Valuation approaches during the COVID-19 pandemic

April 2020

https://home.kpmg/in/covid-19
Valuations in the time of high uncertainty

COVID-19 has infected more than a million people globally. It has impacted lifestyle for all, and most importantly businesses and how they operate or will operate in the future.

With the onset of this pandemic, the global economy is confronting turbulence on account of disruption in supply chain and muted growth. This has impacted both the demand and supply side and created huge gaps, which are yet to be filled. The situation is aggravated by demand, supply, liquidity, and cash flow shocks created by lockdowns throughout the world.

Once the pandemic is controlled, how the businesses and economies will respond is uncertain as of today. It is to be carefully evaluated, how all this uncertainty is to be factored, in the valuation analysis for a business.

We have put together this document as an attempt to address this issue. Throughout this document, we will discuss:

• The current and expected impact on global economy
• The current and expected impact on Indian economy
• Sectoral impact in India
• Key questions to contemplate impact of COVID-19 on a business
• Valuation approach to be followed

We understand approaches will get updated and refined as time passes and we have more data points to rely upon. However, evaluating all these aspects in detail is the first step towards valuing a business in such an uncertain environment.

A well evaluated and informed decision is surely better than a shot in the dark.
Impact on the global economy

Spread of COVID-19 first impacted the Chinese industrial manufacturing hub of Wuhan. The virus has since spread across the globe and has had a worldwide impact.

Even before the virus hit, the global economy had been battered by various geo-political developments and slowdown in trade flows and economic growth.

The spread of the virus led to a supply shock which, in a span of less than four months, has also impacted demand and caused financial markets go into a free fall.

- Supply chains throughout the world have been severely disrupted. Discretionary spending has taken a significant hit in the recent past. The services industry has also witnessed a significant shock on account of the outbreak. Retail activity has also taken a significant hit.
- Volatility indices across the globe are high, which in turn implies a heightened sense of fear, which manifests into wider corporate bond yields, higher debt, lower private investment and a reduction in the gross domestic product (GDP).
- On account of rush to safe havens like U.S. and Europe, other currencies (e.g. INR, etc.) in the world have weakened. For an exporter, a weakening currency is a good sign. However, due to supply shocks (i.e. China) and demand shocks (i.e. U.S. and Europe), there is little an exporter can do.

Much depends on the nature and speed of the recovery of global economies, especially demand centers like U.S. and Europe. The outbreak will necessitate a rethinking of corporate business models.

In order to prevent the spread of the virus, many countries have adopted stringent measures including isolation and social distancing. However, social distancing measures and changing business models have led to a drastic reduction in business activity and consumer spending. Many companies and consumers choose to hold onto previous cash reserves on account of the uncertain environment. Reduction in business activity further necessitates reduction in costs, with employee costs the first item to be targeted. This further perpetuates reduction in spending.

The nature of the recovery in economic activity will be dependent upon various factors, including but not limited to:

1. Containing the spread of the virus
2. Quantum and nature of the fiscal and monetary stimulus provided in each geography
3. Manner of resumption of economic activity

As production is curtailed around the world, many firms are already facing input constraints.

The recovery process is likely to be complicated by the level of debt in certain sectors. Sectors with high levels of debt, such as infrastructure, energy and consumer discretionary, are more likely to be impacted.

We anticipate that the Purchasing Managers Index (PMI) data for the month of March 2020 for services and manufacturing to reflect a growing economic stress as social distancing measures, put in effect by many countries in the same month, start to reflect a sharp decline in consumer spending.

The global economy, as a whole, is more likely witness a “U” shaped recovery (i.e. spread over 4-6 quarters). It is our expectation, at this juncture, that the course of economic recovery in India will be smoother and faster than that of many other advanced countries. The United Nations Conference on Trade and Development (UNCTAD), in its report- ‘The COVID-19 shock to developing Countries’, has predicted that among major economies least exposed to the effects of the virus would be China and India.

2. UN calls for $2.5 trillion coronavirus crisis package for developing countries, UNCTAD news release, 30 March 2020

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Impact on the Indian economy

With weaker demand estimated in China, U.S., Europe and Middle East for most of first half of FY 2020, physical exports from India will be impacted. Developed nations are also re-evaluating discretionary spending.

Recent rout in the equity markets combined with the decrease in the yields on government bonds indicates flight of capital from riskier assets (read as equity) to safer havens (read government securities).

While the COVID-19 outbreak is most spoken-about factor in the market, there were already other factors that were affecting business performance:

- Slowdown in demand and industry growth rates
- High levels of corporate debt
- Slump in oil and natural gas prices (impact oil companies, especially in terms of inventory revaluations).

Banking, real estate, infrastructure sectors were already under stress.

In times of uncertainty, equity markets become very volatile. Investors try to counter the volatility by rebalancing their investment portfolio to include debt instruments. The increase in the demand for government securities, increases the prices and correspondingly depresses the yield on such securities.

Historical stock market trends analysis yields that the small cap and mid cap stocks bear the brunt of market meltdowns, to be followed by the blue-chip stocks.

The extend of or risk perception in the market is also evinced by increase in the India VIX from 16.90 to 70.39 between 25 Feb 2020 and 27 March 2020. The India VIX was 17.18 as at 29 March 20193.

The fall in the equities has also been driven by the quantum of foreign institutional investors (FIIs) and foreign portfolio investors (FPIs) pulling money out of India. This evidenced by the increase in the USD-INR exchange rate from 71.34 to 74.84 between 31 December 2019 and 27 March 2020. The exchange rate also breached the 76 mark on 24 March 20204.

The above leads us to believe that the market is assigning a higher risk to equity investments which implies higher return requirements.

4. UN calls for $2.5 trillion coronavirus crisis package for developing countries, UNCTAD news release, 30 March 2020
In previous sections, we have looked at the impact of COVID-19 on the global economy and the Indian economy. Depending on the complex dynamics of each region and sector, the impact will be felt disproportionately by companies in different businesses and sectors of each region.

To assess how the markets have reacted to COVID-19 and attached uncertainty, we looked at the sectoral performance:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Reference</th>
<th>Mkt Cap/Indices value (01-01-20)</th>
<th>Mkt Cap/Indices value (31-03-20)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal and Mining</td>
<td>BSE Metal</td>
<td>10,404</td>
<td>5,713</td>
<td>-45%</td>
</tr>
<tr>
<td>Auto and Auto Component</td>
<td>BSE Auto</td>
<td>18,393</td>
<td>10,746</td>
<td>-42%</td>
</tr>
<tr>
<td>Building and Construction (Reality)</td>
<td>BSE Reality</td>
<td>2,276</td>
<td>1,354</td>
<td>-41%</td>
</tr>
<tr>
<td>Financial Services</td>
<td>BSE Finance</td>
<td>7,001</td>
<td>4,300</td>
<td>-39%</td>
</tr>
<tr>
<td>Transport and Logistics</td>
<td>Avg Performance</td>
<td>15,022</td>
<td>9,363</td>
<td>-38%</td>
</tr>
<tr>
<td>Aviation and Tourism</td>
<td>Avg Performance</td>
<td>19,966</td>
<td>12,685</td>
<td>-36%</td>
</tr>
<tr>
<td>Building and Construction (Infra)</td>
<td>BSE India Infrastructure</td>
<td>178</td>
<td>116</td>
<td>-35%</td>
</tr>
<tr>
<td>MSME</td>
<td>BSE 250 SmallCap</td>
<td>2,023</td>
<td>1,336</td>
<td>-34%</td>
</tr>
<tr>
<td>Oil and Gas</td>
<td>BSE Oil and Gas</td>
<td>14,707</td>
<td>10,021</td>
<td>-32%</td>
</tr>
<tr>
<td>Consumer (Consumer Discretionary)</td>
<td>BSE Consumer Discretionary</td>
<td>3,705</td>
<td>2,566</td>
<td>-31%</td>
</tr>
<tr>
<td>Power</td>
<td>BSE Power</td>
<td>1,961</td>
<td>1,378</td>
<td>-30%</td>
</tr>
<tr>
<td>Information Technology</td>
<td>BSE IT</td>
<td>15,569</td>
<td>12,843</td>
<td>-18%</td>
</tr>
<tr>
<td>Telecom</td>
<td>BSE Telecom</td>
<td>1,113</td>
<td>972</td>
<td>-13%</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>NSE Pharma</td>
<td>8,047</td>
<td>7,177</td>
<td>-11%</td>
</tr>
<tr>
<td>Consumer (FMCG)</td>
<td>BSE FMCG</td>
<td>11,462</td>
<td>10,255</td>
<td>-11%</td>
</tr>
</tbody>
</table>

Source: Capital IQ, Nseindia.com, Moneycontrol
Market capitalisation has declined across sectors, with significant variation to the extent of the decline. The most impacted sectors are facing common challenges such as supply chain disruption, decline in private consumption, quick drop in revenue due to lockdown, high fixed cost, and long-term growth uncertainty.

For example - The most impacted sectors are:

- Aligned with global markets from demand and supply side, such as aviation and logistics
- Are suffering from demand shock, such as auto, realty, etc.
- Are dependent on highly impacted sectors for demand, such as financial services and metals.

The sectors that performed the best were mostly essential services providers such as FMCG and pharma, which are partially insulated with supply chain issue and have intact demand potential for long term.

Basis the observations, no sector can suggest that COVID-19 has not impacted its business in one form or another. However, the exact impact on business dynamics is yet to be seen. It is paramount to analyse the current and expected impact of COVID-19 on each sector, based on the following parameters:

- Supply side impact/constraints:
  - Input price: shortage of raw materials may lead to price increase
  - Labour force: lockdown may result in shortage of labour force
  - Cash flow: large cash flow gaps created both from demand and supply side
  - Supply chain: global lockdown has disrupted supply chain.

- Demand side impact/constraints
  - Customer sentiment: slowing growth domestically and globally, with expectation of global recession could significantly impact demand
  - Lockdown to have sizeable impact on economy, mostly on consumption
  - Export: headwinds are more likely on account of the demand side shocks in countries affected by COVID-19.
The current and expected impact of these factors on the various sector is presented below:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Supply Side impact/Constraints</th>
<th>Demand Side impact/Constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Input Price</td>
<td>Labour Force</td>
</tr>
<tr>
<td>Auto &amp; Auto Component</td>
<td>Med</td>
<td>High</td>
</tr>
<tr>
<td>Aviation and Tourism</td>
<td>Med</td>
<td>High</td>
</tr>
<tr>
<td>Building and Construction</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Consumer &amp; Retail (Non-essential)</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Consumer &amp; Retail (essential)</td>
<td>Med</td>
<td>Med</td>
</tr>
<tr>
<td>Financial Services</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Metal &amp; Mining</td>
<td>Med</td>
<td>Med-High</td>
</tr>
<tr>
<td>MSME</td>
<td>Med</td>
<td>High</td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>High</td>
<td>Med</td>
</tr>
<tr>
<td>Power</td>
<td>Med</td>
<td>Low</td>
</tr>
<tr>
<td>Telecom</td>
<td>High</td>
<td>Med</td>
</tr>
<tr>
<td>Logistics</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

Source: KPMG in India- Potential Impact of COVID-19 on India Economy, April’20

While performing the valuation for any business in India, it is paramount to evaluate:

- What will be the impact of COVID 19 on the sector we operate in?
- Which are the key pain points out of the list discussed above?
- How other players in the market are impacted or have responded to it?
- How market is pricing the said impact?

Once we evaluate these questions on sectoral impact, we may need to further deep dive to evaluate the business and related aspects as discussed in the next section, to answer one simple question- Is my business similarly impacted or is my business partially insulated?
Key questions to contemplate the impact of COVID-19 on a business

As discussed in the previous sections, the COVID-19 outbreak has had and will continue to have a significant impact on business (global or domestic). Impacts can be in the nature of supply disruptions, demand slowdown, labour shortages, financial stress, etc. These factors are expected to negatively impact the financial performance of businesses across sectors. Some more than others.

As part of evaluation of the value of companies/businesses/ intangible assets, we present a preliminary set of queries to think over below.

Macroeconomic/ policy effects
1. What is the economic outlook for your industry? How is it going to impact the company as a whole or specific reporting units?
2. How have the government policies changed? Is our business eligible for such relaxations?
3. What will be the impact foreign exchange fluctuations for your business?
4. What is the impact of decline in capital markets and decrease in share price?
5. What is the impact of global economy on the business? How does the global downturn impact the revenue or supply side?
6. What is the Management strategy? Assess the responsiveness in terms of concessions extended?

Costs
1. Have we reviewed key contracts with suppliers to understand liability in the event of non-compliance? Consideration of whether this is a force majeure event
2. What is the extent of disruption in our supply chain? How does the management plan to mitigate the supply chain risk?
3. Have we assessed the ability of the workforce to work remotely in the current situation?
4. What is the likely impact on availability of workforce post resuming operations? Do these limitations impact our ability to manufacture products or service our customers?
5. Has volatility in commodity, labor and other costs negatively impacted revenues or production costs?
Revenue
1. What is the likely business loss due to COVID-19?
2. What is the impact on cashflows for Q1, Q2 and beyond?
3. How long will it take for the business to attain normalcy?
4. What will be the strategy for increased competition and price wars?
5. Have you reviewed key contracts with customers to understand liability in the event of non-compliance? Consideration of whether this is a force majeure event.
6. What is the impact of COVID-19 on the consumers?
7. What is the category of our products in terms of consumer spending considering there will be an impact on discretionary spending for the near future?
8. What are the likely concessions we can provide to our customers that help us retain existing customers and gain new ones?
9. Will the customers be able to pay us on time and fulfill their obligations or even remain in business?
10. What is the impact on business liquidity, evaluate where there is shortfall in revenues, but the costs are fixed?
11. Are we required to test a reporting unit for recoverability; thereby reporting an impairment loss in the financial statements?

Financing
1. How difficult is it to raise capital considering the state of equity and debt markets? How to ‘restart’ the business if impacted by the crisis?
2. Has the stock price significantly decreased?
3. What is the likelihood of breach in debt covenants?
4. What is the cost of refurbishment of capital assets once the business resumes operations?
5. In cases where an asset was under construction, have the accumulation in costs far exceeded the initial management estimate?

Others
1. Is there a change in the useful life of intangible and tangible assets based on the conditions of assets post resuming business?

The above questions need to be evaluated so as to form a long-term view, even after taking cognizance of short term events, on the business, its cash flows and ultimately its valuation.
Valuation approach

Standard of value

The below guidance pertains to the processes to be followed for estimation of fair value which is required for financial and regulatory reporting.

Fair value is 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.

To assist you in setting the valuation approaches to be followed as of 31 March 2020, we have set below our recommendations while keeping in mind the key issues amidst these uncertain times.

Discounted cash flow approach:

Building Cashflows: It is important to assess the expected COVID-19 impact on business (lower demand, supply chain issues, availability of raw material, government restrictions etc.). Certain sectors are likely to be more impacted as compared to others. Guidance should be taken from thought leaders, publications and sectoral experts while building the cash flows. We suggest:

- Comparing and analysing the historical Q-o-Q with the Q-o-Q expected performance of the company
- Evaluate business plan on a pre-COVID-19 and post-COVID-19 scenario to ascertain specific impact
- Under the assumption that the lock-down measures in India are withdrawn in a staggered manner by April- May 2020, the first two quarters for FY 2021 are expected to witness a higher impact of COVID-19. Due to the subdued performance in the initial part of the year, flattish or degrowth for FY 2021 over FY2020 can be expected for most of the businesses
- Based on current estimates (although, to be revised), recovery is expected to start in FY2022. Post FY2022, normalcy is expected to be restored. Ideally, post COVID-19 normalisation, cash flow should consider one full business cycle (at least 5 years post FY2022)
- While building out cashflow projections, the preparer should be mindful of the adjustments to working capital (e.g. doubtful receivables, valuation of the inventory etc.). The one-off adjustments (working capital/losses) are recommended to be factored below enterprise value
- Also, check if company has availed deferment of debt obligations for Q1 FY2020 (e.g. covenant breach)
- In case the cash flow projections do not factor in the expected impact on the business on account of COVID-19, we recommend carrying out a scenario analysis and then adjusting the discount rate for implied alpha (COVID-19 alpha) in the discount rate calculations.

Long term growth rate: We expect a long term growth (LTG) rate of 4-5 per cent in India, based on the prevailing long-term inflation estimates in India and UN guidance that long term growth story of India is still intact.

Market approach:

Valuation multiples: In order to capture the impact of COVID-19, we recommend:

- Using the market price as at the valuation date (i.e. spot price), while estimating the multiples for the comparable companies
- However, we recommend analysing the market movements in stock prices to adjust for any short-term volatility in the stock market
- We, at KPMG in India recommend using trailing twelve-month (TTM) multiples as compared to forward multiples as the forecasts for comparable companies have a significant amount of uncertainty associated with them. Also, it might be possible that all the comparable companies’ forward estimates may not be reflective of post-COVID-19 forward earnings.

Analyse whether the expected fall in earnings, of the target, are in lines with that of comparable companies.

1. If yes, apply comparable company multiple after adjusting for illiquidity, profitability, etc.
2. If no, analyze reasons for the differences in earnings expectations between the comparable companies and the target. Apply adjusted multiple (illiquidity, profitability, etc.)

5. Source: ASC 820
Financial metric to be used: We recommend using maintainable revenue and earnings. Revenue and earnings metrics must be evaluated in the context of market participant perspectives. The preparer should analyze the expected performance of the company on a pre-COVID-19 and post-COVID-19 scenario basis, at least on Q-o-Q for the next year and compute the maintainable financial metric to be considered for estimating the value using the market approach.

The one-time or exceptional items should be excluded from the metric to which the multiple is applied. The expected adverse performance in Q1 and Q2 FY2020 and beyond, if deemed one-time, should still impact cash balances and would be reflected as a deduction from enterprise value in estimating fair value.

We, at KPMG in India, recommend not to use transaction prices, especially those from before the spread of COVID-19, in determining fair value. Due to the increased risk in the current times, the required rates of return are expected to increase, which would indicate that multiples will decrease, even in the absence of recent transaction data.

It is evident that there will be some short-term pains in Indian businesses on account of COVID-19. Hence, for the purposes of valuation, we need to be mindful of:

1. Expected loss of cash flows in the near term
2. Expected recovery in economic sentiment, business and cash flows
3. Heightened market risk perception and how it is to be factored in the discount rate.
As described in previous sections, valuation requires careful consideration of the market conditions prevalent on the date of valuation as well as the future outlook for the business.

**Valuation for financial reporting:**
While carrying out valuation of businesses/asset for financial reporting purposes (i.e. fair value reporting or impairment testing), the accounting standards governing such value measurement requirements detail the adherence to the principles of **fair value** (i.e. observable inputs from the market, trading multiples, transaction multiples, cash flow projections). Given the present uncertain environment, projections will need to be developed keeping in mind potential scenarios and probability associated with such scenarios.

For assessment of impairment of goodwill and other intangible assets, the accounting standards lay emphasis on their recoverability. This requires taking a long term of view while also being grounded in present realities (e.g. there may be short-term disruptions, but the cash flows would need to be tested for long term viability).

**Valuation for regulatory reporting:**
Valuations required for submission to regulatory authorities like:
1. Income tax authorities
2. Central banks (e.g. Reserve Bank of India)
3. Stock exchanges/ Stock market regulators
are also to be premised on determining the **fair value** of such businesses/ equity shares.

**Valuation for transaction purposes:**
In case of transaction valuations (i.e. buyer and seller are identified), where the requirement is to arrive at the **investment value**, we need to also consider perspective of the investor and potential synergy together with the aforementioned guidance.

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