

The Economic Impact of a Global Pandemic on India and Ways to Improve the Economy of Odisha.

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Abstract: *The impact of a global pandemic has displayed extremely catastrophic consequences affecting 206 countries in the recent days. Not only has it affected human lives but also the political and economic stability of various nations. The great philanthropist and Corporate Giant Bill Gates had stated that the worst pandemic in modern history was the Spanish flu of 1918 which killed tens of millions of people. Today we stand at the threshold of another pandemic waiting for it to end with bated breath. If only the epidemic could have been anticipated before its attack, the impact would have been less or probably negligible as compared to the devastating situation witnessed in the recent times. Apart from the tragic loss of human lives, the nations have endured the cost of shutting down core economic activities and office temporarily in order to circumvent the spread of epidemic. This epidemic has displayed a negative impact on the normal growth curve demographically and economically as well. Given the fact that over 3,148,709 people have been affected by COVID-19 disease all over the world and over 219,000 deaths (as of 28th April 2020) [1], it is important to control the spread as well as keep the economy running. With the rising social disharmony and prevalent economic shock it has been estimated that India might run into the state of recession. Given the pace of growth any shock or political unrest can take us 20 years back in terms of development. Other countries in South East Asia and Africa who are in the same stage of development as India is, will also have to face the ramifications of global pandemic. Undoubtedly the pandemic has struck us in the form of a biological weapon. This paper aims to find out the reason behind such pathological developments and bring out applicable solutions to expurgate the economic ordeal caused by the biological hazard.*

Keywords: *Economic shock, Novel Coronavirus, Pandemic, Recession, Social Disharmony.*

I. INTRODUCTION

India and many other nations have been grappling from the clutches of novel coronavirus disease which has spread like wildfire in a short span of time. Pre COVID-19 the growth rates of many of the developing nations such as India, China, Indonesia etc. were around 6-7% unlike many developed nations.

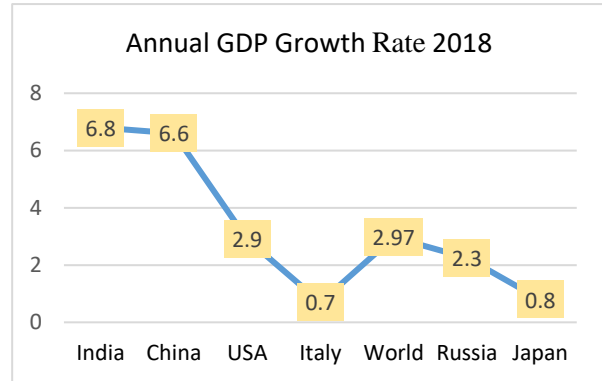


Figure 1.

Source: World Bank report 2019. [2]

But post COVID-19 (Corona Virus Disease -19) the entire world has come to a standstill because of the lockdown. According to speculations the novel coronavirus emerged in the Wuhan region of Hubei district in China in the month of November in 2019. Apparently this new strain of coronavirus also known as SARS CoV-2 (Severe Acute Respiratory Syndrome Corona Virus-2) seems to have originated in bats spreading to pangolins and then to humans ultimately. But now this disease doesn't require any animal intermediary for its spread. It is disseminating from the contact of an infected person. The worst hit countries are China, Italy, Spain, Iran, United States of America, United Kingdom, Switzerland, France, Germany and South Korea. If the chain does not break at the earliest it might ensue a chaos. With the increasing loss of lives, Government might have to deal with a severe economic shock bigger than that of the Lehmann Brothers crisis in 2008. Local businesses, educational institutions have closed down, entertainment and tourism industries have turned dormant and trade has disrupted in the major economies of the World. Every nation is on a mission to safeguard the life of its citizens and also to minimize the complications of the global economic downfall.

II. HISTORICAL REFERENCES

The global pandemic started with the spiralling of the pathogens in China as well as other nations all over the globe. This caused the epidemic to turn into a pandemic. Though the occurrence of a pandemic is not new but its spread and repercussions have been hysterical. In order to understand the gravity of the situation it is important to reflect back on the previous such cases of pandemics [3] that have occurred in the past two centuries under the regime of progressive governments.

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A. Flu Pandemic of 1889-1890:

Despite no air travel taking place in those days the influenza virus managed to eradicate almost a million people all over the World. Taking shape in Russia it took only five weeks to spread to Europe and remaining other nations.

B. Spanish Flu 1918-1920:

Affecting around 500 million people from the South China Sea to the North Pole. It aggravated during the World War 1 when all the wounded soldiers and poor were deprived of proper nutrition and basic treatment due to the distressed economic condition of the nations.

C. Avian Flu 1957-1958:

The Avian influenza was another global pandemic which originated in China. More than one million people were killed by the disease all over the World including USA. It did create a panic- stricken atmosphere.

Table 1. Features of the three Pandemics of the 20th Century

PANDEMIC	ESTIMATED MORTALITY CHANGE	GDP LOSS %
1918-1919 Spanish Flu	20-50 million	-16.9 to 2.4
1957-1958 Asian Flu	1-4 million	-3.5 to 0.4
1968-1969 Hong Kong Flu	1-4 million	-0.4 to 1.5

Source: World Health Organization Pandemic H1N1 2009 report [4].

D. H1N1 Swine Flu 2009-2010:

Similar to the SARS CoV-2, the H1N1 was also a new strain prevalent in the virus family. It took shape in Mexico and affected around 1.4 million people across the globe. Most of the people who died belonged to the age group below 65 years old. It affected most of the working age population which can be a huge setback for any nation. Thankfully vaccine for H1N1 virus has been created and included in annual flu vaccine.

E. West African Ebola Vaccine 2014-2016:

The West African subcontinent experienced this setback and reported a death toll of about 11,325. Similar to COVID-19 the virus seems to have originated from bats and spread to human beings. Sadly vaccination for this virus strain has not been created yet.

F. SARS CoV-1 and MERS [5]

SARS CoV-1 cases were first discovered in Southern China in the year 2002. The global cost of SARS associated with lost economic activity is estimated to have been \$40 billion. MERS or Middle East Respiratory Syndrome originated in Republic of Korea in 2015. Estimated losses in tourism, accommodation, food and beverage services and transportation services were US \$2.6 billion, \$542 million, \$359 million and \$106 million respectively.

With the loss of Human Capital the affected nations also had to go through an economic turmoil simultaneously.

Responsibilities like dispersal of rations to the poor at a reduced rate, building quarantine zones for the affected, provision of necessary medical kit and compensation to the doctors, nurses, paramedics, maintaining a stable money and capital market without letting recessionary forces act in, limiting trade, securing the tourism and aviation industries, keeping the Government as well as private office functional without causing any chaos and by limiting the workload etc. all such activities require an efficient economic workforce to act swiftly.

According to Martin I. Meltzer, Nancy J. Cox and Keiji Fukuda [6], without large scale immunization the estimates of total economic impact in the United States of America of an influenza pandemic would be ranged from \$71.3 billion to \$166.5 billion. Given the statistics the economic burden on developing nations such as India would be ten times higher than that of the United States of America. The real burden arises when the countries around the world have to face a new strain of pathogen and are completely unprepared to deal with it. The government expenditure on research and development as well as on the health and welfare of the citizens prompts the Government to take immediate action. As per the studies of Morens, Folkers and Fauci [7] the features of new pandemic viral strains depends on poorly understood patterns of immunity and the complex and poorly understood process of viral evolution and genetic assortment in dynamic ecosystems. While some pathogen target senior citizens, some attack the working age population. Losing citizens of any age can be depressing but for a thriving economy losing its workforce population can be devastating. It is important to support the research and development wing for proper results and predictions.

III. ECONOMIC LOSS WORLDWIDE DUE TO COVID-19

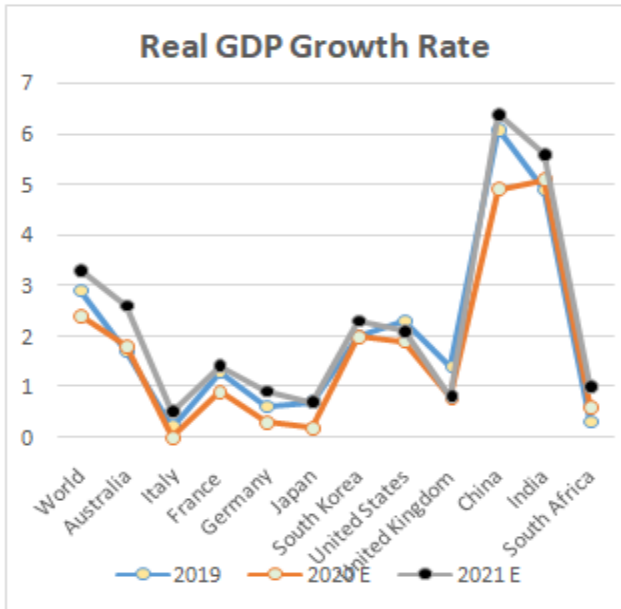
The worldwide economic loss that has arisen due to the Coronavirus disease is enormous. The lockdown that has been authorised in countries like India, China, USA, most of the European nations (Italy, Spain, Hungary, France, Germany etc.) Russia, South Africa is pushing the entire World into a state of recession. According to International Monetary Fund USA has already entered a state of recession. With absolutely no investment activity taking place and decrease in saving there are chances that the World might be heading towards a depression similar to that of the 1930s. While USA had taken around 3 years to come out of the state of the depression (of 1930s), economists are worried about the span of time it might take to recover this time. If we consider the loss of jobs of casual workers, small and medium labourers, the numbers keep rising. The unemployment issue is a concerning issue not only in the West but also in India. With the decrease in job opportunities, feeding and providing unemployment benefits to such workers and labourers can be taxing for the exchequer. Lack of foreign exchange, IT sector and tourism sector slump, trade barriers and protectionist policies, new banking regulations, rise in tax to build up the gap between savings and investment are the financial measures which an economy can expect in the future or post COVID-19.



Another issue is the lack of medical equipments and professionals given the rising number of patients.

Organisation of Economic Cooperation and Development (OECD) [8] has estimated that annual global GDP growth is projected to drop to 2.4% in 2020 from 2.9% in 2019, with growth possibly even being negative in the first quarter of 2020. Table 2 suggests how Europe, North America and Asia Pacific would see a considerable decline in the growth prospects given the high rate of affected people in these regions.

Figure 2. Real GDP growth (Year-on-year % change)



Source: OECD Interim Economic Outlook Forecasts, 2 March 2020

Figure 2 here suggests how the economic slowdown is going to affect the World. Real GDP is an appropriate measure to compare the growth of various countries. It measures the amount of goods and services in a given year taking into consideration the changes in prices. The trend can help predict inflation or deflation and also help in making proper business decisions in time. The table shows how every nation, may it be small or big, is going to be affected by the disease. The pandemic has shown how vulnerable economies can become irrespective of the fact how developed they are. According to the Economic Intelligence Unit India is expected to perform at a better rate than the G20 nations. China along with the European nations such as United Kingdom, Italy, Spain, France and Switzerland might have to face a lot of isolation and protectionist policies from emerging markets as far as trade and travel are concerned.

According to empirical data the American, Japanese and British stock markets have seen a sharp decline in the month of March. Oil prices and Gold prices have dropped drastically in March. People fear hoarding of food items might lead to shortage. Airlines sector all over the World are expecting a net loss of \$113 billion due to the lockdown. It is predicted that 3.3 million Americans will lose their jobs. And this is just the start. There is more to come in the days ahead. Provision of health care benefits to the unemployed can be strenuous for the Government. Even a US \$2 trillion bailout package for the economic slump cannot be enough to

cater to the needs of an over-empowered nation such as that of United States of America. A big bang economic impact would be to adopt President Franklin Roosevelt’s approach to pool in both fiscal as well as monetary policies together to curb the distress.

India’s economy has been suffering from low consumption and demand as well as low revenue collections from GST and income tax. With the onset of COVID-19 India’s economic growth has stagnated. Many of the rating agencies have slashed the GDP growth rate of the country stating its commercial viability. India is about to make a financial loss of about US \$120 billion due to the lockdown. No working capital in hospitals and inadequate safety gear for the medical professionals has made the Government to respond to this crisis immediately to protect our frontline health officers. With about 90% of its migrant workers displaced, rising unemployment is a serious issue lurking behind the doors. With no investment activity for the next three months or so the private entrepreneurs will seek to reduce the amount of employees in factories, real estate, manufacturing, tourism and aviation industries. And with the major segments of the secondary and tertiary sectors succumbing to this lockdown the recessionary forces will spiral into the other sectors dampening the output production and aggregate demand as a whole. With the downfall in demand, supply of raw materials will also become a problem. In order to fill in the gap between savings and investment Government might take the help of increasing taxes say GST. Many of the states have started declaring pay cuts. Though the monetary policy committee did show some leniency in reducing the repo rate to overcome this period of inactivity will it be enough to tackle this menace is a million dollar question.

IV. REMEDIAL MEASURES

Along with India other countries will definitely face the problem of low output with rise in unemployment.

While Republic of China has pledged a bailout plan of US \$5 Trillion in the G20 nations summit to mitigate Global economic crisis because of COVID-19. Various nations have come up with their own rescue plans to revive the economy.

Table 3. Stimulus package to revive economy

Countries	Rescue plans
USA	\$2 trillion
ITALY	\$33 billion
CHINA	\$564 billion
SPAIN	\$220 billion
UNITED KINGDOM	\$450 billion
INDIA	\$23 billion
SOUTH KOREA	\$13.7 billion
AUSTRALIA	\$420 million

Source: Author’s compilation from various sources

India has come forward with a stimulus package of US \$ 23 billion approximately to help 1.33 billion of its population especially the poorer segment. The finance ministry has chalked out certain measures to help eradicate the downfall of the economy [9].



A. For the medical personnel:

1. A medical insurance plan of Rs. 50 lakh for each doctor, paramedic and other medical staff.

B. For Food Security:

1. Provision of 5kg wheat or rice per person, 1kg of dal per household and LPG for Ujjwala beneficiaries for 3 months.

C. To moderate Liquidity constraint:

1. Provision of Rs.2000 to 87 million farmers under the PM KISAN scheme within 10 days of announcement.
2. Increase in MGNREGA wages to Rs. 202 from Rs. 182.
3. Rs. 500 per month to 200 million women who are JAN DHAN account holders for a span of 3 months.
4. Transfer payments of Rs.1000 to poor senior citizens, widows and disabled.
5. Rs.20 lakh collateral free loans to women Self Help Groups.

D. For Organised Sector:

1. Government to contribute EPF to companies with less than 100 workers for both Employer and employees.
2. Non-refundable advance of 75% for 3 months from PF account.

E. For Construction Workers:

1. States to use Rs.31000 Crore construction worker's welfare fund.
2. States have been advised to use District Mineral Fund for medical activities.

The Odisha government has been praised by the Central Government for its prompt action and efficient administration in dealing with this pandemic. Odisha was the first state to declare a complete lockdown before the nationwide lockdown was announced. The Government has also ramped up the number of hospitals and virology lab testing centres in a very short period of time. All the bureaucratic staff, police force, army, State Disaster Management Authority with the medical and para-medical staff have been put on high alert to attend to a wave of coronavirus cases in the near future. All the residents in the affected districts have been under complete lockdown since 22nd March 2020. The ration shops and vegetable vendors and middlemen have been provided with license to work on a daily basis. Khordha, Cuttack and 8 other districts have been under severe surveillance given the rising number of cases.

On the other hand, in order to mitigate the economic downfall the state Government has permitted construction activities and projects to support MGNREGA workers, under the Ministry of Home Affairs revised guidelines. All minor mineral source like sand ghats, crusher and quarry units have been permitted to operate. Besides agricultural activities, harvesting of crops, transportation of harvested produce and raw materials have been allowed. E-commerce of essential goods have been ensured in the state but in a restricted manner. Industrial and MSME units in unaffected districts have been allowed to start operations by ensuring workers to adhere to social distancing norms including Government instructions under the supervision of district collectors. Mom and pop Shops have opened up but not in containment zones. Services provided by self-employed

persons including electrician, IT repairs, plumbers, motor mechanics and carpenters will also commence.

There are three major concerns lying in front of the Odisha State Government:

1. *To reduce the number of coronavirus cases to zero.*
2. *To enhance the economic activities via output creation which can then generate income.*
3. *Revive credit flow into the system to ensure smooth functioning of the economic activities and ease fiscal deficit.*

V. SUGGESTIONS

1. The first and primary motive of all the state Governments and not just Odisha is to develop a vaccine at the earliest. It is extremely important to encourage young bio-technologists to derive a solution and to support them with proper infrastructure for research and developmental activities.
2. Given the huge amount of buffer stock available with the Public Distribution System and with the start of the harvest season the State Government could distribute food coupons to the poor and vulnerable sections for a time span of three months and the credit that has been disbursed to their accounts via direct benefit transfer mechanism can be utilised to buy inputs and raw materials for agriculture and allied activities. This way they would not have to spend on food items. If the Government bodies procure from the farmers they will be protected from distress selling and perishable items will not go waste.
3. Given the large rise in the agricultural production and no buyers in the market due to dormancy in tourism and hospitality sector the state Government can encourage food parks and processing industries in the state to directly procure agro-products from farmers and process it for sale. This way employment can also be generated from nearby areas.
4. The state is endowed with rich amount of chrome, bauxite, nickel, iron ore, coal reserves and manganese. Since the government has approved a 100% foreign direct investment under the automatic route in mining, sales and infrastructure. The centre in consultation with the state could hold up auctions to revive this sector. The sector has been under a lockdown because of the illegal mining activities and violating the forest act for several years now generating less than optimum revenue for the state. If the Centre regularises the sector it could invite interested foreign as well as Indian companies to tap its potential and increase exports which will definitely give a boost to the manufacturing sector as according to Nobel Laureate Paul Krugman it is the manufacturing sector that can create employment opportunities which will stimulate production and generate income.
5. As far as the Interest repayment on Loans re concerned they could be delayed or provided a moratorium for at least six months.



6. The real cause of worry is the middle class section or the services sector employees who are the real contributors to the GDP given the fact that the maximum hit is going to be endured by the tourism and catering, aviation, real estate. Reduction of GST on room service in Hotel industry and banquets and on real estate services can help lighten the burden on sales. The state also generates a huge portion of revenue from tourism activities. Post lockdown it will be the State Government's responsibility to revive the tourism sector within the state and then consider the possibilities of opening this sector for the nation.
7. The textile industries in the entire nation is going through a heavy loss but it did not find any mention of it in the stimulus package. Revival of the textile mills in the various parts of the state can give a boost to this industry and help create employment opportunities.
8. Given the assumption the demand for liquor and tobacco products is inelastic to the price, the state can increase tax on these two items and fill its exchequer. Cigarette taxes in India are amongst the highest in the world as per the data presented in the WHO Report on the Global Tobacco Epidemic 2019. Tax per 2000 cigarettes as a percentage of per capita GDP is 7.34%. If the retail price is increased to 25%-30% more after levying tax then the state can expect to earn some amount of its revenue from these items.
9. The state consists of 3,91,697 MSMEs with a total investment of Rs 19,068 crore and employs 15,27,373 persons till date. Despite the numerous relief packages framed by the Reserve Bank of India and the Government of India it is obvious that the few of the industries might not be able to sustain these low demand and supply conditions. It is anticipated that extravagant buying and selling will reduce and a supply chain entities will reduce. Countries like Canada and New Zealand have announced wage subsidies for a period of three months. Odisha can also adopt this strategy at least for the sake of active industries. Innovative ideas should be encouraged and rewarded in order to revive this sector.
10. The State Government in consultation with Reserve Bank of India can opt for market borrowing via State Developmental Loans. Given the safety and feasibility of these Government securities it is imperative for investors to participate here. Given the depressed economy there is a high chance the Gilt edged papers might yield a low rate of return for investors but the sense of financial prudence might help benefit both the Government bodies as well as the investors.
11. In this time of distress the state can keep its dispute with Chhattisgarh over river Mahanadi on hold and can find amicable solutions to generate benefit out of the pact. If both the states can utilise their respective labourers in forming water reservoirs over the course of the river then both the states can survive during the non-monsoon season as well.

VI. CONCLUSION

Nature has its own way to show us our weakest spots. This truly can be seen in the way the epidemic rose and spread its wings across the World. All the Developed nations who bragged about their advanced health services

and technology have surrendered to the whims of this disease. Doctors, paramedics, nurses, army, police department and government officials all have been deployed to contain the virus. But the real battle is waiting to happen post COVID-19. With the lack of vaccination, lack of knowledge about the origins of the virus and its sub-species, lack of forecast regarding next such occurrence, drainage of capital on hospital management and clinical tests, limited trade, travel, and foreign exchange, and with no investment and savings all the major economies have to deal with an enormous amount of credit crunch. With low aggregate demand aggregate supply will also falter.

The first and foremost task is to protect our frontline heroes who are working day and night to keep us safe. Next would be to induce production activities via creation of jobs in various infrastructure projects and also rural development projects in rural areas etc. This can help manage the supply chain and keep the supply and demand running. With creation of output income will also rise which can ensure growth and stability subsequently. In order to keep the money market stable long term investors can be encouraged to buy the financial instruments at a cheaper rate for which the RBI have started reducing the rates. Apart from the fiscal and monetary policies working tirelessly to keep the economy functioning it is our responsibility as well, to use the resources judiciously and not take anything for granted. If we are prudent today, only then can we expect a better tomorrow.

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