

Impact of COVID-19 on the Indian Economy and Strategies for Managing Risk and Disruption

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ABSTRACT

The outbreak of the coronavirus pandemic comes as an unprecedented shock to countries and organizations worldwide affecting almost all the sectors of economy. The Indian government tried to curb the spread of the virus by imposing lockdowns which caused travel restrictions, shutting down of educational institutions, offices, manufacturing plants and all public events. This proved to be disastrous to the economy by causing supply chain disruption, large scale layoffs, reverse migration of migrant workers and battered financial markets resulting in one of steepest quarterly GDP contraction in history. To revive the falling economy, the government eased lockdown restrictions which caused an exponential increase in the cases of COVID-19 in India. It is clear that the coronavirus has disrupted almost every sector of the economy, but at the same time it has induced opportunities which calls for pragmatic and informed approach by the business leaders. It is also going to fundamentally change how we live and work resulting in a new normal. This paper focuses on assessing the impact of coronavirus on the Indian economy and provides strategies for managing risk and disruption which can be leveraged by political and business leaders in order to adapt and sustain.

Keywords

COVID-19; Coronavirus; Indian economy; supply chain

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Introduction

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The 1st known case of COVID-19 disease was traced back to 17th November 2019 at Hubei province in China. Soon after on 11th March 2020, the World Health Organization (WHO) declared the COVID-19 outbreak as a pandemic. As of 4th September 2020, the coronavirus pandemic has infected almost 26.3million people and killed almost 860,000 people all around the world. It spread from Wuhan, China to countries all around the globe. It is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus is spread primarily via mouth and nose secretions and is highly contagious as the common cold. Its symptoms are also similar to common cold like cough, fever, fatigue, shortness of breath, etc.

Efforts to curb the spread of the disease have led the government agencies to impose nationwide lockdowns, introduce travel restrictions (international and domestic) and ban public gatherings. This severely impacted every sector of the economy and caused global and local supply chain disruption, mass layoffs and battered financial markets.

	U.K.	Brazil	Italy	U.S.	Russia	Germany	India	Japan	Mainland China
636.0 deaths / mil.		592.5	569.6	565.6	123.1	116.1	52.2	10.6	3.3
5,237.2 cases / mil.		19,218.3	4,378.2	18,623.2	7,093.8	3,098.4	3,001.6	558.4	61.2
285.5 tests / 1000		22.8	140.0	254.0	254.8	139.6	33.8	14.4	N/A
2.5 beds / 1000		N/A	3.2	2.8	8.1	8.0	0.5	13.1	4.3
Began easing lockdown on June 8		No national lockdown	Began easing lockdown on May 4	No national lockdown	Began easing lockdown on May 11	Began easing lockdown on April 20	Began easing lockdown on June 8	State of emergency ended May 25	No national lockdown

Source: Bloomberg

Figure 1: Current state of deaths, cases, tests, beds and lockdown information related to the COVID-19 in the leading economies of the world

On 30th January 2020, India reported its 1st COVID-19 case. On 4th September 2020, the number of COVID-19 cases in India crossed more than 3.9 million with 68,000 deaths. The Indian Government decided to impose a lockdown starting from 25th March 2020. All the non-essential businesses and services were stopped including places of worship, educational institutions and restrictions were imposed on travelling and any public gathering.

The unprecedented lockdown had an adverse effect on the economy. This led to job losses of millions of blue-collar workers all over India and created disruptions both on the demand and supply side. Over the period of time, as the government eased the lockdown restrictions to tackle one of its biggest Gross Domestic Product (GDP) contraction, the cases of COVID-19 increased exponentially in India.

Research Methodology

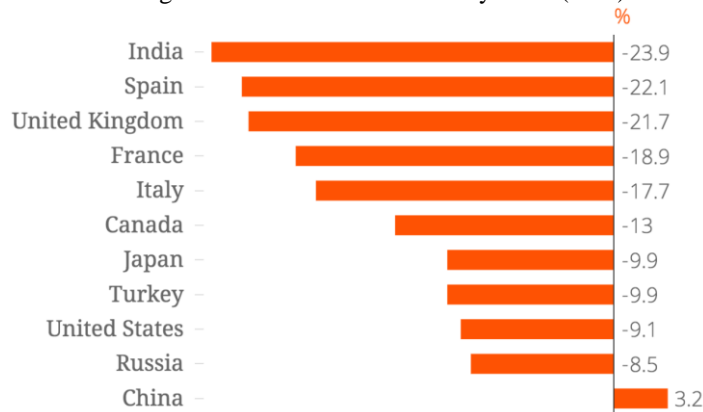
For this research, secondary data was used which was collected from sources such as internet, reports, books and articles published in various journals. Various statistical tools and techniques were applied on this data for analysis and interpretation.

Analysis and Recommendations

Overview

India's Nominal GDP is USD2.94 trillion and gross domestic product (PPP) is USD10.51 trillion. It is the 5th largest and the fastest growing economy in the world. It ranks 3rd if gross domestic product is compared in terms of buying power parity at USD11.33 trillion.

The Indian GDP was USD189.44 billion in 1980, making it the 13th largest around the world at that time. India's growth rate is expected to increase from 7.3% in 2018 to 7.4% in 2019 according to the International Monetary Fund (IMF).



Source: Ministry of statistics and Programme Implementation (MoSPI)

Figure 2: India's GDP growth rate compared with other countries

Figure 2 shows that India's GDP growth rate had contracted by 23.9% for the 1st quarter of 2020 as of 31st August 2020. This is the biggest economic contraction faced by India in at least four decades. India's real gross domestic product growth rate came to its lowest in over six yrs. in the 4th quarter of 2019-20, and the coronavirus pandemic added new challenges. The steps taken by the Government to control the spread had severe impact on each and every sector of the economy with some exceptions.

Year Quarter	2017-18	2018-19	2019-20	2020-21
Q1	5.7%	8.2%	5.0%	-23.9%
Q2	6.3%	7.1%	4.5%	NA
Q3	7.2%	6.6%	4.7%	NA
Q4	7.7%	5.8%	3.2%	NA

Source: Respective countries National Statistics Office, Haver Analytics

Figure 3: India GDP growth quarterly year-on-year (%)

Demand side impact

Private Consumption

The lockdown had a huge impact on the Indian economy, changing the consumer behavior and their buying patterns.

Private final consumption expenditure by purpose	Share, per cent
Food and non-alcoholic beverages	26.3
Alcoholic beverages, tobacco and narcotics	1.9
Clothing and footwear	5.8
Housing, water, electricity, gas and other fuels	13.7
Furnishings, household equipment and routine household maintenance	3.2
Health	4.5
Transport	17.6
Communication	2.7
Recreation and culture	0.8
Education	4.0
Restaurants and Hotels	2.2
Miscellaneous goods and services	17.2

Source: First revised estimates of national income, consumption expenditure, saving and capital formation, MoSPI, 31st Jan `20

Figure 4: Share percentage of private final consumption by purpose

Consumer behavior is now more inclined toward savings and wellness, because of low consumer confidence; thus, supply chains are imbalanced. In addition, consumers have cut down spend in many areas, including travel, fashion, and auto. This has triggered a further chain reaction in industries such as energy, tourism, real estate, financial institutions, durable goods, and so on.

The growing tensions between the USA and China may result in organizations shifting their manufacturing bases from China. This may be an opportunity for India but the extent to which it can be leveraged depends on how quickly and efficiently the economy bounces back.

Informal sector

States	Percentage share of informal workers (non-agriculture)
Rajasthan	54.8
Punjab	51.8
Andhra Pradesh	51.0
Chhattisgarh	49.0
Gujarat	48.4

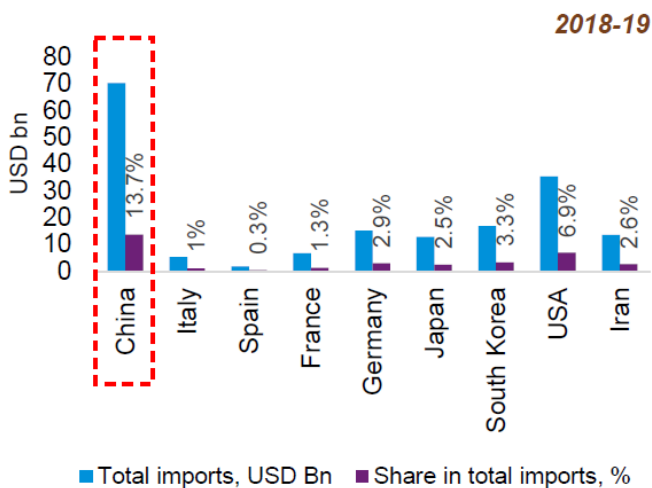
Source: Periodic Labor Force Survey, 2017-2018

The above figure shows the info of Informal labourers from top 5 states and most of them are migrant labourers who are either waiting for the industries to open up or have left their

jobs due to the coronavirus pandemic. This resulted in reverse migration of the migrant workers on a massive scale. The effects of which will unwind over time. In urban India around 37 percent⁰ of salaried employees belong to the informal sector who are going to be the worst-affected from this economic crunch. Stimulus package of INR 1.7 trillion was unveiled which focused primarily on cash transfer and food security.

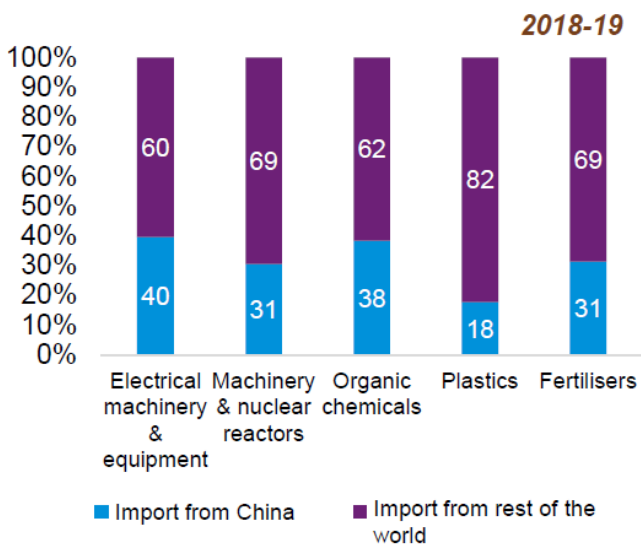
Supply side impact

China is the largest trading partner of India, among the COVID-19 infected nations.



Source: Department of Commerce

Figure 6



Source: Department of Commerce

Figure 7: Top imported commodities from China

While the supply chain disruption in China may impact some companies in India, the economy may not be affected to the same extent since most of the industries rely on China mainly for the supply of raw materials rather than intermediate products. Also, the Indian companies have stock piled their inventories which could help them in the meantime. However, the disruption in the domestic supply

chain may cause storage issues after the regular operations restart.

Sectoral impact

Consumer, retail and internet business

The retail sector contributes about 10% to the GDP¹. With the market size of USD 950 billion (2018-19)¹, India is the fifth largest in retail space¹. The major segments¹ in this sector are household (50%), healthcare (31%), and food and beverages (19%). The market size of e-commerce is estimated to be USD64 billion².

The coronavirus pandemic affected the consumer, retail and internet business sector in the following ways:

- The ongoing pandemic caused the Government to lockdown entire cities and impose restriction on peoples' movement in and out of their households. This caused nervousness in common people which resulted in their overstocking on wellness products and commodities. This might cause a boost to the sales of FMCG products and healthcare which may be neutralized by the supply chain disruptions resulting in corporations unable to fulfill customer demand.
- The e-commerce sector will witness tremendous growth in consumer demand but will face the challenge of fulfilling them due to the disruptions in supply chains and last mile deliveries. Another challenge they would face is to provide necessary equipment to its staff working in warehouses, logistics department, etc. to meet the required compliance of the Government.
- We might also see new companies exploring newer distribution channels for their own direct-to-consumer route.

Recommended Strategies	Short-term	Mid-long term
Tax	<ul style="list-style-type: none"> • Reduction in interest rates • Tax incentives for retail players 	<ul style="list-style-type: none"> • Creating incentives for promoting retail manufacturing and its products • Cutting import duties
Financial stress	Special rebates for SMEs	<ul style="list-style-type: none"> • Encouraging door to door delivery through allowances • Insurance coverage for tackling disruptions
End customer support	Prioritizing digital payments for reducing touch points	Reduction in capital gains tax, income tax slabs, dividend distribution tax
Others	<ul style="list-style-type: none"> • Initiatives and guidelines for prevention for tier 1 & 2 cities • Incentivizing transport & logistics to provide support 	Gradual openings of shopping malls with social distancing policies

Food and agriculture

The food and agriculture sector contributes about 16.5% to the GVA³. With the market size of USD 820.92 billion (2020)³ of food and retail, India is the first in dairy & spices, second in food grains³. The major processed food segments⁴ are dairy (29%), edible oil (32%) and cereals (10%). The

market size⁵ for seeds – USD 4 billion, Agro chemicals – USD 5 billion and fertilizers – USD 19.3 billion.

- Agricultural inputs: The overall impact on this sector ought to be quite low
 - Seeds: The impact is going to be low as the States have declared this as a non-important category
 - Agro-chemicals corporations are in a narrow spot since they rely upon imports of raw materials and export of finished goods.
 - Fertilizers: The impact is low thanks to the stock piling of inventories.
- Food retail: Grocery retail chains are operating normally as many state governments have allowed their movement freely in the lockdown but the supply chains of food and meat still face unpredictability. The retail chains are facing shortage of employees. Prolonged lockdown may lead to accrued demand for food providers. Online grocery platforms such as Flipkart, Amazon fresh, etc. are severely impacted due to last mile issues⁷.
- Food exports: The export companies in India are severely affected due to the steep decline of consumer demand and are also facing issues at the ports. Although the export inventory can be diverted to the domestic markets which may solve the problem temporarily, the booming farm-gate costs for those goods may impact the future crop accessibility.

Recommended Strategies:

Recommended Strategies	Short-term	Medium-long term
Food supply chain policy	<ul style="list-style-type: none"> • Classification of essential food items with 0 hurdle supply chain • Essential category should also include food packaging industry 	<ul style="list-style-type: none"> • Dedicated food transport corridors for seamless transportation • Aadhar based approvals and passes to be issued to support the food supply chain during lockdown
Financial stress	State government may supply free agri inputs to farmers	<ul style="list-style-type: none"> • Re-strategizing domestic and export market incentives for managing existing inventory • Priority handling of agri inputs at ports
Food and agri inputs delivery personnel support	Prioritizing digital payments for reducing touch points	A system enabling direct benefit transfer to migrant agricultural labour
Others	<ul style="list-style-type: none"> • Optimizing farm-gate prices • Encouraging companies which provide door to door delivery to restrict movement in the streets 	Recalibration of agricultural & allied export policy

Aviation and Tourism

The Aviation and Tourism sector contributes USD72 billion to GDP (FY19)⁸ and supports more than eight million jobs. Tourism supports more than forth two million people (FY 18-19) and contributes 9.2%to GDP (2018)⁹. Government spending¹⁰ on tourism is 25 billion Indian Rupees in 2020-2021.

- India’s tourism sector was one of the worst hit by the coronavirus pandemic. Many believe that this might be even greater than the 2008-09 financial crisis and the 9/11 attacks.
- The crisis had cost at least USD 22 billion to the tourism sector, the travel sector contracted by 25% in 2020. According to the WTTC, it resulted in about fifty million job losses.
- The Indian tourism and hospitality industry might lose about 70% of its workforce which is roughly 38 million jobs.

Recommended Strategies:

Recommended Strategies	Short-term	Medium-long term
Financial	<ul style="list-style-type: none"> • Financial support to Maintenance, Repair and Overhaul industry • Additional financial support to regional carriers for a period of 6-12 months to keep essential services operational • Reducing landing and parking charges by incentivizing airport operators • Low interest rates for bank loans to help companies facing cash crunch 	<ul style="list-style-type: none"> • Should be regarded as high-priority sector for lending with increase in the credit allowance • Increased govt. funding
End customer support	<ul style="list-style-type: none"> • Ensuring public safety by mandating social distancing, hygiene and disinfection norms in airlines and tourism industry e.g. mandating airlines to under book, masks to be worn by staff at all times, etc. 	Setting up a regulatory body to ensure compliance to the social distancing norms, hygiene, and disinfection is followed

Healthcare

The healthcare sector contributes 1.28% to the GDP, which is expected to increase by 2.5% by 2025¹¹. The govt. spending for healthcare was 623.9 billion Indian Rupees (2019) of which, 317.5 billion Indian Rupees was allocated for NHM (2019-2020) and 64 billion Indian Rupees for the Ayushman Bharat Yojna. To control the pandemic, the government of India allocated INR150 billion¹². In India, there are more than 2 million health workers¹³ however, the patient : doctor ratio is just 1445:1 which is very low when compared to WHO's recommendation of 1000:1¹⁴.

The coronavirus pandemic affected the healthcare sector in the following ways:

- A crisis like this directly questions the country's healthcare infrastructure globally, forcing the governments to rethink their strategies, policies, funding and manpower allocation.
- It compelled both the sectors (public & private) in most countries to increase the production of medical equipment.
- As the awareness of the common people increased regarding hygiene, contamination and infection spread quarantine, the healthcare sanitation and personal hygiene products witnessed an increase in demand.
- This may result in an increase in govt.'s focus on medical staff.

Recommended Strategies:

Recommended Strategies	Short-term	Medium-long term
Tax	<ul style="list-style-type: none"> • Rebate on interest rates • Reduction of import/export duties on medical equipment and pharmaceuticals 	Enhancement of sin tax
Healthcare guidelines	Release of guidelines related to social gathering and quarantine protocols, testing, waste management, and infection prevention	<ul style="list-style-type: none"> • Increase in awareness about COVID-19 spread, prevention and quarantine in rural and remote areas • Incentivizing pharma companies to develop rapid testing kits
End customer support	Arranging well equipped temporary facilities for the isolation and treatment of COVID-19 patients anticipating the future spikes in cases. E.g. schools, colleges, etc.	Continuous awareness programs and campaigns about infection, prevention, cleanliness, and self-hygiene

Conclusion

The increasing spread of the coronavirus has caused major disruptions in traditional patterns of economic interaction and behavior, forcing countries and organizations worldwide to adapt and improvise to the new emerging normal. The pandemic may fundamentally change the way we work and live.

The business landscape could shift in the below mentioned ways. Leveraging these could help organizations to adjust to the new normal.

1. Localization

The current coronavirus pandemic may lead to a prominent localization of supply chains of consumer goods and wellness products.

2. Digital transformation

Most of the companies having the IT infrastructure have adapted to the current crisis by providing work from home or remote working option for most of their day-to-day activities. This has shown how important it is to invest in IT infrastructure and services such as cloud, cyber security and data, forcing most brick and mortar organizations to adopt to an Omni channel approach.

3. Variable cost model

Conserving cash has proven to be judicious for sustaining crisis like this. It had also forced organizations to convert their fixed costs to variable costs by exploring outsourcing options more aggressively than in-house.

4. Supply chain management

The current crisis has proved that building a resilient supply chain is one of the most critical components of remaining competitive in the market. Organizations need to quickly evolve and come up with initiatives for mitigating supply chain risks in order to stay responsive, inclusive and agile.

References

- [1] Ministry of Statistics and Programeme implementation MoSP, May 2019
- [2] Retail Sector Overview, FICCI
- [3] Market size of e-commerce industry across India from 2014-17, with forecasts until 2027, Statista
- [4] Food Processing Industry in India, InvestIndia website
- [5] Quarterly factsheet on Foreign Direct Investment, April 2000-December 2019, Department of Promotion of Industry and Internal Trade
- [6] Euromonitor International
- [7] Agriculture-Farming and allied activities exempted from lockdown, Press Information Bureau

- [8] BigBasket, Grofers and other delivery services disrupted amid lockdown, TheNewsMinute
- [9] Aviation sector overview, Invest India website and International Air Transport Association (IATA) website
- [10] Tourism and Hospitality sector overview, Invest India website
- [11] Union Budget Speech, Ministry of Finance, 1 February 2020
- [12] National Health Profile Report 2019
- [13] PM Modi Allocates Rs 15,000 Cr For Healthcare Infra To Combat Covid-19 Outbreak, ABP News, 24 March 2020
- [14] Healthcare Workforce in India, WHO 2019
- [15] Doctor patient ratio in India less than who prescribed norm of 1 1000. Business Standard
- [16] First case of coronavirus:
- [17] <https://www.livescience.com/first-case-coronavirus-found.html>,
- [18] <https://www.theguardian.com/world/2020/mar/13/first-covid-19-case-happened-in-november-china-government-records-show-report>
- [19] India's GDP contraction:
- [20] <https://scroll.in/article/971965/in-charts-indias-gdp-shrinks-more-than-other-major-economies-decline-set-in-before-pandemic>
- [21] <https://timesofindia.indiatimes.com/india/covid-19-india-only-country-in-worst-hit-20-with-cases-yet-to-peak/articleshow/77920640.cms>
- [22] <https://www.bloomberg.com/news/articles/2020-08-31/india-s-economy-plunges-by-record-23-9-after-harsh-lockdown>
- [23] <https://timesofindia.indiatimes.com/business/india-business/gdp-collapses-23-9-in-q1-worst-among-big-economies/articleshow/77860877.cms>
- [24] Potential impact of COVID-19 on the Indian economy:
- [25] <https://home.kpmg/content/dam/kpmg/in/pdf/2020/04/potential-impact-of-covid-19-on-the-indian-economy.pdf>
- [26] Tracking COVID-19 worldwide:
- [27] <https://www.bloomberg.com/graphics/2020-coronavirus-cases-world-map/>