

# Market Uncertainty Valuation Challenges

By Ciaran Kirrane



Much is made in the financial press of the valuation difficulties presented by market uncertainty. Ciaran Kirrane considers how different approaches can help with business valuation in turbulent markets.

Oscar Wilde would be surprised to find that the profile of a cynic may have changed since he defined it as someone who knows the price of everything and the value of nothing. In 2009 thanks to the financial crisis, the cynic might struggle with price and value. But has market uncertainty encouraged market participants to place more or less reliance on company valuation disciplines?

Following the Wall Street crash of 1929, Graham and Dodd (1934) introduced the idea that 'earnings power' underpins value and requires 'orderly, comprehensive and critical analysis'. This is alive and well today in regulation and accounting standards aimed at bringing transparency and consistency and making it compulsory to apply disciplined valuation procedures. Increasingly awkward questions are being asked when it comes to understanding whether scarce capital is creating or destroying value. Investors, regulators, accountants and independent directors, to mention a few, want answers about value and anything that is not best practice tends to get found out sooner or later, especially if there is litigation.

Our experience also reflects that the value destruction wrought by financial crises drives investors back to valuation basics.

## Standard Approaches in Uncertain Markets

Valuers are familiar with standard business valuation approaches including:

- ▶ The Income Approach: discounted cash flow analysis (DCF) requiring a weighted average cost of capital (WACC); and
- ▶ The Market Approach: multiples of earnings after tax, operating profit, EBITDA and shareholder funds, for example, drawn from comparable stock-exchange companies and M&A transactions.

Other approaches include net assets, discounted dividends economic profit, or the return to owners after deducting the costs of all capital, and the cost approach, which costs the recreation of an asset but does not consider prospective information. While these and other methods are accepted as good ways to help understand, value and manage risk in stable markets, companies question whether they are helpful when markets are volatile.

Here are some of the arguments against them:

- ▶ They don't help when markets are inactive or price indications are volatile;
- ▶ Fine for situations where cash flow is stable but almost useless where it is jeopardised or distressed;
- ▶ Price and value have nothing to do with each other anyway: I know what price I'm prepared to pay and that's the value;
- ▶ Fair or market value assumes market efficiency, which is a myth.

However, because the methods can be adapted and used alongside more sophisticated approaches, with the

right mix of expertise and common sense they are helpful in difficult markets. There are many ways to demonstrate this but examples focussing on cash flow, WACC and market multiples are illustrative.

## Cash Flow Uncertainty

One way to get better answers from DCF analysis, regardless of market conditions, is through understanding the key drivers of value based on a comprehensive analysis of the underlying business model and competitive market dynamics. Value drivers are sales growth, operating margin and growth, Capex, and working capital.

Even with detailed understanding however, certainty of value drivers is the exception rather than the rule. Valuers deal with this by assigning probabilities to cash flows and testing these through sensitivity analysis to develop ranges but this may not be enough when historically stable cash flows suddenly become very doubtful.

To assess such uncertainty objectively, Monte Carlo simulation (MC) can help. Very simply, this involves generating random numbers, applying them to an input such as operating profit and then transforming random numbers to capture statistical properties of the input variable. In contrast to the standard DCF approach of assuming a cash flow of X in year Y with a probability of Z, thus showing best and worst outcomes, MC shows a complete probability distribution of all outcomes. This helps to explain

risk objectively and has been used in DCF analysis recently to assess the impact on value of a deferred future payment in an acquisition, the cost of executive incentives subject to performance conditions, and to value long-term projects such as Public Private Partnerships which face multiple risks over extended periods. Where cash flows are contingent on once-off decisions, Real Options Valuation is an approach to value the opportunity to revise decisions in response to circumstances. However, it can be very complex to apply.

### Cost of Capital

Building WACC from the elements of the capital asset pricing model (CAPM) requires risk estimation using market price data. In turbulent markets, data can move a lot over short periods, meaning a hard look at CAPM components is needed. Below are a few brief examples of how valuers are doing this.

- ▶ The cost of debt: made up of a risk free rate plus a debt margin after tax, it rises with increasing risk of default and is measured by the spread between the yield on comparable corporate bonds and government benchmark issues. This is fine when the subject company has a credit rating. If not, one can be assigned by analysis of financial ratios required by rating agencies, or by looking at funding terms that have been agreed with banks;
- ▶ Risk-free rates (RfR): at the end of March of this year, the Irish RfR measured by the yield on 10-year government bonds was close to 5.5% compared with 3.3% in the UK and 2.7% in the US. For Ireland, this reflected considerable credit risk whereas the relatively low yield in the US represented a flight to quality in the midst of global uncertainty. For companies using observed RfRs at certain cut-off dates, it is important to consider whether a longer term average yield should be used to correct for unique market conditions;
- ▶ The equity risk premium (ERP): many studies analyse what the premium in excess of RfRs should be. Valuers select ERP according to a number of criteria with evidence suggesting a premium of 5.5% or 6% today, whereas three years ago around 4.5% was common. It is noteworthy that the premium is not static and moves with markets over the medium term and that its

selection should also consider how bond yields have moved;

- ▶ Beta: this is the factor in CAPM by which the ERP is multiplied to reflect the risk associated with a particular equity. For quoted non-financial companies, beta can reflect considerable recent volatility because of the weight of financials in stock market indices. One approach is to measure the subject beta over a historic period, long enough to give a reasonable basis to estimate the future long run return. For a financial institution, for example, this exercise moved the beta from 0.85 over the short term to 1.75 over the long term. Adjusting for certain one-off impacts such as takeover bids also should be considered.

### Market Multiples

Market multiples can be applied stand-alone (albeit with questionable results in some industries at the moment) or to cross-check and benchmark DCF-based valuations. Caution is required when using them whether there is financial distress or not. Brief examples of how market participants are doing so include:

- ▶ Selection of comparables: companies selected for comparison should have similar risk, profit and competitive features to those of the subject company. If not, averaging a group of comparable multiples may be too simplistic;
- ▶ Distress: if the subject asset being valued is distressed, then distressed company and transaction multiples should be analysed;
- ▶ Discounts and Premia: applying discounts and premia to multiples should consider factors specific to the investment being valued. Control premia may not be warranted if it is judged that change of control will not enhance value. Similarly, whether a marketability discount is applicable will depend on when and if an asset could be sold, the cost of sale, and the influence an owner can have on timing and control;
- ▶ Averaging from different approaches: this requires considerable caution. Enterprise and equity values should not be mixed, values reflecting control or marketability should not be included among those without such adjustments, and historic, current and prospective multiples should be clearly separated. In

addition, where DCFs have been risk adjusted to reflect market volatility in WACC and cash flows, they should not be mixed with comparable analyses that have not. One approach to adjust multiples for market turbulence is to look at them over longer periods. This is helpful for cyclical industries whereas defensive industries are more stable. In some cases, value conclusions from DCF have been well in excess of those indicated by multiples largely due to effects of market turbulence on the latter. While the issues mentioned can help us understand some of the gap, differences can not be explained by valuation basics in many cases and may have more to do with market psychology, which can not be quantified.

### Conclusions

Standard valuation approaches can and do help companies assess the impacts of uncertainty in their valuation conclusions. While there are many aspects to consider, understanding the drivers of cash flows and WACC while ensuring consistency between various methods, are good starting points to adjust for market volatility.

The economic downturn does not raise the need to change existing valuation methodologies but materially increases the need to consider carefully the selection of valuation parameters and for a deep understanding of the composition of cash flows. There are no magic numbers: valuers must analyse each variable according to its own merits, use verifiable data and document clearly the supporting sources and judgments. Common sense is vital and requires cross-checking conclusions from alternative approaches and subjecting the overall results to sector, peer or expert valuation review. Finally, one should accept that different value concepts following different dogmas lead to different values (Fair Value, Book Value, Investment Value, Liquidation Value) but rarely to the right price. Valuation today, more than in times of orderly markets, needs to be supplemented by additional information or misinterpretations can occur.

All these things will give the valuation a much better chance of standing up to scrutiny in uncertain times.

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