth $65,760,000 on a marketable, controlling basis. The Service expert selected a 20 percent weighting for the discounted cash flow method.

Based on a market approach, guideline publicly traded company method, the Service expert concluded that the Partnership was worth $99,550,000 on a marketable, controlling basis. The Service expert selected a 20 percent weighting for the guideline publicly traded company method.

Based on an asset-based approach, using the net asset value method, the Service expert concluded that the Partnership was worth $150,680,000 on a

marketable, controlling basis. The Service expert selected a 60 percent weighting for the net asset value method.

Based on the selected weightings, the Service's expert concluded that the total value of the Partnership was $123,470,000 on a marketable, controlling value basis.

The Service expert concluded that the total value of the Partnership after discounts (34 percent combined discount for lack of marketability and lack of control) was $81,490,200.

The Service expert concluded that the value of a 41.128 percent partnership interest in the Partnership was $33,515,000.

The Tax Court Decision

Ultimately, the Tax Court used two generally accepted valuation approaches and presented two generally accepted methods to value the Partnership.

Based on the income approach and the discounted cash flow method, the Tax Court valued the Partnership at $51,702,857 on a marketable, noncontrolling basis. In order to conclude on this value indication, the Tax Court developed its own present value discount rate including the selection of a partnership-specific risk premium.

The Tax Court then selected a 75 percent weighting to apply to the discounted cash flow method indication in order to arrive at the fair market value conclusion for the Partnership on a marketable, noncontrolling value basis.

Based on an asset-based approach and the net asset value method, the Tax Court valued the Partnership at $150,680,000. In this case, the Tax Court essentially accepted the Service expert's asset-based approach conclusion.

The Tax Court then selected a 25 percent weighting to apply to the net asset value method indication in order to arrive at the fair market value conclusion for the Partnership on a marketable, controlling value basis.

The Tax Court reasoned that an owner of a 41.128 percent interest in the Partnership could effectuate a sale by various means. In this case, the Tax Court estimated the probability of a sale to be 25 percent.

The Tax Court selected a 25 percent marketability discount, but it only applied the discount to the income approach estimate.

After the application of the 25 percent marketability discount, as applied to the income approach estimate, the concluded value of the Partnership was $66,752,857 on a purported nonmarketable, minority basis.

The Tax Court concluded that the value of a 41.128 percent partnership interest in the Partnership was $27,454,115.

The Ninth Circuit Court of Appeals Decision

The appellate decision related to the *Estate of Natale B. Giustina v. Commissioner of Internal Revenue*,[2] was filed December 5, 2014, as an unpublished opinion. In its unpublished opinion, the United States Court of Appeals for the Ninth Circuit ("Ninth Circuit") reversed and remanded to the Tax Court for recalculation of its valuation of a 41.128 percent interest in the Partnership.

In its opinion, the Ninth Circuit addressed the Tax Court's use of valuation methods, the selected weightings, the selected valuation discounts, and the selected company-specific risk premium as part of an equity cost of capital calculation.

Valuation Methods and Selected Weightings

As previously mentioned, to arrive at the value of the Subject Interest the Tax Court selected a 75 percent weighting to apply to the income approach value indication. This value was intended to conclude on a value of the Partnership as a going-concern business operation.

The Tax Court selected and applied a 25 percent weighting for the asset-based approach value indication. This value was intended to present a value that accounted for the likelihood of liquidation.

The Tax Court acknowledged that the owner of the limited interest could not unilaterally force liquidation, but concluded that the owner of the limited interest could assemble a two-thirds voting block with other limited partners, and assigned a 25 percent chance of occurrence.

According to the Ninth Circuit, the Tax Court conclusion that the Subject Interest could liquidate the Partnership is contrary to the evidence in the record.

The Ninth Circuit reasoned that the Tax Court was in error based on the following statement:

> In order for liquidation to occur, we must assume that (1) a hypothetical buyer would somehow obtain admission as a limited partner from the general partners, who have repeatedly emphasized the importance that they place upon continued operation of the Partnership; (2) the buyer would then turn around and seek dissolution of the partner-

> ship or removal of the general partners who just approved his admission to the partnership; and (3) the buyer would manage to convince at least two (or possibly more) other limited partners to go along, despite the fact that no limited partner ever asked or ever discussed the sale of an interest.

The Ninth Circuit considered the Tax Court's error in selecting a 25 percent likelihood of hypothetical events. Other Tax Court judges have made similar errors.

The Ninth Circuit discussed this error in the follow quote:

> Alternatively, we must assume that the existing limited partners, or their heirs or assigns, owning two-thirds of the partnership, would seek dissolution. We conclude that it was clear error to assign a 25 percent likelihood to these hypothetical events. As in *Estate of Simplot v. Commissioner*, 249 F.3d 1191, 1195 (9th Cir. 2001), **the Tax Court engaged in "imaginary scenarios as to who a purchaser might be, how long the purchaser would be willing to wait without any return on his investment, and what combinations the purchaser might be able to effect" with the existing partners** [emphasis added]. See also *Olson v. United States*, 292 U.S. 246, 257 (1934) (explaining in a condemnation case that, when a court estimates "market value," "[e]lements affecting value that depend upon events or combinations of occurrences which, while within the realm of possibility, are not fairly shown to be reasonably probable[,] should be excluded from consideration"). We therefore remand to the Tax Court to recalculate the value of the Estate based on the partnership's value as a going concern.

Tax-Affecting Pass-Through Entities

The valuation consideration of selecting and using an income tax rate for valuation of pass-through entities remains a controversial topic in valuations performed for tax purposes. Because the Partnership is a pass-through entity, for income tax purposes, partnership earnings are taxed at the partner level of ownership and not at the corporate level.

Because the estate expert applied public-company-derived rates of return that were based on public company after-tax returns, the estate expert applied an income tax rate to the Partnership earnings prior to calculating the cash flow used in the income approach.

In this case, the estate expert applied a 25 percent income tax rate (approximately equal to the marginal Partnership unitholder federal and Oregon state income tax rate) resulting in a normalized net income used in calculation of the normalized cash flow.

The decision to subtract income tax related to the valuation of a pass-through entity will continue to be a controversial issue. According to the Ninth Circuit, as presented in their unpublished opinion, in regard to tax-affecting pass-through entity cash flows:

> The Estate claims that the Tax Court clearly erred by using pretax cash flows for the going-concern portion of its valuation. The Estate admits in its brief that "tax-affecting is . . . an unsettled matter of law."

However, in this case, apparently because the estate suggested that tax-affecting is an unsettled matter, the Ninth Circuit found that tax-affecting the net income was not appropriate.

Discounts for Lack of Marketability

It is generally accepted that an investment is worth more if it is readily marketable and, conversely, worth less if it is not readily marketable. The difference in price an investor will pay for a liquid asset compared to an otherwise comparable illiquid asset is often substantial.

This difference in price is commonly referred to as the discount for lack of marketability.

The discount for lack of marketability measures the difference in the expected price of (1) a liquid asset (the benchmark price measure) and (2) an otherwise comparable illiquid asset (the valuation subject).

It is true that there are varying degrees of investment marketability. An ownership interest in an actively traded security can typically be converted into cash within three business days of the sell decision. This is the typical investment benchmark for a fully marketable security.

At the other end of the investment marketability spectrum is an ownership interest in a privately owned company. In this case, the company (1) pays no dividends or other distributions, (2) requires capital contributions, and (3) limits ownership of the company to certain individuals.

While both the Tax Court and the Estate agreed that the Subject Interest suffered from lack of marketability, the appropriate level of discount was an item of debate.

The Ninth Circuit agreed with the Tax Court's selected discount for lack of marketability as noted in the following statement:

> Further, the Tax Court did not clearly err by using the Commissioner's proposed 25% marketability discount rather than the Estate's proffered 35% discount, *see, e.g., Estate of O'Connell v. Comm'r*, 640 F.2d 249, 253 (9th Cir. 1981), especially considering that the Estate's expert acknowledged that such discounts typically range between 25% and 35%.

Company-Specific Risk Premium

In general, there may be various company-specific risk factors that surround an investment in a partnership interest. According to the estate expert, the following factors relate specifically to an ownership interest in the Partnership:

1. The Partnership is significantly smaller than the average size of the companies used to estimate the small stock equity risk premium adjustment.
2. The Partnership timberland assets are all located in Oregon and, therefore, not geographically dispersed.
3. The Partnership had nondiversified operations with one source of revenue (timber harvesting).
4. The Partnership timberland assets are managed on a sustained yield basis to optimize forest growth and long-term asset value.

Based on these company-specific, or in this case partnership-specific, risk factors, the estate expert added a 3.5 percent risk premium to the equity cost of capital calculation. The Tax Court decreased the company-specific risk premium to 1.75 percent, however it did not adequately explain its reasoning for doing so.

Because the Tax Court did not explain why it decreased the company-specific risk premium, as a component of the equity cost of capital calculation, the Ninth Circuit found that the Tax Court erred as referencing the following paragraph:

> We do, however, hold that the Tax Court clearly erred by failing to adequately explain its basis for cutting in half the Estate's expert's proffered company-specific risk premium. Even under the deferential clear error standard, "[i]n drawing its conclusions . . . the Tax Court is obligated to detail its reasoning." *Estate of Trompeter*, 279 F.3d at 770. We recognize that diversification of assets is commonly used to reduce company-specific risk. However the Tax Court stated only that "investors can eliminate such risks by holding a portfolio of diversified assets," without considering the wealth a potential buyer would need in order to adequately mitigate risk through diversification.

Summary and Conclusion

The significance of this judicial decision is that it involved a company that had a much greater value in liquidation than as a going concern. It is also significant that the Tax Court was not allowed to impart a so-called imaginary scenario in order to arrive at a value calculation.

In general, the Ninth Circuit found that the Tax Court erred in several aspects of its valuation calculation. One way to look at this matter is to consider that the Tax Court attempted to move away from the fair market value standard to arrive at the Subject Interest value.

As commonly defined in valuation literature, fair market value is the price at which a property would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy, and the latter is not under any compulsion to sell, with both parties having reasonable knowledge of relevant facts.

In this matter, the Tax Court made assumptions regarding the likelihood of an ability to force liquidation and the ability to diversify the Partnership's asset holdings.

None of these assumptions were in the control of the noncontrolling Subject Interest. Therefore, by applying specific assumptions the Tax Court essentially concluded on an investor-specific value and not a fair market value.

The Ninth Circuit reversed and remanded the *Estate of Giustina, et al. v. Commissioner* back to the Tax Court for recalculation. One clear take-away from this Tax Court matter is that, as the valuation profession and legal environment continue to evolve, certain historical issues remain unsettled.

Notes:

1. Estate of Natale B. Giustina v. Commissioner, T.C. Memo 2011-141.
2. Estate of Natale B. Giustina v. Commissioner of Internal Revenue, United States Court of Appeals for the Ninth Circuit, case number 12-71747.

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The Service Continues to Challenge Taxpayer Transactions Based on the Economic Substance Doctrine

Robert F. Reilly, CPA

Valuation analysts and other financial advisers are often called on to perform economic substance analyses in federal income tax challenges. In these cases, the Internal Revenue Service challenges a tax deduction or loss related to a taxpayer transaction by applying the so-called economic substance doctrine. Codified in Internal Revenue Code Section 7701 and repeatedly accepted by the courts, this doctrine allows the Service to disallow a taxpayer transaction if the taxpayer (or the taxpayer's expert witness) cannot prove that (1) the taxpayer expected to earn a profit (absent any income tax consideration on the transaction and (2) the taxpayer had a reasonable business purpose for entering the transaction (other than the reduction of income tax expense). Recently, the Service issued expanded administrative and procedural guidance regarding its application of the economic substance doctrine. This discussion summarizes the guidance provided in Notice 2014-58.

Introduction

A basic principle of the federal tax law is that a taxpayer is entitled to structure its business transactions in a manner that produces the least amount of tax. However, taxpayer business transactions must have "economic substance." The so-called economic substance doctrine is codified in Internal Revenue Code Section 7701(o) and the related Section 6662 tax penalty provisions.

Simply stated, a taxpayer transaction is considered to have economic substance if it has (1) a reasonable possibility of the taxpayer earning a profit and (2) an independent business purpose other than the taxpayer's saving of income taxes. The Internal Revenue Service ("the Service") continues to be diligent in examining—and disallowing—taxpayer transactions that it considers to lack economic substance or to be a sham.

Accordingly, in federal income tax disputes, valuation analysts, economists, forensic accountants, and other financial advisers (collectively, "analysts"), are often called on to analyze—and opine on—whether taxpayer transactions either have or lack economic substance.

These economic substance analyses typically focus on two economic questions:

1. Does the taxpayer have a reasonable expectation of earning a positive economic benefit from the subject transaction?
2. Is there a reasonable business purpose for the taxpayer entering into the subject transaction—other than the reduction of federal income taxes?

The Service has generally prevailed in many of its judicial decisions regarding economic substance challenges to taxpayer transactions. In these challenges, the Service typically alleges that the taxpayer entered into the suspect transaction solely for the purpose of generating tax deductions or capital losses.

In other words, the Service claims that the only expected economic benefit from the suspect transaction is the reduction of taxable income—and income taxes. When litigated, these economic substance cases often become a battle of the accounting, economics, or valuation experts.

And, in 2010, the Service obtained an additional tool in its challenge of taxpayer transactions when the U.S. Congress codified the so-called economic substance doctrine in the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152) (hereinafter "the 2010 Act").

Late last year, the Service issued a notice that provides taxpayers and their legal and other tax advisers with updated guidance with regard to its interpretation of the economic substance doctrine.

Notice 2014-58 expands on the prior administrative and procedural guidance available from Notice 2010-62. The 2014 notice provides guidance on the definition of the term "transaction" in the application of the Section 7701(o) economic substance doctrine. Notice 2014-58 also provides updated guidance on the meaning of the term "similar rule of law" under the Section 6662(b)(6) accuracy-related penalty.

The 2014 notice is effective retroactively—for taxpayer transactions entered into after March 30, 2010.

Economists, forensic accountants, and valuation analysts who perform economic substance transactional analyses for federal income tax purposes should be familiar with this updated administrative and procedural guidance. In addition, taxpayers that are involved in economic substance disputes with the Service—and their legal and other tax advisers—should also be familiar with this updated guidance.

The Economic Substance Doctrine

As mentioned above, Congress codified the economic substance doctrine as part of the 2010 Act. The 2010 Act added Section 7701(o) to the Internal Revenue Code.

Section 7701(o) states that a taxpayer transaction is considered to have economic substance if it meets a two-part test:

1. The transaction must change in a meaningful way, apart from any federal income tax effects, a taxpayer's economic position.
2. The taxpayer must have a substantial purpose, apart from any federal income tax effects, for entering into the transaction.

The term "economic substance" is defined in Section 7701(o)(5)(A) as the common law doctrine that disallows income tax benefits under Internal Revenue Code subtitle A, if the transaction that produces those income tax benefits lacks either:

1. economic substance or
2. a business purpose.

Definition of the Term "Transaction"

Notice 2014-58 applies an aggregation definition to the term "transaction." That is, according to the 2014 notice, a transaction "generally includes all the factual elements relevant to the expected tax treatment of any investment, entity, plan, or arrangement; and any or all of those steps that are carried out as part of a plan."

Therefore, when a taxpayer transaction that generates an income tax benefit involves a series of interconnected steps with a common objective, then the transaction is considered to include all of the steps in the aggregate. Under this 2014 notice

interpretation, each interconnected step should be considered when analyzing whether the taxpayer transaction as a whole lacks economic substance.

However, when a taxpayer transaction includes a series of steps, including a tax-motivated step that is not necessary to achieve a nontax objective, Notice 2014-58 indicates that the Service may apply a disaggregation approach.

This disaggregation approach determines whether any of the individual tax-motivated steps is considered a separate transaction that is subject to the economic substance doctrine. Accordingly, under the 2014 notice provisions, the Service is free to either aggregate or disaggregate the interconnected steps of an overall taxpayer transaction.

And, the Service may aggregate or disaggregate a transaction's interconnected steps when assessing the application of the economic substance doctrine on a case-by-case basis.

This Notice 2014-58 definition of transaction is consistent with the legislative history of the term "transaction" in Section 7701(o)(b)(6). That legislative history was provided in the House report on the 2010 Act. The 2014 notice specifically refers to that House report.

That House report explains that the legislative provision "does not alter the court's ability to aggregate, disaggregate, or otherwise recharacterize a transaction" when applying the economic substance doctrine.[1]

Definition of the Term "Similar Rule of Law"

Sections 6662(b)(6) and 6662(i) together impose a per se 40 percent penalty for taxpayer transactions that fail the economic substance doctrine or a "similar rule of law."

Notice 2014-58 provides an explanation that "a similar rule of law" is a rule or doctrine that applies the same factors or analysis as required under Section 7701(o). The 2014 notice explanation indicates that the "similar rule of law" provision applies even if the doctrine is called something different.

Notice 2014-58 provides the example of the "sham transaction doctrine." Specifically, the 2014 notice defines "similar rule of law" to mean a rule or doctrine that disallows the income tax benefits under Internal Revenue Code subtitle A related to a taxpayer transaction because:

1. the transaction does not change a taxpayer's economic position in a meaningful way (apart from federal income tax effects) or
2. the taxpayer did not have a substantial purpose (apart from federal income tax effects) for entering into the transaction.

Notice 2014-58 also explained that the Service will not apply a Section 6662(b)(6) penalty unless the Service also raises Section 7701(o) to support its underlying income adjustments.

Even with this updated administrative guidance, it remains to be seen exactly how or when the Service will assert the codified economic substance doctrine. The guidance in LB&I-4-0711-015 provides for a specific set of factors for the Service examiners and their managers in the Large Business & International (LB&I) division to consider and procedures for the LB&I division to follow when seeking approval through the Service's chain of command to apply the Section 6662(o)(6) penalty.

Taxpayers and their advisers should hope that the Service's decision to apply the Section 6662 tax penalty will not be taken lightly.

Summary of Recent Judicial Decisions

As mentioned in the introduction, the Service has historically experienced a fair amount of success when it applies the economic substance doctrine to challenge suspect taxpayer transactions in the courts. The last year or two continued this trend of judicial success related to the Service's use of the economic substance challenge.

The following discussion summarizes several recent judicial decisions (all pre-2014 notice) in which the Service challenged taxpayer transactions under the economic substance doctrine.

Kenna Trading, LLC

In 2014, in *Kenna Trading, LLC*,[2] certain Brazilian retailers contributed distressed consumer accounts receivable to a limited liability company (LLC). The LLC claimed a carryover tax basis in the receivables under Section 723.

Later, the LLC contributed some of the accounts receivable to trading companies and then contributed the LLC's interest in each trading company to a holding company.

The LLC claimed a cost of goods sold deduction for each holding company equal to the tax basis of the contributed accounts receivable. The LLC then sold an interest in each holding company to an investor. The trading companies claimed bad debt deductions related to the accounts receivable.

The next year, the LLC contributed more of the Brazilian accounts receivable to main trusts. Each main trust then assigned the accounts receivable to a newly created subtrust. Other investors contributed cash to the main trust, in exchange for a beneficial interest in the subtrust. The subtrusts then claimed bad debt deductions for the accounts receivable.

Claiming that the subtrusts were grantor trusts, for federal income tax purposes, the investors claimed deductions on their income tax returns. The Service disallowed these bad debt deductions under the economic substance doctrine.

In addition, the Service levied (1) the Section 6662(h) gross valuation misstatement penalties, (2) the Section 6662(a) accuracy-related penalties related to the amount of the LLC's underpayments of tax, and (3) a Section 6662A listed transaction understatement penalty.

The Tax Court received expert testimony from both sides in the case. In its decision in *Kenna Trading, LLC*, the Tax Court held that the Brazilian retailers did not intend to enter into a partnership for federal income tax purposes. In addition, the Tax Court concluded that the LLC had a cost basis in the accounts receivable, not a carryover tax basis.

Also, the Tax Court found that the entire taxpayer transaction lacked economic substance. Lastly, because the LLC had understated its income as the Service proved, the Tax Court concluded that the LLC was subject to all three tax penalties.

Humboldt Shelby Holding Corp.

Humboldt Shelby Holding Corp.[3] provides another recent economic substance judicial decision. In *Humboldt Shelby Holding Corp.*, the taxpayer, a holding company, bought two corporations that had recently realized large capital gains.

To avoid paying taxes on the gains it inherited, the taxpayer executed a common tax-avoidance scheme to generate capital losses. Under the scheme, the taxpayer contributed offsetting short-term options to two LLCs that it had formed. The taxpayer increased its tax basis in the recently formed LLCs by the cost of the purchased options. However, the taxpayer did not reduce tax its basis by the cost of the sold options.

This accounting treatment allowed Humboldt Shelby Holding Corp. to increase its tax basis in the partnerships by approximately $75 million—while spending only $320,000.

After the options expired, the taxpayer resigned from the LLCs and received stock with a very low fair market value—and a very high tax basis. The taxpayer then sold the stock and recognized capital losses of almost $75 million. These capital losses completely offset the gains that the Humboldt Shelby Holding Corp. had inherited from the two corporations.

The Service issued a deficiency notice disallowing the taxpayer's claimed deductions from the stock sales under the economic substance doctrine. In addition, the Service assessed the accuracy-related penalty under Section 6662.

Again, the Tax Court received expert testimony from both sides in the case. In *Humboldt Shelby Holding Corp.*, the Tax Court concluded that the taxpayer improperly deducted capital losses on stock with a basis that was artificially inflated in a transaction that lacked economic substance. In addition, the Tax Court concluded that Humboldt Shelby Holding Corp. was liable for the Section 6662 accuracy-related penalty.

Summary and Conclusion

Both at the examination level and in the courts, the Service continues to challenge suspect taxpayer transactions based on the so-called economic substance doctrine. And, at least at the judicial level, the Service continues to win many of these taxpayer transaction challenges. The Service seems to be successful in these challenges when the taxpayer's expert witness cannot convince the court regarding both questions to the economic substance test.

Notice 2014-58 provides Service-friendly administrative and procedural guidance with respect to the application of the economic substance doctrine. However, at least this 2014 notice provides expanded guidance that taxpayers (and their legal and other tax advisers) can consider in their tax planning related to proposed transactions. Valuation analysts, forensic accountants, and economists who provide so-called economic substance analyses should be familiar with this most recent guidance provided by the Service.

Notes:

1. See House Report No. 111-443, 111th Cong., 2d Session 296.
2. Kenna Trading, LLC v. C.I.R., 143 T.C. No. 18 (2014).
3. Humboldt Shelby Holding Corp. v. C.I.R., T.C. Memo. 2014-47 (March 18, 2014).

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

On Our Web Site

Recent Articles and Presentations

Robert Reilly, a managing director of our firm, delivered a presentation at the 2015 Healthcare Seminar held on May 1, 2015, in Nashville. The program was sponsored by the Institute for Professionals in Taxation. Robert's topic was "Valuation and Allocation of Intangible Assets in Healthcare Industry Properties."

Robert's presentation explored the common reasons to value health care intangible assets. He discussed the generally accepted intangible asset valuation approaches and methods. Robert also discussed the methods for extracting intangible asset value from the overall property value. Illustrative examples are included in the presentation

John Ramirez, a senior associate in our Portland office, published an article in the May/June 2015 issue of *Valuation Strategies*, a bimonthly journal published by Warren Gorham & Lamont. The title of John's article is "Establishing Defensible Trademark Royalty Rates for Transfer Pricing Analysis."

In recent years, the Internal Revenue Service has increased its scrutiny of intangible property transfer price arrangements. John discusses Internal Revenue Code Section 482 and the arm's-length pricing standard. He examines the methods and procedures used to estimate trademark royalty rates for intercompany transfer pricing purposes.

Charles Wilhoite, a managing director in our Portland office, delivered a joint presentation (with attorney Gary Zimmer) at a conference on Representing Family and Closely Held Businesses on April 17, 2015. The program was sponsored by Oregon Law Institute. The title of Charles and Gary's presentation was "Business Valuation in a Divorce Setting."

Charles and Gary's presentation explored the various standards of value used in divorce cases. They went on to discuss the generally accepted valuation approaches. Various intangible asset issues common in divorce engagements were discussed. These include the issue of enterprise versus personal goodwill and the topic of "double dipping."

Robert Reilly presented a webinar on April 7, 2015. The webinar was sponsored by Business Valuation Resources. The topic of Robert's webinar was "Valuation and Allocation of Intangible Assets for Property Tax Compliance and Appeal Purposes."

Robert's webinar explored the various types of intangible assets and common reasons why analysts are asked to value intangible assets. He then described and illustrated generally accepted approaches and methods for valuing intangible assets. The webinar also focused on the valuation and extraction of intangible assets for property tax purposes. Illustrative examples are included in this webinar.

Robert Reilly participated in a panel discussion at the 39th Annual Alexander L. Paskay Memorial Bankruptcy Seminar, sponsored by the American Bankruptcy Institute. The Paskay Seminar was held March 5–6, 2015, in Tampa, Florida. Robert's topic was "Intellectual Property and Insolvency Issues: Valuation of Intellectual Property within a Bankruptcy Context."

Robert's presentation explored the various types of intellectual property assets and common reasons why analysts are asked to value intellectual property. He then described and illustrated generally accepted approaches and methods for valuing intellectual property. Robert also provided common data sources and described due diligence procedures related to an intellectual property valuation..

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Communiqué

In Print

Robert Reilly, firm managing director, authored two chapters in the Institute for Professionals in Taxation textbook *Property Taxation*, 4th ed. The title of Robert's two *Property Taxation* chapters are "Identification and Valuation of Intangible Assets" (Chapter 10) and "Issues Related to the Unit Valuation Principle" (Chapter 14).

Robert Reilly authored an article that appeared in the May 2015 issue of the American Bankruptcy Institute publication *ABI Journal*. The title of Robert's article was "A Debtor Company's IP Valuations."

Robert Reilly also authored an article that appeared in the January/February 2015 issue of the journal *Construction Accounting and Taxation*. The title of Robert's article was "Valuation of Professional, Operator, or Trade Licenses and Permits."

Robert Reilly also authored an article that appeared in the February 2015 issue of the legal journal *The Practical Lawyer*. The title of Robert's article was "Goodwill Valuation Approaches, Methods, and Procedures."

Robert Reilly also authored an article that appeared in the February 2015 issue of the *Journal of MultiState Taxation and Incentives*. The title of Robert's article was "Property Tax Valuation of Technology Intangible Assets."

Robert Reilly also authored an article that appeared in the February 2015 issue of *Practical Tax Strategies*. The title of Robert's article was "Goodwill Valuation Approaches and Methods."

Robert Reilly also authored an article that appeared in the first quarter 2015 online publication *Transaction Advisors*. The title of Robert's article was "Goodwill Valuation for Transaction Pricing and Structuring Purposes."

Robert Reilly also authored an article that appeared in the March-April 2015 issue of *Valuation Strategies*. The title of Robert's article was "Special Privileges: Valuation of Licenses and Business Permits."

Robert Reilly also authored an article that appeared in the December 2014 issue of *The Practical Lawyer*. The title of Robert's article was "What Counsel Need to Know about the Valuation of License or Permit Intangible Assets."

Robert Reilly also authored an article that appeared in the Spring 2015 issue of the *American Journal of Family Law*. The title of Robert's article was "Family Law Valuation of Technology Intangible Assets."

Robert Reilly also authored an article that appeared in the April 2015 issue of *The Practical Lawyer*. The title of Robert's article was "Engineering Intangible Asset Valuation, Damages, and Transfer Price Analyses."

Robert Reilly also authored a two-part article that appeared in the National Association of Certified Valuators and Analysts (NACVA) online publication *QuickRead*. The title of Robert's article was "Intellectual Property Valuation for Bankruptcy Purposes." Part I appeared on March 18, 2015, and Part II appeared on March 25, 2014.

Robert Reilly also authored an article that appeared in the March/April 2015 issue of the journal *Construction Accounting and Taxation*. The title of Robert's article was "Valuation of Engineering Intangible Assets."

Chip Brown, Atlanta office managing director, co-authored an American Institute of Certified Public Accountants Practice Aid on Forensic & Valuation Services issued in 2015. The title of the Practice Aid is "Business Valuations for Estate and Gift Tax Purposes."

Curtis Kimball, Atlanta office managing director, co-authored a white paper for the ACTEC – Arkansas State Chapter Conference on February 5, 2015, with Tom D. Womack, JD. The topic of this white paper was "Analysis of Recent Valuation Developments and Trends: Making the Best of the Relationship with Your Valuation Expert."

Kevin Zanni, Chicago office manager, authored an article that appeared in the January 2015 issue of the Commerce Clearing House journal,

Business Valuation Alert. The title of Kevin's article was "Quantifying the Private Company Discount: Multiples Approach and Acquisition Approach."

John Ramirez, Portland office senior associate, authored an article in the May/June 2015 issue of *Valuation Strategies*. The title of John's article was "Establishing Defensible Trademark Royalty Rates for Transfer Pricing Analysis."

Weston Kirk, Atlanta office associate, authored an article that appeared in the April 2015 issue of the tax journal *Trusts & Estates*. The title of Weston's article was "Valuation Discount Considerations with Multi-Level Entities."

Several Willamette Management Associates analysts contributed to the *Valuing Professional Practices and Licenses 2015 Supplement*, edited by Ronald L. Brown. The *Valuing Professional Practices and Licenses* chapter authors and chapter titles are listed below.

- Robert P. Schweihs, firm managing director, authored Chapter 3, Adjusting the Professional Practice Balance Sheet; and Chapter 39, Sample Medical Practice Valuation Report.
- Robert Reilly authored Chapter 7A, Goodwill Valuation Background Considerations Involving Professional Practices in Family Law Cases; Chapter 12, Reasonableness of Practitioner/Executive Compensation Analyses for Family Purposes; Chapter 14, Differences in the Valuation of Large and Small Professional Practices; Chapter 17, Valuing Individual Intangible Assets in a Marital Estate Involving a Professional; Chapter 21, Professional Guidance from Internal Revenue Service Publications in Family Law Valuation os Professionals; and Chapter 41, Accounting Practice Valuation Approaches, Methods, and Procedures.

In Person

Tim Meinhart, Chicago office managing director, delivered a presentation to the J.P. Morgan Closely Held Asset Management Group in April 2014 in Columbus, Ohio. The topic of Tim's presentation was "Business Valuation Methods and Other Special Topics."

Shawn Fox, Chicago office managing director, delivered a presentation at a webinar sponsored by the Knowledge Group, LLC, on June 22, 2015. The topic of the webinar panel discussion was "Best Practices in Dealing with Disputes and Litigation in a Limited Liability Company."

Shawn Fox will also deliver a presentation to the Accounting Basics for Attorneys Practising Law Institute seminar in Chicago, Illinois, on July 24, 2015. The topic of Shawn's seminar presentation is "An Introduction to, and Comparison between, Accounting Frameworks."

Curtis Kimball delivered a presentation to the International Association of Consultants, Valuators, and Analysts International Valuation Forum held on May 7 and 8, 2015, in Atlanta. The topic of Curt's presentation was "Valuation for Tax Issues."

Curtis Kimball also delivered a presentation to the Tax and Estate Planning Council on May 14, 2015, in Shreveport, Louisiana. The topic of Curt's presentation was "Latest Valuation Topics in Tax and Estate Planning 2015."

Curtis Kimball also delivered a presentation to the Duke Estate Planning Conference at the Duke University Law School in Durham, North Carolina, on October 15, 2014. The title of Curt's presentation was "Analysis of Recent Valuation Developments and Trends: Making the Best of the Relationships with Your Valuation Expert."

John Ramirez delivered a presentation at the Institute of Professionals in Taxation 2015 annual conference held in San Diego, California, in June 2015. The topic of John's presentation was "The Relevance of Fair Value Measurements for Property Tax Purposes."

Weston Kirk, Atlanta office associate, delivered a presentation to the honors finance students at Georgia State University on February 20, 2015, in Atlanta, Georgia. The title of Weston's presentation was "Business Valuation Approaches, Methods, and Analyses."

In Encomium

The biography of managing director Robert Reilly was recently published in the following biographical publications: *Marquis Who's Who in the Midwest*, 2015 (41st) edition; *Marquis Who's Who in America*, 2015 (69th) edition; and *Marquis Who's Who in the World*, 2015 (32nd) edition. We congratulate Robert on this recognition.

Charles Wilhoite, Portland office managing director, was appointed to the Portland branch board of directors of the Federal Reserve Bank of San Francisco. We congratulate Charles on this Federal Reserve Bank appointment.

Insights Archives

❑ Spring 2015
Focus on Corporate Transaction Advisory Services

❑ Spring 2014
Focus on Property Tax Intangible Asset Valuation Analyses

❑ Spring 2013
Focus on Forensic Analysis and Litigation Services

❑ Winter 2015
Focus on Intercompany Transfer Price and Other Income Tax Insights

❑ Winter 2014
Focus on Bankruptcy and Reorganization Financial Advisory Services

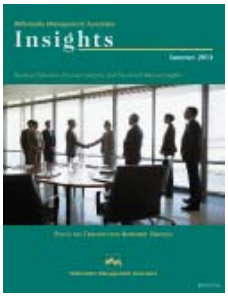
❑ Winter 2013
Focus on Health Care Valuation Insights

❑ Autumn 2014
Focus on Gift, Estate, and Generation-Skipping Tax Issues

❑ Autumn 2013
Focus on Gift and Estate Taxation

❑ Autumn 2012
Focus on Intangible Asset Valuation

❑ Summer 2014
Focus on Forensic Analysis and Litigation Services



❑ Summer 2013
Focus on Transaction Advisory Services

❑ Summer 2012
Focus on Estate and Gift Tax Issues

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