Volatile Values

Valuation in times of market uncertainty
April 2020
This UK guidance is primarily focused on the valuation of illiquid assets in the context of the turbulence currently being experienced in public markets.

**Background**

Since the beginning of 2020, we have observed significant volatility in global public equities (increases as well as falls in share prices).

In fact, the level of volatility in equity markets around the world has recently surpassed levels experienced at the start of the global financial crisis.

**The scope of this guidance**

This guidance provides recommendations for valuation considerations, which will be particularly relevant for impairment exercises and the fair value of unquoted investments, as valuers approach the 31 March reporting date and beyond.

These valuations will be particularly judgemental as they are performed against the backdrop of public market volatility and concerns regarding the impact of both COVID-19 and oil and other commodity price movements.

Fair value for financial reporting purposes is an exit price concept and therefore inputs need to be based on current market participant assumptions and views.

While valuation will certainly be more tricky and judgemental in the coming period, we are sharing this guidance to emphasise that it remains possible to arrive at a view on value, albeit one with a wider range. The methodologies that we have always applied will likely remain appropriate; what will need to be revised is the information that is flowing into the valuation and how we adjust market inputs if we feel that there is an element of ‘noise’ or excessive volatility.

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Source: CapitalIQ as at close of 31 March 2020
Global stock markets have turned ‘bearish’ with a decline in major equity indices around the globe. Using the low water marks from 1 January 2020 to 31 March 2020 (closing), the largest declines ranged between 29% and 42% (Nikkei and FTSE 250 respectively). Since then equity indices have risen slightly but are still trading around 20% to 30% below January 2020 levels.

The decline in equity prices over the past few weeks has been the most rapid and sharp decline since the global financial crisis.
Do capital markets still bear a relationship with the fundamental value of the underlying businesses?

Debt margins on borrowing have increased but risk-free rates have fluctuated in response to announcements of revised monetary policies. At this early stage, it is difficult to form a view as to whether capital markets continue to bear a relationship with the fundamental value of underlying businesses.

Debt margins in specific sectors (such as transport, energy, hospitality) have increased significantly, particularly for high yield borrowers given the expectations of a rise in defaults. The financial markets as a whole are showing a high level of ‘volatility’. This volatility has impacted bank and insurance stocks in particular and has been spreading to other sectors.

As profits are expected to decline and cash flow generation is expected to be limited, a significant proportion of companies will find it harder to make interest payments. As a result, debt margins have increased. On average, the spread of high-yield corporate bonds has increased from around 9% to 19% from the beginning of the year to the close of 31 March 2020.

With regards to risk-free rates, we have seen a significant decline in yields on government debt across the UK, US and Europe since January 2020. As with the equity markets, it is difficult to gauge whether gilt yields reflect long term expectations or are a short term reaction and gilt yields have been particularly volatile in recent weeks.
Points of debate

Observable transactions or trading multiples generally serve as benchmarks in the fair value concept. Can valuers still use recent asset transactions (if there are any) or trading multiples taken from stock prices as appropriate benchmarks? Whilst it is tempting to focus on the impact of share price volatility on market multiples, the more pertinent question to ask may be whether projections have been appropriately adjusted for changes in earnings and balance sheet values as a result of issues with the supply chain and/or changes in the demand for products/services.

Companies with high levels of debt and/or limited debt servicing headroom (e.g. because they have low operating margins or low cash flow conversion, particularly where costs are fixed e.g. salaries, rent) have an increased likelihood of liquidity issues, either over the next month or two or on a more sustained basis depending on the sector.

Although share prices have fallen in recent weeks, which will clearly impact multiples (as earnings estimates will not have been adjusted downwards), it is important to note that the starting point for market multiples was already fairly high and the new implied earnings multiple may still be above long term norms (it is difficult to be definitive given the level of volatility we are seeing in public markets).

The downturn in stock markets may be a result of investors requiring higher equity returns. Do valuers need to make any adjustments to the way in which we usually calculate discount rates or to specific inputs such as the equity market risk premium?
Actions to take (for all types of valuations)

1. Projections

- Revisions to projections: In relation to cash flow projections or maintainable earnings, we recommend thorough discussions and challenge with the providers of projections on whether and how, the implications of the events above are fully reflected in management’s expectations (e.g. changes in revenue, growth rates, margins, capital expenditures, etc.).
  - Given the significant changes in recent weeks in the financial markets and in expectations of business performance, the date at which the projections were prepared should be considered as well as other external factors including foreign exchange rates.
  - Projections should, where possible, be compared to market evidence and will need to reflect a much higher probability of a weak economy in the short to medium term. In the case of discounted cash flow (DCF) analysis, if the projections cannot be updated, an ‘alpha’ factor may need to be applied to the discount rate which will clearly require consultation and judgment to reflect company and industry specific factors.
  - Note that discount rate adjustments to correct for overstated cash flows are not best-practice as, without additional analysis, the concluded alpha may under- or overstate the correction. Under limited circumstances where alpha may be unavoidable, e.g. cash flows cannot be rigorously adjusted in a timely manner, practitioners should conduct additional analysis to consider and assess the reasonableness of the cash flow impacts implied by the risk premium (i.e. backsolve to the implied forecast and discuss with management).
- ‘Alpha’ adjustments should not be confused with illiquidity adjustments to discount rates, which are covered under separate headings to the right. Alpha is a specific risk premium because the set of cash flow projections being used may not be ‘expected’ cash flows. There may be some ‘downside’ scenarios missing from the ‘probability weighted average’ set of projections.
- Scenarios for projections: Different cash flow scenarios could be a useful way of understanding the range of potential outcomes for a business and its attached risks. For example, a business as usual scenario, a scenario with short/medium term disruption and a scenario with a broader and longer economic downturn.
- Long term growth rates: Long term interest rate changes reflect market participants’ long term estimates for inflation and economic growth. Thus, the growth rate assumption for a terminal value calculation may need to be lowered if a low spot rate is being used for the risk free rate input.
- Discrete projection periods: Given the significant impact of terminal value calculations on overall DCF valuations, valuers may need to extend the discrete project period or perform some level of sanity checks on the terminal value (for instance by considering the multiple implied by the terminal value).

2. Balance sheet items

- Deferred revenue: It is not just earnings and cash flows that require discussion/challenge. For businesses in the travel sector, or where there are large amounts of deferred revenue, it may be the case that with bookings/income dropping off, there will be working capital shortfalls that need to be filled. This will clearly impact the valuation.
- Real estate assets: COVID-19 will not affect all assets uniformly across the real estate market, with both regional and sectoral factors to consider. Prima facie, certain operational assets (such as hotels and leisure assets) along with transport assets (e.g. airport assets) may feel the impact most acutely initially and could potentially see values deteriorate quickly if COVID-19 continues to spread. Other sectors could also be affected but, most likely, over a longer time horizon; for instance, leased assets where financially weak tenants are now in a worsening position, student accommodation (depending upon travel bans for international students) etc. Ultimately, it could potentially have an impact on most sectors if we consider the most extreme scenarios and with certain countries very heavily impacted.
Actions to take (for all types of valuations)

3. Going concern versus gone concern

When scoping the valuation of a business with high levels of debt and/or limited debt servicing headroom, valuers will need to consider whether we can base our valuation on a going concern basis. Other metrics to consider are profitability, cash burn rate and covenant compliance. It may be more appropriate to assume that the business (or some segments within it) need to be valued on the basis of being put into run-off i.e. on a gone concern basis.

Fair value requires us to assume an orderly transaction (i.e. an appropriate period and amount of marketing in advance of the transaction). If the valuation is not for financial reporting then valuers will need to be mindful of the real risk of a business having short term liquidity crunches, which would mean needing to consider a distressed rather than an orderly transaction.

As these distressed transactions occur, the financial metrics arising from them will need to be treated with caution for the purposes of cross-checking to financial reporting valuations going forward.

4. Illiquidity adjustments to discount rates

These may be required if we observe that the marketplace for buying and selling assets has frozen up or its efficiency has diminished to some degree. There may be some frictional transaction costs that translate to a higher required rate of return. This is not the same as the ‘alpha’ adjustment. Alpha and illiquidity adjustments are clearly related but are not the same thing.

Share trading in public equity markets has been volatile recently but it still appears to be liquid. The market that may have become illiquid in recent weeks is the market for transactions in whole companies.

The market for parcels of shares is different to the market for the sale of whole companies. We therefore need to bear in mind whether, when we are valuing a controlling stake using a DCF analysis, we may need to consider an incremental value or discount rate adjustment for illiquidity to reflect this. Relative illiquidity may have also increased in private markets generally, so may also impact valuations of non-controlling holdings in an illiquid / non-marketable scenario.

Selling a whole company is carrying an illiquidity premium because buyers appear to be less interested in buying businesses at the moment (based on our anecdotal experience of current transaction processes). This is partly down to their observation of volatility in the public equity markets.

The impact on our valuations of either controlling or non-controlling privately held assets may be that we need to factor in a greater illiquidity adjustment in our discount rates or in the applied discount for lack of marketability to an “as if publicly traded” valuation basis than would normally be the case.

5. Cost of capital

At the current time, we believe that the Capital Asset Pricing Model (CAPM) and other established methods for calculating the cost of capital should continue to be used. As these approaches rest upon a theoretical basis which should hold in general – including in times of an economic downturn – there is no reason to adjust the general approach for calculating the cost of capital. However, a review of each input factor seems appropriate and assessment of the overall result is certainly required. For instance, the use of a normalised or smoothed risk free rate may be advisable if a particular daily spot risk free rate appears out of line with other days as a result of market volatility. Given the overall decline in risk free rates, even if a spot risk free rate is being used, it may be necessary to consider an increase in the equity market risk premium from recent norms. Our overall observation is that the current level of volatility in public markets would appear to suggest that on the whole, the current cost of capital has increased rather than decreased compared to 31 December 2019.
Actions to take (for all types of valuations)

6. Cost of debt/gearing

Other components of the cost of capital may need to be adjusted to take into account industry, geographic or company specific risks arising out of current market conditions. Therefore, valuers must consider (on a case-by-case basis) whether the actual, current debt margins should be applied (or not) in order to estimate an appropriate cost of debt (e.g. depending on whether a company is funded short-term or long-term, the necessity of future (re)financing, promised vs. expected yield, assumption whether observed spreads persist indefinitely, etc.). The same principle holds for the appropriate target debt/equity ratio which, in general, we might expect to be lower relative to equivalent historical ratios due to the increasing constraints on current debt financing packages and higher debt margins.

7. Use of spot share prices for trading multiples

Additional care must be applied when relying on observable recent market transactions (if any) to benchmark DCF valuation analyses. Due to heightened volatility in share prices, it may be appropriate to use average trading multiples over several weeks instead of daily multiples and to review analyst forecasts (as an additional source of benchmark data). However, market prices should still be used as a plausibility check for valuation results as there is a clear need to take into account all market evidence. Observable market transactions cannot simply be assumed to be forced transactions and therefore ignored without careful consideration of the circumstances and all relevant evidence.

8. Public market volatility

Given the increased uncertainty, valuers might expect valuations to:

- Have more volatility associated with them. It is important to flag this to the users of valuations up front, particularly if those users are planning to rely upon them from a commercial perspective or where the valuation exercise is a recurring one.

- Have wider ranges, more scenarios and/or sensitivity analyses. Our PwC experts have provided initial guidance on various business impacts of COVID-19.

- Have point estimates within those wider ranges that are based more on instinct than underlying financial metrics in these times of heightened uncertainty.

- Be accompanied by higher levels of disclosure in the case of financial reporting valuations. Those disclosures may wish to explain to the user that valuations could potentially change quickly over short periods of time (particularly where the subject business is highly leveraged).
Key take-aways

In the current climate, financial reporting valuations need to consider not only the turbulence in public markets but also the impact on growth rates and margins of recent developments related to COVID-19, oil and other commodity price movements:

1. Valuation basis/purpose

In performing valuations in the current climate, we must ask what the specific purpose of the valuation is and overlay this with the commercial and financial attributes of the target asset / company, when deciding on how much of the market’s volatility to ‘import’ into the valuation.

2. Decline in the pricing of debt and equities

Mechanistically matching declines in public markets may not be appropriate but at the same time, arguing that the whole market is distressed and therefore insulating the valuation from declines in the market will be equally inappropriate. Individual transactions can be distressed, whole markets rarely are.

3. Discount rates

If the use of CAPM is suggesting that discount rates have fallen (relative to December 2019) then the market inputs may need some degree of adjustment as COVID-19 has caused significant uncertainty which typically means higher rather than lower discount rates.

4. Valuation ranges

These will need to be wider and these ranges themselves may be subject to volatility in the case of recurring valuations that are performed over time as projections are updated and investors revise their expectations.

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