

# Practitioner Perspectives

Insights from Leading Property Tax Professionals

## Obsolescence and personal property: Considerations in the current economy

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There can be no doubt that the global economy is in the midst of the most significant downturn since the Great Depression. The collapses in the financial and other key sectors have sent ripples through the economy and have shaken consumer confidence. Plant closures are becoming commonplace in order to rationalize capacity or as a result of bankruptcies which, according to the American Bankruptcy Institute, have reached their highest quarterly level since 1994.

In the wake of these conditions, there has been considerable discussion about the recession's impact on the value of real property. But with the overcapacity and corresponding underutilization of assets, a fairly safe assumption is that personal property is selling for less than in previous periods. The question we need to address is this: How valid are these transactions? Furthermore, based on the definition of fair market value and given current economic conditions, are *any* of these market transactions without duress? Are there any willing buyers exploring the marketplace and do markets even exist for certain assets?

These are legitimate questions, no doubt, but we need to keep in mind that the definition of fair market value is meant to consider arriving at a value as of a given point in time, regardless of whether that point in time is during a period of economic growth or decline.

We cannot get into the mindset that certain transactions or other data are discredited merely because we are in an economic downturn rather than economic euphoria. If that were the case, we also would need to discredit those sales and corresponding data from periods when times are good. The fact is that an arms-length sale should be considered valid even if the markets are depressed. This is not to say that forced liquidation sales solely should be used to establish the market. But, at some point, if these are the only sales that are taking place, they become the market reality and should be considered in conjunction with other data. This is not so much an issue of invalid sales as of over-supply and low demand creating low values at a particular point in time.

So, we should consider the market data from sales in a depressed market as valid—if the sales in fact represent what is taking place in the market on a broad basis. However, what should we do if there are limited willing buyers, or if there are no transactions at all?

From a real estate perspective, we may find ourselves appraising a limited-market or special-use property on a continued-use basis, which the Appraisal Institute cautions is not to be confused with a market value estimate. This process involves deriving a hypothetical market based on potential users or alternate uses of the property. The American Society of Appraisers (ASA), however, comments on this issue with a seemingly more straightforward conclusion in *Valuing Machinery and Equipment*. "An inactive market, or one where there are a limited number of sales of comparable property, often indicates a lack of demand and the existence of economic obsolescence: where an inactive market exists, property might be better analyzed using the income or cost approaches."<sup>1</sup>

During times of economic downturn, asset value is clearly affected. Whether in market transactions with low values or in the lack of willing buyers, the fact is values are depressed due to the existence of economic, or external, obsolescence.

## Obsolescence Considerations in Valuation

Accrued depreciation is the valuation concept that describes the total deduction from the value of an asset as if it were new, to arrive at the value of the asset in its present state. This concept includes an element for physical deterioration, which is typically defined as the loss in value due to physical wear and tear during usage and/or from the forces of nature. Accrued depreciation, though, also includes obsolescence. The two standard forms of obsolescence are *functional* and *external*.

Functional obsolescence is defined as the loss in value due to the inability of the asset to perform adequately the function for which it is used. Common indications of functional obsolescence include excess operating or capital costs, over-capacity due to bottlenecks and lack of utility.

An example of functional obsolescence is production improvements in an asset, whether the improvement is the increase of a machine's speed or better product yields and less waste, spillage and breakage. Take a machine that operates at 60% of the speed of a newer model, or one that requires 30% more in utility costs to operate. If all other factors were constant, clearly the value of the asset would be lower than a similar asset that could operate at the higher speeds or with lower utility costs. The bottom line is this: If the asset in question can be improved, functional obsolescence may exist.

The concept of obsolescence is not just a theoretical one that is considered by appraisers or used by property tax professionals to advocate lower value in a tax dispute. Rather, obsolescence is a real concept that captures market conditions and other issues affecting the value of assets outside of simple physical deterioration. On Oct. 3, 2001, the Financial Accounting Standards Board (FASB), the organization responsible for establishing standards for financial accounting and reporting, issued Statement Number 144: *Accounting for the Impairment or Disposal of Long-Lived Assets*.

According to Paragraph 8 of Statement 144, a company needs to test an asset to determine if it is impaired "whenever events or changes in circumstances indicate that its carrying amount (*i.e. net book value*) may not be recoverable."

FASB offers the following examples of situations that constitute events or changes in circumstances that may indicate that a company should test for recoverability:

- A significant decrease in the market price of an asset.

- A significant adverse change in the extent or manner in which an asset is being used or in its physical condition.
- A significant adverse change in legal factors or in the business climate, including actions by a regulating body, which could affect an asset's value.
- An accumulation of costs that are significantly in excess of the amount originally expected for the acquisition or construction of an asset.
- A current operating or cash flow loss combined with a history of operating or cash flow losses or a forecast that demonstrates continuing losses associated with the use of an asset.
- An expectation that there is a probability in excess of 50% that an asset will be sold or disposed of before the end of its estimated service life.

These examples constitute events or changes in circumstances, and may indicate that a company should test for impairment as the primary forms of functional and external obsolescence. These are clearly issues that an appraiser would also consider as indications of additional accrued depreciation. Therefore, if a company determines that an asset is impaired, it must suffer from a form of obsolescence or excess deterioration.

In the post-Enron age of accounting, the standards boards have confirmed that obsolescence exists—and perhaps even more so in an economic downturn—and that it needs to be considered when companies report the value of their assets to shareholders and the public. This is consistent with how appraisers and property tax professionals need to approach the valuation of assets to ensure that the impact of any economic conditions (or other issues) are taken into account.

### PRACTITIONER PERSPECTIVES

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### The Three Approaches to Value: Economic Impacts

If we agree that the current adverse economic conditions are having an impact on the value of personal property, then the heart of the matter is calculating an appropriate adjustment in order to reach a market value that correctly considers the economic factors. This, of course, needs to be accomplished within the confines and guidelines of valuation theory which gives us standard approaches to consider.

The three well-established approaches to determining value are the sales comparison, income and cost approaches.

- According to the sales comparison approach, the value of an asset is based on adjusted sale prices in actual transactions and on adjusted asking prices for similar assets.
- The income approach concludes that the value of an asset is represented by the present worth of future financial benefits derived from ownership.
- Under the cost approach the value of an asset is considered to be the amount required to construct a new asset of equal utility, less adjustments for the asset's accrued depreciation from all causes.

These three valuation approaches often stand alone in their analyses. However, there are instances, as we will see later, where they overlap and are used to supplement each other to reach an appropriate valuation. Regardless, ultimately the appraiser needs to reconcile the conclusions of each approach to determine which are valid to rely upon given the property being appraised, and to reach a final overall value conclusion.

If we consider the theory behind each of the three, we realize the sales comparison and income approaches should automatically take into account the impact of any adverse economic conditions. For example, sales of machinery that produce products used in new home construction already consider the impact of decreased new home starts and the potential over-supply of similar assets in the used market. Similarly, an investor considering acquiring a portfolio of assets leased to a supplier of parts to commercial aircraft manufacturers will already consider the decline in potential revenues as lease rates decline and assets may be returned as demand continues to decrease.

The cost approach, on the other hand, requires additional analyses to ensure any economic impact is considered and an appropriate value is reached. Regardless of the approach, we need to thoroughly analyze the underlying elements of each and effectively

describe them and their conclusions to the assessment community. The remainder of this discussion will focus on each of the three, using examples that show the impact of the current economic conditions and how we as property tax professionals can effectively present the conclusions to the assessment community.

### The Sales Comparison Approach: Calculating Economic Impacts

We have already discussed the concerns over the applicability of market transactions during a period of economic downturn. Certainly, many industries are experiencing economic turmoil and have regular occurrences of asset sales that are well below what was once considered normal. The question is whether these transactions are valid to consider when determining market value for property tax purposes. Our conclusion, based on appraisal theory, is that if there are valid arms-length transactions, regardless of whether their conclusions seem low, they are the market reality and useful tools in establishing value as of that point in time.

Recent experience in the plastic injection molding industry serves to illustrate this issue. The plastics industry has been significantly affected by the simultaneous economic distress in all three components of the supply chain: original equipment manufacturers (OEMs), plastic processors and consumers of molded parts. The primary end users of plastic components, auto and appliance manufacturers, are now either in bankruptcy or have significantly scaled back production.

What started with the 2005 bankruptcies of automotive tier one suppliers Collins and Aikman Corporation and Delphi ended in the closure and liquidation of hundreds of plastics manufacturing plants in the subsequent three years.<sup>2</sup> Conditions in 2009 haven't improved; several other plastic parts consumers have suffered.

On July 1, seat maker Lear Corp. announced plans to seek Chapter 11 protection in the worst vehicle sales environment in 30 years. Lear will be the largest automotive supplier to file so far this year but has been preceded into Chapter 11 this year by at least nine other parts makers, including Visteon Corp. and Metaldyne Corp.<sup>3</sup>

According to Autodata Corporation, in February 2009 US domestic auto sales fell from a peak of 15–17 million to a projected 2009 level of 8-9 million units, and new injection molding equipment purchased for peak years sits largely unused. In addition, commod-

ity grade injection molding projects have migrated to less expensive markets in Mexico and China. With these losses and many domestic plastic processors in bankruptcy, industry utilization in 2009 has been projected to have fallen below 50%.

As a result, the resale market has seen a saturation of injection molding machines going up for auction. In auto industry equipment auctions, plastic injection machines and equipment are selling for 35%–50% of resale prices from two years ago, and buyers are passing up any items that are more than four- or five-years old.<sup>4</sup> The lone surviving OEM of injection molding equipment, Milacron, is also in bankruptcy and new machines are being heavily discounted, up to 30%, to compete with the saturated used marketplace.<sup>5</sup>

This phenomenon is not confined to only certain industries such as plastic injection molding, but is being seen across many asset classes and even for those assets that are not specialized and can be used in many industries. This is due to the saturation of used assets available combined with the lack of demand for those used assets, as companies are dealing with under-utilization of existing assets and reduced demand, affecting their ability to justify capital expenditures or secure financing for equipment upgrades.

Moreover, the current economic conditions and resulting low sale amounts have even called sales of the subject assets into question. If this is the case, then how much more difficult is the assignment of arguing sale transactions in today's economic environment as market comparables? Nonetheless, it is clear: We should consider the market data from sales in the current economy and be willing to submit that information to the assessment community with a proper explanation and any corroborating evidence we can provide. These market transactions are the best way to capture the external obsolescence that is having an impact on asset values in the affected sectors. In these instances the market is ahead of the curve and has already incorporated the future economic and production projections into the asset prices. These transactions are not isolated and are the market reality of today.

### **The Income Approach: Calculating Economic Impacts**

The income approach concludes the value of an asset is represented by the present worth of future financial benefits derived from ownership. According to the ASA, "The decision to purchase any business asset,

whether a piece of land, a building, a business, an automobile or an item of machinery and equipment, is typically an investment decision. Investment decisions are made based on the expected return to be generated by the investment, the period of time over which the return will be earned, and the risk of not receiving the return."<sup>6</sup> The question in the current economy is: What happens to the value of the underlying assets when the initial assumptions for the investment decisions go awry? Moreover, do the economics of the business affect the value of the assets used in the business? The answer to that is: absolutely.

The ASA thoroughly discusses one of the underlying valuation assumptions, that there are sufficient business earnings to support the value conclusion for the underlying assets. They explain that the primary way to establish this is to use the income approach and capitalize the earnings associated with the assets being appraised to determine if the resulting business value exceeds the value of the assets. If the business value does not exceed the assets value, then that is less than what was originally concluded. The primary reason this may occur, according to the ASA, is that there is additional obsolescence specific to the assets that was not captured in the traditional application of the three valuation approaches.

This is an interesting phenomenon and is telling in the current economy. Take for instance Ford Motor Company and International Paper. Each company is currently experiencing economic issues and the market capitalization of each is below the value of their property, plant and equipment. If we consider the stock and debt of each company as a proxy of value, International Paper's cumulative value is less than the value of its tangible assets. Ford has substantial debt, and the combination of its outstanding stock and debt actually exceeds the value of its tangible assets. However, Ford has had a negative operating income for the last four years. So, the question is whether the underlying value of the tangible assets for these two companies is supported by their business earnings. We would submit that the answer is no and, therefore, their tangible assets are suffering from external obsolescence. This is valid information to submit to an assessor, but often difficult to analyze and translate into an adjustment on a property-by-property basis.

In addition to these macro considerations, as the financial landscape has changed and assumptions have been turned upside down there are issues to consider

on a case-by-case basis for each investment decision. In a June 15, 2009 broadcast of ABC's *Nightline*, financial author Suze Orman was filmed in Manhattan's Bryant Park, in a Peanuts-style advice booth, dispensing free advice to a gathering crowd (alerted via her Twitter account). In an about-face to her classic advice of paying off high rate credit cards, she told one visitor that repaying her \$11,000 balance would give the credit card issuer an opportunity to shut off her credit completely.

Small business owners may find themselves facing similar scenarios with drastically higher rates or being shut out of credit entirely. After Advanta Corp. recently completed record write-offs of uncollectible loans, it cancelled all of its small business credit cards, affecting approximately one million account holders. Similarly, the company running Office Max's credit card program terminated its arrangement in May 2009 and Office Max no longer accepts its own credit card from 100,000 small businesses.<sup>7</sup>

Recent economic events have affected the availability of credit, the cost of credit to those who can obtain it, durability of revenue streams, and reduced economic lives that require an acceleration of investment recapture. Increased uncertainty about the resale value of equipment is prompting finance companies to either amortize the entire cost of the machinery or require a guarantee shifting that risk to the lessee.

This level of uncertainty is also causing business owners to postpone or forego replacement of inefficient or outdated equipment because of the questionable prospects of securing financing.

The following is an example of this scenario:

A Michigan based automotive supplier purchased \$900,000 in welding equipment with the anticipation of having a net operating income of \$100,000 annually over the next 12 years. Assuming a 4.33% risk free rate, this anticipated revenue stream has a present value of approximately \$921,000.

$$PVA = \text{Payment} \times (1/i - 1/i(1+i)^n); i = 4.33\%, n = 12$$

$$PVA = \$100,000 \times (1/.0433 - 1/.0433(1+.0433)^{12}) = \$100,000 \times 9.21 = \$921,000$$

With the bankruptcy filing of General Motors, the supplier had to reduce the forecasted equipment life to eight years, effectively cutting the present value to \$664,000. This effectively reduced the value of the welding equipment and was addressed with the taxing jurisdiction. The assessor recognized the obsolescence and agreed with the taxpayer to list the equipment on the idle schedule, effectively reducing the value 60% over what the jurisdiction originally proposed

In the end, taxpayers should look at the justifications for their largest capital acquisition requests and determine the underlying assumptions made about cost savings or revenue growth and whether these are still likely to be achieved. This is all valid information to discuss with the assessor in an effort to demonstrate that the underlying earnings and economic structure do not support the value of the assets. An assessor can be expected to counter that the credit squeeze and recession are endemic, leveling the playing field for the whole population of taxpayers. But, by bringing specific issues to the assessor's attention, you bolster your case for an adjustment.

The income approach is not always viewed as the most appropriate to consider for personal property due to the lack of credible lease transactions or operating income data, and the fact that it is difficult to segregate the value conclusion to specific assets. Regardless, it's a powerful tool to use in conjunction with the other valuation approaches and in instances where the underlying business assumptions have changed and can be quantified. The assessment community rarely utilizes the income approach, but it must be considered according to appraisal standards and can work to your advantage to quantify the impact of the current economy.

### The Cost Approach: Calculating Economic Impact

The cost approach is by far the most commonly used approach by the assessment community, even though determining adjustments for accrued depreciation is subjective, and accounting for all forms of accrued depreciation can be difficult. Because of this, property tax professionals need to understand this approach thoroughly and know how to calculate obsolescence that is often overlooked because it is industry- or property-specific.

The typical application of the cost approach includes the assessor classifying personal property based on the type of asset, then assigning an economic life and valuation table accordingly. For example, assets may be grouped into classifications for computers, office furniture and equipment, and machinery and equipment with asset lives ranging from three to 20 years. The norm is to then have different valuation schedules assigned to each classification; assets having shorter economic lives or that experience more rapid depreciation receive a more aggressive valuation schedule. There is little doubt, however, these valuation tables, designed to value all types of property on a mass

appraisal basis, do not consider all forms of accrued depreciation. In fact, many state assessment manuals point this out in their discussion of the cost approach and application of the valuation schedules.

Physical deterioration is usually adequately accounted for, unless a jurisdiction uses a single factor for all property or the valuation table has a 50% floor. However, functional and economic obsolescence are rarely considered unless the jurisdiction has a special table for specific types of assets, such as computers or high-tech medical equipment, or for industries such as microchip or automotive manufacturers. These instances are rare, so taxpayers must determine if their assets are affected by either functional or external obsolescence, and recommend an appropriate adjustment.

Since functional obsolescence is internal to the assets themselves, taxpayers need to identify areas where technology has created better or more efficient assets. While this form of obsolescence is not our main concern here, we will briefly consider its application in the cost approach.

The two primary types of functional obsolescence are *excess capital costs* and *excess operating costs*. Excess capital costs are defined as the difference between the reproduction cost and replacement cost of an asset, with the assumption that the replacement cost will inherently consider any technological advancement in the asset or construction materials, as compared to the reproduction cost, the current cost of an exact replica of the asset. Excess operating costs, on the other hand, represent the additional costs required to operate an asset due to an inadequacy or a super-adequacy inherent in the asset. The theory is that because of advancing technology, newer assets are typically cheaper to operate than older ones. The adjustment for this type of functional obsolescence is usually calculated as the present value of the operating cost differential between the newer and older assets using an appropriate discount rate over the expected remaining life of the asset. Combined, these two adjustments should account for the functional obsolescence affecting most assets, even though they may not consider all plant-specific issues such as bottlenecks and other manufacturing process inefficiencies.

Periods of economic downturn could affect functional obsolescence to the extent that it affects the level of replacement or reproduction costs or the levels of excess operating costs. For example, the discussion of the plastics industry included information that the

primary equipment manufacturer was significantly discounting the costs of the new, technologically advanced, machines. This could affect the calculation of excess operating costs if the current costs to replicate an asset are not being discounted at all or to the same extent. Similarly, the economic downturn could spur more interest in cutting operating costs which could lead to advancements that would affect the calculation of excess operating costs. While there is some potential impact from the economy on these calculations, it is ancillary when compared to the impact on economic obsolescence, much of which appears to be directly linked to economic conditions.

We defined economic, or external, obsolescence as the loss in value due to an impairment caused by factors external to the asset. The common forms of this type of obsolescence include increased production costs and decreased product demand, clearly factors that are affected by an economic downturn. Several items FASB offered, as examples of situations that constitute events or changes in circumstances that may indicate that a company's assets are experiencing obsolescence, clarify this connection even more.

Consider the following indications:

- A significant adverse change in the extent or manner in which an asset is being used or in its physical condition
- A significant adverse change in legal factors or in the business climate, including actions by a regulating body, which could affect an asset's value
- A current operating or cash-flow loss combined with a history of operating or cash flow losses or a forecast that demonstrates continuing losses associated with the use of an asset
- An expectation that there is a probability in excess of 50% that an asset will be sold or disposed of before the end of its estimated service life

During the current downturn, many industries and businesses have had decreased asset utilizations, adverse changes in the business climate, operating losses and the probability that their assets may be disposed of or sold before the end of their expected life due to over-capacity or bankruptcy. Unmistakably, there is a connection between economic conditions and external obsolescence's impact on the value of personal property.

The Institute for Professionals in Taxation teaches two primary ways to calculate external obsolescence for personal property which are consistent with accepted valuation principles. The

first method is utilizing the income approach to determine an adjustment; the second is to calculate an inutility penalty using a cost-to-capacity analysis. Essentially, the income approach capitalizes any loss in income due to external causes over the remaining economic life of the asset. If the value derived from the income approach is lower than the value derived using the cost approach, then external obsolescence exists and a corresponding adjustment needs to be made.

For example, consider the following:

Use the cost approach to determine the value of an injection molding machine that is 15-years old. The reproduction cost of the machine installed is \$325,000; it has a useful operating life of 30 years. New machines have computerized mold controllers, use \$500 less per month in utilities and cost \$250,000 installed. The capitalization rate is 10%.

Reproduction Cost New	\$325,000
Less: Physical Deterioration ( $\$325,000 \times (15\text{yrs} / 30 \text{ yrs})$ )	<u>(162,500)</u>
Reproduction Cost Less Physical	\$162,500
Less: Functional – Capital Costs $\$325,000 - \$250,000 = \$75,000$	
Less: Physical Deterioration Previously Charged $\$75,000 \times 50\% = \$37,500$	
Functional – Capital costs $\$75,000 - \$37,500$	<u>(37,500)</u>
Reproduction Cost Less Physical & Functional – Capital Costs	\$125,000
Less: Functional – Excess Operating Costs PWF 10% for 15 yrs. = 7.6061 $\$6,000 \times 7.6061$	<u>(45,636)</u>
<b>Indicated Value</b>	<b>\$79,364</b>

Assume that the net operating income for this machine is only \$5,000 due to the current demand for injection molded products. Using the capitalization rate of 10%, the income approach indicates a value of only \$50,000 ( $\$5,000 \div 10\%$ ). Based on this, we would conclude that there is external obsolescence of \$29,364.

From a valuation theory perspective, this result seems reasonable since the cost approach to value

sets the upper limit of value given that a prudent investor, under the principle of substitution, would pay no more for an asset than the cost to build a new one of equal utility less any accrued depreciation to equate to the asset being acquired. So, when the income approach indicates a lower value it is natural to make an adjustment to the cost approach for the obsolescence that must have not been correctly identified and quantified. This concept of the cost approach setting the upper limit of value also nullifies the notion that the income approach can be used as an indication of enhanced value if the income approach conclusion is greater than that of the cost approach. Any value in excess of the cost approach value is generally attributable to other tangible or intangible assets.

The second method, an inutility penalty based on a cost-to-capacity analysis, is more frequently employed to calculate external obsolescence as it considers the utilization of the asset being appraised. The calculation measures the loss in value due to under-utilization of an asset by determining the percentage decrease in capital costs based on the hypothetical reduction in asset size from the current rated capacity to the actual operating levels. The formula utilizes scale factors to recognize that the costs of assets with different capacities vary exponentially rather than linearly.

The formula is as follows:

$$\text{Obsolescence (\%)} = [1 - (\text{Capacity A} / \text{Capacity B})^n] \times 100$$

Capacity A = actual production  
Capacity B = rated or design capacity  
n = scale factor

Scale factors are considered in the formula in order to account for the cost of facilities of different capacities vary exponentially because of economies of scale. In other words, every additional unit of capacity does not add the same unit of cost as the prior unit. Scale factors are published for various industries and application over time has shown there is a central tendency of factors between .60 and .70.

The following is an example of an application of this calculation:

An automotive parts supplier had a manufacturing facility in Georgia that was designed to produce components for approximately 2,000 vehicles per day. However, because of the state of the automotive industry the facility was only producing components for 425 vehicles per day. The appraisal guidelines from the Georgia Department of Revenue indicate assessors must consider external obsolescence, so the taxpayer provided valuation text describing the cost-to-capacity and the following analysis on appeal:

$$\text{Obsolescence (\%)} = [1 - (425 / 2,000)^{.70}] \times 100$$

$$\text{Obsolescence (\%)} = 66.18\%$$

After confirming the decrease in utilization led to a corresponding decrease in revenue, the appeals board granted 65% obsolescence and issued a \$41,000 refund.

In addition to these two methods, taxpayers can also look to the market to derive external obsolescence.

Recall that market sales typically are the best indication of market value, especially if the sale is of the subject asset or of an asset with a high degree of comparability. Similar to the income approach analysis, if the sales comparison approach results in a value that is less than the cost approach conclusion then there must be additional depreciation, presumably in the form of external obsolescence if all other factors were correctly considered.

Take for instance the injection molding machine example outlined above. If instead of the income approach analysis we were able to determine that similar machines were selling in the marketplace for \$48,000, we would then be able to conclude that the value of the asset is \$48,000 and that the \$31,364 difference between the cost approach value conclusion and the value based on the market is attributable to external obsolescence since the other forms of accrued depreciation, physical deterioration and functional obsolescence, are assumed to be correctly calculated.

This same phenomenon can be seen in the examples of the injection molded plastic parts supplier and the manufacturer of components for products used in new home construction. In both instances the market transactions for the assets in question were less than what would have been calculated as their cost approach value. In the case of the injection molded plastic parts supplier, the first asset in the list was a 2006 injection molding press that had an original cost of \$450,000.

Using a typical valuation table and assuming there is little functional obsolescence to consider, since the asset is relatively new, the value using the cost approach would likely be no less than \$350,000. Yet, the asset sold for only \$160,000. Therefore, the external obsolescence due to economic turmoil can be estimated at approximately \$190,000.

Similarly, the cost approach value for the metal-working assets held by the manufacturer of components for products used in new home construction would more than likely be greater than the orderly liquidation values that were assigned at the time of the acquisition. The fact that these same assets were selling for approximately 50% of their acquisition values less than a year later indicates that there is also a significant level of external obsolescence impacting this class of assets due to the economic conditions impacting the housing industry and other industries that use metal-working equipment.

## Conclusion

The current economic conditions are affecting most industries and sectors to some extent, with many experiencing devastating results. As tax professionals, we need to determine if these circumstances are affecting the personal property values of our companies and clients. If they are, we need to use the standard valuation approaches and the techniques discussed above to effectively present appropriate obsolescence adjustments to the assessment community.

These are certainly not new concepts, but these are certainly unprecedented times in which we now find ourselves; we need to successfully apply them. The stakes may never have been higher. ♦

## Endnotes

- <sup>1</sup> The American Society of Appraisers, *Valuing Machinery and Equipment*, (Washington D.C. 2000), 116.
- <sup>2</sup> Robert S. Risbridger, Kenneth M. Heyse ASA, *Plastics One Advisers, LLC. The Perfect Storm*, May 2009.
- <sup>3</sup> David Barkholz, "Lear announces bankruptcy reorganization plan" [PlasticsNews.com], July 1, 2009.
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- <sup>5</sup> Bill Breger, "Bankruptcy court approves sale of Milacron," [PlasticsNews.com], July 7, 2009.
- <sup>6</sup> The American Society of Appraisers, *Valuing Machinery and Equipment*, 158–159.
- <sup>7</sup> Cyndia Zwahlen, "Tighter credit pinches owners," *Chicago Tribune*, June 29, 2009.