

Review Article

Impact of COVID-19 pandemic on Indian economy

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ABSTRACT

The Coronavirus disease 2019 (COVID-19) pandemic has emerged as the most challenging biological disaster of the 21st century. The sudden onset of pandemic in the background of unpreparedness and the lockdown and social distancing measures has impacted the economies of not only the less developed but also the well-developed countries. The objective of this paper is to examine the economic impact of the COVID-19 pandemic on the various sectors of the Indian economy. The data has been collected from the start of the pandemic till the second week of May 2021. The results of the study show that the policy measures taken to contain the pandemic resulted in a severe crunch in the Indian economy. The GDP growth rate recorded a negative figure, the manufacturing sector and contact-intensive hospitality service sectors, domestic and international trade had to shut down and suffered losses like never before. Agriculture, Information technology and software services sector remained resilient and sustained the economy. Migrants had to revert back to their hometowns in search of alternate jobs, unemployment was at its highest during the lockdown in 2020. Continued policy measures and monetary support are needed to cope with the economic impact of COVID-19 in the backdrop of an unprecedented forecast.

Keywords: COVID, Economic Impact, India

INTRODUCTION

COVID-19 disease is a respiratory tract infection caused by a newly emergent RNA beta-coronavirus which infects the host epithelial cells by gaining entry into the lungs via the ACE-2 (Angiotensin converting enzyme-2) receptors predominantly expressed on the type II alveolar cells of the lung.¹ Transmission is via droplets, contact with contaminated fomites and surfaces as well as via aerosols in some settings.² The patients with COVID-19 infection manifest a spectrum of upper and lower respiratory tract symptoms. While most people with COVID-19 develop only mild or uncomplicated illness, approximately 14% develop severe disease with complications like acute respiratory distress syndrome (ARDS), sepsis and septic shock, multi-organ failure, including acute kidney injury,

and cardiac injury that requires hospitalization and oxygen support, and 5% require admission to an intensive care unit.³

The economic growth of India had been registering slowdown since 2017-18. GDP growth at constant prices (2011-12) was 7% in 2017-18; 6.1% in 2018-19 and 4.4% in 2019-20 prior to the COVID-19 pandemic.⁴ The demonetisation of high value currency notes in 2016, introduction of GST in 2017 and other domestic causes, global causes including a sharp reduction in the exports owing to fall in demand to have been quoted as the reasons for this slowdown. During this prolonged period of slowdown, the onset of the COVID-19 pandemic came as a shock to the Indian economy as it was largely unprepared.⁵

EPIDEMIOLOGY OF COVID-19 PANDEMIC

The infectious disease started as a cluster of pneumonia cases of unknown etiology in Wuhan city of Hubei province in China in December 2019.⁶ By January 2020, imported cases were reported from Thailand, Japan and Republic of Korea.⁷ By mid-March 2020, Europe became the new epicentre apart from China with Italy and Spain reporting the highest number of cases.^{8,9} By April 2020, the region of Americas reported the highest number of cases with USA (United States of America), Brazil and Canada on the top of the list.¹⁰ As of May 2021, there have been over 167 million confirmed cases of COVID-19, and nearly 3.4 million deaths reported to WHO, with India, reporting the highest number of new cases followed by Brazil, Argentina and USA.^{11,12} Globally, new cases and deaths have been on a declining trend since mid-May 2021.¹²

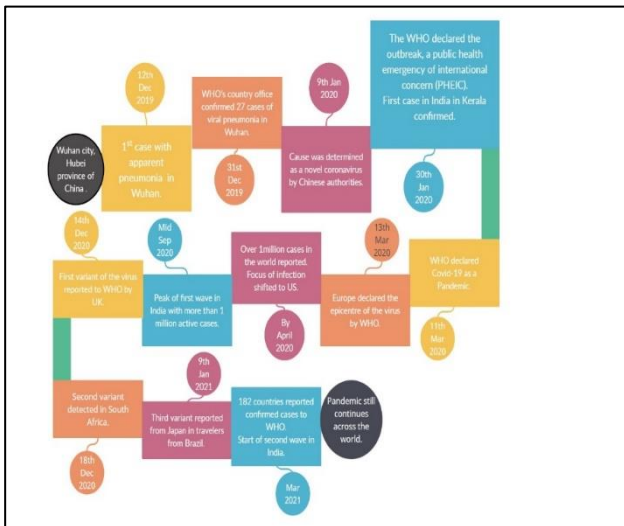


Figure 1: Major timelines of COVID-19 pandemic (WHO).^{8,13}

The first lab confirmed COVID-19 case in India was reported in the state of Kerala on January 30th, 2020, who had travelled from Wuhan. The first COVID-19 death from India was reported on 10th March 2020 from Kalburgi district of Karnataka, a 76-year-old man who had a travel history from Saudi Arabia, whose COVID positive status was confirmed on March 13th 2020 post death.¹⁴ The first wave of the COVID-19 pandemic peaked in India in mid-September 2020, when the number of active cases crossed 1 million. It continued to decline for about months touching a low of 9,110 new cases per day on February 08, 2021.¹⁵

MEASURES TAKEN BY GOVERNMENT OF INDIA (GOI) TO RESTRICT THE SPREAD OF COVID-19

The policy response to the pandemic by GoI to save the lives and livelihoods was designed with an objective to

minimize losses under the worst-case scenario in a situation of enormous uncertainty.

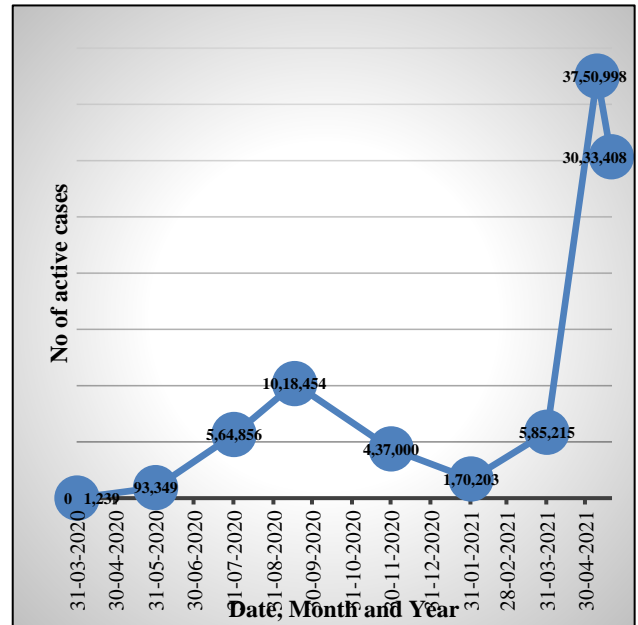


Figure 2: Rise in the number of active cases- second wave of COVID-19 in India (Worldometer-COVID-19).²³

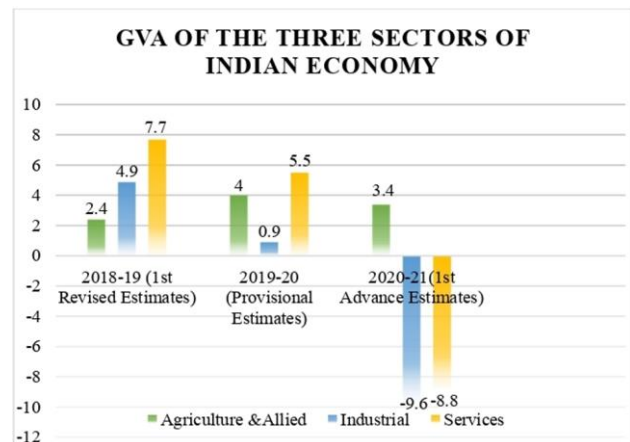


Figure 3: GVA* of the three sectors of Indian economy in percentage.

*GVA-Gross value added - indicates the value of output minus the value of intermediate consumption and is a measure of the contribution to GDP made by an individual producer, industry or sector.

A nationwide lockdown was imposed from 25th March 2020 when there were only 500 confirmed cases. All non-essential services and businesses, including retail establishments, educational institutions, places of religious worship, across the country stayed closed, all means of travel were stopped, only some inter-state transport was permitted. The lockdown period was utilized to scale up the necessary infrastructure for active surveillance, expanded testing, contact tracing, isolation and management of cases, and educating the citizens

about social distancing and personal protection measures etc.'5 T' strategy - Test, Track, Trace, Treat, Technology was put in place to control the spread of the epidemic. Towards end April and early May 2020, migrant workers, stranded pilgrims, tourists, and students were allowed to return to their native places. From early June, lock-down was gradually relaxed in a phased manner but was continued in high-risk zones or 'containment' areas. With the continued surge in cases thereafter, lock-down was extended till July 31, 2020, but in a less stringent manner. Measured relaxations were permitted in areas outside the high-risk zones. Domestic flights were restarted on May 25, 2020, subject to the guidelines to ensure safe travel of the passengers. Vehicular movement within States was allowed and night curfew was put in place. After the nation-wide lockdown was gradually eased, the States were advised to impose restrictions as per the spread of the pandemic in the State. Thus, the stringency of lockdown varied across States over time.¹⁶⁻¹⁸

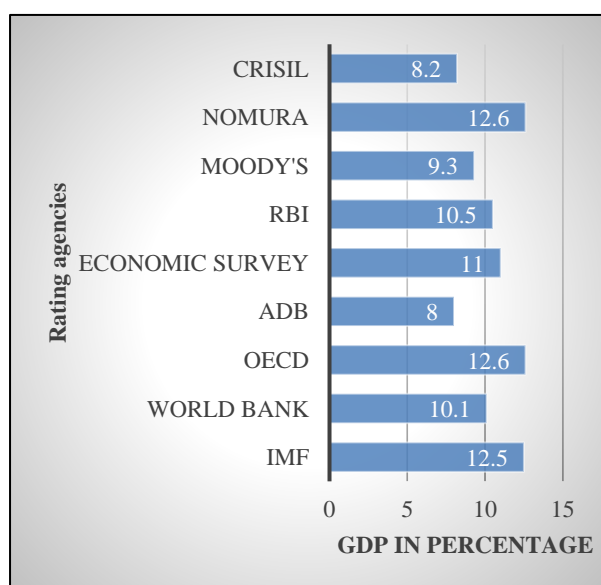


Figure 4: India-GDP forecasts for 2021-22.

SECOND WAVE OF COVID-19 AND VACCINE ROLL-OUT IN INDIA

By 25th February 2021, States like Maharashtra, Kerala, Punjab, Madhya Pradesh, Tamil Nadu, Gujarat and Chhattisgarh witnessed an upsurge in daily new cases marking the beginning of the much anticipated second wave of Covid-19 in India.¹⁹ Cases started rising steadily from March 1st week 2021. By early March 2021, eight States/UTs had weekly positivity rates more than the national average of 2.29%, the highest among them being Maharashtra at 11.13%.²⁰ The number of new cases on May 6, 2021, reached a peak of 414,188 cases per day, followed by a declining trend thereafter.¹⁵ INSACOG (Indian SARS-CoV-2 Consortium on Genomics) reported in March 2021 that gene sequencing of samples from various parts of India showed 771 variants of concern. Some mutations like E484Q and L452R (found in 15-

20% of the samples) conferred immune escape and increased the infectivity in the virus.^{19,21} To tackle with the rise in new cases during the second wave, the five-fold strategy advocated now is "Test, Track, Treat, COVID appropriate behaviour and Vaccination."²²

As of May 2021, as many as 101 vaccines have been in clinical development stage in various countries of the world.²⁴ A total of 1.4 billion vaccine doses have been administered globally by May 2021.¹¹ As far as India is concerned, two vaccines have been granted emergency use authorization by the Central Drugs Standard Control Organization (CDSCO): Covishield (manufactured by Serum Institute of India), a viral vector-based vaccine and Covaxin (manufactured by Bharat Biotech Limited), a whole virion inactivated corona virus vaccine. The pan India vaccination drive started with the priority group of health care workers and front-line workers from January 16, 2021. Later, from March 1, 2021, it was started for the vulnerable population in the age group of 60 years and above and those with co-morbidities aged between 45-59 years. From 1, April 2021, people aged above 45 years and finally, from 1st May 2021, all citizens above 18 years of age were made eligible for the vaccine.²⁵

In order for the government to take suitable fiscal and monetary measures, it is necessary to study the long-term economic effects posed by this pandemic situation, as the Indian government promises to promote the welfare of its citizens by ensuring social, economic and political justice under the Directive principles of State policy.

The findings of this study are based on an analysis of the secondary data sources such as annual reports, monthly reports and special reports from various departments of Government of India like Ministry of health and family welfare, Ministry of finance, Ministry of Commerce, CMIE (Centre for monitoring Indian economy), Budget reports, RBI (Reserve Bank of India) publications, Economic survey 2020-21, IMF (International Monetary Fund), WHO (World Health Organisation) and other United Nations reports, news articles (online) and peer-reviewed journals to get an overall picture of the macroeconomic impact of the COVID-19 pandemic from the time of the onset of the pandemic till May 2021. To retrieve relevant literature, the keywords used were "COVID-19, Corona virus, Economy, India, and economic impact" on databases like PUBMED, Google scholar and Google.

IMPACT OF COVID-19 ON INDIAN ECONOMY

The gross value added contributed by the primary, secondary and tertiary sectors of the Indian economy from 2017-18 to 2020-21 are as shown in Figure 3.

GVA-Gross value added - indicates the value of output minus the value of intermediate consumption and is a measure of the contribution to GDP made by an individual producer, industry or sector.

Impact on Gross domestic product (GDP)

According to second advance estimates by National statistical office, the growth in real GDP for India in 2020-21 is estimated at -8.0% as compared to a growth of 4.0% in 2019-20. The latest GDP forecasts by various rating agencies for the upcoming year 2021-22 are as shown in Figure 4.

Impact on agricultural and allied sector

Agriculture, forestry and fishing sector had a positive growth of 3.4% contributing to the Gross value added (GVA) during the first and second halves of 2021-21. During the 2020 lockdown period, there was an uninterrupted harvesting of rabi crops and sowing of kharif crops.³² Many state-specific measures taken to ensure good production, harvesting and procurement yielded good results as far as this sector is concerned. For example- in Punjab, coupons with holograms were provided to the farmers to bring their wheat to the mandis in an effort to avoid overcrowding.³³ But the necessary supply chains were affected by closure of restaurants, transportation impediments etc. which reduced the demand for fresh produce, poultry and fishery products.¹⁷

Impact on manufacturing sector

The eight-core industries - coal, crude oil, natural gas, refinery products, fertilizers, steel, cement and electricity contribute to approximately 40% of the IIP (Industrial index of production). The eight-core index recorded its historical all-time low growth of -37.9 due to the nationwide lockdown in April-2020. All India coal production declined by 3.3% YoY (year on year) from April-October 2020 which was attributable to COVID-19.²⁶ MSMEs (Micro, small and medium enterprises) in India contribute to around 30% of India's GDP and half of the country's exports. With 633.88 lakh MSMEs all over India, the sector plays a crucial role in employment generation. They were worst hit by reduced cash flows caused by the nationwide lockdown.^{17,34}

Impact on services sector

The services sector accounts for more than 50% of the Gross State Value Added (GSVA) in 15 out of the 33 states and UTs. Sectors which are contact intensive like airlines, hotels, energy, and financials have been more affected by the lockdown and social distancing, whereas those that are less contact-intensive like information technology, communications have fared better. Indian airlines stuck to the ground between March and May 2020 with a gradual recovery since August 2020. Rail freight traffic growth declined to - 35.3% YoY (year on year) in April 2020 and again rose back sharply to 15.5% YoY in September 2020 followed by a continued growth later on.²⁶ The tourism sector had foreign exchange earnings of USD 29.9 billion in 2019. The arrival of foreign tourists to India from different parts of the world had reduced by 68% in March 2020 compared to the

previous month, greatly impacting the revenue generated from tourism in the form of FEE (Foreign exchange earnings).³⁵

Impact on revenues

The total receipts of state governments during April-October 2020, contracted by 13.7%. However, gross GST collections (Centre plus states), increased in October 2020 (₹1,05,155 crores) crossing ₹1 lakh crore mark and has been so at a stretch consecutively for the last 6 months with an increasing trend with highest recorded collections in April 2021 (₹1,41,384 crores).^{26,36}

Impact on employment

More than 80% of India's workforce is in the informal sector and were particularly affected by the lockdown. There was a loss of 122 million jobs in April 2020.¹⁷ The unemployment rate varied between a low of 7.0% to a high of 8.8% between April 2019 to March 2020 and shot up to 23.5% and 21.7% in April and May 2020 during lockdown.³⁷ Survey reports showed that young workers in the age group of 15-24 years were most vulnerable to job loss during lockdown with 33% of them never returning to work by December 2020 compared to workers of other ages. 7% of men and 47% of women suffered a permanent job loss and could not return to work by December 2020 showing that women were disproportionately affected.⁵ As per CMIE, employment conditions brightened in March 2021, when the unemployment rate slid down to 6.5% from 6.9% in February 2021.³⁷

Impact on migrants

Millions of workers migrate from rural to urban areas in India who are employed in the construction sector, domestic work, textiles, brick kilns, mining etc. During lockdown, 92.5% of these laborers lost 1 to 4 weeks of work.³⁸ There was a reverse migration experienced during the pandemic with the push factors as, high costs of living in urban areas with no earnings due to job loss, uncertainty about the lifting of the lockdown, limited access to social and unemployment benefits, and the pull factors as rabi crop harvesting, seeking alternate employment opportunities such as Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), re-joining their family in the native place and a feeling of more safety and security in their hometowns.³³ Hence there was a significant decline in employment especially in urban areas in construction and manufacturing sectors.³³

Impact on trade

From April to December 2020, India experienced a deficit in the merchandise trade of US \$ 57.5 billion, with fall in exports by -15.7% and imports by -29.1%. In contrast, the services trade registered an estimated surplus of US \$ 62.7 billion during April-December 2020. India's export

of software registered 9.1% growth over the previous year.³⁹ Export of computer services contributed to 66.6% and ITES/BPO (Information technology enabled services/Business process outsourcing) services contributed to 33.4% of the total software services exports.⁴⁰ Again, India's merchandise exports recorded a worth of US\$ 34.4 billion and imports of US\$ 48.4 billion in March 2021, indicating a rebound in global demand and revival in domestic activity.³³

DISCUSSION

The economic effects of COVID-19 pandemic can potentially threaten the sustainability of developing countries like India by reverting the hard-earned gains accumulated over the years. The overall macroeconomic impact of the pandemic on Indian economy during the year 2020-21 can be understood in the form of a negative GDP, a sudden shutdown of businesses and enterprises leading to vast supply and demand shocks for the merchandise sector especially the MSMEs, the contact intensive service sectors like hospitality, travel coming to a stand-still while IT and software services registering a positive growth. Agricultural sector remained resilient. The migrant workers lost their jobs and there was a phenomenon of reverse migration back to their hometowns in search for alternate jobs. With the lifting of the lockdown, businesses resumed, imports and exports picked up and a rise in the GST collections was observed seemingly on a path to economic recovery. Before any consistent growth could be observed during the first quarter of 2021-22, the Indian economy has been threatened by the second wave in India and the possibility of impending subsequent waves of the pandemic. Agricultural sector is expected to continue as the silver lining as record food grain production has been estimated for the ensuing year with normal monsoons predicted. As economies learn to operate with COVID-19, it is expected that the economic impact from subsequent waves will be less than the first wave.²²

CONCLUSION

To boost the economy, fiscal measures such as Atmanirbhar Bharath packages as well as monetary measures through Reserve Bank of India have been undertaken by GoI. The impact of these measures is estimated to unfold in the medium to long term. Presently, in India, there is a need for continued policy measures and monetary support to the small and medium scale businesses and vulnerable communities, to increase the coverage of the social protection net by suitable laws. The economic growth of any country is dependent not only on the successful trade and businesses but also on the overall capacity to cope with serious health challenges as the COVID-19 pandemic.

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Conflict of interest: None declared

Ethical approval: Not required

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