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Abstract: The COVID-19 pandemic has wreaked unprecedented havoc on the Indian economy. Due to country-wide lockdown, disruption of demand supply chains and effects of the global economic meltdown, deep effects on the Indian economy and GDP are observed. COVID-19 has far reaching impact on various sectors of the Indian economy and hence the Government of India is working on implementing various strategies for swift economic recovery. Understanding the estimated GDP and economic projections before and after COVID-19 hit during the various stages of lockdown is essential in order to establish recovery measures. COVID-19 has impacted the primary, secondary, tertiary, and quaternary sectors differently. Hence, it’s important to analyze the impact, recovery period and reasons for the same. Understanding this helps to perform immediate stock market predictions which can be one of three types such as – a temporary impact, severe and extended impact or a prolonged severe turndown due to the pandemic. The COVID-19 pandemic has also resulted in specific benefits for the Indian economy in particular. And hence a close look into the various possible business strategies that a complex economy like India has been applying and can attempt to adopt in the future to minimize the negative impacts of the pandemic and elevate the GDP and elevate the economy of the country is a necessity.

Keywords: COVID-19, Corona Virus, Economic Impact, Finance, Economic Recovery, GDP, Business Strategy, India

1. Introduction

COVID-19 has wreaked havoc in the global sense challenging science, basic humanity, and also mankind posing various socio-economic and political threats. The pandemic has disrupted the global economy of all countries, global value chains (GVCs), supply-demand fluctuations, etc. Historically, such unpredictable events which catch everyone off guard and cause a massive impact by disrupting everyday human and socio-economic activities and causing chaos are called “black swan” events.

Black Swan refers to the occurrence of highly improbable, unexpected events causing extreme impacts. The fields of finance and economics regularly attempt to detect and explain outlier events and fail with certain regularity as well. The impact of COVID-19 on the economies of the world is a black swan event [13]. Looming defaults after the moratorium ends keep adding to the finance sector’s worries. It is hence necessary to gain perspective on the impact that COVID-19 has had and will continue to have on the banking industry as well as all the global economies of various countries of the world.

In this paper, we are covering a wide array of issues pertaining to the impact of COVID-19 on the Indian economy in specific. We begin by giving an overview of the estimated GDP and economic projections before COVID-19 hit along with the impact of COVID-19 on the economy during the various stages of lockdown. COVID-19 has affected various sectors of the economy like primary, secondary, tertiary and quaternary differently hence it’s important to understand the impact, recovery period and reasons for the same. Understanding these impacts helps us perform immediate stock market prediction in lieu of COVID-19. Finally, we delve into how the COVID-19 pandemic will result in specific benefits for the Indian economy in particular. Hence, we aim to cover a holistic approach towards the impact of COVID-19 on the Indian economy.

2. The estimated GDP and economic projections for India in the pre-COVID-19 phase

India ranks fifth in terms of economy in the world having a $2.94 trillion GDP. The 2020 pandemic has caused a massive disruptive impact on the Indian economy. COVID-19 is predicted to have significant effect on 7 key sustainable development goals as follows: i) low poverty, ii) health and well-being, iii) education, iv) sanitation and clean water, v) clean energy, vi) economic growth, vii) infrastructure development [5, 14].

India’s Growth Projections:

- State Bank of India - Research Report Ecowrap had expected the country’s GDP to shrink by 16.5% during Q1 of 2020 [17].
- The Organization for Economic Cooperation and Development (OECD) - Projections show that the annual GDP growth rate will go down to 2.4% in 2020 as compared to the weak GDP of 2.9% in 2019 [18].
- Fitch Ratings - Fitch had previously projected 5.1% economic growth for India but has now reconfigured its forecast to 4.9% for 2019-20.
- Moody's - Moody's Investors Service previously estimated a 5.4% growth forecast for India in February but later revised it down to 5.3% for 2020.
- S&P Global Ratings – S&P’s previous projection for India’s economic growth of 5.7% has now been lowered to 5.2% for 2020.
- Barclays – Barclays’ earlier projected a 6.5% economic growth for India but then brought it down to 5.6%. [4].

In the next section, we are going to look at impacts on the economic growth based due to various COVID-19 phases.
3. Impact on the GDP and overall economic growth during various COVID-19 quarantine phases

At a national level, the economic growth has been wallowed due to various factors like the outbreak of COVID-19, the resulting quarantine, and the lockdown along with the numerous constraints imposed accordingly [1]. In the lockdown, all educational institutions, factories, offices, transport vehicles, airports, shopping arcades, railways, metros, buses, local markets etc., are entirely shut down, except hospitals, police stations, emergency services such as fire stations and petrol pumps, and groceries [21]. The various lockdown phases along with their relation to the COVID-19 cases and the plummeting economy can be explained as:

Table 1. Synopsis of the Lockdown phases

<table>
<thead>
<tr>
<th>Lockdown Phases</th>
<th>Duration</th>
<th>Confirmed Positive COVID-19 Cases</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lockdown 1.0</td>
<td>March 25 - April 14</td>
<td>500(approx.) 10877 cases registered</td>
<td>Every day in the phase 1, the Indian economy lost approximately over ₹32,000 crore ie. US$4.5 billion. Lockdown 1.0 was the most rigorous as the basic ‘non-essential’ activities throughout the country arrived at the dead end.</td>
</tr>
<tr>
<td>Lockdown 2.0</td>
<td>April 15 - May 3</td>
<td>31094 cases registered</td>
<td>It largely affected low-income families and daily wage stipendiaries.</td>
</tr>
<tr>
<td>Lockdown 3.0</td>
<td>May 4 - May 17</td>
<td>56636 cases registered</td>
<td>It provided some comfort with classification of the zones into red, orange and green conferring to the outbreak range of the virus.</td>
</tr>
<tr>
<td>Lockdown 4.0</td>
<td>May 18 - May 31</td>
<td>85974 cases registered</td>
<td>The economy was yet on the downfall.</td>
</tr>
<tr>
<td>Lockdown 5.0</td>
<td>June 1 - June 30</td>
<td>96988 active cases</td>
<td>Lockdown resumed in containment zones. Services were established in phased routine from 8th June.</td>
</tr>
</tbody>
</table>

While the Lockdown Phases 1 and 2 affected nearly all the states, the third and fourth phases had a different impact in terms on individuality. The eight states (according to Phase 3), accounting for overall 60% of India’s GDP who had a significant number of their districts under the red zone were disturbed and suffered economic devastation, which in turn affected 58% of the nation’s workforce. To further dive into the specifics, the states of Tamil Nadu, Maharashtra and Gujarat are further susceptible to external losses, as production from industry and services from these states are suffering the most due to the imposed restrictions. The states of Rajasthan, Andhra Pradesh along with Uttar Pradesh have greater debt ratio in comparison to others and hence have high susceptibility. Also, petroleum, stamp duty, in addition to liquor revenue bases provide strong economic foundation for these states. West Bengal, Andhra Pradesh, as well as Tamil Nadu are sensitive to unemployment due to the loss of jobs as they have a higher amount of workforce [19].

While Indian industries, barring a few sectors, could possibly shield themselves from the global supply chain commotions caused by COVID-19 due to lesser confidence comparatively on transitional importations, if the situation arises where COVID-19 infested nations import Indian products, it could further lead to the country’s financial collapse. Private consumption, investment and external trade, the three chief providers to GDP would all get affected [1]. 14 crores i.e., 140 million people faced the issue of unemployment in the comparison, along with majority of the nation suffered salary censorship. The income drops due the pandemic was the reason of woes in 45% of the households in comparison to last year. Up to 53% of the country’s businesses were significantly affected [5].

4. Sector wise impact on Indian economy and GDP

WHO director-general, Dr. Tedros Adhanom Ghebreyesus explained that this is not just a public health crisis, it is a catastrophe that will affect every sector. Hence, each sector must be involved in the fight against the pandemic [2]. The numerous business entities will limit their industry operations as a result of the economic disruption of the industries that are responsible for regulation
of the growth due to COVID-19 pandemic.

The different economic sectors stumble upon the setbacks of the following sectors:

**Primary Sector:**
The primary sector incorporates industries associated with the extraction and fabrication of raw materials. This sector provides employment to about 43.21% of the population in India and contributes about 16.1% of the Indian GDP. It provisions raw materials to the secondary sector and furnishes basic necessities of human life [23, 24].

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Impact</th>
<th>Recovery Period</th>
<th>Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Industry</td>
<td>Moderate</td>
<td>Short Term</td>
<td>The number of agricultural workers has been scarce as a result of the travel restriction infliction by the lockdowns leading to the production descent. As restaurants, hotels, tea shops and other businesses have halted their processes, the raw market has suffered indefinably adding to the difficulties of the farmers.</td>
</tr>
<tr>
<td>Mining</td>
<td>Moderate</td>
<td>Medium Term</td>
<td>The pandemic has curtailed the total demand for metals and minerals which has clipped down their prices. The mining entities have also experienced drastic descent in their share prices.</td>
</tr>
<tr>
<td>Livestock</td>
<td>Severe</td>
<td>Short Term</td>
<td>Outbreak may lead to an increase in the prices and demand.</td>
</tr>
</tbody>
</table>

**Secondary Sector:**
The secondary sector provides employment to around 24.89% of the population in India and offers about 29.6% of the Indian GDP. It embraces industries that manufacture and distributes finished goods or indulged in construction activities, consequently providing support to both the primary and service sector [23, 24].
<table>
<thead>
<tr>
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<th>Recovery Period</th>
<th>Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>High</td>
<td>Short Term</td>
<td>Manufacturing industries are bearing the brunt of the pandemic as they had concluded their production at a brief notice. The charge of the inventories that are delayed within the manufacturing centres or warehouse of those industries has gone down and therefore the apparatuses are too lying idle for an extended time.</td>
</tr>
<tr>
<td>Automobile</td>
<td>High</td>
<td>Long Term</td>
<td>The low confidence of customers, the restrain in economic activity and low income which is not refundable will lead to the deferred demand for cars. The growth in Gross Material Products (GMP) is inactive, which is the main reason for the demand for commercial vehicles.</td>
</tr>
<tr>
<td>Textile and Apparel</td>
<td>Moderate</td>
<td>Short Term</td>
<td>Discretionary expenditure is predicted to stay subdued for a minimum of one quarter. But healthcare products like masks, gauzes and cotton rolls, etc. will be in high demand. The closure of exports and imports have an adverse impact on the spinning mills in India because the exports of cloth, yarn, and other materials have been disturbed.</td>
</tr>
<tr>
<td>Pharmaceutical and Drugs</td>
<td>Moderate</td>
<td>Short Term</td>
<td>Production is predicted to recover quickly because of the government funding for important commodities. The availability chain is hence elevated comparatively. These industries highly calculate import of bulk drugs and several raw materials from China thanks to import restrictions these industries were are impacted.</td>
</tr>
<tr>
<td>Electronics</td>
<td>High</td>
<td>Long Term</td>
<td>The pandemic has slowed down the rate of production and sales of the electronics which has consequently affected the supply chain. India has an import of 50%-60% of the total products and 70%-80% of the components.</td>
</tr>
<tr>
<td>Solar Power</td>
<td>High</td>
<td>Medium Term</td>
<td>Solar power project builders depend upon Chinese imports. Around 80% of solar modules and photovoltaic cells utilized in India are from Chinese manufacturers. Thus, the Indian solar project developers started confronting a shortage of raw materials and have limited stocks.</td>
</tr>
<tr>
<td>Construction and Engineering</td>
<td>High</td>
<td>Medium Term</td>
<td>For construction and engineering industries, the physical presence of a huge labour pool is important which is restrained during the lockdown and therefore the construction activities have also halted. Thus, the industries are tormenting at the hands of ruthless corona virus.</td>
</tr>
<tr>
<td>Metals</td>
<td>Moderate</td>
<td>Medium Term</td>
<td>The metal trade is directly linked to numerous significant sectors like automotive, infrastructure and construction. Hence as these industries collectively slowdown, this sector will face fall in demand too.</td>
</tr>
</tbody>
</table>
Tertiary Sector:
The service sector has employed about 31.9% of the Indian population and contributes to around 54.3% of the Indian economy [23, 24].

Table 4. Economic impact of COVID-19 on the tertiary sector

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Impact</th>
<th>Recovery Period</th>
<th>Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourism and Hospitality</td>
<td>Severe</td>
<td>Long Term</td>
<td>In spite of relaxed travel bans, both domestic and foreign travel is estimated to stay low because of high risk aversion, social distancing measures and limited disposable income. Slowing down in the tourism sector will result in effects on the hospitality sector.</td>
</tr>
<tr>
<td>Transportation</td>
<td>Severe</td>
<td>Short Term</td>
<td>Border closures and travel restrictions have hit the Airlines, cruise and road cargo operators severely. Quite a few aviation companies are not even in the position to facilitate flight ticket refunds because of cancelled flights due to the lockdown.</td>
</tr>
<tr>
<td>Healthcare</td>
<td>Healthcare</td>
<td>Short Term</td>
<td>According to FICCI, the healthcare sector is at the focal point of this pandemic. Public hospitals have witnessed a surge in demand. In this situation, private hospitals are providing the government with all the required medical facilities.</td>
</tr>
<tr>
<td>IT</td>
<td>Moderate</td>
<td>Short Term</td>
<td>The IT sector has been suffering a massive dwindle in global tech activities. Employees in the IT industry have suffered because of downsizing in the workforce and pay cuts. A lot of people have been left unemployed by this pandemic and have been desperately turning to alternate income solutions and job recruitments.</td>
</tr>
<tr>
<td>BFSI (Banking Financial Services</td>
<td>High</td>
<td>Long Term</td>
<td>COVID-19 has impacted the BFSI segment by causing a hike in their annual and business reporting giving rise to the NPA loans. In these difficult times, technical and operational issues faced by customers and employees exhibited a lack of agile approach in the finance and banking industries.</td>
</tr>
<tr>
<td>Insurance)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entertainment</td>
<td>Severe</td>
<td>Long Term</td>
<td>The greatest impact factor is the continuation of social distancing norms. Revenues from advertisements are uncertain due to their dependence on the revival of demand in the economy. The pandemic has caused postponement of various movie releases, shootings have reduced.</td>
</tr>
<tr>
<td>Retail and wholesale (non-food items)</td>
<td>Severe</td>
<td>Short Term</td>
<td>Essential items sales have recovered very swiftly whereas non-essential items are taking longer to recover in sales. Shut down of malls and busy shops had brought down revenue loss and considerable unemployment.</td>
</tr>
<tr>
<td>MSMEs</td>
<td>High</td>
<td>Long Term</td>
<td>Pressures due to recessions on the global scale are having a directly proportional impact on the international export levels. Due to delay in payments from customers, MSMEs might experience severe liquidity problems. Also, the strain experienced by the banking and finance industry is estimated to increase the credit gap in the case of MSMEs.</td>
</tr>
</tbody>
</table>

Quaternary Sector:
The quaternary sector primarily consists of industries providing IT services such as computing, ICT, R&D, consulting services,
Table 5. Economic impact of COVID-19 on the quaternary sector

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Impact</th>
<th>Recovery Period</th>
<th>Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>High</td>
<td>Long Term</td>
<td>Governments around the world are operating with radical uncertainty and are facing heavy decisions to make about difficult trade-offs pertaining to health, economy and social challenges due to this pandemic. All governments have been reacting quickly and quite efficiently to address the fiscal and economic consequences. It is risky for governments to focus on immediate short-term issues alone. The response and actions by the government has caused an increase in government control and power [8, 10].</td>
</tr>
<tr>
<td>Scientific Research</td>
<td>Severe</td>
<td>Long Term</td>
<td>The pandemic limited most industry, academic, basic science and medical research and also redirected all research towards COVID-19. Scientists working in fields requiring physical laboratories and time-sensitive research and experiments reported a high decline of 30-40%. Conversely, fields like computer science, statistics, economics and mathematics reported minimal declines in research.</td>
</tr>
<tr>
<td>Education</td>
<td>Severe</td>
<td>Long Term</td>
<td>The pandemic has gravely impacted educational institutions leading to almost complete closures of colleges, schools and other academic institutions. Closing of schools has not only impacted teachers, students and their families but shall have long-lasting societal and economic effects such as student debt, food shortage, homelessness, access to healthcare, housing, childcare, disability services, etc. The impact has been the most severe on disadvantaged and impoverished children and their respective families due to inadequate learning, compromised nutrition and economic repercussions to families without jobs due to the pandemic. Academic quality and integrity has been compromised globally. Increase in cheating and malpractices in academics has been identified as specifically problematic [11].</td>
</tr>
<tr>
<td>Information Technology</td>
<td>Severe</td>
<td>Long Term</td>
<td>Positively, the disruption due to COVID-19 has caused a speed-up of remote working conditions and rapid development of evaluation and de-risking of value chains. Potential reduction in carbon emission has resulted in renewed focus on practicing sustainability. Companies are facing challenges in resuming production fully. Most organizations are suffering because of not having a tech stack ready for business-continuity plans (BCP). Access to data and automation is enhancing focus on network communications and equipment, an acceleration of 5G network deployments and swift adoption of 5G technology [12].</td>
</tr>
</tbody>
</table>

Table 6. Legend

<table>
<thead>
<tr>
<th>Impact</th>
<th>Moderate</th>
<th>High</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovery Period</td>
<td>Short Term</td>
<td>Medium Term</td>
<td>Long Term</td>
</tr>
<tr>
<td>Time(months)</td>
<td>&lt;= 6</td>
<td>7-12</td>
<td>&gt; 12</td>
</tr>
</tbody>
</table>

The understanding of the impact of COVID-19 on the various economic sectors leads us to a deeper comprehension of the possible predictions of stock market fluctuations.

5. Stock market predictions and fluctuations

“India's fourth recession since independence, the first since liberalization and perhaps the worst to date, is here.”

— CRISIL

Predicting the probable case scenarios for the Indian economy is difficult. Analyzing the precise impact for India is not easy because of the uncertainty of how long the pandemic might last. Mentioned below are three possible scenarios of what India’s economic conditions could be: [7][15]

- Temporary impact of COVID-19 depicting an optimistic situation and a V-shaped recovery
- A severe and extended impact of COVID-19 resulting in a somewhat optimistic scenario with a U-shaped recovery
- A prolonged severe downturn due to a pessimistic situation, leading to a new low level normal

6. The benefit of COVID-19 on the Indian economy

The pandemic outbreak has created various challenges for the Indian economy, but it will pave the leading opportunity for India in
the case of the reliability catastrophe for China. The world seems to mitigate its dependency on China. The foremost role played by China in the global market is hanging on to its last straw due to the pandemic and its after-effects [3].

China’s distress can prove to be India’s security as the mayhem wrecked by COVID-19 has China at its deep roots, which could result in the emergence of foreign investments in our country. The countries with the plan of action can choose India as the replacement of China [23]. Group Chief Economic Adviser, Dr. Soumya Kanti Ghosh of the State Bank of India (SBI) quoted that, the conversation regarding the advantage each country could provide, apart from China in the post-pandemic world is reopening and in trend. Further explaining the topic of India’s benefit from the COVID-19 pandemic, she said that although 2020 was filled with chaos and lost overall, India could fill the vacant space created by China by devising plans in terms of building long-term and high-profile relationships.

If India is able seize subsequent shares from China, the nation can focus in expanding the range of incremental exports which will be growing up to $20 billion in the minimum constructive scenario and in the best possible case, it can jump to $193 billion in time span of 5 years [6].

The reasons for which India has a probable chance of replacing China can be jot down as follows:
1. India is the second-largest populated country, resulting in a high percentage of domestic demand as well as the consequent market.
2. In India the average age is 29 years, making the majority of the youth population. This increases the availability of manpower and labor along with cheap costs.
3. The world’s fifth-largest economy is India in accordance to the nominal GDP and third leading in terms in regards to purchasing power parity.
4. Also, Indian products are more reliable compared to Chinese products.
5. India has an inexpensive digital communication network and is one of the largest along with swiftly evolving markets for digital users. With more than 56 crores internet subscribers, India is in the second highest position for the number of internet users on the planet.
6. Besides all this, in India, the judiciary system is an independent body making things beneficial for the replacement of China in the global market. [23]

Measures to overcome loss and profit from the pandemic scenario:
In response to the current difficult times, the Reserve Bank of India and the Indian Government have come up with an array of reforms such as reductions of the rate of rate, relaxations in regulations, and varied measures to increase the liquidity potential. The pandemic has deeply affected the corporate sector. Other factors like subdued loan growth, payments deferrals, slow business conditions and increasing cases of bad loans have inhibited the growth and the conditions of the economy.
1. The business world needs to bite the bullet of the corona virus catastrophe and should come to grips with it by means of proper business strategies.
2. Firstly, every organization needs to understand the present external environment, for which they need to conduct PESTLE (Political, Economic, Social, Technological, Ecological, and Legal) analysis. Studying the political environment will potentially provide information about the government and administrative decisions implemented by the state and central governments. This will certainly help businesses take advantages of the benefits provided by the government which might relax their business operations in this pandemic.
3. Then the enterprises should conduct an internal analysis to appraise their current position. They should properly know their core competent area, availability of resources and manpower, and their capabilities.
4. On the basis of internal and external analysis, the entities should use SWOT analysis to correctly identify their strengths, weaknesses, opportunities, and threats.
5. The ability to absorb a shock and deal with it i.e. resiliency is the key to survive in the crisis and vital for long-term prosperity.
6. Resilience capabilities of the entities must be reinforced to respond to the aftermath of unforeseen events.
7. Firms need to rethink their business model, concentrate on their core business area, revive their strategies, rework their plans and policies, and try to explore new markets, embrace new sales channels and find more opportunities to grow.
8. Businesses should ensure agility in their operations, strategies, etc. so that they can respond swiftly and efficiently to any threats or opportunities whether it be from external or internal environments.
9. Technology is one of the most important aspects which every company must focus on. At present, every business should concentrate on digitalization since social distancing is a major concern today.
10. Entities should ensure that an adequate amount of liquidity is there to weather the crisis.
11. Entities should focus on their core customer segments and need to predict their behavioral changes due to corona virus.
12. Lastly, to keep the business buoyant in the course of a challenging period, robust business continuity and disaster management plan is required [23]

Measures implemented by the government so far in order to alleviate and counter the effects of the pandemic:
1. Countrywide lockdown along with fiscal steps, coupled with fantastic monetary measures implemented by the RBI in order to facilitate relief to all citizens and in specific to the disadvantaged and vulnerable population of the country.
2. Government has given clear directions to employers to not terminate any employees or perform any wage cuts, in specific of
India had thousands of available beds and resources specifically for very. It is very important to focus on the minimization of the effect of the shock on all the sectors and overlay the foundation for an unrelenting recovery. The government should recognize that are crucial for a business to cope with the present situation and detain plausible impending deviations in the business. The quarantine phases and their respective effects on the economy with the stock market predictions and fluctuations are further frilled upon to bring out greater insight. However, throughout this current pandemic situation, each enterprise ought to brace for the uncertainties and challenges that are cropping up thanks to corona virus. They need to be pre-emptive and should shape up policies to combat the effect of COVID-19 in order to sustain during this hard-hitting time. Thus, the paper highpoints the survival strategies that are crucial for a business to cope with the present situation and detain plausible impending deviations in the business world and should recognize the opportunities with the intention of strive and thrive. Policymakers should be ready to counter the reaction focusing on the minimization of the effect of the shock on all the sectors and overlay the foundation for an unrelenting recovery. Measures implemented by the government so far in order to alleviate and counter the effects of the pandemic along with measures which are needed to be implemented also have been explained in the given research. This study discovered the impending influence of the pandemic on numerous sectors like textile and apparel, financial services, manufacturing electronics, jewelry, automobile, and other industries putting forth a pool of strategic advises for particular sectors.
References


