A Study on the Winner and Laggard Sectors Post COVID-19 Pandemic in India

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Abstract

The present pandemic situation has not only impacted the human lives but also have had an adverse impact on the businesses in India. Factors including slower economic growth rates, inadequate health infrastructure, and significant population living in poverty are amongst the key reasons causing slower domestic demand. These factors can lead to slowdown in the demand domestically and can further lead to job losses furloughs in the various sectors across India. The GDP has contracted by 7.3% during the financial year 2020-21. For the ongoing year, Reserve Bank of India (RBI) is expecting growth rate of 10.5%.[1] However, global rating agencies have downgraded economic growth rate for India considering the second wave of COVID-19. Initially, Moody's had projected 13.7% as growth rate for financial year 2021-22 but decreased it to 9.3% recently. Similarly, S&P had projected a growth rate of 11% and later corrected it to 9.8% to adjust the impact of second wave of Covid-19 with a worst-case scenario of 8.2%[2]. Impact of pandemic varies with the sector, while few sectors have quick recovery in contrast with non-discretionary sectors. This paper is an attempt to understand the impact, length, depth of crisis across various sectors along with understanding the shape of recovery and best practices across winners and laggards during the pandemic. The study considers the qualitative and quantitative factors to identify the mutual themes driving the various sectors the pandemic.

Keywords: COVID-19, GDP, Pandemic, Reserve Bank of India (RBI), Economy

Introduction

Before the outbreak of COVID-19, Indian economy was in a negative state and the pandemic has created an unmatched shock to the growth rate of the economy. Current pandemic COVID-19 is similar to the other crisis like the Great Depression, 2008 crisis, etc. Economic impact of the crisis has been immense and has led to the fall in the growth rate of the economy. According to World Bank, Indian economy had numerous pre-risks, hampering the economic outlook and the current crisis has demonstrated negative impact on economy's growth rate with lowest figures since India's economic liberalization in the 1990s.

On May 26th, 2020, CRISIL declared the current crisis to be worst since India's independence along with a research by India's leading bank State Bank of India estimated a decline of over 40% in the economic growth in Q1'20[3]. However, it stated that the contraction will be unequal and dependent upon the various factors including state and sector.

On September 01st 2020, Ministry of Statistics, GOI announced the GDP figures for Q1 (April to June) FY'21, stating a contraction of 24% in comparison to the figures of same period previous year.[4]

Economic activity reduced from 82.9 in March to 44.7 in April 2020 as per Nomura India Business Resumption Index. However, economic activity went back to pre-COVID level in September 2020. Unemployment rate increased from 6.7% in March 2020 to 26% in April 2020 and then came back down to pre-COVID levels by June 2020. More than 140 million people have lost their employment due to COVID while a lot of people have experienced salary cuts. Also, more than 45% of households across India has reported fall in their income as compared to the previous year[5].

Various other brokers have reduced their GDP growth estimations for India. Nomura has downgraded its projection for economic growth to 12.6% from 13.5%. JP Morgan has reduced its estimates for GDP from 13% to 11% and UBS has downgraded its projection to 10%[6]

Indian economy has lost more than 32,000 crore (~$4.5 billion) per day during the initial 21 days of lockdown due to COVID-19 outbreak. Also, more than 50% businesses got affected due to lock down with a pressure on supply chain network[7]. Below is the impact on different stakeholders in the economy:

- Impact on Financial Market: Stock market has experienced volatility with significant wealth erosion. All the key indices including BSE and NSE have seen downward pattern with stock market crashing on March 12th, 2020. Major indices fell around 10% in a single day. BSE Sensex fell by 2919 points and NSE Nifty fell by 868 points. Further, Indian stock markets fell to a new low level on March 19, 2020, with BSE Sensex fell by 581 points and NSE Nifty fell by 205 points[8].
- Impact on Supply Chain: Supply chain got impacted due to shutdown of factories in China and this impacted Indian manufacturing industry due to shortage of raw material. Major sectors which got impacted due to supply chain disruption were involved electronics, chemicals, automobiles, and pharmaceuticals, among others. Also, Indian exports got impacted due to the slowdown in manufacturing activity in China and other countries including Asia, Europe and United States.
- Impact on International Trade: COVID-19 has negatively impacted exports of various commodities including seafood, petrochemicals, gems and jewellry, among others. Fishing sector has experienced a loss of around Rs.1,300 crores due to reduction in exports. States including Rajasthan has incurred a loss of approx. Rs. 10,000 crores post cancelling key trade events. India has exported 34% of its petrochemicals to China and had to reduce prices in the line of reduction in demand recently[9].
- Impact on corporates: Leading companies existing in India including Larsen & Toubro, UltraTech Cement, Bharat Forge, Aditya Birla Group, BHEL, Grasim Industries and Tata Motors has suspended or reduced operations temporarily. Young startups have also been impacted as funding has reduced due to lack of

liquidity. Also, FMCG companies have curtailed operations and started focusing on essential commodities.

Government's response to pandemic

- **Sectoral reforms:**
    - Mar 21st, 2020: Union cabinet provided incentives worth 40,995 crore for incentivizing electronic manufacturing[10]
    - Mar 24th, 2020: Prime Minister announced a new package of approx. 15,000 crore for promoting development in the healthcare sector[4]
    - Jun 02nd 2020: Government of India had announced mobile manufacturing incentives of Rs.50,000 crores to promote manufacturing of mobiles through a production-linked incentive schemes to increase locally made manufacturing in India[11]
- **Special schemes:**
    - Atmanirbhar Bharat Abhiyan: Prime Minister of India announced an economic package of 20 lakh crore on May 12th, 2020
    - The package included announcements by RBI previously on March 26th, 2020, and accounted for 8 lakh crore supporting liquidity[4]
    - Also, on Mar 25th, 2020, Government of India announced food security scheme providing a support of 800 million people across country[4]
    - On May 20th, 2020, Indian government cleared proposals of economic packages, including collateral free credit for MSMEs and free food grain package
- **Policy changes:**
    - On Apr 18th, 2020, India made few amendments to the foreign direct investment (FDI) policy to tackle with "opportunistic takeovers/ acquisitions" of Indian corporates due to current pandemic
    - On May 22nd, 2020, Reserve Bank of India announced extension of moratorium on loans and reduction in the repo and reverse repo rates
    - On Jun 20th, 2020, Government of India launched Garib Kalyan Rojgar Abhiyaan to deal with the impact of COVID-19 on migrant workers in India. The fund was aimed to supporting rural public schemes with funding of 500 bn covering 6 states across 116 cities[12].
- **Global support:**
    - On Apr 02nd 2020, World Bank declared $1 bn emergency financing to India to cater with coronavirus named as "India COVID-19 Emergency Response and Health Systems Preparedness Project"[4]
    - On Apr 28th, 2020, Asian Development Bank granted a loan of 10,500 crore to fight with the pandemic[4]
- **Objective of study:**
    - To understand the length and depth of crisis by sector in India

- To identify the correlation between the COVID-19 versus performance of different sectors
- To understand the shape of recovery and future growth scenarios post pandemic for different sectors
- To track the responses of winner and laggard sectors during pandemic

Methodology:

Stock market works on the principal of absolute knowledge to among the investors. It is believed that prices of any stock will be corrected based on the factors of demand and supply. The below study focusses on understanding how different sectors have reacted to COVID-19 pandemic.

Ho: There is no difference between the impact of COVID-19 on different sectors or all sectors have responded equally to the COVID-19 pandemic.

To understand the impact of COVID on different sectors, performance of Nifty 50 companies have been considered. Apart from the same, company information sources, press articles, journals and interviews of the industry experts have also been incorporated for the current study.

- **Timeline:** All the major events in the time period of 16 months has been considered (Since the year Mar-2020)
- **Research type:** Secondary research
- **Tools:** Press articles, company prospectus, presentations and annual reports, google finance tool and other relevant economic reports and web portals

Limitation of the study:

- As the study is based on secondary data. Therefore, the information available will be restricted to the publicly available data.
- Timeline considered for the research is 14 months. Hence, there is possibility of missing some significant information in the pre-COVID-19 period

Data Analysis and Interpretation:

In order to understand the impact of COVID-19 on different sectors, it is important to have an overview on the sector-wise performance and impact due to COVID.

Table 1: Reponses by key sector to COVID-19

Sector	What best performers did?	What worst performers did?
Consumer	• Shift to omni-channel retail • Partnered with digital supply chains • Reduced rentals and improved space utilization	• Over-dependence on single sales channel • Lack of product diversity

Automotive	• Investment in autonomous/ Electronic vehicle • Strict cost discipline of contain operating costs and deferring capex plans	• Failure to control infection spread within factories • Launched new products
Banking & Financial services	• Invested in cyber security, AI, cloud, block chain solutions and focus on contact less payments	• Inability to diversify into more customer friendly products like mobile wallets, digital cards
Healthcare	• Adoption of data analytics, rapid clinical trials • Remote patient monitoring	• Slower shifting to alternative manufacturing options including face masks, sanitizers
Industrials	• Strict cost discipline to contain operating costs and deferring capex plans • Restructured activities including lay-offs and furloughs	• Failure to control infection spread within factories • Launched new products
Media & Telecommunications	• Media companies started reusing archived contents • Upgrading business model	• Declared cash dividend and share repurchase
Metals and Mining	• Invested in regulatory environmental expenses, operational efficiencies, infrastructure improvement	• Regulated businesses faced strong headwinds as they could not benefit from government relaxations • Reduced capital expenditure
Technology	• Outsourcing manufacturing to low-cost geographies/ contract manufacturers	• Distributing cash dividend and share repurchase

Length and depth of the crisis by sector

Different sectors have varied responses towards COVID-19 depending upon the demand, sector responses and nature of the sectors. Length of the crisis is defined as period taken in months by a sector to recover from the crisis. While depth of the crisis is the minimum point reached by any sector due to crisis.

Below is the analysis on Nifty 50 companies to understand the depth of crisis and duration took by each sector to recover and come back to the pre COVID-19 level. Each sector's responses varied and proved that depth and length of crisis was much dependent on the sector specific conditions.

Sector	Depth of crises	Length of crises
Automotive	-32.6%	~4-5 months
Banking & Financial Services	-43.2%	~6-7 months
Consumer	-25.0%	~2-3 months
Energy & Power	-27.5%	~6-7 months
Healthcare	-8.9%	~1-2 months
Industrials	-34.7%	~5-6 months
Infrastructure	-39.0%	~4-5 months
Media & Telecommunications	-23.3%	~7-8 months
Metals and Mining	-31.3%	~5-6 months
Technology	-25.4%	~2-3 months

Figure 1

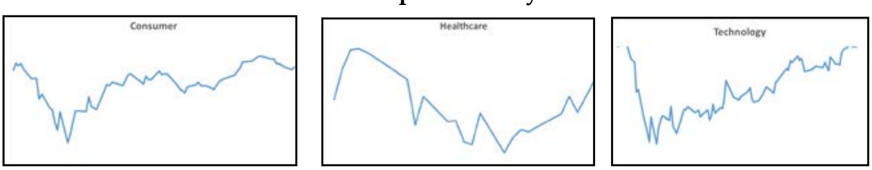
Source: https://www.nseindia.com/get-quotes/equity?symbol=SBIN15

Shape of recovery by sector:

Shape of recovery is a terminology used to describe type of recession and subsequent recoveries. It is defined by the period in which the economy comes back to its pre-recession levels. Below are the responses by each sector towards pandemic. Different sectors responded differently to the pandemic, while few had shown quick V-shaped recovery, others had prolonged U-Shaped recovery.

In the below analysis, stock prices of Nifty 50 companies had been considered for the analysis to understand the lowest price drop by each sector and time taken to reach back to pre-covid levels. While recovery was considered as the sustained come back to pre-covid prices.

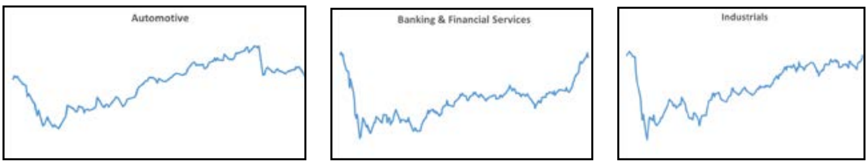
V-shaped recovery



Consumer, Healthcare and Technology sector experienced sharp decline followed by the rapid recovery primarily impacted by:

- Lockouts and restricted movements of goods and people
- Factory and store closures
- Avoidance of elective surgeries and hospital visits
- Shift of life science sector to vaccine development
- Increased dependencies on technology and creating a connected environment

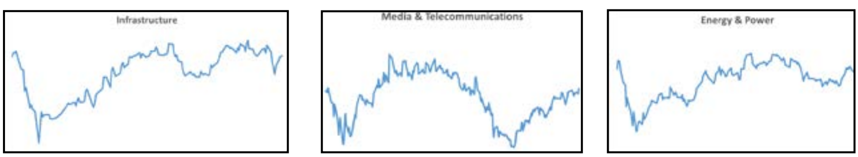
U-shaped recovery



Automotive, Banking & Financial Services and Industrials experienced sharp decline followed by the pro-longed recovery primarily impacted by:

- Factory shutdowns, limited movement of goods
- Non-availability of raw materials
- Disrupted supply chain
- Uncertainty of COVID-19 impacted credit performance
- Remote working of certain functions of banks created operational difficulty

W-shaped recovery



Infrastructure, Media & Telecommunications, Energy & Power experienced steep decline followed by the W-shaped recovery and longest time to recover and are primarily impacted by:

- Government guidelines, high liquidity crunch
- Reduced travel due to government guidelines
- Decline in need of office spaces due to remote working

Normal Distribution of deviations by sector:

Statistical tests are applied to understand the relevance of the data, relationship between COVID cases and stock price movement by sector.

Pearson Correlation:

Pearson's correlation coefficient is the statistical test which helps to measure statistical relationship/ association, between two continuous variables. It is a preferred method for measuring the association between variables as it is based on method of covariances.

Sector	Pearson correlation
Banking & Financial Services	-0.38758
Metals and Minings	-0.26333
Industrials	-0.22472
Automotive	-0.17230
Infrastructure	-0.13794
Energy & Power	-0.09173
Technology	0.19150
Media & Telecommunications	0.38100
Consumer	0.45511
Healthcare	0.90033

Figure 2

Source: https://www.nseindia.com/get-quotes/equity?symbol=SBIN15

The values for Pearson Correlation ranges between -1.0 and 1.0. A correlation of -1.0 reflects perfect negative correlation, while a correlation of 1.0 shows a perfect positive correlation. Zero correlation means no linear relationship between movement of 2 variables.

P-value test

P-value is stated as the probability that null hypothesis is true. In case under examination, it shows probability that the correlation between x and y in the sample data happened due to chance.

A p-value of 0.05 means that there is only 5% chance that results from your sample occurred due to chance. A p-value of 0.01 depicts only 1% chance of error. So lower p-values are good.

H_0: There is a no relation between COVID cases and performance of stock prices of Nifty 50 companies.

Sector	P-Value
Automotive	0.01261
Banking & Financial Services	0.00000
Consumer	0.00000
Energy & Power	0.18650
Healthcare	0.00000
Industrials	0.00107
Infrastructure	0.04641
Media & Telecommunications	0.00000
Metals and Minings	0.00012
Technology	0.00548

Figure 3

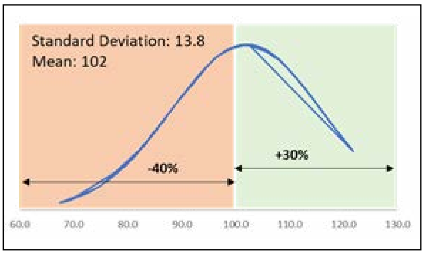
Source: https://www.nseindia.com/get-quotes/equity?symbol=SBIN15

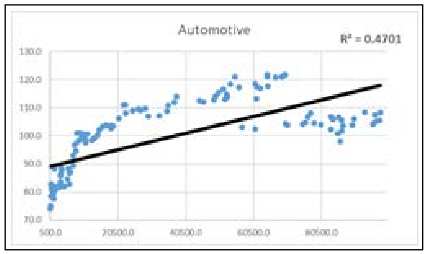
As the P-value for all the sectors is less than 1% smaller than the significance level (α =0.01), we REJECT the null hypothesis in favour of the alternative. Hence, it can be concluded that the sample size is relevant and there is a correlation in the sample.

Normal Distribution curve:

Further, normal distribution curve was plotted for each sector based on Nifty 50 companies to understand how close these sectors stayed with the base price (re-based to 100 for pre-covid level). The analysis was aimed to understand the volatility of each sector and variability from the base price 100 (stock prices are rebased to 100 for pre-covid level)

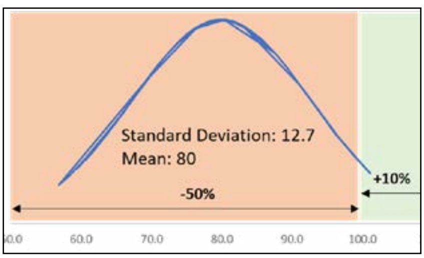
Automotive:

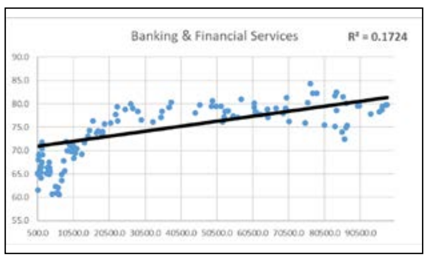




Automotive sector has experienced performance below the par value of 100 in 40% of the intervals, while it was up in the 30% of the intervals during 2020. Mean value of share price performance for shares in Automotive sector was 102 (at premium of 2 from pre-COVID levels)

Banking & Financial Services:

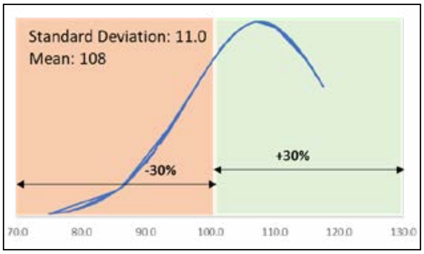


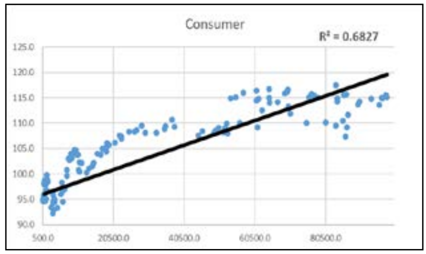


Banking & Financial Services sector has experienced performance below the par value of 100 in 50% of the intervals, while it was up in the 10% of the intervals during 2020. Mean value of share price performance for shares in Banking & Financial Services sector was 80 (at discount of 20 from pre-COVID levels)

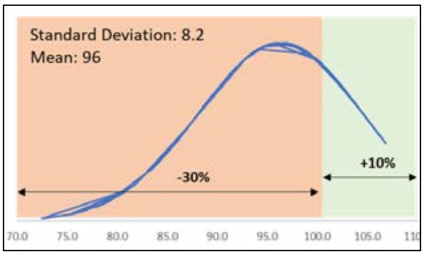
Consumer:

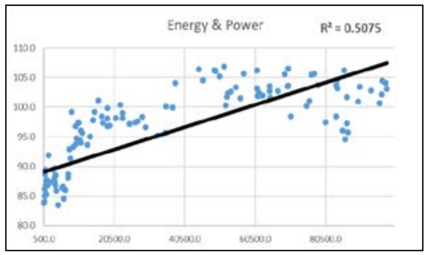
Consumer sector has experienced performance below the par value of 100 in 30% of the intervals, while it was up in the 30% of the intervals during 2020. Mean value of share price performance for shares in Consumer sector was 108 (at premium of 8 from pre-COVID levels)





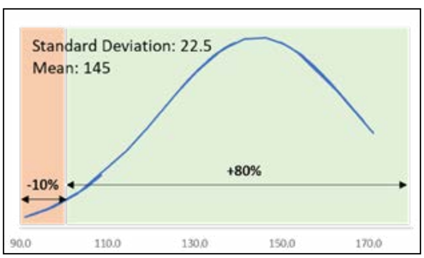
Energy & Power:

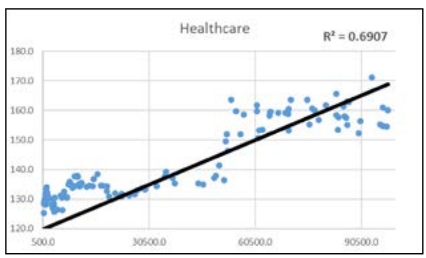




Energy and Power sector has experienced performance below the par value of 100 in 30% of the intervals, while it was up in the 10% of the intervals during 2020. Mean value of share price performance for shares in Energy and Power sector was 96 (at discount of 4 from pre-COVID levels)

Healthcare:

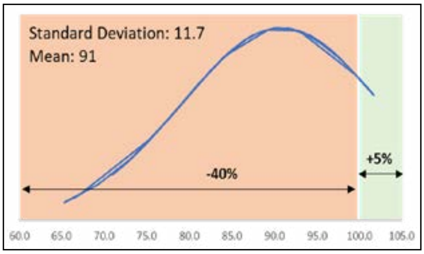


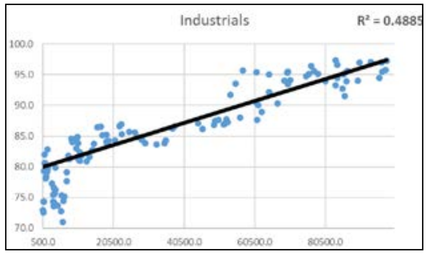


Healthcare sector has experienced performance below the par value of 100 in 10% of the intervals, while it was up in the 80% of the intervals during 2020. Mean value of share price performance for shares in healthcare sector was 145 (at premium of 45 from pre-COVID levels)

Industrials:

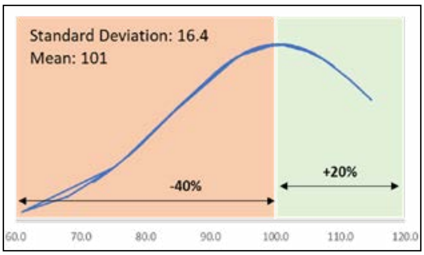
Industrials sector experienced performance below the par value of 100 in 40% of the intervals, while it was up in the 5% of the intervals during 2020. Mean value of share price performance for shares in Industrials sector was 91 (at discount of 9 from pre-COVID levels)

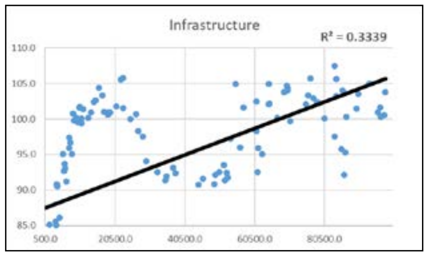




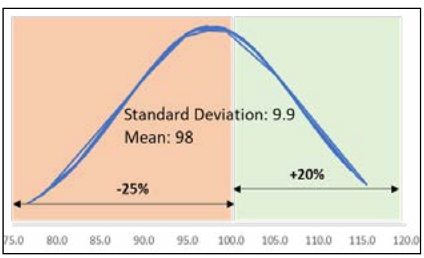
Infrastructure:

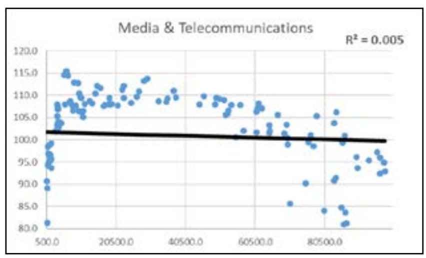
Infrastructure sector experienced performance below the par value of 100 in 40% of the intervals, while it was up in the 20% of the intervals during 2020. Mean value of share price performance for shares in Infrastructure sector was 101 (at premium of 1 from pre-COVID levels)





Media & telecommunications:

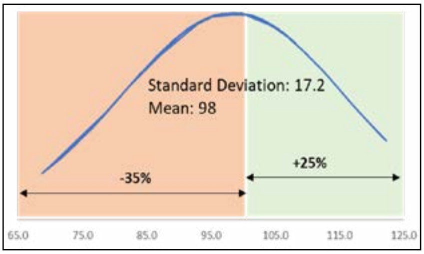


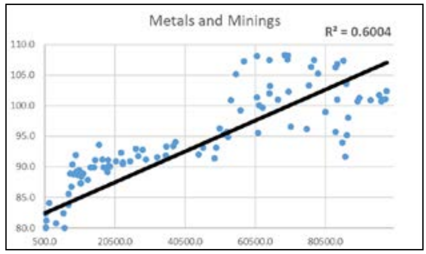


Media & Telecommunications sector experienced performance below the par value of 100 in 25% of the intervals, while it was up in the 20% of the intervals during 2020. Mean value of share price performance for shares in Media & Telecommunications sector was 98 (at discount of 2 from pre-COVID levels)

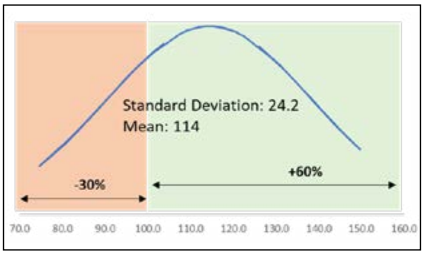
Metals and Minings:

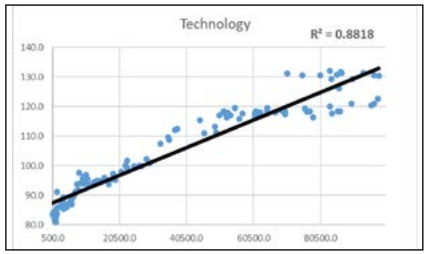
Metals and Mining sector experienced performance below the par value of 100 in 35% of the intervals, while it was up in the 25% of the intervals during 2020. Mean value of share price performance for shares in Metals and Mining sector was 98 (at discount of 2 from pre-COVID levels)





Technology:





Technology sector experienced performance below the par value of 100 in 30% of the intervals, while it was up in the 60% of the intervals during 2020. Mean value of share price performance for shares in Technology sector was 114 (at premium of 14 from pre-COVID levels)

Key responses by each sector:

Automotive:

Key responses by Automotive sector supporting the future growth includes:

- Companies focused on better price realization to boost revenue
- Rationalized the product portfolio with a focus on essential, higher margin syndicated businesses
- Companies had to reimagine supply chains and develop new and local supplier relations, negotiate terms and prices and ensure supply availability

Technology:

Key responses by Technology sector supporting the future growth includes:

- Reduced marketing spends by deferring or suspending sponsorships, campaigns and customer events, reduced non-essential expenditure

Metals:

Key responses by Metals sector supporting the future growth includes:

- Budget cuts, Capex reduction, salary cuts and reducing overheads costs

- Companies suspended stock repurchase programs and dividends

Media & Telecommunications:

Key responses by Media & Telecommunications sector supporting the future growth include:

- Companies borrowed spectrums to meet capacity demand in spike
- Deferred launch of new products
- Reduced marketing spends by deferring sponsorships, campaigns and customer events, reduced non-essential spending

Banking & Financial Services:

Key responses by Banking & Financial Services sector supporting the future growth include:

- Investments in process automation and technology and improved cyber security
- Banks implemented safety protocol at branches and offered loan deferrals

Consumer:

Key responses by Consumer sector supporting the future growth include:

- Companies focused on developing e-commerce network to each-out its consumers
- Invested in process automation and improving supply chain
- Also, companies took initiatives like overhead expenses reduction, headcount reduction and salary cuts

Energy & Power:

Key responses by Energy & Power sector supporting the future growth include:

- Companies engaged in improving utilization of the product lines and plants
- Focused on budget cuts, headcount reduction and salary cuts

Healthcare:

Key responses by healthcare sector supporting the future growth include:

- Companies engaged in improving utilization of the product lines and plants
- Focused on budget cuts, headcount reduction and salary cuts

Infrastructure:

Key responses by Infrastructure sector supporting the future growth include:

- Issued furloughs to the employees, reduced base salary of top executives and freeze new hirings
- Focused on budget cuts, headcount reduction and salary cuts

Industrials:

Key responses by Industrials sector supporting the future growth include:

- Companies focused on better price realization to boost revenue
- Rationalize the product portfolio with a focus on essential, higher margin syndicated businesses
- Companies had to reimagine supply chains and develop new and local supplier relations, negotiate terms and prices and ensure supply availability

Conclusion:

Pandemic has caused impact in the economy across different segments. Winners and laggards have been defined based on their respective responses towards the pandemic. While few sectors have responded by cost cuts, investment in cost reduction technologies on the other hand laggards have not been able to keep the track on their cost structure and curtail capital expenditure.

Length and depth of crisis by sector: Different sectors have reacted differently to the pandemic. Banking & Financial Services (-43.2%), Infrastructure (-39.0%), Industrials (-34.7%), Automotive (-32.6%) and Metals and Mining (-31.3%) have been the most impacted sectors, while Healthcare (-8.9%), Media and Telecommunications (-23.3%), Consumer (-25.0%) and Technology (-25.4%) are the least impacted sectors from COVID.

Correlation between the COVID-19 versus performance of different sectors: Correlation between the sectors vary with the nature of the sector, initiatives taken by each sector and responses by each company in the sector. While sectors like Banking and Financial services, metals and Mining, Industrials and Automotive have high degree of negative correlation with the COVID-19 pandemic. Similarly, sector like healthcare, consumer, technology are least related with disruption caused by the pandemic.

Shape of recovery and future growth scenarios post pandemic for different sectors: Shape and depth of the crisis also varies with the sector and is not uniform throughout the economy with recovery rate varying from 2-3 months in incase of technology to 7-8 months in case of Energy & Power and Media & Telecommunications.

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