

The Covid-19 pandemic significantly affected financial markets in the first quarter of 2020. Stock markets declined sharply and volatility increased. The rapid deterioration in the economic environment has been accompanied by significant fluctuations in foreign exchange rates and commodity prices. The geopolitical forces have driven nominal oil prices to lows not seen since 1999. These market movements present valuation challenges to investors in private equity.

To assist you in setting fair value as at 31 March 2020, we have set out below the key issues to consider in estimating fair value at times of significant uncertainty.



Stock market movement and market outlook

 The Covid-19 outbreak brought businesses, cities, and almost entire countries to a standstill. The increase in uncertainty in the macroeconomic and business outlook triggered a sharp fall in stock markets worldwide.

Index name	31-Dec-19	31-Mar-20	% change
Hang Sang Index	28,190	23,603	-16%
Dow Jones Industrial Average	28,538	21,917	-23%
FTSE 100	7,542	5,672	-24%
S&P 500	3,231	2,585	-20%
NASDAQ Composite	8,973	7,700	-14%
Shanghai Stock Exchange Composite Index	3,050	2,750	-10%
Shenzhen Stock Exchange Composite Index	1,723	1,666	-3%

Source: Bloomberg and S&P Capital IQ

- The market generally believes that COVID-19 has a significant impact on global economic growth. Economists around the world are busy revising their estimates. The International Monetary Fund, in the World Economic Outlook published in April 2020, estimates that "the global economy is projected to contract sharply by 3 percent in 2020, much worse than during the 2008–09 financial crisis."
- Central banks and governments have made pre-emptive rate cuts or offered economic relief to simulate growth but the effectiveness of the relief efforts will take time to observe
- With the reboot of business activities, China's economy gradually has picked-up from the first quarter. Still, with the disruption on the supply chain, the pace of recovery remains uncertain.

Source: 1. IMF. World Economic Outlook: The Great Lockdown, April 2020



- Based on US private equity quarterly return data published by Cambridge Associates in its US Private Equity Index², and S&P 500 index data sourced from S&P Capital IQ, the 10-year correlation of private equity to the S&P 500 was approximately 0.77. Other correlation estimates to public equities have been observed in the 0.6 to 0.9 range.
- These imply that private investments are generally less volatile in terms of value compared to public market investments. As AICPA observes that it "is because the drivers of value for non-traded or infrequently traded investments are not specifically or uniquely tied to the second-by-second trading vagaries of the public markets."3
- Nonetheless, given the significant adverse impact Covid-19 has had on all industries and their business operating environments around the globe, it would warrant investors to carefully consider the valuation of their investments.

Valuation framework

- It is important to note that valuation principles remain unchanged under the impact of Covid-19.
- For financial reporting valuation, fair value is defined as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date."⁴
- Fair value is a market-based measurement and the following factors need to be considered and remain the guiding principles when conducting valuation:
 - What are the market conditions and market participant assumptions?
 - What constitutes an orderly transaction?
 - What is known and knowable at the measurement date?

 Fair value is not equal to a "fire sale" price unless there are clear signs that the target company is not striving and is heading towards a break-up/winding up.



- Covid-19 does not change the approach to value an investment. As before, when estimating the fair value of a specific investment, both the macro-environment and investment specific value drivers should be considered.
- In this environment, it means that the following questions need to be addressed:
 - What are the drivers of value: revenue/ customers, operating expenses, competition, supply chain, operations etc.?
 - What is the impact of Covid-19 on the business (ability to operate through a shutdown, ability to control costs and cash flows, inventory levels and exposure to impacted supply chains, etc.)?
 - What are the short-term, medium-term and longer-term impacts of a market disruption on the business?
 - What are the special strengths or weaknesses of the company during a pandemic/recession and what is the company's ability to rebound (recover lost revenues, trajectory) after a pandemic/recession?
 - Does the company have any liquidity, solvency, and/or covenant concerns?
 Does it have access to additional capital?
- Given the volatile market and uncertain outlook, it is important to demonstrate through the valuation process that the inputs and assumptions reflect the fast-changing business outlook as well as market-driven assumptions as viewed by market participants.
- Any changes in assumptions should be supported by documents with solid logical underpinnings.
- Source: 2. Cambridge Associates. US Private Equity (Legacy Definition) Index and Selected Market Benchmark Statistics, September 2019
 - 3. AICPA. Investment Companies: Measuring Fair Value in Times of Significant Uncertainty
 - 4. HKICPA. Hong Kong Financial Reporting Standard 13: Fair Value Measurement, September 2018



Update financial projections to reflect the latest conditions

- The underlying financial projections used for the fair value estimate should reflect the latest financial projections. Estimating future cash flows could be particularly challenging with the increase in economic uncertainty. Effort should be expended to consider the specific drivers and assumptions to arrive at adjusted forecasted cash flows. In particular to consider whether the disruption would cause temporary impact or permanent loss in growth and/or the potential shape and tenor of a recovery.
- Given the uncertainty in magnitude and duration of the Covid-19 impact, it may be helpful to consider using an expected cash flow approach (i.e. use multiple, probabilityweighted cash flow projections) rather than a single cash flow projection.

Reflect risks in the discount rate

- Covid-19 has had a significant impact on the risk-free rate and on entity-specific risk premiums.
- To stimulate the economy, certain jurisdictions have cut rates, some even to near zero. The use of the risk rate may yield a downward effect on discount rates under a Capital Asset Pricing Model (CAPM) framework, when market participants are likely requiring higher returns for the uncertainty and the risk.
- This means that other inputs to the CAPM would need to be further adjusted which include:
 - Adjusting the equity risk premium ("ERP") to reflect the increase in market volatility.
 - Adjusting the cost of debt to reflect the widened credit spread.
 - Adjusting company specific risk to reflect the credit risk/liquidity risk/forecasting risk.

 With the increased volatility and risk, it is unlikely that the discount rate would decrease compared to the previous valuation date.



Use caution with market multiples

- When using a market approach, it is important to ensure that the financial metrics adopted are consistent. In other words, to ensure that both the numerator (e.g. enterprise value) and the denominator (e.g. EBITDA) both contain the same frame of reference (i.e. reflected the Covid-19 impacts) to avoid a "double dip".
- The market data is updated daily but not for forward estimates or historical financials. The use of market data with a metric that has yet to reflect the Covid-19 impacts would understate the multiples leading to an under estimate of the fair value.



Consider the investment time harizan

- The investment horizon for private equity investments are of longer term. In contrast, stock market investors may sometimes be subject to short-term liquidity needs.
- When estimating the value of private investments, one may consider how the current market could change the investment horizon, return requirements and exit assumptions from the perspective of market participants and consider if these factors could mitigate the fair value volatility for private investments relative to the listed shares.



- The recent transaction price before the Covid-19 outbreak may no longer be used as a proxy for fair value given the significant change in market conditions.
- It is important to assess how the target company is affected by the Covid-19 outbreak in terms of its business plan, financial forecast, milestone completion compared to those determined from the recent transaction.



Consider the value trend

- Having a consistent valuation approach and evaluating the value trend, the relative quarter-over-quarter movements are key considerations for private equity investments.
- The overall changes in fair value should be supported by changes in company performance and the markets.



- Fair value should reflect market participants' assumptions based on information available and market conditions at the measurement date.
- The greater uncertainty may translate into greater risk and higher required return and may have a negative impact on the valuation of investments.
- Care should be taken not to "double dip" the value (e.g. same risk is reflected on both discount rate and cash flow projections or the lower expected performance has been reflected in the financials but not in market multiples).
- Valuation should be backed by robust documentation with external evidence to support how the changes in assumptions/ inputs are derived.
- Additional sensitivity analysis/scenario analysis should also be done to illustrate the impact of any changes in the key assumptions and include the same in the valuation analysis/disclosures.
- With the complexity of issues involved, funds should plan early in conducting valuations and consider increasing the valuation frequency.

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