Risky Business: **When Lost Value Damages Do Not Involve Lost Income**

By Chris Hamilton, CPA, CFE, CVA

The following case study examines the veracity and application of one of the most basic formulas used in the valuation of businesses and other intangible assets. The damages case was much more complex and nuanced than presented here. However, the energetic and complex litigation boiled down to a very basic question: Is it possible for a business to lose value even though cash flow generated by the business stayed the same, or increased, after the damage event?

Is it possible that a business can have minimal to no loss of net income or cash flow and still lose value? Theoretically—and most likely, practically—the answer to that question is yes.

A large, profitable, privately held business was up for sale. The sellers (a small ownership group) had adequately prepared for the process, and their efforts resulted in the submission of several letters of intent, with more expected. The sellers had substantial alternative investment opportunities that were dependent on a well-planned and rapid sale of the subject company, and a lot of work had been done to make the business attractive to strategic buyers. The subject company had a significant presence in a well-defined industry with relatively few competitors and high barriers to entry into the market. The sellers knew the company was attractive to competitors and other synergistic buyers and, therefore, anticipated a smooth due diligence process and a quick closing.

The seller's favored strategic buyer had already submitted an offer, as had the second and third choices. All pending offers were based on the same general formula: 10 times adjusted EBITDA, or more. Several of the potential buyers were granted access to a virtual data room and had visited the business to tour the plant and commence negotiations.

One buyer, in particular, was pressing to close the deal and eventually the other suitors were pushed aside. The formula for calculating adjusted EBITDA and the multiple to be applied to adjusted EBITDA had been negotiated, and both parties agreed. The plan was to complete normal operations the following month, calculate adjusted EBITDA based in part on those operating results, and complete the transaction at the predetermined formula.

The subject company was highly dependent on a single supplier, although there were many available suppliers in the industry. Because it looked like there was going to be a sale of the business, the buyer requested that the sellers contact the supplier to notify it of the sale and to get assurances that there would be no interruption in supply for the new owners. For reasons that are not important for this narrative, once the supplier was informed about the sale, it actively and knowingly sabotaged the sale by immediately cutting off all supply and creating negative publicity throughout the industry and with the company's customers. Because of the potential reputation damage within the industry, the seller was forced to notify potential buyers of the supply interruption. In response, all potential buyers either dropped out of the process or immediately amended their offers for substantially lower amounts.

Meanwhile, the seller was able to replace inventory supply through new vendors within two weeks and allay customers' concerns sufficiently to resume normal sales. But the damage had already been done. After several weeks, the primary buyer reengaged in the process. Inventory supply and cash flow had returned to normal and improved. However, the potential buyer dropped its offer from more than 10 times adjusted EBITDA to less than six times adjusted EBITDA. When the sellers rejected the modified offer, the sales process was terminated.

The sellers sued the supplier to recover the lost value of the business and damages related to interrupting a transaction that caused lost opportunity for the sellers. In short, the claim was that the deliberate and dramatic effort of the supplier to damage the subject business and prevent the sale was successful and damages were, therefore, due to the sellers to compensate for lost value related to the contemplated sale. Ignoring the permanence of the loss for purposes of this analysis, the controversy became whether it is possible that a business can have minimal to no loss of net income or cash flow and still lose value. Theoretically—and, most likely, practically—the answer to that question is yes … of course! The shareholders (potential sellers) thought so.

Theory Becomes Application

A basic formula in business valuation, or in the valuation of any intangible asset, is that value equals income[1] divided by risk.[2] To the extent that expected cash flow (or some other measure of benefit) and the risk associated with that cash flow can be identified, the associated asset (invested capital, in this case) can be valued. For an experienced valuator, this is akin to the law of gravity; it is foundational to valuation theory and practice. The basic formula contains the elements and mathematical relationship of the two core elements of any valuation analysis: income and risk. The formula (income ÷ risk) is the mathematical and theoretical platform for the income and market approaches to valuation.

Every business or intangible asset valuation method, with the exception of the asset approach, uses some form of the "formula." Even the asset approach may include those elements if an income approach is used in a tangible asset appraisal. The market approach is the search for a multiple that, when inverted, becomes a "risk rate" that is used to capitalize income or cash flow. The formula (income ÷ risk) is also known as the capitalization of earnings method/formula. A variation of that basic formula is the application of a multiple to a benefit stream as is done in the market approach or as an income approach. The discounted cash flow method is based on the same formula and the same two elements: income and risk.

After the damage was done to the subject company, adjusted EBITDA continued to increase, yet the price suitors were willing to pay for the business decreased. The decrease in value was evidenced by real-time negotiations and additional offers received for the business after the damage event. Since there was no sustained reduction in cash flow, the cause of the decrease in value must have been the increased risk resulting from the supply interruption and other actions of the supplier. The unsystematic risk associated with the plaintiff's business was the only factor that changed. The uncertainty of inventory supply and the industry stigma surrounding actions taken by the defendant supplier obviously impacted the perceived reliability and stability of expected earnings for the business, increasing the risk of the investment and resulting in lower multiples (higher risk rates).

In litigation, where the value of a business is at issue, there is surprising resistance to the concept that both factors (cash flow and risk) affect value. There is ready acceptance that a decrease in cash flow caused by the act of another can result in damages in the form of lost business value. The alternative cause of lost business value—greater risk—may be more difficult for courts to embrace. Where the perceived risk surrounding a benefit stream is elevated, value decreases (all other things being equal). This is, admittedly, less common in damages cases, but no less relevant.

The same buyers making significantly smaller offers based on the same, or greater, annual cash flow, reflects as clearly as anything that such a concept exists.

Multiples as a Measure of Risk

A multiple is a capitalization rate, and a capitalization rate is a multiple. If $100,000 in cash flow is divided by a capitalization rate of 20 percent, it results in a value of $500,000 ($100,000 ÷ 0.2). That is the same result as multiplying $100,000 times a multiple of five. That relationship is not a coincidence, of course. A multiple of five is the inverse of 20 percent (1 ÷ 0.2) and 20 percent is the inverse of a multiple of five (1 ÷ 5). A multiple, therefore, operates as the inverse of a capitalization rate. The higher the capitalization rate, the lower the multiple; and, of course, the higher the multiple, the lower the capitalization rate. This is a critically important relationship in business valuation and the pricing of equity. Embedded in the multiple are all the risk factors traditionally ascribed to a capitalization rate.

A multiple of 11 times EBITDA represents a capitalization rate of 9 percent (1 ÷ 0.11). When an offer to buy changes from 11 times EBITDA to six times EBITDA, and EBITDA has not changed, that change in price is due entirely to a change in the capitalization rate from 9 percent to 16.7 percent (1 ÷ 6). If there are no systematic factors explaining the dramatic drop in the multiple being used to price the asset—and growth is assumed to be constant—the remaining element must be the unsystematic risk factors associated with the asset. In this case, those were easily identified as risks associated with supply interruption as well as negative information about the business, whether true or not, that put customer relationships at risk.

1 The generic term "income" encompasses several potential measures of income or benefit to the owner of the asset. The alternatives include net income, pre-tax net income, EBIT, EBITDA, cash flow to equity, cash flow to invested capital, etc.

2 An experienced valuator recognizes this as the formula used for the capitalization of earnings, where the capitalization rate or "risk rate" is adjusted for expected growth and is assumed to be static. The same formula is relevant in the discounted cash flow method where, for a period of time, growth is variable and accounted for in projected cash flows rather than the risk rate.

Practical Evidence

There is significant evidence of the relationship between value and risk in short-term public company markets on an almost daily basis. At times, the broad market reflects the adverse impact of increased perceived risk on equity prices. The mortgage market meltdown of 2008 and 2009 is a good example. The circumstances of that crash would certainly impact the cash flow and risk of banks, investment bankers, and others in the financial industry. However, for much of the market, there was no cash flow impact and yet the price of most stocks went down for a sustained period of time. The reason was uncertainty and risk, not cash flow. Reporting on litigation, government regulatory action, political or social upheaval, new technology, or even consumer sentiment can impact perceived risk, resulting in a decrease in stock prices, even when there is no known or expected impact on cash flow.

Conclusion

Many in the valuation community understand the relationship between value, income, and risk. The users of our work in the litigation arena, depending on the circumstances and venue, may not possess as deep an understanding. It is the starting point for describing valuation and one of the easiest formulas and concepts to explain to a trier of fact. Testifying that a business lost value because of a damage event that reduced cash flow may be more logical and rational to a trier of fact. However, it may be more difficult for an inexperienced judge to understand that an increase in risk has the same effect. Since damage calculations in the courtroom are often correlated with reduced cash flow, evidence of damages associated primarily with increased risk must be delivered with clear, concise, and convincing testimony. VE

Chris Hamilton, CPA, CFE, CVA, spends most of his professional time in the areas of business valuation, forensic accounting, and litigation-related engagements. He has served as an expert in hundreds of cases in civil, criminal, probate, and family court matters. Mr. Hamilton is regularly asked to teach courses ranging from certification classes to advanced business valuation and forensic accounting. He has written several continuing education and certification courses and is a co-author of the textbook, Financial Valuation—Applications and Models*. Email: CHamilton@arxisgroup.com.*