

VALUATION

Impairment Revisited

Beware of goodwill impairment analyses during extreme market conditions

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During the latter part of 2008 and into early 2009, macroeconomic disintegration and plummeting stock prices led to a period of unprecedented asset write-downs and, specifically, goodwill impairment charges. As we entered the season of goodwill impairment testing in 2009–2010, economic and financial conditions appeared to have stabilized rela-

tive to the year prior, and stock prices in general had rebounded significantly. In fact, the market capitalizations as of October 2009 for a number of firms that took impairment charges during the prior year's impairment testing cycle may have very well exceeded the net book value of those firms, as measured just before their impairment charges. Such irony highlights the limitations of impairment accounting guidance and related analyses during periods of acute financial market distress.

The purpose of this article is not to address the specific considerations that led to the goodwill impairment of a particular company, but rather to broadly address the application of ASC 350 and ASC 820 in the context of stock price swings during the period between late 2008 and late 2009 that ostensibly indicated significantly different values for many companies (depending upon the date of measurement) despite the fact that many of those companies' fundamental risks and prospects did not substantially change during that period. Consequently, based on the observations and reasoning compiled herein, I believe that in periods of ex-

treme market conditions, the usefulness of goodwill impairment analyses and their conclusions are questionable at best. (While the rules of ASC 820 with respect to goodwill impairment testing did not technically apply until the first calendar quarter of 2009, many public companies had begun applying it *de facto* during 2008 in anticipation of heightened audit and regulatory scrutiny.)

STOCK PRICE AS IMPAIRMENT INDICATOR

While not a sole or definitive indicator of impairment, stock price (when available as a Level 1 input) cannot be ignored in assessing goodwill. The companies that took goodwill impairment charges ostensibly did so as a result of more-than-temporary changes in the financial and operating conditions of their businesses, corroborated, as applicable, by associated stock price declines. Nevertheless, some would argue that a number of these firms were as much influenced by audit and regulatory pressures (both perceived and real) to reconcile market capitalizations that were significantly below the book

values of their net assets. Regardless of the SEC's heightened interest in goodwill impairment beginning in late 2008, the fact remains that accounting rules (and their interpretations) must be *consistently* applied in order to reap the greatest benefit to the users of financial statements. That being said, if companies have historically relied upon their stock prices during up markets to justify no impairments in their businesses, it would seem reasonable that they seriously consider the implications of stock price declines as well.

MARKET EFFICIENCY VS. MARKET UNCERTAINTY

Embedded in standard business valuation approaches, as well as in the definition of fair value, is the assumption that the market for the business being valued is reasonably efficient, and if not, that any apparent arbitrage opportunity is at least readily explainable. Absent extraordinary circumstances, one could expect to value a business using reasonable cash flow projections coupled with a discount rate developed using one of the commonly used models such as the capital asset pricing model, and arrive at a valuation conclusion using a discounted cash flow (DCF) method not wildly divergent from that indicated by some type of Level 1 input (e.g., a publicly traded stock price or transaction price). However, this paradigm seemed

to change dramatically (at least for a period) beginning in mid-September 2008. Not just financially distressed firms but also profitable companies with solid balance sheets were finding themselves in the predicament of having to reconcile the differences in value between Level-3-input-based valuation approach (i.e., a greater indicated value based on the DCF method) and Level-1 inputs (i.e., an indicated value based upon market capitalization). When no explanation could be provided, some firms were induced to either (a) ignore or severely discount any income-based valuation approach and rely instead on stock price to assess goodwill impairment, or (b) employ what might be viewed in retrospect as exceedingly high cost of capital assumptions in order to reconcile their indicated values derived from the two methodologies.

In these situations, financial managers (as well as valuation practitioners) were perplexed in their attempts to rationalize how the market was pricing their businesses. While some would argue that market efficiency somehow broke down or irrationality took over, another likely explanation is that market *uncertainty* was a culprit. Market efficiency is a function of the amount of available information that is priced into the market, relative to the amount of information that is knowable, period. When less information becomes knowable, markets can still be efficient, but rational, risk-adverse participants will likely charge a higher price (i.e., a higher risk premium) for the use of their capital to reflect any marginal uncertainty.

DEFINITION OF FAIR VALUE

The key to the entire goodwill evaluation process is the definition of value which governs the analysis. With the

emergence of fair value accounting and the institution of ASC 820, “exit price” rules the day, and priority is given to inputs based on quoted prices in active markets for the assets being valued or similar assets (Levels 1 and 2). In most impairment analyses of public companies, though, discounted projected cash flows are heavily relied on due to the existence of multiple reporting unit structures for many companies as well as the desired consistency with commonly accepted valuation approaches. Such analyses rely heavily on unobservable inputs (Level 3) as well as weaker forms of Level 2 inputs (e.g., debt yield curves). The indicated value using a DCF method often results in more of an “entry price” (i.e., what the owner would be willing to pay); but while exit price is theoretically more easily observable and less susceptible to “gaming,” during relatively benign and competitive market conditions, entry and exit prices should typically not vary substantially. However, even absent any grossly unsubstantiated entity-specific assumptions, a problem (and a divergence in valuation results) still arises when the assumptions used in a DCF analysis (e.g., the equity risk premium and size risk premium) are based on long-term, historical information as a proxy for normalized expectations—particularly when the information imputed by stock market prices is substantially more negative.

This is the phenomenon that occurred during late 2008 through 2009: Valuation techniques using data sources that had worked in prior years had difficulty addressing the new circumstances. For example, through the end of 2008, long-term average realized stock returns in excess of the risk-free rate, commonly used as an estimate of the equity risk premium, declined just

as the economic conditions indicated that discount rates should be greatest. As a result, for many firms the value of their reporting units appeared to be maximized by retaining and developing those assets as opposed to disposing them to “market participants.” This perception was further magnified by the fact that the latest equity market downturn coincided with a dearth of M&A activity, limiting the availability of credible Level 2 inputs.

The definition of value also has an implication on the influence of liquidity in the goodwill evaluation process. A valuation based on the intrinsic economic benefits a business generates (e.g., a DCF analysis) normally presupposes the availability of capital in a healthy, competitive market. As a consequence, entry and exit prices should converge, all else being equal. When that capital becomes constrained, however, the same intrinsic value may no longer be representative of what a firm would receive in the sale of its business to a market participant, and the stock price will reflect this. Specifically, during a macroeconomic shock that causes a “flight to liquidity,” the expected return for financial assets will increase, even after controlling for other risk factors, placing downward pressure on the prices of those financial assets.¹ A manifestation of this phenomenon existed between October 2008 and March 2009. During this period the relative bid-ask spread on the S&P 500 index was more than double its 10-year historical average and coincided with record volatility (and daily absolute price return) levels.

¹ Brunnermeier and Pederson, “Market Liquidity and Funding Liquidity,” Oxford University Press, December, 2008; Chen and Ibbotson, “The Liquidity Premium,” *Morningstar Advisor*, June 2009; Amihud and Mendelson, “Stock and Bond Liquidity and its Effects on Prices and Financial Policies,” Swiss Society for Financial Market Research, March 2006.

One may argue that this phenomenon was simply a function of the heightened uncertainty of that period: a result of heterogeneous expectations among market participants that became more divergent due to macroeconomic shock. Trading volume during this period (another liquidity proxy) was still relatively robust. Nevertheless, during periods of heightened uncertainty it would seem that the price impact from the act of trading itself (the very definition of liquidity) would be more pronounced since other forms of information are more limited.

Estimating an appropriate cost of capital during such a market environment can become problematic. While cost of debt inputs may be readily discernible through contemporaneous yield curve information, the inputs for estimating the cost of equity are commonly based on historical equity returns over some extended period of time. Such data should theoretically include any illiquidity risk premium embedded in stock prices and returns, but only on a long-term, average basis. Consequently, a firm's true cost of capital that reflects the additional illiquidity (or uncertainty) risk premium created by acute financial market distress may not be easily discernible, but it is likely higher than a discount rate estimation based on commonly applied discount rate models. One may argue that any incremental risk premium caused by a one-time shock is not necessarily relevant in estimating the value of a business based on its intrinsic economic benefits, i.e., its fundamental value. Right or wrong, however, the exit price condition of fair value effectively requires that all factors being priced into assets by market participants, including any incremental illiquidity/uncertainty

risk, be fully considered in any fair value estimation. As a result, market capitalization has become a driving force in goodwill impairment determination.

WHAT ABOUT THE NUMERATOR?

The other key input to a DCF analysis, and implicit in the price of any financial asset, is the projection of expected cash flows that the subject of the analysis is expected to generate (the numerator). Given the depths that the stock market reached in early 2009 and the ensuing rebound over the subsequent six to nine months, one might argue that the relative change is simply a function of the market's reassessment of those cash flow expectations. Consequently, a company undertaking the impairment process as of late 2008 or early 2009 may have run into reconciliation problems because its cash flow expectations diverged significantly from what was imputed in its stock price, whereas today the same analysis with the same cash flows may be much easier to reconcile. Such an explanation does raise the question of whether the market was behaving rationally during its nadir. Assuming rational behavior for the moment, however, if a change in cash flow expectations is the primary explanation for the market's fairly abrupt rebound, one would expect other information in the marketplace to reflect such a change in attitude. As a crude test of this hypothesis, I compared the Congressional Budget Office's nominal-dollar GDP forecasts for 2010 and 2011, as of January 2009 and January 2010. As of January 2009, the CBO's GDP forecasts for 2010 and 2011 were approximately \$14.6 billion and \$15.3 billion, respectively. As of January 2010, these estimates were approximately \$14.7 billion and \$15.1 billion, respectively. Alone, these dif-

ferences in the CBO's estimations made between 2009 and 2010 hardly suggest a dramatic shift in the overall prospective health of the economy as of these respective periods. Furthermore, and potentially as a more precise indicator of any dramatic expectation changes imputed in the price of equities, I also reviewed analyst consensus estimates of normalized EPS for the S&P 500 index, based on Reuters estimates per *Capital IQ*. Between March 2009 and February 2010, the consensus estimates for 2010 normalized EPS increased from approximately \$69 to \$77 (roughly 11 to 12 percent). For 2011 these estimates increased from approximately \$82 to \$87 (roughly 6 percent). These data, while more explanatory than the GDP data, still seem insufficient in justifying a 40 to 60 percent increase in the broad market indices compared to any shift in cash flow expectations alone.

IRRATIONALITY AND REVISITING UNCERTAINTY

As alluded to above, and likely consistent with the intuition of many business managers and valuation practitioners, one cannot exclude the probability that the equity prices a year ago reflected a degree of irrational investor fear and behavior. Unfortunately, in the realm of valuation for financial reporting purposes, taking such a position becomes untenable from a practical point of view (e.g., irrational behavior is unlikely to be a rationale that an audit partner or SEC reviewer would accept as the primary reason for why a company's DCF results do not reconcile reasonably to its market capitalization), especially since it is nearly impossible to prove irrational market behavior during the period of irrationality. Only in retrospect can one assess whether the market reason-

ably reflected all available information regarding potential outcomes and their associated risk. Additionally, fair value accounting guidelines and empirical valuation techniques in general do not easily cope with irrationality since they are implicitly, if not explicitly, based on the behavior of informed, rational actors. Nevertheless, even if stock price movements over the last year or so have ostensibly been inconsistent with the changes in expected outcomes (i.e., cash flows), this does not necessarily mean that market participants acted irrationally. It is possible that while expected outcomes changed modestly, the breadth (or standard deviation) of potential outcomes changed dramatically. In the context of risk-adverse market participants, this has significant implications for the rate of return that they require. That is, during the period of market turmoil, the range of perceived outcomes was likely much greater—indicating greater risk—than a year later, resulting in a much greater required rate of return. This directly relates to the earlier discussion of the impact of heightened uncertainty on stock price returns, and it again raises the concern regarding the efficacy of standard asset pricing models during financial and economic crises. More specifically, the ultimate implication for this change in uncertainty is a change in the risk premium demanded by market participants. The contention that the equity risk premium can, and does, change has been supported in empirical research and matches one's intuition given the behavior of equity markets (A. Damodaran, 2010). Nevertheless, it creates a complication if not a challenge for the valuator when it comes to estimating an appropriate cost of capital during a period such as that witnessed between 2008 and 2009.

A RETURN TO NORMAL?

By the fourth calendar quarter of 2009 (and still to this day), a substantial amount of the macroeconomic uncertainty and illiquidity risk that plagued stocks (and other financial assets) six to twelve months prior had exited the market. Even if a company's long-term cash flow projections had not substantially changed from a year prior, chances are that its stock price had rebounded, implying a lower (i.e., more "normal") cost of capital, all else equal. The result for many of these companies was impairment analyses that much more easily reconcile indicated values based on a DCF method and an indicated value based on market capitalizations. This in turn might call into question some of the valuation conclusions that drove goodwill impairments in the previous testing cycle. While those conclusions were not necessarily wrong per se, they did highlight the limitations of U.S. GAAP accounting rules and valuation practices during extraordinary market circumstances, and called into question the efficacy of goodwill impairment analyses in such circumstances. Specifically:

- An abnormal spike in uncertainty and liquidity constraints within the financial markets led to an implicitly higher cost of equity (and debt) than what would be normally estimated under conventional empirical techniques.
- The exit price and value hierarchy regime of ASC 820 created pressure to account for the above factors despite significant divergence from results based on fundamental value or entry price assumptions.
- Any impact on market capitalizations due to irrational investor behavior was practically impossible to support contemporaneously and so had to essentially be dismissed.

This conclusion may not be much consolation to firms that may feel they unnecessarily expended resources to renegotiate debt agreements or explain write-downs to their investors as a result of their goodwill impairments. Nevertheless, it hopefully provides some worthwhile considerations for navigating the waters of ASC 350 in the future. **VE**



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