St. Xavier's College (Autonomous), Kolkata
Postgraduate Department of Economics

# ECO ECHOES

VOL. XX 2022



LIVES AND LIVELIHOOD





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# **PANDEMIC CRISIS:**

Lives and Livelihood

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# MESSAGES



### **MESSAGE FROM THE**

# RECTOR

I am filled with a sense of profound joy at the publication of the 20th edition of Eco Echoes, the journal of the Postgraduate Department of

Economics. The department has made exemplary progress over the years and has successfully established itself as one of the best departments in the country. I am also happy to learn that the students of the newly established Postgraduate Department have contributed to this issue of the magazine.

The past two years have thrown numerous challenges at everyone and every sphere, and education was no exception. Yet, surrendering to challenges is not at all a Xaverian characteristic, rather facing it confidently and creatively is. I am indeed proud that the faculty and students of the department, like one big family, dreamt together to embark upon this challenging journey, and have valiantly marched forward to see its successful publication, always holding hands in support of one another through these trying times, without being ever complacent.

I wish the students and professors of the department all the best and hope that their hard work and collective efforts will always lead them to achieve their goals in a true Xaverian spirit – Nihil Ultra- Nothing Beyond!

Rev. Jeyaraj Veluswamy, SJ

Rector,

St. Xavier's College (Autonomous), Kolkata

Velestramy



### **MESSAGE FROM THE**

# PRINCIPAL

It gives me immense pleasure to learn that the Postgraduate Department of Economics, St. Xavier's College (Autonomous), Kolkata is launching the twentieth edition of its departmental

magazine, 'Eco Echoes'. This year's theme, 'Pandemic Crisis: Lives and Livelihoods' is extremely significant in terms of its contemporary relevance.

COVID-19 has posed a major threat to the world and the human race has been valiantly attempting to overcome the setback it has caused, over the last two years. At the institutional level, St. Xavier's College, along with its Alumni Association, has tried it's best to reach out to the vulnerable sections of the community. At this critical juncture, it is our pious responsibility to uphold the educational and cultural pursuits of the students' community and to ensure that the students can harness all possible infrastructural resources to enrich their academic quality and overcome morale sagging effects of COVID-19. The Postgraduate Department of Economics has thoroughly imbibed the spirit of role of philanthropy and social works, thus making education all inclusive. I am, both intellectually and emotionally overwhelmed, to experience how the teachers and students, together, have braved all odds and have come up with a magazine focusing on different dimensions of COVID-19.

The magazine has always endeavoured to provide an opportunity to the students to delve deep into the realms of research and development, in addition to their normal curriculum. As the magazine completes two whole decades of successful publication, I wish to extend my heartfelt congratulations to the department for upholding the legacy and the beliefs of the college by challenging students to realize their full potential, especially in these torrid times.

May the Lord bless us and bestow upon us His Own peace! Nihil Ultra!

Rev. Dr. Dominic Savio, SJ

1 /2003

Principal

St. Xavier's College (Autonomous), Kolkata



### **MESSAGE FROM THE**

# VICE PRINCIPAL

I am happy to learn that the Postgraduate Department of Economics is coming up with the 20th edition of its Annual Magazine, Eco Echoes. The department which has a reputation for academic excellence, has lived up to its reputation during the two years of the pandemic. This is corroborated by its continuing commitment to academic enquiry and research through the rigorous training of its students, leading to the publication of scholarly research articles. Eco Echoes is a platform for students of the department to publish their work, which in turn promotes the culture of research among students. This is of paramount importance, especially at this point of time, when the department is consolidating and expanding.

I extol the Xavier's Economics Society for the quality and standard maintained in terms of its articles and other endeavors. I am happy that the pandemic could not tamper their indefatigable spirit, and I wish them good luck for all their present and future endeavors.

5) (a)

Prof. Bertram Da Silva Vice-Principal Department of Arts and Science St. Xavier's College (Autonomous), Kolkata



# MESSAGE FROM THE HEAD OF THE DEPARTMENT

The ongoing pandemic has put policymakers around the globe in a dilemma of having to choose between lives and livelihoods. Hence, the theme of the 20th edition of Eco Echoes - 'Pandemic Crises: Lives and Livelihood' is deemed perfect in terms of its congruity. This magazine contributes significantly to the students' academic initiative and vision-building. It gives them an opportunity not only to get an insight but also analyse and prescribe measures for today's economic realities. It gives me immense pleasure to inform the readers that this year's magazine includes contributions from not just undergraduate students but also students from the recently inaugurated Postgraduate Department.

I convey my regards and thanks to my colleagues and students who, despite the challenges posed by COVID-19, worked relentlessly and with the utmost zest to successfully put this magazine together. I would like to express my heartfelt gratitude to our principal, Rev. Dr. Dominic Savio, SJ, for his everencouraging support and guidance. I appreciate the authors of the articles in this magazine for stepping forward and sharing their ideas and observations. I sincerely thank our sponsors for their encouragement and wishes.

Dr. Partha Pratim Ghosh

Head of the Department Postgraduate Department of Economics St. Xavier's College (Autonomous), Kolkata

# Message From EDITORS IN-CHIEF



Tavishi Rupani



Akniti Agarwal

"Strength does not come from physical capacity. It comes from an indomitable will"

- Mahatma Gandhi

Among the numerous opportunities provided by the department to uncover the young economist within oneself, its annual publication, Eco Echoes, stands out as a diamond in the crown. And it is with profound pleasure and excitement that we present to you its 20th edition. The theme for this year is "Pandemic Crisis- Lives and Livelihood".

The years 2020 and 2021 have been volatile to say the least, with the entire world shutting down due to the pandemic and people still trying to cope with the "New Normal". With social distancing as the only effective measure to prevent the spread of the disease, the government had to decide whether to shut down the economy as a measure to save lives at the cost of livelihoods or to defer the lockdown in order to save the economy from the looming crisis. The impact of the decision would no doubt vary from person to person, depending on their perspectives and hence it had been a very tough challenge to take on. In this edition, we intend to highlight the various perspectives on this challenge, as well as the pandemic's impact on different sectors and agents of the economy.

On behalf of the entire Eco Echoes Team, we take this opportunity to express our sincere gratitude to our Principal, Rev. Dr. Dominic Savio, SJ for motivating us to launch the 20th edition of Eco Echoes. We would also like to thank our Vice-Principal, Department of Arts and Science, Prof. Bertram Da'Silva, Dean of Science, Dr. Tapati Dutta, and our Head of the Department Dr. Partha Pratim Ghosh for their unwavering support and guidance. We would also like to extend our regards to Dr. Ranjanendra Narayan Nag, Dr. Pia Ghoshal, Dr. Urmi Mukherjee, and Prof. Soumyajit Mandal. This endeavour would have been impossible without the indomitable will and persistent efforts of the Design Team, the Finance Team, and the Editorial Board. We would also like to extend our regards to Prof. Romit Beed and the entire staff of the Programme and Publication Committee (PPC) for their assistance. We thank the treasury for their cooperation. We are honoured to had the pleasure of interviewing internationally renowned professionals, and we are grateful that they agreed to give us their valuable time. We would also like to thank the authors who voluntarily contributed and applied their diligent learning of the subject to analyzing different aspects of the theme. We would like to thank everyone who has contributed to the development of this magazine.

We extend a very warm welcome to the readers of the magazine. It fills our hearts with immense joy and pride as we see the culmination of all our efforts in the successful continuation of this glorious legacy. We sincerely hope that the legacy of Eco Echoes continues for years to come.

# KNOW YOUR EGO-SOC

# **OUR FACULTY**



Rev. Dr. Dominic Savio, SJ



Dr. Partha Pratim Ghosh



Dr. Mallinath Mukherjee



Prof. Bipra Kumar Das



Dr. Ranjanendra Narayan Nag



Dr. Pia Ghoshal



Dr. Urmi Mukherjee



Prof. Soumyajit Mandal



Dr. Saswati Chowdhuri (Guest Lecturer)



Dr. Samrat Roy (Guest Lecturer)

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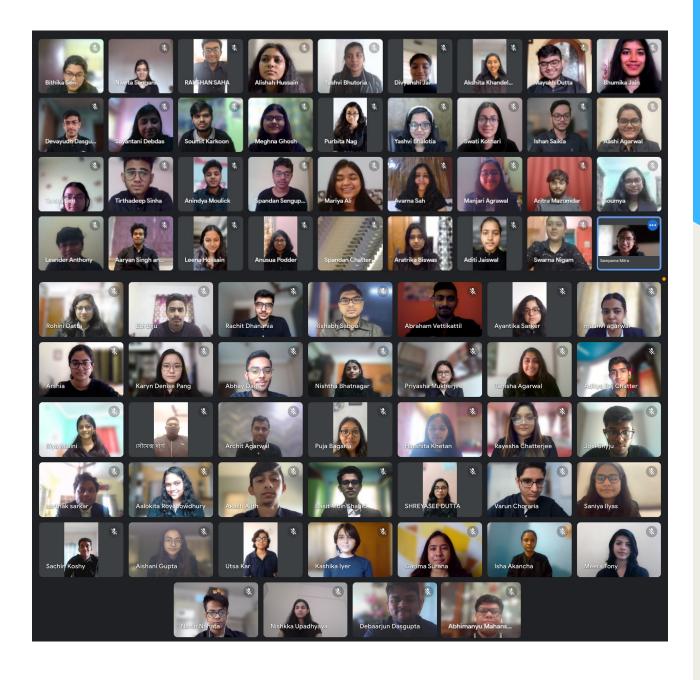


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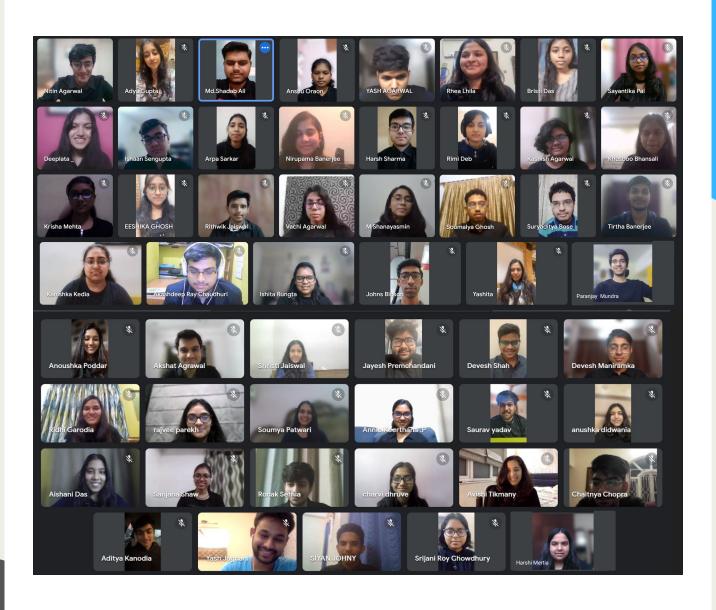


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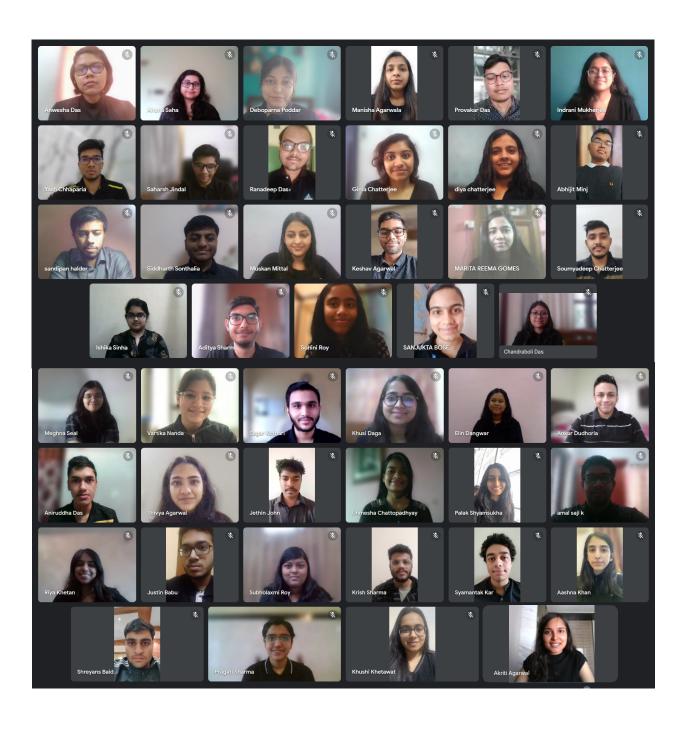
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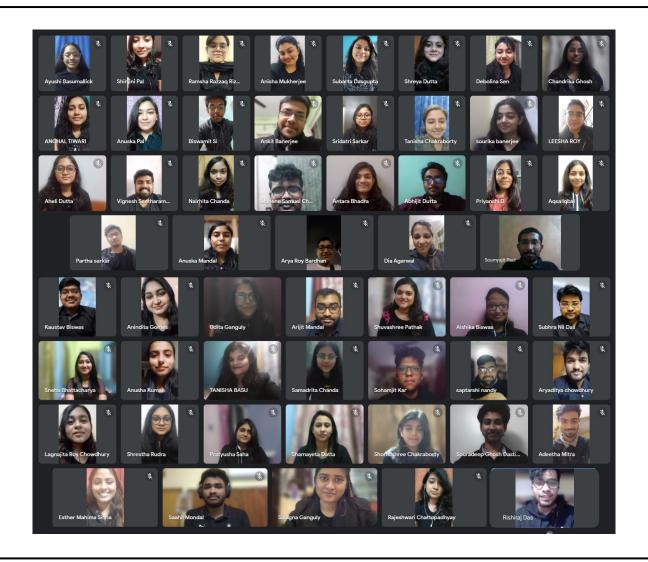
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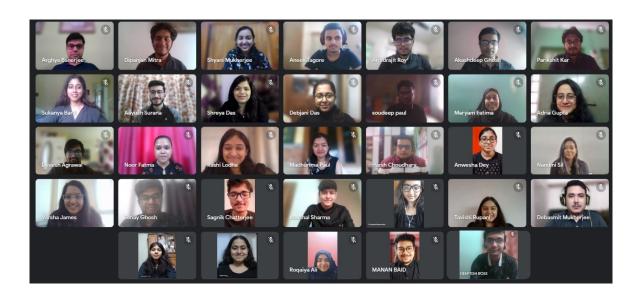
# **UG SENIOR**



# **PG FRESHMAN**



# **PG SENIOR**



# STUDENTS' ACHIEVEMENTS

The students of the department have carried forward the legacy by acing various competitive exams like UGC-NET, GATE, CAT, GRE, and entrance examinations of premier institutes. We are pleased to inform you that one of our students, Arghya Banerjee (B.Sc 2017-20), achieved All India Rank (AIR) 1 in the GATE (2021) examination. Our graduates and postgraduates have been successfully placed in reputed companies and have gained entrance to esteemed institutions to pursue their dreams of reaching higher echelons in the field of economics. This is a testimony to the talent and acumen that our department inculcates, harbours, and nurtures. The following table provides a glimpse of the success that the untiring efforts of our students and professors have yielded over the years.

IIM Kozhikode	Kantar
National University of Singapore	Alvarez and Marsal
Faculty of Management Studies	PwC
Indian Statistical Institute	D.E.Shaw
Delhi School of Economics	Deloitte
IIM Ranchi	Zomato
Singapore University of Management	Quantiphi
Madras School of Economics	Swiss Re
Indira Gandhi Institute of	Globiva
Development and Research	Accenture
University of Nottingham	YConnect
IIM Calcutta	EOX Vantage

# **ACADEMIC ACHIEVEMENTS**

Achievement	Name of Student	Date	Organised by - Published by / in - Awarded By
Best Paper at the Second	Shyani Mukherjee,	24-Sep-21	Department of Economics,
Annual Economic Summit	M.Sc. (2020-22)		St. Xavier's University, Kolkata
Best Paper at the Second	Tavishi Rupani,	24-Sep-21	Department of Economics,
Annual Economic Summit	M.Sc. (2020-22)		St. Xavier's University, Kolkata
Best Paper at the Second	Adria Gupta,	24-Sep-21	Department of Economics,
Annual Economic Summit	M.Sc. (2020-22)		St. Xavier's University, Kolkata
Best Paper at the Second	Deeptish Bose,	24-Sep-21	Department of Economics,
Annual Economic Summit	M.Sc. (2020-22)		St. Xavier's University, Kolkata

#### Deep Mehta

- "The Electric Vehicles Market in India: An Analysis" article published in Aviskaar, Xaverian Journal of Research 2020-21.
- "A Behavioural Framework for Intra-Household Bargaining" published in Towards Equilibrirum, Academic Journal, Department of Economics, St. Stephen's College, University of Delhi.
- "The Role of Culture and Ethics in the Economic Bases, Structure and Development of Societies" Winner, Economics Essay Writing Competition, Department of Economics, St. Stephen's College, Published on EconAfterHours, academic blog of Stephen's Economics Society.
- "A behavioural framework for intra-household bargaining" Runners Up, Shri Ram Paper Presentation 2020.

#### Kaustav Sen

#### **Publications:**

- "FDI, Rural-Urban Migration and Unemployment: Theory and Empirics" co-authored with Poulomi Mukherjee published in Ramjas Economic Review, 2021.
- "Analysis of Environmental Policies in India: Simulation Using Computable General Equilibrium Model" coauthored with Poulomi Mukherjee published in "Aapoorti" 2021, annual journal of Miranda House, New Delhi.
- "Generation of Health and Its Effects on Female Labour Market and Economic Development: A Theoretical and Empirical Review" co-authored with Poulomi Mukherjee published in "Prophets Of Profit" 2021, annual journal of Indraprastha College, New Delhi.

#### Awards:

- First Prize in Paper Presentation Competition in Miranda House, Delhi
- First Prize in Paper Presentation Competition in Indraprastha College, Delhi
- Second Prize in Paper Presentation Competition in Shri Ram College of Commerce, Delhi
- First Prize in Poster Presentation Competition on the topic "Growth Trajectory of Indian Economy" in 40th Annual Economics Conference held by Bengal Economic Association.

 Second Best paper award in Paper Presentation Competition in 'Young Economist Students Meet' at Jadavpur University.

#### **Poulomi Mukherjee**

#### **Publications:**

- "FDI, Rural-Urban Migration and Unemployment: Theory and Empirics" co-authored with Kaustav Sen published in Ramjas Economic Review, 2021.
- "Analysis of Environmental Policies in India: Simulation Using Computable General Equilibrium Model" coauthored with Kaustav Sen published in "Aapoorti" 2021, annual journal of Miranda House, New Delhi.
- "Generation of Health and Its Effects on Female Labour Market and Economic Development: A Theoretical and Empirical Review" co-authored with Kaustav Sen published in "Prophets Of Profit" 2021, annual journal of Indraprastha College, New Delhi.

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- Second Prize in Paper Presentation Competition in Shri Ram College of Commerce, Delhi.
- First Prize in Poster Presentation Competition on the topic "Growth Trajectory of Indian Economy" in 40th Annual Economics Conference held by Bengal Economic Association.
- Second Best paper award in Paper Presentation Competition in 'Young Economist Students Meet' at Jadavpur University.
- First Position in Essay Writing, in 'Young Economist Students Meet' at Jadavpur University.

#### Vani Dugar

- Next Best Paper Award in Ramjas Annual Winter Conference.
- 2. Corporate Wars Case Study, St. Stephens.
- 3. Ramjas Economic Journal publication.

# DISCLAIMER

Eco Echoes is published annually by the Department of Economics, St. Xavier's College (Autonomous), Kolkata, 30 Mother Teresa Sarani, Kolkata 700016, West Bengal, India.

All articles published in this magazine represent the views, interpretations and findings of their respective authors. These articles were written in November, 2021. They do not reflect the views of the college or the department in any manner.

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# GOVER STORY

# **COVER STORY**

Manchite Chowdhary, Shyani Mukherjee UG Sem 5, PG Sem 3

Faith is the bird that feels the light and sings when the dawn is still dark."
- Rabindranath Tagore.

The world has changed dramatically since the last edition of Eco Echoes. Following a global sweep of a crisis as unprecedented, both in scale and in order, as the COVID-19 pandemic, people from almost all walks of life have been forced to adjust to radically different ways of life, driven by one single motto – 'How to minimize the risk of contracting or spreading COVID-19, subject to survival constraint.' Over the course of the last two years, a lot of things were at stake as it proved to be a strange and disorienting experience for many. However, resilience was everywhere. It quietly but consistently reminded us that not all heroes wear capes. Even as the threat of COVID-19 continues to rage, unprecedented advancements in science have revealed the light at the end of the tunnel.

2020 was a year of how a global threat touched the lives of nearly every person on the planet. Every time we looked at the news, we were reminded of just how monumental the significance of globalization were, that something happening at some remote corner of the world, across continents, affected us and our loved ones at home, far away from the epicenter of the event. Majority of our social and work life shifted to the clouds, making our world feel smaller than ever.

2021 was in no way an improvement on the 'pandemic-year' as it brought death, disruption and desolation in a greater magnitude. But it also brought along with it an effective response in the form of vaccines that became the greatest weapon in our battle with the virus. If 2020 was a year of causes, 2021 tuned out to be the year of effects as strict mobility restrictions and social distancing norms led to severe economic fallouts. Supply disruptions, labour shortages and high rates of inflation constrained the ability to address renewed disruptions as the pandemic entered its third year, in 2022.

India, with almost 1.4 billion individuals, i.e. the 2nd largest population in the world, was in no way spared of the harrowing effects of the pandemic. Any lapse in policy framing or government inaction threatened to escalate the delicate state of the nation. When the Central Government introduced a 55-day nationwide lockdown on 25th March 2020, no one had probably imagined that they would have to remain confined to their homes for such a long time to come. Despite such stringent and timely measures, there was a massive surge in COVID-19, with India's COVID tally crossing the 1 crore mark on December 19, 2020. The lockdown impeded the industrial sectors as businesses remained shut in the affected regions. A clear linkage was evident between the outbreak and the economic downturn experienced by everyone- from white-collar to blue-collar workers, from lawyers to bankers, from retailers to suppliers and consumers. The pandemic exposed the dire state of the medical services, food supplies, and essential services in the nation. The massive shortage of essentials like food grains, packaged food, medicines, transportation services, and medical equipment emerged, causing multiple organisations to alter their business models and supply chains.

The April-June quarter of FY21 witnessed a staggering 7.3% decline, continuing to demonstrate the near-fatal blow COVID-19 had on the Indian economy (Source: Business Standard, May 31, 2021). This was attributed primarily to industrial shortages and the return of more than 10 million migrant workers to their hometowns due to strict lockdown regulations. The government had to resort to the MGNREGA, in a bid to provide an adequate livelihood for these migrant workers.

Analysing the sectoral effects of the pandemic, tourism and hospitality remained few of the worst affected sectors of the economy as restaurants, eateries and hotels were forced to remain shut or operate stricter hours in view of the lockdown restrictions. The second wave furthered the crisis faced by hotels and aviation, with recoveries taking longer than usual and demand remaining low as expected. Air travel had seen little to no chance in consumer demand as most countries remained closed for Indian citizens while business travel had been reduced due to the rise of online and digital workspaces.

The fiscal deficit severely widened, from an expected 3.5 percent to 9.5 percent of GDP for 2020-21. The target for FY 2021-22 was set at 6.8 percent with a view to return to a target of 4.5 percent by 2025-26. (Ref:The Print, 1 Feb, 2021)

The very first day of 2022 seemed to announce the third notable wave of rising COVID-19 infections in the country. Maharashtra, Delhi-NCR, West Bengal and Uttar Pradesh were some of the most affected regions. Despite witnessing huge spikes in positivity rates, the successful vaccination drive in the previous year, made the wave less fatal and harmful. Recovery rates were high and booster doses were made available for the elderly. Alongside, vaccinations also received a nod for teens above the age of 15.

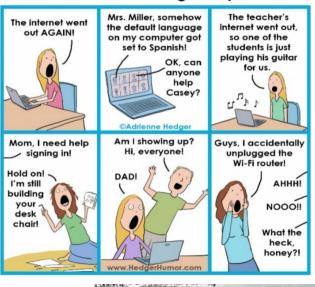
This is a crisis like no other and there is substantial uncertainty about its impact on people's lives and livelihoods. There is also no doubt that this will result in significant, long-term changes that will take years to fully comprehend. However, to echo the words of Yuval Noah Harari, "People are usually afraid of change because they fear the unknown. But the single greatest constant of history is that everything changes." The end of the pandemic will stand testimony to the efforts of all those who have put a lot of their own at stake – not just the policymakers and elected officials who are in charge of the official government response, but also the healthcare workers, police people and sanitation workers who are enduring unimaginable trauma on the frontlines, the teachers, parents, and caregivers who are going above and beyond to make sure kids don't fall behind in school, the scientists and researchers who are working around the clock to stop this virus and even the neighbors and volunteers who are cooking extra meals to make sure no one in their community goes to bed, hungry.

Through the 20th edition of Eco Echoes, we aim to capture the impact of the pandemic as well as the immense resilience that humanity has put up in the face of all the adversity that these ragged times have thrown at it. We also salute the undaunting spirit that each one of you, our dear readers, have displayed over the past 24 months. The world has adapted to bigger adversities before, and we will do it again.

# **HUMOUR IN TIMES OF COVID**



#### Scenes from Schooling At My House









# STUDENT ARTICLES

#### **GLOBAL IMPACT OF COVID-19**

-Devesh Agarwal, 2<sup>nd</sup> Year, PG

#### **Abstract**

COVID-19 which originated in China and later spread throughout the world disrupted lives and livelihood of people. The spread of the virus was accelerated following large-scale migration and its economic effects were felt worldwide due to globalisation. The major preventive strategies used by governments to contain the spread of the virus were social distancing and isolation which halted many economic activities for long periods. Global GDP was expected to collapse by as much as 3% in 2020, with developing nations taking the brunt of the fall (with average losses of 4% and in some cases as high as 6.5 percent) while global commercial commerce was estimated to fall by 13%. This paper analyses the impact of COVID-19 on the economy at global scale.

#### Keywords

COVID-19, GDP, Macroeconomics, Public Health, Unemployment

#### **JEL Classification**

I15, I18, I31

#### Introduction

COVID-19 has had a significant impact on the world economic and financial markets, in addition to becoming a global pandemic and public health disaster. The disease mitigation strategies that have been imposed in many nations have resulted in significant income reductions, increased unemployment, and difficulties in the transport, service, and manufacturing sectors, to name a few. Most governments throughout the globe appear to have misjudged the rate of spread of COVID-19 and have been primarily laidback in their crisis response. Since recovery from a pandemic is a long process, strong international action is required to not only save lives but also defend economic interests (Mou, 2020).

The epidemic has adversely affected global GDP growth and the consequent global recession has been the most severe since the end of World War II. According to the IMF's April 2021 World Economic Outlook Report, the global economy declined by 3.5 percent in 2020, a 7 percent drop from the 3.4 percent growth anticipated in October 2019. While practically every IMF-covered nation had negative growth in 2020 (IMF 2020b), the decline was more acute in the world's poorest regions. The shock is likely to have a long-term effect. While the global

economy is predicted to begin recovery, GDP levels are expected to stay below the prepandemic levels by the end of 2021. The extent of impact varies greatly among nations, with Emerging Market and Developing Economies (EMDE) incurring the biggest loss. According to the IMF, global GDP will be 3% lower in 2024 than in the absence of COVID (6% for low-income countries). Depending on how long the crisis lasts, African GDP might be anywhere from 1% to 4% lower than it was pre-COVID (Yeyati & Filippini, 2021).

#### Analysis

Large fluctuations in stock markets may have a significant impact on pensions and individual savings. As the number of COVID-19 cases increased in the early months of the crisis, the FTSE, Dow Jones Industrial Average, and Nikkei all suffered significant drops. Following the introduction of the first round of vaccines in November 2020, the major Asian and US stock markets rebounded, but the FTSE remained in negative territory. In 2020, the FTSE fell by 14.3 percent, its lowest level since 2008. As a result, several countries' central banks, including the UK's, lowered their interest rates. In principle, this is supposed to make borrowing less expensive and increase spending to help the economy grow. Certain markets gained ground in January of 2021, however, this was a common occurrence which is known as the "January effect." Analysts are concerned that more shut downs and setbacks in vaccine coverage might result in further market volatility this year (Jones et al., 2021).

#### Impact of COVID-19 on Stock Market (2020-2021)



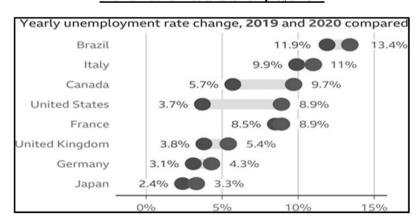
Source: Bloomberg

The unemployment rate has risen in all major economies and according to the International Monetary Fund, the number of people out of work in the United States reached an all-time high of 8.9% in 2020, signalling the end of a decade of employment growth. Certain industries, such as tourism and hospitality, came to a halt, resulting in millions of people to be placed on

government-sponsored employment retention programmes. Although job openings in some countries like Australia have rebounded to the same level as in 2019, other nations such as France, Spain and the United Kingdom are still falling short.

Recovery is projected to be gradual in large, service-based economies such as the United Kingdom or Italy. Airlines have reduced flights and passengers have cancelled business trips and vacations, wreaking havoc on the travel sector. Many nations have imposed stricter travel restrictions as a result of new virus strains found relatively recently. According to data from the aircraft surveillance firm Flight Radar 24, the number of flights worldwide fell dramatically in 2020 and is still far from recovering.

Hundreds of billions of dollars have been offered by governments throughout the world to develop a COVID-19 vaccination and treatment alternatives. Some pharmaceutical companies involved in vaccine research have seen their stock prices soar. Moderna, Novavax, and AstraZeneca have all witnessed considerable increases in their stock prices. However, Pfizer's stock has dropped in value. Investors have lost faith in the company's ability to expand revenue in 2021 due to its relationship with BioNTech, the high cost of manufacture and management of the vaccine, and the rising number of similar-sized rivals. A number of pharmaceutical companies have already begun delivering dosages, and several governments have begun immunization campaigns (Blake & Wadhwa, 2020).



**World Economies and Unemployement** 

Source: International Monetary Fund

#### Conclusion

In light of this ominous picture, officials' first priority should be to treat the health issue and limit the short-term economic harm. Once the crisis has passed, authorities will need to implement extensive reform plans to enhance the underlying drivers of economic development.

Strengthening health services and putting in place targeted stimulus measures to assist rekindle growth, including support for the private sector and distributing money directly to people, are among the policies to rebuild both in the short and long term. Countries should aim on sustaining economic activity throughout the mitigation phase by providing assistance to people, businesses, and critical services. The greatest possibility of meeting public health goals and ensuring a full worldwide recovery is through global coordination and cooperation—both of the measures needed to restrict the pandemic's spread and of the economic steps needed to alleviate the economic harm, including international support.

#### References

- 1. Blake, P., & Wadhwa, D. (2020). 2020 Year in Review: The impact of COVID-19 in 12 charts. World Bank. https://blogs.worldbank.org/voices/2020-year-review-impact-COVID-19-12- charts
- 2. Jones, L., Palumbo, D., & Brown, D. (2021, January 24). Coronavirus: How the pandemic has changed the world economy. BBC. https://www.bbc.com/news/business-51706225
- 3. Mou, J. (2020). Research on the Impact of COVID19 on Global Economy. IOP Conference Series: Earth and Environmental Science, 546(3). https://doi.org/10.1088/1755-1315/546/3/032043
- 4. Yeyati, E. L., & Filippini, F. (2021). Social and economic impact of COVID-19. https://www.brookings.edu/research/social-and-economic-impact-of-COVID-19

# A MACROECONOMIC ANALYSIS OF COVID-19: THE INDIAN CASE

-Samadrita Sarkar and Adrija Kundu, 2<sup>nd</sup> Year, PG

#### **Abstract**

India had been presenting signs of overall fatigue and demand curtailments for quite a few years. The COVID-19 pandemic because of its cataclysmic nature, exacerbated the situation by gradually giving way to supply failures. This article seeks to present this phenomenon with the help of a full-employment macroeconomic model. It also examines the impact it has on prices and delves into the repercussions that government interventions can have on such an economy.

#### **Keywords**

COVID-19, Demand Constraints, Fiscal and Monetary Policies, Stagflation, Supply Chain Disruption, Uncertainty

#### **JEL Classification**

E120, E21, E23, E320, E62, I15

#### Introduction

The COVID-19 pandemic has not only been calamitous on the global health sector but has also managed to debilitate economies across the globe. In this article, we firmly direct our attention homeward and try to examine the pervasive effects that COVID-19 has had on the Indian economy. It would be remiss of us to not consider the already declining demand and slowdown trajectory that the economy was on before the pandemic hit. The arrival of the cataclysm only served to exacerbate the situation and mired the economy into a recession which can be defined by demand and supply failures. Since macroeconomic studies in this field are relatively scant, we have tried to represent the supply-constrained economy in the purview of the IS-LM paradigm.

The initial predictions that had rolled in at the start of the pandemic presented us with an austere picture. Moody's re-examined India's GDP growth rates for the year 2020 and, reduced it from a stable 5.3% to 2.5%. World Bank followed suit by announcing that India was forecasted to grow at a mere 1.5% to 2.8% in the financial year 2021. This was the lowest value that the subcontinent had witnessed ever since the 1991 reforms. The Chief Economic Advisor and the RBI- Governor did little to assuage fears as they asked the people to prepare themselves for a negative growth rate in 2021. This is not to say that India was an exception in the way the

pandemic affected her. There was a global contraction in both developing and developed nations. USA saw its relatively stable GDP undergo the biggest contraction since 1945, as it declined by 3.5% in 2020. The Chinese government let go of any future economic goals for 2020 as the GDP plummeted by 6.8%. The unique medico-economic aspect of this pandemic makes it all the trickier to handle. With the 2008 Great Recession, countries could utilise proper policy prescriptions to diagnose and troubleshoot the problems. The COVID-19 being a biological usurper, such remedial actions tend to fall flat unless medical breakthroughs come to the rescue and curb the spread of the virus.

Our analysis, presented in the upcoming section, is concerned only with the financial year of 2020 and attempts to capture the various scenarios that had been presented to us by major rating agencies.

# The Model

Complete lockdown across the nation, introduced to protect human life, adversely affected both demand and supply in the economy. People stayed away from markets, employment and income fell, leading to a fall in consumption demand. Investors were afraid to invest due to uncertainty and negative expectation, reducing investment demand. Adding fuel to the fire was a supply chain disruption, due to the migration of rural labourers and the inability of workers to work and produce goods. Thus, the economy simultaneously faced an acute demand shortage, and a capacity constraint, in addition to the effective demand shortage from the early 2020s. We analyse the effects using the IS-LM model in a classical framework.

The Investment-Savings (IS) function is given by:

$$Y = \overline{C} + C'(Y^D) + \overline{I} + I'(r) + G + NX$$

Where, Y = pre-Covid output,  $Y^D = \text{Disposable}$  income,  $\overline{C} = \text{Autonomous Consumption}$ ,

C' = MPC,  $\overline{I} = \text{Autonomous Investment}$ , I' = Interest Sensitivity of Investment, r = Nominal Interest Rate, G = Government Expenditure, NX = Net Exports

The Liquidity-Money (LM) function is given by:

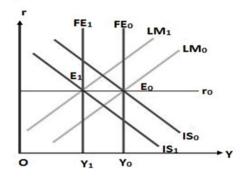
$$(M/P)_s = L_1(Y) + L_2(r), L_1' > 0, L_2' < 0$$

Where, M = Nominal Money Supply, P = Price Level,  $L_1(Y) =$  Transactions Demand for Money (TDM),  $L_2(r) =$  Speculative Demand for Money (SDM).

We introduce the Full-Employment line in the model, having classical properties. Due to the demand constraint, IS curve shifts to the left from IS<sub>0</sub> to IS<sub>1</sub>. The corresponding aggregate demand curve also shifts leftwards, causing a recession. Again, due to the adverse supply

shock, the Full-Employment line shifts leftward from FE<sub>0</sub> to FE<sub>1</sub>, and the corresponding aggregate supply curve moves upwards, causing stagflation. If interest rate remains constant, then the LM curve shifts to the new equilibrium at  $E_1$ , where IS<sub>1</sub> and FE<sub>1</sub> intersect. The final effect is a fall in Y.

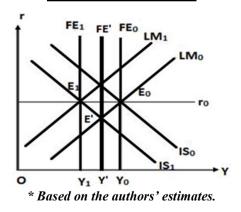
Figure 1: Effects of Demand-Constraints Arising from the COVID-19 Pandemic



\*Based on the authors' estimates.

In our model, the price rises and the interest rate remain the same. To counter the price rise in these trying times, if the government introduces policies to facilitate public investment, and curb supply shortage, then aggregate supply rises. As a result, FE<sub>1</sub> will shift rightwards to FE', raising aggregate output Y to Y'. The effect on the price level is ambiguous and the interest rate is assumed to be fixed at r<sub>0</sub>.

Figure 2: An IS-LM Representation of the Economic Consequences of the Introduction of Government Policies.



#### **Conclusion**

The peculiar nature of the demand-constrained economy's transformation to one that is supplyconstrained can be accredited to the various government measures taken to curb the Covid-19 pandemic, a major one being the extended lockdown. While such precautions were taken all over the globe, the labour-abundance nature of India only aggravated the economic crisis. The near-complete shutdown of all economic activity for more than seven months effectuated in the country, a migrant-worker exigency; employment rates plunged and labourers languished in absolute impecuniosity.

While India has shown a slight recovery in the latter part of the financial year of 2020 and continues to steadily improve now, the future remains unpredictable. There has been a concerted vaccination drive alongside a cautious reopening of the economy however the pandemic still seems to be far from over. Repeated spikes and crests in the global infection rates coupled with numerous mutations of the virus further complicate the situation at hand. Even if a cure is just around the corner, the tendency of the virus to completely obliterate society will make revitalising efforts difficult. A return to normalcy would require governments to stabilise income flows and incentivise consumers. More money needs to be injected into the economy and ensured that the poor receive a substantial part of it. Only then can the propensities to consume be resuscitated. The government needs to provide the demography with ample employment opportunities as recompense for the jobs they unwittingly lost during the mass exodus. A good example of this would be the rural employment schemes under MGNREGA.

With the entire world slowly emerging from the lockdown and travel restrictions easing, the government needs to be well prepared for an upsurge in cases once again. The Covid-19 virus has shown us all its capricious, annihilating character and it is now the onus of the administration to learn from its tragic experiences and hopefully ensure that history does not repeat itself.

## References

- 1.Blanchard, O. (2016). Macroeconomics (4th ed.). TBS.
- 2.Barua, S. (2020). Understanding Coronanomics: The Economic Implications of the Coronavirus (COVID-19) Pandemic. SSRN Electronic Journal. Published.
- 3. Ray, D., & Subramanian, S. (2020). India's lockdown: an interim report. Indian Economic Review, 55(S1), 31–79.
- 4. Business Today. (2020, March 27). Coronavirus: Moody's cuts India's 2020 GDP growthforecastto 2.5%. Retrieved November 12, 2021.
- 5. Times of India. (2020, April 12). World Bank sees FY21 India growth at 1.5-2.8%-slowest since economic reforms three decades ago. The Times of India. Retrieved November 12, 2021.

# NPA AND THE MACROECONOMY: A STRUCTURALIST FRAMEWORK

- Pragati Sharma, Ritasree De, Syamantak Kar, 3<sup>rd</sup> Year, UG

#### Abstract

Growth in the Indian Economy has faced a slowdown that reverses years of economic progress. Non-Performing Assets (NPAs) are arguably the most important indicator of the financial health and performance of the banking sector, which is an integral part of the economy. It is essential to determine what their impact entails for the economy. With the rising incidence of bad loans and a severe demand constrained recession in the pandemic, the economy faces a particularly tough challenge in the coming years. This article employs a structuralist macroeconomic model to explain the effects of a rise in NPAs on various macroeconomic variables including national product, informal and formal credit, labour market, interest rates, exchange rate, and foreign capital flows. We find that a parametric rise in NPAs generates a chain of events that ultimately lead to the contraction of the economy.

#### **Keywords**

Economic Growth, Foreign Capital, Informal Credit, Non-Performing Assets

#### **JEL Classification**

E26, E43, E52, O43

#### **Introduction**

Of the woes that the banking sector has had to deal with, Non-Performing Assets (NPAs) rank quite high. NPAs are loans that have been defaulted and earn no income. A bank earns its income from the interest on its assets, i.e., the loans it disburses, and NPAs hinder its ability to lend further and tends to make commercial banks risk-averse, often when monetary intrepidity is of the essence.

In the light of the changing macroeconomic milieu over the years, NPAs have become an important indicator because of their pro-cyclical nature. In the face of constantly increasing bad loans, banks resorted to loan restructuring to avoid having to recognize non-performance. The remedy to the ongoing NPA crisis came in the form of RBIs Asset Quality Review (AQR) of 2015-16. Additionally, the credit boom in the NBFCs sector (Non-Bank Financial Company) financed real estate inventory accumulation which propelled growth. However, growth fuelled thusly was short-lived and unsustainable- resulting in the "Four balance sheet problem", and

the consequent economic slowdown before the pandemic. The current scenario is a mirror image of the NPA boom of the 1990s, except that there is no miracle of liberalization to absorb it and hasten growth. While analyzing why and when NPAs escalate, it is essential to know the long-term, veiled effects they may have on various sectors of the economy. In this paper, we aim to study the effect of NPAs on macroeconomic policy variables in different sectors using an analytical model. Our study encompasses formal and informal interest rates, money supply, exchange rate and their relation with NPAs.

The NPA boom during the pandemic recession has been due to a severe lack of effective demand, resulting in loan defaults by producers. However, this was not a strategic default; it came as a natural outcome of the contemporary economic scenario. With several lay-offs, closing of businesses, and an unprecedented rise in unemployment, households and firms have defaulted loans. A rise in the stringency of claiming these defaults by commercial banks will only worsen the already tense situation. The remedy to this will only come with the eventual recovery of the economy; we must keep hope in the first economic tenet we ever learnt – the inevitability of the business cycle.

Subramanian and Felman (2019) talked about the Four Balance Sheet problem of India with the predicament of unsuitability of fiscal and monetary policy measures at that period of time. They prescribed the repairing of the monetary transmission mechanism by tackling NPAs as the only viable option for effective monetary policy implementation. Aisac, Mathew and Cherian (2018) confirmed the significant relationship between NPAs and GDP, using regression models and paired sample testing with data from 2004 to 2017, for the Indian economy. It concluded that 0.796 variation in GDP can be explained by NPAs.

Analyzing the existing literature, we find that there have been several studies using empirical data and regression models to explain the effects of NPAs on the banking sector, and effects of macroeconomic policies on NPAs. In this paper, we focus on how NPAs affect macroeconomic variables, and policies are shaped in turn. We use a theoretical model to show the effects of changes of NPAs on the formal and informal sectors, interest rates, exchange rate and balance of payments; which follows from the basic structure of structuralist macroeconomics. The paper is constructed as follows: Section 2 discusses the analytical sketch of the model the paper is based on, and Sector 3 explains some important propositions and offers some concluding remarks.

#### The Model

We use a structuralist model with two production sectors – agriculture and industry. The economy is characterised by its developing nature, openness, prevalence of formal and informal sector and labour distortion.

The agricultural sector employs two inputs, namely, unskilled labour and imported fertilizer (which takes the form of capital). Unskilled labour earns a competitive wage rate while the fertilizer is imported by the government at given world prices. All marginal products are positive and exhibit diminishing marginal returns. Demand for agricultural output is consumed by both agricultural as well industrial labour. Output of the industrial sector is determined by effective aggregate demand (domestic and export). Price for industrial output is fixed; by virtue of mark-ups and value of labour. Activities of production are financed by loans taken from the credit market – which has both formal and informal sectors, and are taken to be perfectly substitutable. For demand for the industrial sector, government expenditure and investment is autonomous. Balance of Payments account is balanced when the value of export of industrial output net of fertilizer import is equal to capital flows. All input and output demand is dependent on interest rate and exchange rate. Demand and supply of money as given by asset and liabilities of Central and commercial banks determines interest rate. The money supply is determined by currency to deposit ratio, reserve ratio, excess reserve ratio, and high-powered money. Excess reserve ratio is determined by NPAs. We take NPAs to be a parameter affecting the macroeconomic variables.

The agricultural sector production function is:  $X_A = f(L_A, K_A)$ 

By standard profit maximization, we have:

$$\pi_A = P_A f(L_A, K_A) - (w_A L_A + e P_K^W K_A)(i+1)$$

From first order conditions, factor demand functions as given as:

$$L_D = L_D(w_A, P_A, eP_K^W, i); K_D = K_D(w_A, P_A, e, P_K^W, i)$$

Where  $P_A$  denotes price of agricultural output,  $w_A$  denotes competitively determined agricultural wage, e denotes exchange rate,  $P_K^W$  denotes world price of fertilizer, i denotes the informal rate of interest. The labour market equilibrium determines the equilibrium wage rate for unskilled labour:

$$L_D(w_A, P_A, eP_K^W, i) = \underline{L}; \ w^* = w^*(P_A, e, P_K^W, i) \ , L_A^* = L_A^*(P_A, e, P_K^W, i)$$

The demand function in the agricultural sector is:

$$X_A^D = \frac{w_A \underline{L} + \lambda \left( \underline{w_I} \alpha_{LI} X_I \right)}{P_A}$$

Equating demand with supply, we obtain the equilibrium price:

$$X_A(P_A, e, P_K^W, i) = X_A^D;$$

$$P_A^* = P_A^* \left( e, P_K^W, i, \underline{w_I} L_I \right); X_A^* = X_A^* (e, P_K^W, i, \underline{w_I} L_I)$$

Where  $X_A^D$  denotes demand for agricultural output,  $\lambda$  denotes proportion of industrial labour income spent on agricultural output,  $a_{LI}$  denotes fixed labour coefficient of industrial output,  $X_I$  denotes industrial output,  $\underline{w_I}$  denotes fixed wage of industrial labour and  $L_I$  denotes industrial labour.

Moving on to the industrial sector, we have industrial price through the Kaleckian mark-up:

$$P_I = (1+\tau)\left(\underline{w_I}a_{LI}\right); \ a_{LI} = \frac{L_I}{X_I}$$

The conventional identity gives us the aggregate demand, AD=C+I+G+NX. Given equality between aggregate demand and aggregate supply, we have:

$$X_{I} = C((1 - \lambda)\underline{w_{I}}L_{I}) + I(r) + G + EX\left(e^{\frac{P_{I}^{W}}{P}}\right)$$

Where  $\tau$  denotes mark-up over cost, C denotes Consumption,  $(1 - \lambda)$  denotes proportion of income of industrial labour spent on industrial goods, I denotes investment, G denotes government expenditure, EX denotes net exports, and  $e^{\frac{P_I^W}{P}}$  denotes real exchange rate. The credit market has both formal and informal components, which are elaborated below. Informal credit is a function of informal rate of interest, which is itself positively related to formal rate of interest.

$$Z_S = Z_F + Z_F(r) + Z_I(i); Z_D = Z_D(P_A, w_A, e. P_K^W)$$

Where r denotes formal rate of interest,  $Z_S$  denotes supply of credit,  $Z_D$  denotes demand for credit,  $Z_I$  denotes supply of credit by informal sources (informal credit), and  $Z_F$  denotes supply of credit by formal sources (banks).

Informal credit is more easily accessible to the agricultural labour; formal credit includes several legal constraints and collaterals, which they may not be able to fulfil. Hence, they avail informal loans, by compulsion, at higher rates, whereas if the formal conditions are met, they avail the formal loans. Hence, they are perfectly substitutable.

For a balanced BOP account, value of net exports must equal the value of capital flows, as given:

$$P_I^W X \left(\frac{eP_I^W}{P}\right) - eP_W^K K_A = F(r - r^*)$$

Where  $P_I^W$  is the world price of industrial output, F is the flow of foreign capital,  $r^*$  is the world interest rate.

Finally, the money market ties the system together with the incorporation of the NPAs. By asset-liability levels of the Central and commercial banks, we obtain the interest rate:

$$\frac{M_S}{P} = M_D(r, Y)$$

$$M_S = \frac{1+\beta}{\alpha_1 + \alpha_2(\rho) + \beta} H$$

Where  $M_S$  denotes money supply by the Central Bank,  $M_D$  denotes money demand,  $\beta$  denotes cash to deposit ratio,  $\alpha_1$  denotes reserve ratio,  $\alpha_2$  denotes ratio of excess reserves to deposits,  $\rho$  denotes ratio of NPAs to total reserves. This completes the set-up of our model. The following section discusses the detrimental effect of NPAs on several variables in our stylized economy.

#### Conclusion - Impact of NPAs on the Economy and COVID-19

Let there be a parametric rise in  $\rho$ . This will contract the money supply, causing formal, and consequently, informal interest rate to rise. Banks become risk-averse and prioritize lending, which causes a fall in autonomous supply of credit. Cost of production will rise, which lowers the profit maximizing output in the agricultural sector. Consequently, equilibrium output is lowered as well, and cost-push inflation pushes agricultural price upwards. The rise in interest rate causes foreign capital inflow, which appreciates the exchange rate. The rise in exchange rate causes a fall in export demand, lowering industrial equilibrium output. Thus, a rise in NPAs causes an exchange rate appreciation, cost-push inflation and contraction in national income (output of both sectors).

The analysis of our stylized economy, which includes many characteristic features of the Indian economy, corroborates results that were found by empirical analysis in earlier work. It also demonstrates the sheer enormity of the NPA problem and how it has exacerbated India's slowdown. The policies that have been undertaken in the past have only served to mask the problem and provided no feasible solution. With the way that the pandemic has affected the economy, stringency in garnering the defaulted loans will only serve to worsen the effective

demand and divert income away from consumption and investment. The only feasible way forward is loan forgiveness; the NPA problem must be halted. Keynesian-esque policies must be used to eradicate the root of the problem – boosting consumption and investment will allow the economy to return to a point where aggregate demand will be able to accommodate the downward pull of the NPAs, and resume reclamation of such loans. Till then, we must keep hope in the inevitable optimism of the business cycle.

#### References

- Aisac, N. M., Mathew H. E., and Cherian S., (2018), The Rising Level of NPAs and its Impact on GDP of India, Journal of Emerging Technologies and Innovative Research, Vol. 5, Issue 11, November. https://www.jetir.org/view?paper=JETIRM006022
- Blanchard, O., Macroeconomics, 7<sup>th</sup> Ed. (2020), Indian Subcontinent Reprint, Pearson Education Limited.
- Subramanian, A., and Felman, J., (2019), "India's Great Slowdown: What Happened? What's the Way Out?, CID Faculty Working Paper No. 370, Centre for International Development, Harvard University, December.
  - https://www.hks.harvard.edu/sites/default/files/centers/cid/files/publications/faculty-working-papers/2019-12-cid-wp-369-indian-growth-diagnosis-remedies-final.pdf
- Taylor, L., and Taylor, T., Structuralist Macroeconomics (1983), Business and Economics -Basic Books.

# WILL THE MSME SECTOR SURVIVE?

-Vachi Agarwal 2<sup>nd</sup> Year, UG

#### **Abstract**

The Micro Small and Medium Enterprises (MSME) sector is one of the major contributors to the socio-economic development of the country. Entrepreneurial development, employment generation and innovation are the three key attributes of this sector. However, in the unprecedented situation of COVID-19, the sector witnessed low output levels causing a setback. In light of this issue, the article, while outlining the impact of the outbreak on the sector, seeks to analyse the intervention of the government in this regard.

#### **Keywords**

COVID-19, Fiscal Policy, MSMEs, Revival Strategy

#### **JEL** classification

E62, H32, L53

#### **Introduction**

Micro, small and medium enterprises (MSME) play a vital role in the economic development and pose as a catalyst for improving the livelihoods of many in the country. According to the Ministry of MSME, the sector absorbs an approximate of 111 million people and employs the second largest workforce after agriculture, therefore contributing immensely with respect to entrepreneurship development. The sector has gained significant importance due to its contribution to the Gross Domestic Product (GDP) of the country and exports. In response to the COVID-19 outbreak, the government took measures to initiate nationwide lockdown that led to closure of all non-essential economic activities. This hindered economic and business activities, adversely impacting the functioning of industrial and other establishments. Consequently, supply and demand chains were deranged resulting in loss of output and low levels of revenue in businesses. The MSME sector also faced major economic setbacks including loss of jobs of many workers. In order to ensure a thriving entrepreneurial ecosystem in the country, the government found it imperative to provide a fiscal boost to the sector.

#### **Defining MSME**

MSMEs in India are regulated by the Micro, Small, and Medium Enterprises Development (MSMED) Act of 2006. The Act defines MSMEs as "all enterprises engaged in production of goods pertaining to any industry specified in first schedule of Industrial (D&R) Act, 1951 &

other enterprises engaged in production and rendering of services subject to limiting factor of investment in plant & machinery and equipment respectively". This definition of MSMEs provides for the threshold level of investment in plant and machinery. Prior to the onset of COVID-19, the appropriateness of investment criterion was under deliberation. The government revised the criteria defining MSMEs following the onset of the pandemic, adding to the former, a criterion of annual sales turnover. Thus, an establishment is categorised as a MSME if it falls within the two mentioned criteria namely investment and annual turnover.

Existing MSME Classification							
Criteria: Investment in Plant and Machinery or Equipment							
Classification	Micro	Small	Medium				
Manufacturing Enterprises	Investment <rs. 25l<="" th=""><th>Investment &lt; Rs. 5 Cr</th><th>Investment &lt; Rs.10 Cr</th></rs.>	Investment < Rs. 5 Cr	Investment < Rs.10 Cr				
Services Enterprises	Investment <rs. 10l<="" th=""><th>Investment &lt; Rs. 2 Cr</th><th>Investment &lt; Rs. 5 Cr</th></rs.>	Investment < Rs. 2 Cr	Investment < Rs. 5 Cr				
Revised MSME Classification							
Composite Criteria: Investment and Annual Turnover							
Classification	Micro	Small	Medium				
Manufacturing & Services	Investment < Rs. 1 Cr and Turnover < Rs.5 Cr	and	Investment< Rs.50 Cr and Turnover < Rs. 250 Cr				

Source: https://gjepc.org/pdf/MSME/Circular-Revised-MSME-Definition-final.pdf

The initiative of revising the above definition faced strong opposition from small scale industrialists who feared competition from larger establishments that would become eligible for sector specific incentives like concessional credit facilities. The legislative intent behind increasing the threshold limit is to encourage the growth of MSME sector and inducing them to initiate large capital investments and realize benefits of cost advantage and economies of scale.

### **Impact of COVID-19**

The International Monetary Fund (IMF) reported a sharp contraction of 4.5% for the Indian economy and highlighted the negative rate of growth of GDP for the FY 2020-21 signifying the harsh impact of lockdown on industrial production. As the outbreak of COVID-19 crippled the economic activities of the country, nearly 50 percent of the MSMEs witnessed a considerable amount of reduction in their earnings leading to involuntary termination of

employees. A survey revealed that about 35% of MSMEs had started shutting their businesses as an outcome of lowered levels of revenue, business losses and lack of adequate capital. Such unprecedented closures were reported to be termed as 'mass destruction of businesses. In the entirety, MSMEs were faced with existence issues due to slowdown in economic activities.

#### Revival of MSME Sector

The Confederation of Indian Industries (CII) initiated certain measures to finance the MSME sector. It declared an infusion of at least 25% of the working capital of the MSMEs to elevate the flow of cash in the industry. Additionally, assistance was also provided to registered MSMEs by aiding them in receiving loans from commercial banks at the earliest and filing of various returns as mandated by law. In order to revive the MSME sector from the shock of the lockdown, the central government had taken the following policy measures:

- 1. **Relaxing tax returns and due dates:** Among many other administrative relaxations, the government had extended the dates for filing returns of income tax and goods and services tax to aid enterprises in its administrative operations.
- 2. **Providing credit facilities:** In the wake of the pandemic, the Reserve Bank of India had reduced interest rates substantially and also announced a moratorium period on repayment of term loans.
- 3. Relief package: In order to support availability of credit to establishments in the MSME sector, the government announced a relief package whose benefits could be availed by registered MSMEs. The relief package provided for the following components:
- a) Collateral free loans of 4-year tenure with no payment dues for 12 months by commercial banks and non-banking financial institutions to finance the working capital of establishments enabling them access to emergency credit, provided they are eligible for it in accordance with the conditions laid thereunder.
- b) Credit facilities were introduced to aid economically stressed MSME or those declared as NPA and a provision of INR 200 billion was made to help MSMEs facing issues related to its equity share capital.
- c) To fund the equity of the enterprises that have considerable growth potential, the government declared a setting up of fund of funds with a corpus of INR 100 billion.

d) MSMEs in India often have to face unfair competition from foreign companies and to protect them from such, global tenders of up to INR 2 billion were disallowed in government procurement.

#### Conclusion

The MSME sector has been imperative in providing livelihood to many in the country. It operates in the rural as well as the urban areas and has offered substantial employment within the sector. Various studies have indicated that the sector has lost a substantial number of its employees owing to reduced output levels, shortage in revenue among others.

Staggered flow of capital in the sector and consistent losses in business led to the extinction of some micro and small enterprises. This required the urgent attention of the government and fiscal stimulation was extended. The response to the relief package was not well received. It was widely accepted by many businesses that such relief measures were relevant only for the medium enterprises of the sector. Moreover, the measure relating to the provision of collateral free loan was highly regarded but it posed certain prima facie issues as the risk aversion levels of financial institutions were already high and it could have restricted lending to the MSMEs. Additionally, many MSMEs often face serious concerns of delayed payments that constrains financing of their working capital. Consequently, when flow of cash in the sector is minimal, establishments find it difficult to pay wages and salaries to its workers, having major repercussions. The relief package announced poses another drawback in its execution in the sense that it only seeks to assist the registered MSMEs which is only a small segment of the entire MSME sector.

#### References

Shelly Kedia, Rita Pandey (2020), 'Shaping the post COVID-19 development paradigm in India: Some imperatives for greening the economic recovery'.

Ghosh, S. (2020) "Examining the COVID-19 Relief Package for MSMEs", Economic & Political Weekly, Vol. 55, Issue No. 22, 30 May, 2020.

Sahoo, P.; Ashwani (2020) "COVID-19 and Indian Economy: Impact on Growth, Manufacturing, Trade and MSME sector", IEG Working Paper.

# IMPACT OF COVID-19 AND ITS POLICIES ON MSMES: A MACROECONOMIC ANALYSIS

-Adrija Kundu and Unmesha Chattopadhyay 2<sup>nd</sup> Year, PG and 3<sup>rd</sup> Year, UG

#### **Abstract**

Micro, small and medium enterprises (MSMEs) are one of the main contributors to the national income of India, yet it faced a major setback due to COVID-19. This article studies the macroeconomic implications of the adverse impact of the pandemic on the MSMEs in India and the policies and relief packages implemented by the government, such as credit facilitation, liquidity infusion, etc., in order to financially support the MSMEs and stabilize the entire economy at large. We use the IS-LM and the Complete Keynesian Models for this purpose.

#### **Keywords**

COVID-19, Effective Demand, MSMEs, Recession, Supply Chain

#### **JEL Classification**

E12, E32, E63, I15, L52

#### Introduction

Micro, small and medium enterprises (MSMEs) are mainstay of the Indian economy as it significantly contributes to the national output of the economy and acts a vital driver in reduction of unemployment. Yet, MSMEs are exposed to risk factors and are facing a perpetual downswing since 2016 (due to demonetization and introduction of GST in the following year). Ultimately, the greatest of all crises, the prolonged period of lockdown due to the outbreak of the COVID-19 virus, has devastated these sectors as a result of supply chain disruption and acute shortage of effective demand in the economy. The state has incorporated many schemes and relief packages to support the MSMEs in such an unfavourable condition. This work analyses the macroeconomic implications of the supply chain distortion, decrease in effective demand due to the pandemic on the MSMEs and studies the impact of the Covid-19 policies and relief packages on this sector. (Dubey, P., 2020)

### **Literature Review**

The paper "Examining the Covid-19 Relief Packages for MSMEs" by Sangeeta Ghosh studies the changes in defining criteria of the MSMEs with respect to the investment size and turnover criteria and analyses the COVID-19 relief packages provided by the government for this sector. The packages include collateral free loans, funding by the government to provide equity for

MSMEs for listing in stock exchange. According to the study, this recession needs a fix from demand side whereas the government's measure of liquidity infusion is a supply side solution.

Anukarsh Singh's paper, "What About India's MSME Sector: COVID-19 Pandemic and Indian MSME Sector Outlook" examines the contribution of MSMEs in the GDP and series of supply shocks the Indian MSMEs faced due to the outbreak of the pandemic. The paper also analyses the pre-pandemic and post-pandemic economic scenarios of the MSMEs in India. It explains how the demand and supply shocks together led to the economic recession. Policy recommendations such as wage support to labour intensive MSMEs, reduction in import duties to reduce prices of imported inputs of the MSMEs, credit availability to this sector are also discussed in this paper.

### **Macroeconomic Impact of COVID-19 on MSMEs**

The nationwide lockdown has had a detrimental impact on the mechanism of demand and supply of MSMEs and the entire economy at large. The economy got constrained by both demand and supply shocks.

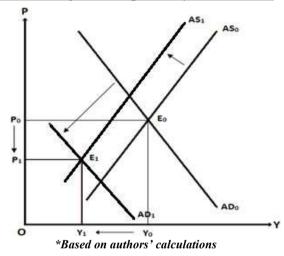
The adverse supply shock in the MSMEs is the consequence of severe damage to the supply chain due to distortion in inputs including labour shock. During the outbreak of the pandemic, the state and national borders were sealed which barred the movement of raw materials and other mobile working capital including finished products leading to supply chain disturbances. Amidst this lockdown scenario, thousands of migrant labourers, vulnerable to this detrimental disease and unsecured mode of income moved to their respective hometowns and villages. MSMEs being a labour intensive sector faced a major disruption in supply chain and consequently a severe supply shock due to withdrawal of huge quantities of labour.

Demand in the economy was already facing a downswing in the pre-COVID scenario. After the lockdown announcement, a sharp decline in demand was noticed as people were stuck at homes that lessened their access to the market. Moreover, keeping in mind the health situation in the economy, instability of income and expectations of further future shocks led to the fall in both autonomous and induced consumption and investment. Effective demand fell down further due to the reduction in output and employment as a result of supply shock. Reduction in effective demand and supply evidently led to a revenue crisis in MSMEs. (Singh, A., 2020)

# <u>Analyzing the Effective Demand and Supply Shocks using the Complete Keynesian</u> <u>Model</u>

Due to the demand and supply constraints working simultaneously, both the aggregate demand (AD) and aggregate supply (AS) curves shifted back, causing a fall in the aggregate output Y. However, fall in AD causes recession (P falls), while shift in AS leads to stagflation (P rises). Here, we assume that demand shortage is more acute than the supply shock, hence price falls. These two factors lead to unemployment, and thus further fall in production and income. Thus, effective demand decreases by a greater margin, and the cycle continues.

Figure 1: Effects of Demand and Supply Shocks on the Economy, due to COVID-19, shown using the Complete Keynesian Model



# Study of the Impact of Policies on MSMEs using IS-LM and CKM Models

To stabilize the condition of the MSMEs the government incorporated several policies; including liquidity infusion, equity introduction of MSMEs and relaxation on borrowing as now, MSMEs can take collateral free loans which may enhance their spirit to some extent to invest. In this article, we will study the macroeconomic impact of the "Liquidity Infusion" in the economy. (Ghosh, S., 2020)

**Liquidity Infusion**: In order to fight the pandemic raging in the country, the government of India and the RBI were compelled to provide security to the vulnerable sections of the society and the collapsing industries. A liquidity infusion package of ₹3 lakh crore was introduced for the MSMEs, on May 13, 2020, to promote 'AatmaNirbhar Bharat'. These policies put more money in the hands of the producers and entrepreneurs, raising the overall money supply in the economy, without causing fiscal deficit. It also intended to help the MSMEs to overcome the

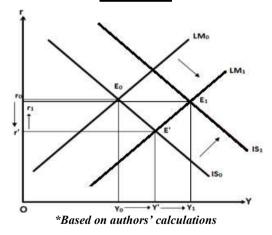
existing problem of capital crisis. Rajnish Kumar, Chairman of State Bank of India said, "The measures guarantee equity infusion and, debt support incentivise bank lending to MSMEs as well as provide crucial support to stressed entities in the current situation." Though the MSMEs need a demand boost to gain momentum, the policy measures by RBI and the Government aims to provide relief from the supply-chain disruption. Moreover, only a handful of the MSMEs, about 7%, can take advantage of these relief measures. The AD function is given by:

$$AD = Y = \overline{C} + C'(Y^D) + \overline{I} + I'(r) + G + NX$$

Where, Y = pre-COVID output,  $Y^D = \text{Disposable}$  income,  $\overline{C} = \text{Autonomous}$  Consumption, C' = MPC,  $\overline{I} = \text{Autonomous}$  Investment, I' = Interest Sensitivity of Investment, r = Nominal Interest Rate, G = Government Expenditure, NX = Net Exports.

Theoretically, such expansionary monetary policies cause LM curve to shift rightwards, raising output Y and reducing r unambiguously. Also, the MSMEs may be able to invest more due to the ease of taking loans, resulting in a rise in I. IS curve shifts rightwards, causing a further rise in Y.

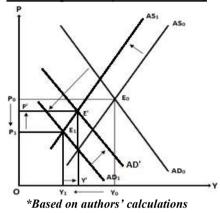
Figure 2: Theoretical Effect of Liquidity Infusion on the MSMEs (Analysed by the IS-LM Model)



However, in real world, loss of employment and uncertainty about the future leads to lack of effective demand. This causes IS and thus the AD curve to become steeper and shift back. Therefore, though the rightward shift of LM curve moves AD curve forward, but the demand constraint dampens the initial increase in output. Thus, the final increase in Y is sluggish (Y'). Also, no MSME would borrow during recession, and the economy would receive no boost

from liquidity infusion. This is because the blow to the economy came from demand shortage, and such supply-side policies cannot provide any relief. Since the situation is similar to liquidity trap, fiscal policy will be the only appropriate tool to fight the economic slowdown. Any fiscal expansion would boost demand, causing IS, and hence the AD curves to return back to their initial positions, raising output back to its natural level  $(Y_0)$ .

Figure 3: Actual Effect of Liquidity Infusion Without any Fiscal Policy (Analyzed by the Complete Keynesian Model)



#### **Conclusion**

The central government has declared relief packages to empower the MSMEs which include liquidity infusion, credit scheme, funds allocation for equity and changes in definition of MSMEs with respect to its investments and turnovers. Though the sector is aided by several central government schemes, no policy is sufficient to overcome the downfall completely. Hence, the government should incorporate more policies such as wage support to the workers of MSMEs as mostly; this sector hires informal workers with minimal guarantee for jobs and wages, especially in micro enterprises. MSMEs are an integral part of the Indian economy, restoring its stability will accelerate the GDP of the country. (Times of India, 2020, September 23)

#### References

1. Ghosh, S. (2020). "Examining the COVID-19 Relief Package for MSMEs". Economic and Political Weekly, 55 (22). Available at:

https://www.epw.in/journal/2020/22/commentary/examining-covid-19-relief-package-msmes.html (accessed on 12th November, 2020)

2. Blanchard, O. (2016). Macroeconomics (4th ed.). TBS.

- 3. Singh, A. (2020). "What About India's MSME Sector: COVID-19 Pandemic and Indian MSME Sector Outlook". SSRN Electronic Journal. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3696778 (accessed on 13th November, 2020)
- 4. Times of India (2020, September 23). Covid-19 affect on Micro, Small and Medium EnterprisesMSMEs).RetrievedNovember12.Availableat: https://timesofindia.indiatimes.com/blogs/agyeya/covid-19-affect-on-micro-small-and-medium- enterprises-msmes/ (accessed on 13th November, 2020)
- 5. Dubey, P. (2020). "MSMEs in COVID-19 Crisis and India's Economic Relief Package: A Critical Review". AIJR Preprints, 207, version 1, 2020. Available at: https://preprints.aijr.org/index.php/ap/preprint/view/207 (accessed on 13th November, 2020)

# COVID-19 PANDEMIC AND FINANCIAL MARKETS: HOW THE STOCK MARKET STAYED AFLOAT EVEN AS THE REAL **ECONOMY PLUNGED**

-Dipanjan Mitra, 2<sup>nd</sup> Year, PG

#### **Abstract**

The COVID-19 pandemic brought about the first major global economic crisis since the 2008 recession. However, luckily and surprisingly for the economy, the recession did not bring about a financial crisis. This article aims to answer the following questions- Why did the stock market perform so well when the economic recession ran deep? What effect did government measures, with respect to lockdowns and monetary policy, have on the stock market and speculations that often make or break financial systems? What are the lessons learnt regarding the handling of the crisis? And finally, is there no longer any threat of a financial meltdown?

#### **Keywords**

Central Bank, Credit, Financial Crisis, Government, Stock Market

#### **JEL Classification**

G01, G28, E44

#### Introduction

The world has seen two financial crises before the COVID-19 pandemic struck-one in 1929 and the other in 2008. A financial crisis is an economic scenario where inter-institution capital flow comes to a complete halt. The effects this has on the rest of the economy is well explained by the financial accelerator hypothesis. The financial accelerator theory says that, at the peaks of business cycles most businesses and consumers take on cheap debt to finance improvements or expansion to their lifestyles and businesses. Their economic health therefore heavily deteriorates when the credit environment worsens as institutions go bankrupt and a recession ensues. The recession further worsens the credit environment and a self-sustaining destructive loop is created that accelerates the rate of economic deterioration.

The global economy was trying to overcome the effects of Global Financial Crisis when the COVID-19 pandemic struck. However, as lockdowns brought about another recession, the financial situation did not worsen because the financial markets stayed mostly stable owing to Government and Central Bank interventions. A study of this phenomena yields interesting results which we shall now discuss.

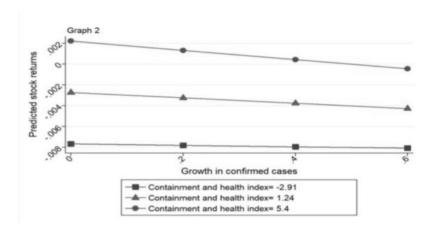
# **Explaining the Conundrum: The Disconnect between Financial Markets and the Real Economy**

Surprisingly, when lockdowns were shutting down the real economy, speculations were positive and stock prices were on the rise. This talking point did become a spark for lengthy political debates on economic inequality. However, a capitalist system requires healthy financial markets to take the economy back to its natural state once things get better. A closer look at the causes for the stock market remaining healthy all throughout reveals the following-

- 1. First, a strong financial model takes into account the long-term cash flows and profits of companies. It does not consider just the performance in the immediate years of the pandemic. If strong government measures are taken with respect to containment of the disease and investing in vaccine research and then it's subsequent distribution, the market expects profits of companies to pick up as soon as situations return to pre-COVID levels. Poor performance due to the lockdowns don't affect speculations as such.<sup>[1]</sup>
- 2. Secondly, the makeup of stock markets like the S&P 500 has changed over the last three decades. Media, technology, telecom, pharmaceuticals, and medical device companies are weighted heavily. These industries have improved their share of the market index to about 40% over the aforementioned time period. These are sectors that have either remained the same or grown since the pandemic began.

Investors and analysts ignore these concepts in valuing companies. They give more attention to earnings multiples like enterprise value-to-earnings ratios. As earnings decline suddenly, the earnings multiple increases if it is expected that the company will recover in the near future; as the pandemic draws to a close.

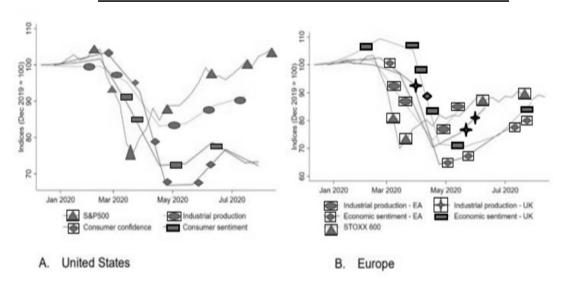




Source: Ashraf (2020)

Extensive research has been carried out by Ashraf (2020)<sup>[2]</sup> to understand the possible economic impact of state actions on stock market returns during the pandemic. Announcements regarding the implementation of social distancing by governments have two effects on returns in the stock market—an indirect positive and a direct negative. The announcements of social distancing measures are negatively related with stock market returns due to their negative impact on economic activity. However, these announcements lead to positive market returns by reducing COVID-19 confirmed cases and increasing chances of opening up later on. Economic support announcements led to positive returns.

# **Disconnect between Stock Markets and Real Economic Indicators**



Source: Igan, Kirtia and Peria (2020)

When it comes to the effect of Central Bank interventions Igan, Kirtia and Peria (2020) conclude that monetary policy announcements in mid-March 2020 led to a significant decline in discount rates (both risk premiums and risk-free rates) that increased asset valuations. This implies that a reversal of monetary policy actions could trigger a reversal in asset valuations: risk-free rates will increase, but more disturbingly, risk premiums will go up again. Therefore, strong intent shown by both Central Banks and Government kept the financial markets afloat.

# What are the Lessons Learnt from Handling of the Financial Markets in COVID Times?

The Financial Stability Board (FSB) in a report released on the 28<sup>th</sup> of October 2020 elaborated on the areas of concern. The three most important lessons that we could learn from the report are the following-

- The market turmoil in March 2020 highlighted the need to make the NBFI sector more resilient. The results from various undertakings under the FSB's NBFI programme for example, on MMF resilience and liquidity risk and its management in open-ended funds, and practices of margining will affect the relevant international standards in these areas.<sup>[3]</sup>
- The way capital and liquidity buffers function requires further examination. Banks
  avoided using their capital and liquidity buffers to meet loan demand till now since
  they did not need it. But some evidence states that banks would have hesitated to dip
  into their buffers had it been needed, despite the flexibility provided by the regulatory
  framework.
- The financial system still remains procyclical, to some degree. Credit rating agency ratings are used too mechanically in some areas, and the impact of the new expected credit loss accounting framework, on bank capital and lending, is negative. This issue needs to be addressed seriously.

While the concerns raised by FSB did not seriously affect the financial system, they should be solved at the earliest.

#### Should we be worry of a bullish stock market?

The history of stock market booms has taught us one thing- when expectations are not grounded in reality, bubbles are formed and when they burst, they take entire economic systems down with them. The Federal Reserve flooded the economy with cheap credit to prevent financial markets from going into a crisis when the COVID Pandemic struck. In doing so, it has repeated the mistakes of the early 2000's where cheap credit led to moral hazard problems best manifested by the subprime mortgage crisis which took down the global economy later on. Today the crypto currency bubble is just one example of such an incoming crisis.

The United States has recently seen a 39 years high inflation rate of 7%. Inflation is rising all around the world. As Central Banks are forced to raise interest rates to control inflation, many companies might see bankruptcies. Many bubbles are yet to burst. A crisis has not been avertedit has just been postponed.

#### **Conclusion- Is the Threat of a Financial Crisis Over?**

The future of the world economy to a large degree depends on the virus not mutating into a version that would render vaccines ineffective. If that were to be the case then lockdowns would return, trust in vaccines and effectiveness of governments would fall, the government would have a hard time keeping speculations positive and a financial crisis would not be far away.

The global financial system can be affected by financial contagion originating in one country. For example, the potential collapse of the Chinese financial system in the wake of the Evergrande liquidity crisis would impact the world economy in two ways [4]. First, the Chinese real economy could tank in a way similar to the US economy did in 2008. This would affect global demand and supply. Secondly, possible financial contagion would infect Western Markets as many companies have strong exposure to Evergrande through their ownership of corporate bonds. If the Chinese Government shows strong intent, a crisis can be avoided.

To conclude, as one crisis draws to an end the world must put in place a system that is well prepared to hold off the next crisis. While the way we dealt with the COVID crisis ensured that nothing similar to the GFC happened again, we must keep strengthening our institutions for potentially harder times to come.

#### References

- https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-strategy-and-corporate-finance-blog/why-have-stock-markets-shrugged-off-the-COVID-19-crisis (Accessed on 5th November, 2021)
- Ashraf, B.N(2020), Economic impact of government interventions during the COVID-19 pandemic: International evidence from financial markets, Vol 27, Journal of Behavioural and Experimental Finance
- 3. Igan, Kirti, Peria (2020) The Disconnect between Financial Markets and the Real Economy, Special Notes Series, International Monetary Fund
- 4. Lessons Learnt from the COVID-19 Pandemic from a Financial Stability Perspective, Final Report of the Financial Stability Board (2020)
- 5. https://www.ft.com/content/6d127e05-2208-4226-9cd1-ef2f7463cdf0 (Accessed on 5<sup>th</sup> November, 2021)
- 6. https://www.nytimes.com/2020/06/15/opinion/coronavirus-stock-market.html (Accessed on 31st January,2022)

# **MEDICAL INFLATION AND HEALTHCARE:** SOME REFLECTIONS IN THE ERA OF COVID-19

-Indrani Mukherjee, Vartika Nanda and Meghna Seal 3rd Year, UG

#### Abstract

During a pandemic, the cost of healthcare is bound to grow, therefore the current spike in India's ever-increasing healthcare inflation should not come as a surprise. However, even before the pandemic. India's medical inflation was on the rise. As a result, for many years, medical inflation has been several percentage points higher than the headline number. This paper aims to study the impact of the COVID-19 pandemic on medical inflation in India.

#### Keywords

COVID-19, Government, Healthcare, Medical Inflation, Private Sector

#### **JEL Classification**

I11, I13, I15, I18, P24

#### Introduction

Medical inflation can be defined as the rise in both the utilization and the unit costs of services. It can also be said that it is the increase in the average or unit cost of a healthcare service over time. The definition of medical inflation must be clear and consistent over time. Most insurers continue to struggle with medical inflation, which generally exceeds retail or consumer price inflation, despite adopting many initiatives in claims management, fraud management, provider networks, and case management, amongst others. Moreover, the emergence of new market players with competitive pricing and product offerings has made this increasingly important. In addition to general cost increases and retail price inflation, other major drivers of medical inflation include increases in the real wages of medical personnel, increases in healthcare access, and medical advancements, of which new drugs and treatments account for a substantial portion. Another factor that drives the changes in cost experiences from one insurer to another is product design: Insurers with premiums that provide better benefits tend to attract increased usage, moral hazard, and anti-selection by the insured. With greater access to new technologies and services that are more generously covered by insurance companies, there is higher medical inflation among these groups, as well as difficulties in negotiating lower-frequency, higher-cost services.

States are responsible for designing health systems and implementing related policies that comply with human rights obligations. A significant number of health services are delivered through private sector institutions in the contemporary landscape and many components of the health system fall under government control. The dysfunctional public health system still poses a grave threat to Indian patients despite India's impressive economic progress. Private hospitals have played a vital role with the rapid expansion of population and shortages of healthcare facilities in the government hospitals, which provide treatment full of free service to the poor.

#### **COVID-19 and Medical Inflation in India**

India's healthcare inflation had been on the rise even before COVID-19. In December 2018, healthcare inflation was 8.87% due to the rise in prices of certain medicines, which is higher than the rate of inflation recorded during the ongoing pandemic. Inflation in the health sector climbed to 8.4% and 7.7% in May and June 2021, respectively, from 3.8% in December 2019. A substantial rise in the pricing of medical tests (6.2%), medicines (8.6%), consultation fees (4.5%), and hospital charges (5.9%) has been recorded (MoSPI, Annual Report-2021). Telangana reported the highest increase in health expenditure, while Kerala reported the lowest. It is estimated that the total health expenditure is expected to rise by ₹66,000 crores due to COVID-19, which accounts for 11% of the health expenditure in FY20.

However, the healthcare inflation rates at the retail level do not reflect the entire magnitude of the increase in expenses for the average person. One of the reasons for this could be that the government's social spending limits sharply increase in healthcare expenses during times of crisis. Though the private facilities' costs are likely to have risen dramatically during the pandemic, smaller businesses face higher costs as they struggle to reach economies of scale. As a result, the healthcare inflation does not accurately reflect the true magnitude of the increase in expenditure. Moreover, the shortage of basic commodities, such as hospital beds, medicines, and oxygen cylinders, forced people to spend outrageous prices to procure them.

HEALT	H EXP	ENDITURI	ESTIMA	TE(₹ CRORE	=)

PRICE EFFECT( IMPACT OF INFLATION)	15,000
QUANTITY EFFECT (IMPACT OF	35,000
HOSPITALIZATION)	
TOTAL IMPACT DUE TO INCREASED HEALTH	16,000
EXPENDITURE	
HEALTH EXPENDITURE IN FY20	6,00,000
TOTAL IMPACT AS PERCENTAGE OF	11%
HEALTH EXPENDITURE	

Source: SBI research

Though the healthcare system that had been imagined for independent India had no division between the public and private sectors, currently, in India, most of our healthcare is provided by the private sector (70-80%), and most of it is paid directly by the people. Despite this, our public health system, which is funded by general taxes, plays a critical role in delivering preventive services (vaccines, community spraying during malaria season, and other similar activities) as well as treatment to populations that lack access to or cannot afford private care. Adequate financial investments in the public health sector were not made, and overall, our public health expenditure is a little more than 1% of our GDP, making it one of the lowest in the world.

With a few exceptions, the public health system in most Indian states has remained underdeveloped in the form of restrictions in basic structural and functional capacities such as medicines, equipment, and human capital. The services rendered by these government hospitals have been inadequate in terms of both quantity and quality. States such as Kerala and Tamil Nadu, having more developed public healthcare systems, have been able to deal with the pressure from the COVID-19 crisis in a better way, but in most states, the public sector has not been able to rapidly expand its capacity. We have witnessed first-hand the terrible effects of an outbreak on society when the health system is unable to cope. We don't know how many infectious changes will occur; therefore, the issue to ask is how can we construct health systems to assist us to deal such that even repeated outbreaks are less severe and disturbing?

#### Conclusion

In high-medical-inflation markets like India, it's critical for insurers' long-term viability to be able to include risk-adjusted inflation in their pricing at least once a year. This will necessitate a robust methodology and techniques for closely tracking medical data, as well as the development of internal processes for standardizing the repricing exercise. Such a strategy will be difficult to implement at first due to the nature of the competitive price market. Our public health system requires more investment. We must re-establish a stronger healthcare system with more capacity and interconnectivity. Because people's trust cannot be developed overnight in the middle of a pandemic, our healthcare system must have societal legitimacy. As a society, we should strive for more inclusivity and equity in our healthcare system.

#### References

- 1. The Impact of Reliance on Private Sector Health Services on the Right to Health. (2014, July
- 1). Health and Human Rights Journal.

https://www.hhrjournal.org/2014/07/the-impact-of-reliance-on-private-sector-health-services-on-the-right-to-health/ accessed on 12.11.2021 at 00:25 IST

- 2. URL:https://www.livemint.com/market/mark-to-market/indias-already-stiff-healthcare-costs-get-a pandemic-boost-11621582098264.html accessed on 13.11.2021 at 19:00 IST
- 3. Nihalani, J. S. S. R. V. (2021, July 17). Data | Medical expenses climb after second wave, adds to financial stress. The Hindu. https://www.thehindu.com/data/data-medical-expenses-climb-after-second-wave-adds-to-financi al-stress/article35375720.ece accessed on 14.11.2021 at 16:06 IST
- 4. The Impact of Reliance on Private Sector Health Services on the Right to Health. (2014, July 1). Health and Human Rights Journal.

https://www.hhrjournal.org/2014/07/the-impact-of-reliance-on-private-sector-health-services-on-the-right-to-health/ accessed on 14.11.2021 at 15:45 IST

- 5. URL: https://life.futuregenerali.in/life-insurance-made-simple/smart-living/things-to-know-about- India's-healthcare-system accessed on 14.11.2021 at 17:32 IST
- 6. URL: https://in.milliman.com/-/media/milliman/pdfs/articles/medical-inflation-and-health-insurance-productsin-india.ashx accessed on 14.11.2021 at 16:33 IST
- 7. URL:https://mospi.gov.in/web/mospi/annual-report-of-ministry accessed on 14.11.2021 at 16:45 IST

# FACE-MASKS: SAVIOUR OR SILENT KILLER?

- Jyotirmoy Misra, 3<sup>rd</sup> Year, UG

#### **Abstract**

The COVID-19 pandemic not only adversely affects human health, but also negatively impacts the GDP of a country. In order to curb the spread of the virus governments worldwide mandated the use of face masks. Hence, the usage of such masks drastically increased. Since, majority of the masks contain plastics or derivatives of plastics, this article attempts to draw attention towards the environmental impact caused by mask wastes and also prescribes steps to overcome this issue. The predictions made about generation of mask wastes, gives some fundamental knowledge about its hazards. Results showed that there is a huge mask-generated plastic waste in land and marine areas, which contributes to micro-plastic pollution. This article also talks about how natural plant fibre can be used in production of face masks which can reduce the plastic waste. Two reliable and detailed databases, namely Scopus (scopus.com) and Web of Science (webofscience.com) were used to gather the datasets.

### **Keywords**

Bioplastics, COVID-19, Face-masks, Non-biodegradable

#### **JEL Classification**

A13, O35, Q51, Q56, R11

# Introduction

Based on a study by WHO, more than 89 million surgical masks are estimated to be required in the USA in 2020 as this pandemic is likely to continue for some more time. The domestic demand for the mask is estimated to be 24.37 billion per year in the UK (Liebsch, 2020). China has already increased the daily manufacture of medical masks by a staggering 14.8 million. A study by (Klemeš et al., 2020) states that production of a mask needs 10 to 30 Wh energy and thereby emits 59 g CO2 equivalent greenhouse gas. More importantly, this increasing usage of mask adds highly to the landfill as well as medical waste. Face mask wastes contains polypropylene and/or polyethylene, polystyrene, polycarbonate, polyacrylonitrile, which propels microplastic pollution. Therefore, sustainable solutions is required to reduce the environmental impacts, without hampering the uplifting demand for face masks. Government of various countries are already exploring the alternatives, including the reuse, reprocessing and disinfection of approved disposable masks, and producing biodegradable masks. Most

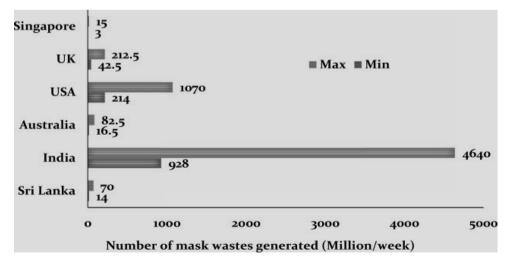
people are not yet aware of the benefits of wearing masks which are biodegradable; which is also a concern.

#### **Empirical Analysis**

According to reports by WHO, about 80% of people use masks always while going out of house whereas about 16% occasionally wear the mask. This states that around 96% of people know the value of wearing masks during the pandemic. Interestingly, 3% of them hardly use the mask, possibly due to lack of awareness or because they gave less importance to the gravity of the situation. More or less 1% of the people never wore masks due to pre-existing medical conditions.

Wastes from mask produced from countries (i.e., Sri Lanka, India, Australia, Singapore, UK and USA) were calculated and has been shown in figure below. This was considered based on the number of masks (minimum -1 and maximum-5) used by healthy individuals in the age group 16 to 65 (Clark, 2020; Erin, 2020; Hirschmann, 2020; Plecher, 2020a,b,c). The figure shows the idea of mask-waste generation per week from Sri Lanka, India, Australia, Singapore, UK and USA. At the peak of the initial COVID-19 wave most of the countries were under lockdown. So, people travelled mostly in private vehicles and walking was rare. This might have led to the lower percentage of mask usage per week. Hence, it is expected that mask usage will increase, which will eventually create a significant amount of plastic waste to the environment.

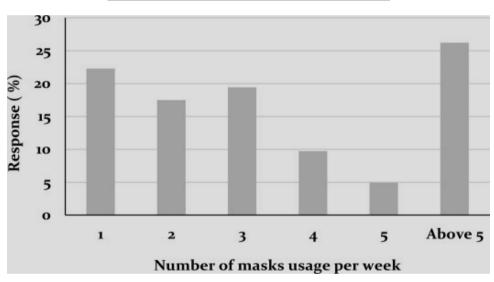
#### **Wastes from Masks Produced in Various Countries**



Source: https://www.sciencedirect.com/science/article/pii/S2667010021000184

An empirical study by Akber et al. (2020) stated that surgical mask and N95 mask contain 4.5 g and 9g polypropylene respectively. The amount of polypropylene generated from various countries were calculated based on the mask wastes generation per week. Per week, about 2.5 kt, 0.6 kt, 0.04 kt plastic or subsidiary wastes were produced respectively from India, USA, Australia. This clearly indicates that the Covid-19 pandemic will impact the sustainability of environment.

The mask-waste littered beneath the soil can impact the fauna and can lead to their death. For instance, a bird in Columbia was entangled in a discarded mask. Then it died after the mask was wrapped around its beak and it was unable to get free (Boyle, 2020). Furthermore, masks are mistaken to be food by many animals, which, unfortunately, is a common occurrence. The plastic can fill stomachs, causing animals to starve and die eventually.



No. of Masks Usage Per Individual Per Week

Source: https://www.sciencedirect.com/science/article/pii/S2667010021000184

#### **Sustainable Alternatives**

One of the modern sustainable alternative options to reduce the usage of the mask that boosts plastic-waste is biodegradable mask. The polypropylene in the mask can be suitably replaced by substitute organic and biodegradable materials with very similar mechanical, physical and chemical properties, namely light weight and high biodegradable potential Biodegradable polymers and bioplastics can be an option to replace the polypropylene.

#### References

- Boyle, L. (2020). Bird dies after getting tangled in coronavirus face mask. *Independent New York*.
- 2. Clark, D. (2020). Population of the United Kingdom in 2019, by age group. *Statista www. statista. com*.
- 3. Erin, D. (2020). Resident Population of the United States by Sex and Age as of July 1, 2019. *Statista www. statista. com*.
- **4.** Hirschmann, R. (2020). Population of Singapore in 2019, by age group. *Statista www. statista. com.*
- 5. Khalil, A. B., & Arslan, M. (2020). Extensive use of face masks during COVID-19 pandemic:(micro-) plastic pollution and potential health concerns in the Arabian Peninsula. *Saudi Journal of Biological Sciences*.
- **6.** Klemeš, J. J., Van Fan, Y., & Jiang, P. (2020). The energy and environmental footprints of COVID-19 fighting measures–PPE, disinfection, supply chains. *Energy*, *211*, 118701.
- Lackner, M. (2015). Bioplastics-Biobased plastics as renewable and/or biodegradable alternatives to petroplastics. Kirk-Othmer Encycl Chem Technol: 1– 41.
- **8.** Le Duc, A., Vergnes, B., & Budtova, T. (2011). Polypropylene/natural fibres composites: analysis of fibre dimensions after compounding and observations of fibre rupture by rheo- optics. *Composites Part A: Applied Science and Manufacturing*, 42(11), 1727-1737.
- 9. Liebsch, T. (2020). The rise of the face mask: What's the environmental impact of 17 million N95 masks?. *Ecochain [WWW Document]. Ecochain. URL https://ecochain. com/knowledge/footprint-face-masks-comparison/(accessed 4.4.21).*
- **10.** Plecher, H. (2020). India: Age distribution from 2009 to 2019. *Statista www. statista. Com*

# ANALYZING CHANGES IN INCOME AND CONSUMPTION PATTERNS DURING COVID-19

-Batch Article by 1st year, UG

#### **Abstract**

The onset of COVID-19 has brought forward various devastating impacts for the entirety of humankind. This article aims to study the change in economic behaviour of consumers across various strata of the society broadly categorized into the non-homogenous groups of upper, middle- and lower-income groups. Secondary data was used and analyzed to gain insights into the different issues that the Indian population had to confront amidst the crisis. It was observed that even though all the income groups faced consequences of the lockdown in 2020, there was a stark difference in the effect on each group. The upper class were left better off than before, while the financial security of the middle class was crippled and the lower class was pushed to worse living conditions.

#### **Keywords**

Consumption, COVID-19, Income, Unemployment

### **JEL Classification**

E00, I14, I15, J20

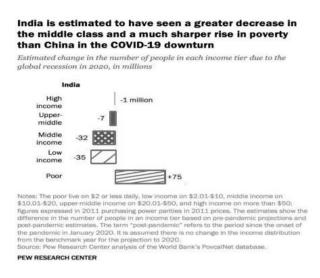
#### Introduction

Economists around the world had accredited COVID-19 as a threat to employment, household investment, and consumption expenditure. With well over a year having passed since the onset of the pandemic, were the effects as pronounced as had been predicted? Is the aftermath as grim as was foreseen? We have tried to analyze whether there is a relationship between the change in income and consumption patterns. We also look to highlight the contrasts in severity of lockdown restrictions across various income groups.

#### **Lower Income Group**

Lower-income groups and daily wage earners were among the worst hit by the pandemic. This was primarily because their income had decreased post-pandemic, due to them being subjected to lay-offs and sudden wage cuts. This compelled them to borrow extensively through the informal sources, such as moneylenders, leaving them highly indebted. The rising prices of necessary goods worsened the situation.

Some of the lower-income households had to reduce both consumption and investment expenditure due to a fall in income. Others were forced to increase the former on account of spending more on necessities and hygienic products but had to decrease the latter. Some used to invest in gold, fixed deposits, etc. but after the pandemic, they were unable to do so.



## Middle Income Group

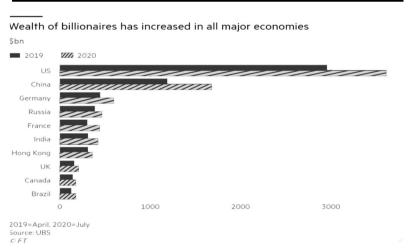
The middle-income group is known to consistently be at the forefront of social movements and thus, by extension, social change, defining society and its hierarchy throughout human history. The pandemic is one such change, of seismic proportion, which has rattled all strands of society, all while retaining the characteristics of the inequality that is known to plague society. The Indian middle class has shrunk by a margin of 32.2 million in the last year alone due to the socio-economic constraints enforced by the pandemic, according to a study conducted by Pew Research Centre. The surviving middle class didn't escape unscathed either, having to deal with reduced income and, therefore, scant resources, often because of the practice of hoarding resources by the privileged class which resulted in a marked decline in the consumption expenditure of the middle-income group.

Particularly, consumption of luxury goods and non-necessities was decreased by a considerable amount as an aftermath of the pandemic with more resources being diverted to the purchase of necessities. As the lockdowns brought the nation to a standstill, public transport was close to being rendered redundant. The middle-income group has had to adapt to a variety of changes that have uprooted the lives of many all over the country.

## Upper Income Group

According to the United Nations, The global economy is set to lose \$8.5 trillion due to COVID 19. Another report by Statista states that "the world's leading billionaires added over \$1 trillion to their collective wealth during the novel coronavirus disease (COVID-19) pandemic." The stark irony here is quite interesting. While most people experienced an economic collapse, lost their livelihood, and faced a major public health crisis, the top 10% of society did not even flinch. The Hurun Rich List shows that the world proudly welcomed eight billionaires per week, even as the pandemic raged on.

So, why did the rich become richer? At the onset of the pandemic, during the initial stages of lockdown, there was tremendous panic in the market, and stock prices fell precipitously. While most retail investors lost their life savings, this turned out to be an opportunity for the big players to buy shares at pennies on the dollar. The subsequent bull-run made a windfall for all equity investors.



## The wealth of billionaires has increased in all major economies

## Conclusion

"We are in this together and we will get through this together," said UN Secretary General, Antonio Guterres. The truth, however, is that COVID-19 has not affected everyone equally. The pandemic and the restrictions that followed have made a considerable impact on some sections of society, while others remain relatively unscathed. The rich got richer and the poor got poorer. While investment and expenditure increased in the upper echelons, the less well-to-do households had to make sacrifices just to survive the lockdowns.

However, as of October 2021, unemployment rates are steadily improving. From a peak of

11.84% in May to 7.75% presently, perhaps the effects of the pandemic are slowly starting to revert. As people continue to grapple with the jaws of a threat to both health and economic well-being, it remains to be seen whether the efforts of the government and the aforementioned upper class shall be sufficient to aid the thousands of households who have lost a normal way of living.

- 1. Kochhar, R. (n.d.). In the pandemic, India's middle class shrinks and poverty spreads while China sees smaller changes. *Pew Research Center*. (Accessed on: 8th November, 2021.) https://www.pewresearch.org/fact-tank/2021/03/18/in-the-pandemic-indias-middle-class-shrinks-and-poverty-spreads-while-china-sees-smaller-changes/
- 2. Rohit Inani, I. com. (n.d.). For the millions who just joined India's middle class, the pandemic has been a cruel financial blow. Scroll. In. (Accessed on: 10th November, 2021) https://scroll.in/article/1004102/for-the-millions-who-joined-indias-middle-class-the-pandemic-has-been-a-cruel-financial-blow
- 3. Wadhwa, P. (2021, March 16). 633,000 "new middle class" households in India: Hurun India report. *Business Standard India*. (Accessed on: 9th November, 2021.) https://www.business-standard.com/article/economy-policy/633-000-new-middle-class-households-in-india-hurun-india-report-121031600357\_1.html
- 4. Nations, U. (n.d.-a). COVID-19 to slash global economic output by \$8.5 trillion over next two years. United Nations. (Accessed on: 10th November, 2021.) https://www.un.org/en/desa/covid-19-slash-global-economic-output-85-trillion-overnext-two-years
- 5. What did the billionaires lose during COVID-19 pandemic? (n.d.). (Accessed on: 7th November, 2021.) https://www.downtoearth.org.in/blog/economy/what-did-the-billionaires-lose-during-covid-19-pandemic--75729
- 6. Jones, S., & Romei, V. (2020, October 23). Pandemic makes world's billionaires—And their advisers—Richer. *Financial Times*. (Accessed on: 10th November, 2021.) https://www.ft.com/content/ab30d301-351b-4387-b212-12fed904324b
- 7. Nations, U. (n.d.-b). *COVID-19: We will come through this together*. United Nations. (Accessed on 9th November, 2021.) https://www.un.org/en/coronavirus/covid-19-we-will-come-through-together
- 8. *Unemployment*. (n.d.). (Accessed on: 11th November, 2021.) https://unemploymentinindia.cmie.com/

## IMPACT OF COVID ON RESIDENTIAL REAL ESTATE IN INDIA

-Harsh Sharma 2<sup>nd</sup> Year, UG

## **Abstract**

COVID-19 had a devastating impact on economies across the globe. It disrupted healthcare, supply chain and mobility, bringing economy to a virtual standstill. This paper assesses COVID's impact on Indian residential real estate by analyzing the impact of the two waves of COVID and providing a view of the future along with policy recommendations.

## **Keywords**

Circle Rates, Inventory Overhang, Real Estate, Stamp Duty

## **JEL Classification**

K25, R21, R31

## Introduction

The residential real estate sector is an important part of the Indian economy that employs over 50 million people and supports several ancillary industries. The performance of this sector is greatly linked with that of the economy. Incomes of households; interest rates, which determine mortgage rates; consumer confidence; and migration of people determine the demand for housing. On the supply side, similar factors influence the expected demand for housing, using which developers decide locations for developing new properties. COVID has had multifaceted repercussions on all the economy, and hence impacted housing in various ways.

## **Impact of the first wave**

Even before the pandemic, the residential real estate sector in India was marked with rapidly increasing inventory that outweighed increases in sales, while prices remained fairly constant since 2014. At and all-India level, the growth in sales was 20-25% while inventory had grown by 2.5 times. In 2019, 4 years of supply was available in the market. In 2020, COVID-19 and associated lockdowns further weakened demand, exacerbating inventory overhang. This happened due to fall in purchasing power as a result of loss of jobs and incomes due to the lockdowns and also due to delays in processing of sales deeds.





The figure on the left shows sales data for CY19 and CY20 for the top 7 cities, and indicates a 47% decline in total sales. NCR and Bangalore markets were worst hit, with a drop of 51% in sales. The second figure shows data for undeveloped properties of 50 cities covered by NHB RESIDEX. Declining inventory despite lower sales, compared to previous year, was a result of fewer new launches. Total sales fell by 60% while new addition to housing units fell by 83% YoY in June 2020. Fall in consumer confidence shifted customer preference to completed houses.

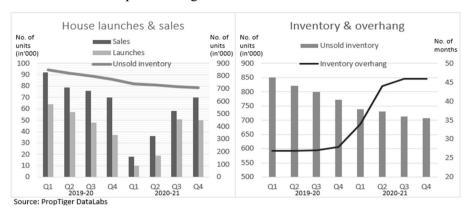
The Government provided relaxation in project timelines under the Real Estate Regulation Act (RERA) in response to delayed work due to worker unavailability and raw material shortages due to lockdown. The reduction in repo rate and the easing up of lockdowns amid intensive vaccination programs provided momentum to sales towards the end of CY20 and in the first quarter of FY21. MMR and Pune witnessed greatest surge in sales following reductions in stamp duty and circle rate.

## **Impact of the second wave**

The period between the first and the second wave of COVID in India witnessed revival in sales, demonstrating the pent-up demand from the first wave. The second wave was more devastating than the first one, as the delta variant was more potent. However, realtors were better prepared for it after their experience with the first wave and digital adoption. The figure below presents the picture of Indian residential real estate right before the onset of the second wave in April. The unsold inventory had hit a 24-month low with impressive sales revival.

The second wave, with multiple regional lockdowns, impeded this momentum and brought a drop of 62% and 43% in volume of sales and launches, respectively, in April-June (Knight Frank report). Developers continued to launch new projects, after perceiving that the sales would stabilize after the second wave, and accomplished this by managing worker exodus better through on-site accommodation arrangements. The inventory overhang remained high

and the reason for this is that overhang is calculated by dividing existing unsold inventory by average sales of trailing months. Feeble sales during the first wave were thus factored into the calculation and resulted in a high value for inventory overhang. To sum up, residential real estate remained resilient despite a resurgence in COVID cases.



## Future Outlook and Suggestions to the Government

The COVID pandemic has increased the perceived value of homes in India, with people spending a great amount of their time indoors due to restrictions on mobility. The affordability of housing has also improved, with improvement in mortgage to income ratio as a result of decline in house prices due to stamp duty cuts in West Bengal, Maharashtra and Karnataka, along with continuance of low interest rates. The supply-side stakeholders' Real Estate Sentiment Index has greatly improved due to these factors, as can be seen in the figure. The



current sentiment reflects current outlook in comparison to last six months, while future sentiment signifies outlook for the next six months. Mass inoculation, ease in restrictions and economic recovery have contributed to positive sentiment. By 2025, the Indian housing market is estimated to grow to US\$ 180 billion.

The government can undertake the following actions to accelerate growth:

 Reduction in stamp duty: This measure was implemented in Karnataka, West Bengal and Maharashtra led to double digit growth in sales. If it is implemented in other states

- in India, and the time period of reduction is increased in the three aforementioned states, it could drastically boost the residential real estate industry.
- Incentives for embracing technology: With the help of subsidies, discounts and other
  policy incentives, the Government can encourage continued adoption of technology to
  optimize overall operational flow, and reduce costs.
- Input Tax Credit (ITC) for realtors: The absence of ITC for real estate developers increases the housing prices by Rs 400-450 per square foot, as noted by Credai. This ultimately affects purchasing power of buyers.
- GST reduction on building materials: This can help to further reduce costs of construction and reduce housing prices.

## **Conclusion**

COVID-19 heavily impacted sales and stalled construction projects during its first wave in India. However, the pent-up demand, government incentives, adoption of technology and preparedness allowed the sector to navigate through the second wave. While with steady increases in sales, the current outlook for residential real estate in India is positive, more government incentives can accelerate growth.

- National Housing Bank (2020), Report on Trend and Progress of Housing in India 2020. Retrieved November 17, 2021 from https://nhb.org.in/NHB-T&P-20/web/files/downloads/nhb.pdf
- Liases Foras (2020), Quantifying the impact of Covid-19 on Commercial and Residential real estate market. Retrieved November 17, 2021 from https://www.liasesforas.com/admin/WhitePaper/45/WhitePaper\_2020-06-19 63728185800531.pdf
- Knight Frank (2021), *India Real Estate Residential and Office- July-September 2021*. Retrieved November 17, 2021 from https://content.knightfrank.com/research/2320/documents/en/india-real-estate-residential-and-office-july-september-2021-8454.pdf
- FICCI, NAREDCO, Knight Frank (2021), *Real Estate Sentiment Index Q3 2021*. Retrieved November 17, 2021
- Anarock (2020), 2020 Year-end Housing Market Review. Retrieved November 17, 2021 from https://www.anarock.com/blogs/2020-year-end-housing-market-review-anarock

# GLOBAL PANDEMIC AND SOCIETY: DETERIORATING SOCIAL SUPPORT NETWORK AND ITS IMPACT ON MENTAL HEALTH

-Diya Chatterjee, 3<sup>rd</sup>Year, UG

## **Abstract**

The outbreak of the novel Coronavirus in China that aggravated into a "once in a century" crisis led to a complete standstill in the daily lives of the people across the world. The economies were faced with an intense trade off of "lives vs livelihoods". To curb further spread of the infection, country-wide stringent lockdowns were announced leading to severe socioeconomic repercussions. In this study, we focus on the effect that the stringent lockdowns had on the social capital (social support network to be precise) which in turn had severe impacts on the mental health of the society as a whole.

## Keywords

Social Capital, Mental Health, Productivity, Well-being

## **JEL Classification**

I150, I310, Z130

## Introduction

Social Capital is defined as the network of association among people who reside and work in a particular society enabling that society to function smoothly. Though there are several confusions regarding its applicability and definition, it is majorly perceived as a public good that affects the society as a whole. Social Support forms a very important part of social capital which is actually the perception of the people of the society that they are a part of a supportive network. The supportive resources range from emotional, informational, companionship, to even tangible.

Mental Health on the other hand is defined as a state of well-being in which the person realizes his or her own potential, can cope with the normal worries of life, can work productively, and is able to do something of value for his or her society. Global burden of disease estimates places mental illness in the top three causes of 'years lost due to disability' which underlines the need to investigate social and environmental causes for the same. (De Silva et.al.,2005).

This study tries to establish social capital, especially social support network as a causal factor that positively affects mental health through a small review analysis and goes on to show how the ongoing pandemic has affected them.

## **Social Support & Mental Health—How Are They Related?**

There is sufficient evidence from literature which shows that social support lowers mental health problems (Taylor, 2011) and social support deterioration increases mental health issues. Studies in this regard mostly show that social support functions as a problem-focused and emotion-focused coping strategy (Folkman & Lazarus1991). Another model shows that Perceived social support acts as a buffer, thus protecting individuals from different aspects of mental health like stress and anxiety (Thomson et.al., 2015; Szkody& McKinney,2020). Thus, there is enough evidence to conclude with a modicum of confidence that social support enhances a person's mental health.

It is also intuitively understandable that the more there are people whom one can trust and bank upon, the more that person is at ease mentally. Consequently, when we think about it on a societal level, this positive effect of social support on mental health becomes more and more pronounced as a means for improving welfare and hence cannot be ignored.

## Social Capital Deterioration During Lockdown - An Overview

Ever since the outbreak of the Covid-19 pandemic, social distancing policies have emerged as a central component of the response. Measures like post-exposure isolation, shelter-in-place orders, and limits on the size of social gatherings have been credited with 'flattening the curve' and reducing the growth of new infection cases (Wong & Kohler, 2020). These measures mainly owe to the fact that different groups of people are at different levels of risk of how serious the infection may turn into based on their age or any comorbidity that they might possess. The variation in risk factors on the basis of underlying conditions and the fervour for social isolation that could be seen as a result is observed through the following tables. Table 1 clearly shows that the people aged 75 years and above are at most risk with 14.2% share of deaths being reported from that age group followed by the rest of the population in descending order of their age, the least being adults of age group 18-44 years (1%).

Table 1: Age-Wise Vulnerability of Death By Covid-19

AGE	Number of Deaths	Share of deaths	With underlying conditions	Without underlying conditions	Unknown if with underlying cond.	Share of deaths of unknown + w/o cond.
0 - 17 years old	3	0.04%	3	0	0	0%
18 - 44 years old	309	4.5%	244	25	40	1.0%
45 - 64 years old	1,581	23.1%	1,343	59	179	3.5%
65 - 74 years old	1,683	24.6%	1,272	26	385	6.0%
75+ years old	3,263	47.7%	2,289	27	947	14.2%
TOTAL	6,839	100%	5,151	137 (2.0%)	1,551	24.68%

Source: https://www.worldometers.info/coronavirus/ as on 1/10/2021

Table 2: Percentage of People Isolating On The Basis Of Underlying Condition

Percent who say they have done each of the following because of the recent coronavirus outbreak:	Chronic Condition in HH	No Chronic Condition in HH
Engaged in social distancing (NET)	92%	92%
Decided not to travel/changed travel plans	69	69
Stayed home instead of going to work, school, or other regular activities	74	77
Canceled plans to attend large gatherings	66	65
<b>Sheltered in place</b> , haven't left their home except for essential services such as food, medicine, health care	78	87
Stocked up on items such as food, household supplies or prescription medications	59	62

Source:https://www.kff.org/viewed as on 1/10/2021

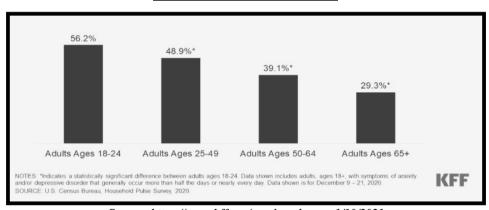
Table 2 shows maximum people have gone into strict social distancing protocols irrespective of their health conditions (92% in both cases), have sheltered in place (78% and 87%) and stocked up food items (59% and 62%).

Hence, lockdowns and increasing levels of social distancing measures have contributed towards the dramatic disruption of normal patterns of social interaction by limiting access to the familiar channels of social support – such as spending in-person time with family members, friends, colleagues, neighbours, peers and such, thus freezing up the normal flow of supportive resources.

## Mental Health Scenario during Lockdown

An unimaginable deterioration in mental health across all age groups has been observed in the pandemic period. It has been seen that mental health issues of anxiety and depressive disorders among adults (18+) has increased from 11% (January - June 2019) to 41.1% (January 2021) (taken from NHIS Early Release Program and U.S. Census Bureau Household Pulse Surveys). The percentage of adults experiencing this across the different age groups has been shown below. It is clearly observable that adults in the age group of 18-24 are the most affected with 56.2% of them reporting symptoms of anxiety and depression followed by people in ascending order of their age group, the least being reported by adults of age 65+(29.3%).

Share of adults reporting symptoms of anxiety and/or depressive disorder during the COVID-19 Pandemic, by Age



Source: https://www.kff.org/ as viewed as on 1/10/2021

## **Analysis**

The pandemic has resulted in a lot of socio-economic shocks in the daily lives of people. While unemployment has risen by leaps and bounds within the first two months of lockdown, fear of the heretofore unknown disease, spread of misinformation, unavailability of proper healthcare and death of hundreds of people are some of the major issues that might have resulted in this sharp deterioration in the mental health of people across the world. But one of the leading factors for this is undeniably the loss of social support through the nullifying of social gathering to the extent of remaining confined in the houses (in many cases even alone) for months on end thus leading to increased sense of loneliness, vulnerability and monotonicity. This has nothing but fueled the already raging fire of panic and anxiety within people. Thus, the social distancing and lockdowns have acted as a two-edged sword which has not only created a vast trade-off between health and economy but also between the physical and mental health of people were

trying to prevent getting affected by COVID through sacrificing social capital is ultimately worsening mental health.

## Observation

One of the major observations from this study is that even though the adults above 75 years are at most risk of death by COVID (Table 1), the mental health deterioration is highest among the adults of age group 18-24 years (Figure 1) which constitute the students and young adults mostly, i.e, covid is mostly affecting the people in descending order of their age groups while mental health issues are spiking in the complete reverse order of age. This goes on to prove that fear for the disease is not the only reason for this spike. Social support loss owing to loss of contacts with friends, peers and colleagues may be a big reason.

## Conclusion

Although estimation of the correlation between mental health and social support was beyond the scope of this study, the association is observable from the literature cited and has also been intuitively shown. The fact also remains that mental health issues have long-term negative effects on the productivity of individuals both per se and for the economy as a whole and that the pandemic has resulted in a huge loss to both social support and mental health. Thus, addressing the likely mental health consequences of social distancing measures through conscious incorporation of psychological interventions within the international pandemic response becomes imperative. At the local levels, targeted social interventions may help provide effective relief from the impact of pandemic related isolation and loneliness. In this regard, a pandemic may in fact prove to be an opportune moment for raising awareness and mobilizing resources for new strategies that help build up immunity in our aging population and future generations.

On a concluding note, it must be reiterated that good mental health is integral to human health as well as to the conceptualization of well-being because it enables people to do and be things, they have reason to value (Amartya Sen, 1999). Reinstating the deteriorated state of mental well-being through building up and enhancement of the social support network thus becomes a fundamental measure to positively impact the "lives" of the people in the pandemic.

## References

1. De Silva, M. J., McKenzie, K., Harpham, T., & Huttly, S. R. (2005). Social capital and mental illness: a systematic review. Journal of epidemiology & community health, 59(8), 619-627.

- 2. Faraji, J., & Metz, G. A. (2021). Aging, Social Distancing, and COVID-19 Risk: Who is more Vulnerable and Why?. *Aging and Disease*, 12(7), 1624
- 3. Folkman, S., & Lazarus, R. S. (1991). 10. Coping and Emotion. In *Stress and coping: An anthology* (pp. 207-227). Columbia University Press.
- 4. Guruge, S., Thomson, M. S., George, U., &Chaze, F. (2015). Social support, social conflict, and immigrant women's mental health in a Canadian context: a scoping review. *Journal of psychiatric and mental health nursing*, 22(9), 655-667.
- 5. Sen, A. (1999). Development as freedom
- 6. Szkody, E., & McKinney, C. (2020). Appraisal and social support as moderators between stress and physical and psychological quality of life. *Stress and Health*, *36*(5), 586-595
- 7. Taylor, S. E. (2011). Social support: A review.
- 8. Wong, A. S., & Kohler, J. C. (2020). Social capital and public health: responding to the COVID-19 pandemic. *Globalization and Health*, *16*(1), 1-4.
- 9. World Health Organization. (2014). Social determinants of mental health.
- 10. https://www.kff.org/ as viewed on 1/10/2021
- 11. https://www.worldometers.info/coronavirus/ as viewed on 1/10/2021

# IMPACT OF THE PANDEMIC CRISIS ON GENDER INEQUALITY IN INDIA

- Deeplata Deeksha Jha, 2<sup>nd</sup> Year, UG

## **Abstract**

The COVID-19 pandemic has, without exaggeration, induced an upheaval and left us in a contorted world, where the road to normalcy still remains nebulous. One significant aspect to consider in this aftermath is the gender dimension. We know how patriarchal practices and imposed gender norms subjugate women. However, it has been shown that the autonomy of women is further compromised during any health emergency – and this pandemic has been no exception. This paper aims to examine the widening gender gap that has resulted and propose some steps to overcome it.

## **Keywords**

Gender gap, Post-Pandemic Recovery, Policy Approach, Response Initiatives, Socio-economic Disparity, Unemployment

## JEL Classification

D04, D63, J16

## Introduction

According to the World Economic Forum's Global Gender Gap Report 2021, India has slipped 28 places to rank 140<sup>th</sup> among 156 countries, becoming the third-worst performer in South Asia. The pandemic has indisputably helped precipitate this - because the kinds of unprecedented effects that ensued have disproportionately been projected upon women.

## Literature Review

Coronavirus has deeply penetrated society and warped the socio-economic composition of our country. The said composition, however, was already crippled with gender inequalities. In fact, India had some of the worst gender statistics in the developing world before the onset of the pandemic, with female labour force participation (one of the strongest indicators of women empowerment), lingering around the 20% mark (Global Gender Gap Report, 2021). In the past decade, although Indian GDP has grown by around 6%, there has been a large decline in female labour force participation.

In addition, socio-cultural gender roles have continued to repress women, especially in marginalised rural communities entrenched in gender-based discrimination. With such being the status-quo, what the pandemic has brought forth is evidently an exacerbation of pre-existing disparities (Estrada, Dolun, Carmen & Schmidt, 2020). On average, women spend 9.8 times more hours than men on unpaid domestic chores and 4.5 hours a day caring for children, elders and the sick. During the pandemic, their share of unpaid care work grew by nearly 30 per cent (Azcona et al., 2021). By April 2020, although more men than women lost jobs in absolute terms, women were 20 percentage points less likely to be employed among those employed

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20 Data from World Bank

<u>Labor Force Participation Rate, Female (% of Female Population aged 15+) (modeled ILO estimate)</u>

Source: International Labour Organization, ILOSTAT database, 2021

before the pandemic

and by August 2020, although both had recovered partially, women were behind men (Deshpande, 2020). The Ebola epidemic had showed us that women are likely to remain in prolonged unemployment or exit the labor force, and now the gender poverty gap is expected to worsen well into 2030 (Khan & Nikore, 2021). As India seeks to recover, it's imperative to include women at the core of our revival strategy - this must be done by first understanding the various relevant facets and then shaping policies accordingly.

## The multi-layered role that covid-19 has played in deepening gender disparities

Evidence shows that even in normal times, women tend to be more burdened with menial responsibilities when infrastructure is inadequate. For instance, according to Sitaram Shelar of PaniHaq Samiti, a non-profit focused on water access, about 4.5 million people in Mumbai only have community taps as their water source. Research on the virus's impact in such slum communities has revealed that lockdowns aggravated the marginalisation of women when household water needs swelled and they had to spend more time queuing up. Some were also

compelled to turn to underground water markets, thus putting their safety at considerable risk. Of course, this is just one example out of a myriad. According to an Oxfam study, there is also a potential linkage between unpaid care work and violence against women. In fact, the lockdown period has seen a staggering rise in domestic violence against women - The National Commission for Women (NCW) received an increasing number of distress calls from women seeking help. Furthermore, a third of married women in India report experiencing spousal physical, sexual or emotional violence – which took place partly due to everybody being confined at home under unfavourable circumstances.

What introduces yet another layer to this problem is that lockdowns have cut off most formal and informal support systems for women. In developing countries, low-income families often share one smartphone, owned by the husband. So, with the lack of said systems, women's access to the outside world has been heavily curtailed. Additionally, women bear a disproportionate risk in terms of exclusion from the labour force, which harms their economic prospects even in the long run. Around 90% of India's women are engaged in informal employment — unpaid or irregular work, and women also form a significant portion of the workers employed in the most vulnerable sectors i.e., retail, hospitality and service, and that too, in branches such as textile and apparel that are characterized by low wages, long working hours and significant gender pay gaps (Asadullah & Raghunathan, 2020). As per the CMIE Consumer Pyramids Household Survey (CPHS) data, 4 out of 10 women lost jobs in India and 17 million women lost their jobs during the nation-wide lockdown in March and April 2020.

Apart from direct job losses during lockdown, even as India exercises its post pandemic strategies with requirements that businesses operate with fewer employees, mechanisation will accelerate and menial jobs which are more commonly relegated to women will be the first to go, potentially leading to a trend that will only amplify the damages that have already occurred over the last two years, resulting in the "feminization" of income poverty.

Such effects combined, can create new cycles of poverty and subjugation, especially among working-class women, which would mean that even as the pandemic gets over, the disparities that have been catalysed are likely to get worse yet.

## So, what is the solution?

Clearly, something needs to be done to alter the trajectory and help close the ever widening of the gap. This will involve a multitude of measures, at each level of administration. Needless to say, the first priority should be to restore pre-existing health services and social safety net schemes for women that had been suspended upon the imposition of lockdown. Further, expanding provisions at the community level would immensely help in boosting women's economic and social empowerment at the grassroots and make a real difference by creating economic opportunities for women that also serve the needs of the pandemic.

That being said, such micro-initiatives pale in comparison to the extent of the problem – to put things in perspective, the UNFPA warns that the pandemic could reduce progress against gender-based violence by one-third. On a macro level, it is imperative to collect accurate gender-disaggregated data on employment and health impacts, to design policies that truly cater to the current scenario and actively mitigate the current trends. In the short run, redressal and prevention mechanisms need to be prioritised to curb the rising cases of domestic violence – a problem that requires immediate attention. A temporary basic income for impoverished women can also help alleviate economic pressures and empower them to make independent choices. A monthly investment of 0.07%-0.31% of a developing country's GDP could provide reliable financial security to 613 million deprived working-aged women (Paul, 2021).

A more sustainable and long-term solution (or a step towards one, rather) would include initiatives to enhance digital access, and upskill low-income women. Inter-alia, fair wages and better terms of employment need to be ensured to prevent marginalisation of women. Moreover, direct employment programmes to provide necessary supplies should be expanded; for example, the Andhra Pradesh government employed thousands of women to stitch masks – such schemes can provide a cushion for women in the post- lockdown transition period as they try to find more permanent forms of employment. Involving more women lawmakers in our post-pandemic recovery can also help ensure greater investment in public goods that serve women's needs.

## Conclusion

Our current scenario necessitates an active effort to understand the specific needs and contributions of women in all dimensions, and apply the understanding to revive the country effectively and inclusively, while doing away with both horizontal and vertical segregation in the labour market. The response should include anti-discrimination laws and affirmative action initiatives encompassing all aspects – from access to financial relief packages, credit and unemployment benefits to removing barriers for women to perform higher-skilled and betterpaid jobs. Not only in India, but in every part of the world, the socio-economic crisis of COVID-19 must be understood through the lens of gender, so that the policy response can be tailored accordingly. For India to consolidate its position as a global growth leader, more concerted

efforts at both micro and macro levels, by the public sector as well as the private sector, are needed to bring women to parity with men.

- 1. Khan, P. R. K., &Nikore, M. N. (2021, January 11). *It is Time to Address COVID-19's Disproportionate Impact on India's*. Asian Development Blog. Retrieved November 13, 2021.
- 2. Deshpande, A. D. (2020, October). *The COVID-19 Pandemic and Gendered Division of Paid and Unpaid Work: Evidence from India* (No. 13815). IZA Institute of Economics. Retrieved November 13, 2021.
- 3. Azcona, G. A., Bhatt, A. B., Encarnacion, J. E., Plazaola-Castaño, J. P., Seck, P. S., Staab, S. S., &Turquet, L. T. (2022). *From insights to action: Gender equality in the wake of COVID-19* (No. 978–92-1-005339–6). UN Women. Retrieved November 13, Roche, E. G. C. P. (2020, October 29).
- 4. Pandemic has worsened gender inequality in India, says Oxfam. Mint. Retrieved November 14, 2021, from Estrada, C. U. E., Dolun, M. D., Schuber, C. S., & Schmidt, N. S. (2020, May 6).
- 5. Industries post-COVID- 19: A gender-responsive approach to global economic recovery. Industrial Analytics Platform. Retrieved November 14, 2021.
- 6. Asadullah, M. N. A., & Raghunathan, K. R. (2020, July 8). *Tackling India's deepening gender inequality during COVID-19*. South Asia@LSE. Retrieved November 12, 2021.
- 7. The Diplomat. (2020, June 26). Fighting Gender Inequality in India During the COVID-19 Pandemic. Retrieved November 13, 2021.
- 8.Labor force participation rate, female (% of female population ages 15+) (modeled ILO Estimate) India Data. (2021, June 15). ILOSTAT Database.
- 9. Paul, M. P. (2021, March 5). Women's Day: UNDP bats for temporary basic income to combat COVID-19. Retrieved November 14, 2021.
- 10. Global Gender Gap Report 2021. (2021, March 31). World Economic Forum. Retrieved November 12, 2021.

## THE PERILS OF COVID-19: A GENDER SPECIFIC ANALYSIS

- Ahana Saha 3<sup>rd</sup>Year, UG

"Empowering women is key to building a future we want."-Amartya Sen

## **Abstract**

The Covid-19 pandemic has brought unprecedented changes in the lives of people across the globe. Women are facing disproportionate negative impact of the pandemic. This article discusses briefly about the gendered effects of the pandemic and suitable policies that have to be implemented to deal with the issues.

## **Keywords**

Covid-19, Gendered impact, Policy, Unpaid Work

## **JEL Classification**

J710, J780

## Introduction

The Covid-19 pandemic has brought unprecedented changes in the lives of people across the globe. Economies around the world have faced catastrophic effects on account of the pandemic. Certain sections of the society have been severely affected, including migrant workers, domestic workers, daily wage labourers and other poor and marginalised groups. Women and men are experiencing the effects of the Covid-19 pandemic differently. According to surveys conducted by UN Women, females have been bearing the brunt of the Covid-19 pandemic more than men. The pandemic has exacerbated gender inequality. Females, who are refugees, belong to minority ethnic groups or are poor and marginalised, face higher risks during a crisis. It adds up to the income, food and physical insecurity they have already been facing. Studies claim that, at the global level, 70 percent of healthcare workers and first responders happen to be women and girls. But women are not at par when compared to their male counterparts. In the health sector itself, the gender pay gap is 28 percent, which is higher than the overall gender pay gap at 16 per cent. Female employees faced increased job loss during the lockdown compared to the males. At the beginning of the pandemic, 25 per cent of self-employed women lost their jobs while in case of males it is 21 percent. Some females experienced reduction in access to existing reproductive health care facilities during the lockdown. Women and girls have been subjected to increased cases of gender- based violence. Due to the advent of the

pandemic, females in the informal sector experienced a dramatic decline in capacity to earn a living.

## **Gendered Impact of COVID-19**

The pandemic has increased the burden of work done by women. Pandemic induced lockdowns resulted in women juggling income loss and increase in unpaid work. Major activities done by women like cooking, cleaning and other household chores, childcare and care of the sick and elderly, goes unpaid. Restrictions imposed to prevent contagion caused the entire family to stay at home all the time as a result of which females faced a burden of increased unpaid work.

Evidences show that, a large number of girls dropped out of schools during the pandemic crisis and there has been a surge in the rates of early marriage and teenage pregnancy. Death of both the parents, economic stress, closure of educational institutions due to the pandemic, are some of the reasons that put girls at increased risk of child marriage. Cases of cyber violence and trafficking of women and girls also increased. Because of travel restrictions, girls failed to access proper health care and community support that protect them from domestic violence, child marriage and teenage pregnancy. The pandemic has taken its toll on the mental health of women.

## The Indian Scenario

Table 1: Time Spent on Paid, Unpaid and Total Work in India by Gender

Time spent (in minutes per day)	Unpaid work	Paid work	Total
Men	51.8	390.6	442.3
Women	351.9	184.7	536.6

Source: OECD.Available at https://stats.oecd.org/index.aspx?queryid=54757(accessedon 12thNov,2021 at 6 pm)

The above table shows that, time spent on unpaid work by women (351.9 min/day) is much higher compared to the males (51.8 min/day). There are disproportionate effects of the burden of unpaid work on females.

When the entire nation moved into lockdown on 24<sup>th</sup> March, 2020; economic activities had come to a standstill. The pandemic has worsened the already declining female labour force

participation rates in India. Women in the informal sector have been negatively impacted by the pandemic. Restrictions on mobility and social isolation measures have resulted in loss of jobs of most females working as domestic help and the ones dependent on daily wages in the informal sector. Those still working, experienced a reduction in their wages. Some females were found compromising their meals to provide adequate food for their husbands and children. As a result of financial stress in the family, debts incurred by them have increased. In 2021, between March and April, women from rural regions accounted for 80 per cent of job losses in the informal sector. Therefore, the pandemic has profoundly affected the lives of women in India.

## **Conclusion and the Way Forward**

Covid-19 has posed a severe threat to the health, safety and economic security of women. For the response and recovery of the pandemic, it is vital to pay attention to increased gender inequality. Policies should be centred on addressing the disproportionate negative impact of the pandemic on women and girls. Some policy recommendations are as follows:

- Pandemic response and recovery must be gender inclusive and should address the disproportionate negative impacts of the pandemic on females.
- In order to combat violence against women, more focus should be made on the roles of female experts and civil servants and in the application of gender-responsive budgeting.
- Extension of pathways for the admission and housing of survivors of gender-based violence, women who have left their abusive partners, migrant women workers who are at risk; would help reduce gender-based violence.
- Appropriate gender-responsive training and capacity-building to social and health workers and assistance by law enforcement professionals to the vulnerable groups of women, should be provided.
- Proper representation, redistribution, reduction and recognition of care work done by women should be made to reduce the burden on them.
- There must be encouragement of female-based start-ups and promotion of self-help groups to empower women.

• Improving the wage structure with more emphasis laid on female-dominated sectors and proper allocation of government schemes to cater to the needs of the poor and marginalised females; are some of the steps that can be undertaken.



## Female healthcare workers at a government hospital in Port Blair

Source: From the author's gallery.

47 per cent of all healthcare workers and more than 80 per cent of midwives and nurses are females, who have risked exposure to the deadly virus during the pandemic. Female workers make up the majority of social work and service sectors. Self Employed Women's Association (SEWA) workers, have been working tirelessly to provide necessary commodities and ration to the poor and marginalised groups in India. The Anganwadi centres have provided free meals, health check-ups for children and pregnant women and access to government schemes. The government has to play a major role in the empowerment of women for a better future.

- Azcona, G., Bhatt, A., Davies, S. E., Harman, S., Smith, J., & Wenham, C. (2020). Spotlight on gender, COVID-19 and the SDGs: will the pandemic derail hard-won progress on gender equality? UN Women. Available at: <a href="https://www.unwomen.org/en/digital-library/publications/2020/07/spotlight-on-gender-covid-19-and-the-sdgs">https://www.unwomen.org/en/digital-library/publications/2020/07/spotlight-on-gender-covid-19-and-the-sdgs</a>(accessed on 12<sup>th</sup> Nov 2021, at 4 pm).
- Azeez EP, A., Negi, D. P., Rani, A., & AP, S. K. (2021). The impact of COVID-19 on migrant women workers in India. *Eurasian Geography and Economics*, 62(1), 93-112. Available: <a href="https://www.tandfonline.com/doi/full/10.1080/15387216.2020.1843513?scroll=top&needAccess=true">https://www.tandfonline.com/doi/full/10.1080/15387216.2020.1843513?scroll=top&needAccess=true</a>(accessed on 28<sup>th</sup> Jan 2022, at 9 pm).

- Chauhan, P. (2020). Gendering COVID-19: impact of the pandemic on women's burden of unpaid work in India. *Gender issues*, 1-25. Available at: <a href="https://link.springer.com/article/10.1007/s12147-020-09269-w">https://link.springer.com/article/10.1007/s12147-020-09269-w</a>(accessed on 28<sup>th</sup> Jan 2022, at 9:10 pm).
- UN Women (2020). COVID-19 and its economic toll on women: The story behind the numbers. Available at: <a href="https://www.unwomen.org/en/news/stories/2020/9/feature-covid-19-economic-impacts-on-women(accessed on 14th Nov 2021, at 8 pm)">https://www.unwomen.org/en/news/stories/2020/9/feature-covid-19-economic-impacts-on-women(accessed on 14th Nov 2021, at 8 pm)</a>.
- UN Women (2021). Your questions answered: Women and COVID-19 in India. Available at: <a href="https://www.unwomen.org/en/news/stories/2021/7/faq-women-and-covid-19-in-india">https://www.unwomen.org/en/news/stories/2021/7/faq-women-and-covid-19-in-india</a>(accessed on 12<sup>th</sup> Nov 2021, at 6:30 pm).
- UNICEF (2021). 10 million additional girls at risk of child marriage due to COVID-19. Available at: <a href="https://www.unicef.org/press-releases/10-million-additional-girls-risk-child-marriage-due-covid-19">https://www.unicef.org/press-releases/10-million-additional-girls-risk-child-marriage-due-covid-19</a> (accessed on 14th Nov 2021, at 8:30 pm).

## GENDER ROLES, HUMAN RIGHTS AND EMPLOYMENT DURING COVID-19

-Indrani Mukherjee, Deboparna Poddar and Meghna Seal 3<sup>rd</sup>Year, UG

## **Abstract**

This paper aims to portray how the Covid-19 pandemic impacted gender inequality, labour inequality and gendered roles in the Indian context, both in the formal and informal sector, along with throwing light on the gender-based violence that has persisted in the socioeconomic space. It also aims to show the ramifications of the pandemic on the LGBTQIA+community.

## **Keywords**

Covid-19, Gendered Roles, Gender Inequality, Labour Laws, LGBTQIA+ Community, Violence

## **JEL Classification**

B54, I14, J12, J15, J16, J71

## Introduction

Across the world, a significant number of lives have been lost due to the COVID-19 pandemic, which has posed an unprecedented threat to public health and the workplace. Tens of millions of people are at risk of falling into extreme poverty as a consequence of the pandemic's economic and social effects. A contagious disease caused by the SARS-CoV-2 strain of coronavirus (severe acute respiratory syndrome), Covid-19 has impacted gender inequality, further exacerbating it.

Inequalities in treatment result when individuals are perceived differently based on their gender. It manifests itself in a variety of ways in our lives. Women and the LGBTQIA+ community in India are often confronted with gender inequality and discrimination in varying degrees. A discriminatory act is the treatment of people unfairly based on their sex, race, etc. This is deemed a barrier to achieving equality, development, and peace.

## **COVID-19** and inequalities

COVID-19 especially worsens inequalities between men and women as gender differences are implicated. As a result of these socio-cultural and economic factors, women have a different capacity to absorb economic shocks than men. The hardship felt most severely by low-income

groups was due to a nationwide lockdown that was reluctantly implemented in late March, bringing life to a standstill, primarily in large cities and towns. Life during the lockdown couldn't have been easier for those with means, with healthcare services available on their doorsteps, offices, and schools accessible through high-speed Internet connections and shopping and entertainment at their fingertips. A precarious position could not have been worse for the invisible majority, which already lacks adequate social security such as paid leave and medical care.

Women working in the informal sector have faced undue difficulties in the form of domestic and/or sexual violence and have undergone problems relating to hygiene and sanitization (in the form of lack of availability of sanitary products, medical facilities, and proper healthcare). Economic policy formulation requires a gender-inclusive perspective. The Indian Government's response to the pandemic has excluded specific measures for women. In the wake of the economy's struggles, their livelihoods have been debilitated by the loss of income during the lockdown period and the increased odds of being underpaid. Children who are forced to work to supplement the family's income are suffering from the consequences, one of them being an increase in school dropouts.

Many women employees, including construction workers, vendors, micro, small and medium companies, garment makers, and platform-based service providers, spend 12-16 hours each day away from home due to demanding work circumstances and infrequent public transportation (Patel, 2021). More attention is being paid to non-coronavirus patients as public health services shift their focus from Coronavirus patients to non-coronavirus patients, resulting in maternal and neonatal death and morbidity. Because vaccination programmes for children and pregnant women have been threatened, a major issue for reproductive healthcare has resulted in an increase in morbidity among women and babies. Due to the absence of family planning services, the number of unintended pregnancies, childbirths, and maternal deaths among women workers is likely to rise.

The pre-existing gender inequality and the growing divide in the gendered roles for men and women (excluding the LGBTQIA+ community because no policies are holistically made as of now to take into consideration their needs) have given rise to persisting inequalities in the labour markets stemming from the inability of women to perceive economic shocks (due to COVID -19) in the same way as men. Lack of data post-COVID-19 makes quantification of changes in gendered labour markets difficult. In the context of India, we have low and declining labour force participation rates, which have been exacerbated due to the pandemic.

Women have suffered a relatively higher loss of income and earnings. Additionally, the hours spent by women on household chores and additional responsibilities have also increased due to the pandemic. The Indian economy would gain INR 19 lakh crore (Sinha, 2020) a year if women were recognized for the amount of time they spent on unpaid care work (which refers to activities completed in the home that are not market-related, such as household chores and caring for family members).

To make labour laws that are inclusive, we need to take into account the sociological perspective of women and not just the economic measures. Employment records from National Sample Survey Office (NSSO) have seen that the labour force participation rate of women has decreased in the rural areas from 35.8% in 2011-12 to 26.4% in 2018-19, which further keeps decreasing and stagnating (Mitra et al., 2021).

Self-employed women have especially taken a hit due to this pandemic, with combined reasons of having to sacrifice their employment and entrepreneurial status in order to take care of the households (especially in rural areas). An important factor here is that it is difficult to assess women's work as a large part of non-market aspects of women's work remain unremunerated and unrecognized. Non-recognition of this work is important in increasing causation behind feeling 'invisibilized' and unemployment.

Future work trends will only increase existing inequities for women and the LGBTQIA+ community unless structural and systematic discrimination is specifically addressed. With the marginalized communities bearing the brunt of the COVID-19 fallout, the government's relief measures urgently require a second version that takes into account their suffering. The prevailing socio-economic disparities must be taken into account while formulating policies, with women's and the LGBTQIA+ community's human rights placed at the centre. Their participation must be fostered at all levels of governance, starting from municipalities and panchayats. Inclusion of policies and acts taking into account the actions of the marginalized LGBTQIA+ community should be undertaken by the government whereby acts and policies need sections including them (especially in the employment sector associating with labour laws). Direct financial assistance should be provided to women's and LGBTQIA+ organizations, and local authorities operating at the grassroots level must ensure that resources are accessible to the marginalized communities. The chances for these communities to recover in the economy will improve if they have access to equal pay, pensions, paid sick leave, and maternity benefits. Gender-responsive budgeting along with protection services to deal with

violence against women and the LGBTQIA+ community are required for the reduction of socio-economic inequality.

## Conclusion

COVID-19 has brought to light the multidimensional deprivations faced by marginalized communities, thus emphasizing the necessity to re-evaluate the existing social protection schemes and policies. Policies must be made more inclusive, considering women and the LGBTQIA+ community at all the stages of decision-making rather than being treated as an afterthought or being left out altogether. Though this calls for immediate action, the long-term goal is redistribution of power relations and thus making the socio-economic structure of the country more equitable.

- 1. Jayaram, N., Jain, P., & Sujatha Sugathan, S. (2019). No City for Migrant Women: Construction Workers' Experiences of Exclusion from Urban Governance and Discrimination in Labour Markets in Ahmedabad. Gender & Development, 27(1), 85-104.
- 2. Mitra, S., & Sinha, D. (2021). COVID-19 and Women's Labour Crisis Reiterating an Inclusive Policy Response. Economic and Political Weekly, 44-51.
- 3. Motihar, Renuka (2020): "The Impact of COVID-19 on Reproductive Health Services," India Development Review, 25 June. URL:https://idronline.org/the-impact-of-covid-19-on reproductive-health-services/ accessed on 12.11.2021 at 00:50 IST
- 4. Patel, V. (2021). Gendered experiences of COVID-19: Women, Labour, and Informal Sector. Economic and Political Weekly. 56(11).
- 5. Sinha, N.(2020). The need for a gender responsive economy in the aftermath of COVID-19 in India. URL: <a href="https://blogs.lse.ac.uk/southasia/2020/07/27/the-need-for-a-gender">https://blogs.lse.ac.uk/southasia/2020/07/27/the-need-for-a-gender</a> responsive-economy-in-the-aftermath-of-covid-19-in-india/ accessed on 11.11.2021 at 22:22 IST
- 6. Unni, Jeemol (2020): "Impact of Lockdown Relief Measures on Informal Enterprises and Workers," Economic & Political Weekly, 55(51).
- 7. URL:https://www.epw.in/engage/article/not-sailing-same-boat-why-covid-19-pandemic has accessed on 13.11.2021 at 15:51 IST.

## RETHINKING UNPAID CARE WORK AS INTERMEDIATE SERVICE

-Tavishi Rupani, Shyani Mukherjee 2<sup>nd</sup> Year, PG

## **Abstract**

Unpaid care work is both an important aspect of economic activity and an indispensable factor contributing to the well-being of individuals, their families and societies (Stiglitz, 2007). The gender inequalities in the time allocated to this work are glaring, with McKinsey (July, 2020) estimating that women do 75% of the world's total unpaid care work. This inequality has a direct correlation with participation in the formal economy. Based on an ILO report on 'Care work and care jobs for the future of decent work', unpaid care work is the main barrier preventing women from getting into, remaining and progressing in the labour force. Therefore, policies should address the rising need for care and tackle the huge disparity between women's and men's care responsibilities.

## Kevwords

Family Economics, Labor Discrimination, Unpaid Care Work, Women

## **JEL** classification

J71, J16, J12

#### Introduction

The Global Pandemic Crisis has brought to limelight the fact that the maintenance of a large portion of the formal economy and the sustenance of our daily lives are built on the seemingly invisible and unpaid labor, which majorly constitute that of women and girls. With the world being forced into a complete standstill, children out of school, absence of domestic helpers (housemaids, nannies etc.) and increased care needs of elderly and ailing family members, the demand for caregivers and care work has increased exponentially. Thus, women now face a difficult time trying to juggle between their jobs and rising care and domestic work demands.

## Women's unpaid care work

Before the pandemic, women were doing thrice the amount of unpaid care work than that of men. In India it was 9.8 times more (NITI Aayog, 2017). With the advent of the pandemic and imposition of the lockdown, this gender gap in average hours spent on domestic work decreased in the initial stages. However, with the 'new normal' starting to become normal, the lion's share of the increased burden of domestic chores and care work fell on the shoulders of women as it had always been, conditioned and governed largely by the patriarchal structure.

Women's unpaid care work forms a substantial part of an unseen economy that has real impacts on the formal economy, and in everyone's lives as it has a direct link to wage inequality, lower income, poorer education outcomes, and physical and mental health stressors. According to the UN Women report (2020) 16.4 billion hours are spent on unpaid care work every day, which is equivalent of 2 billion people working 8 hours per day without pay. The actual value of this work amounts to USD 11 trillion, which is almost 9 percent of the global GDP. An econometric analysis performed by Eric Bettinger et al. (2014) on the effects of stay-at-home parents on children's long-run educational outcomes, found that reduced labour force participation of women was the major determinant of better academic performance of students. The study also found that the benefits of this extend beyond the early years of a child's life. Another research stated that the effects of working mothers can have a negative impact on cognitive and emotional abilities of children. These negative psychological impacts in the developmental stages of a child lead to reduced productivity in future. Assigning an economic value to this loss of productivity would only add up to the already depressing figures.

The working woman is an institution on her own accord, balancing work life on one hand and looking after the needs of her family on the other. It is important to understand that both these jobs are extremely daunting, and to do justice to each without neglecting the other is a formidable task. The pandemic has exacerbated this daily struggle of maintaining a balance between the two.

It is crucial to make policies facilitating unpaid care work as a means of pandemic recovery since it ensures people's well-being, education, and income, which is especially critical given the rise in home-schooling, elderly susceptibility, and work-from-home arrangements. However, when it comes to formulating policy based on this issue, the women who are most affected are left on the periphery of most narratives. We have the potential to be transformative if we construct more inclusive and robust economic structures and recognise, eliminate, and redistribute unpaid care work once and for all.

#### Conclusion

India's response to the pandemic has depended heavily on the exploited labour of women workers, most of them from marginalized backgrounds. However, the long-term consequences of not acknowledging and aiding this unpaid care work can be appalling since it is not infinitely elastic. As can be seen in the case of ASHA workers, without adequate support and immediate action, it is impossible to guarantee continuity of care for those who need, which is crucial in

dealing with a crisis of this magnitude. It is also important to recognize unpaid family and community caregivers as essential workers. Apart from creating a new provision of salary for carework, we need to strengthen awareness, implementation and utilization of other existing policies such as SwadharGreh Scheme, Mahila Shakti Kendra etc, such that there is non-reversal of the gender equality progress that had been achieved in the recent decades. It is high time that we realize the importance of care work as a generator of productivity and go so far as to acknowledge care work as an intermediate service for the production of final outputs and service.

- 1. Agrawal, M. (2019, July 26). *It is not your job Unpaid care work in India*. Retrieved from OxfamIndia: <a href="https://www.oxfamindia.org/blog/unpaid-care-work-in-india#:~:text=Unpaid%20care%20work%">https://www.oxfamindia.org/blog/unpaid-care-work-in-india#:~:text=Unpaid%20care%20work%</a>
  20constitutes%20for,%2DSaharan%20Africa%20(39%25).
- 2. Company, M. &. (2020, July 15). COVID-19 and gender equality: Countering the regressive effects.
- 3. *Policy Brief.* (n.d.).https://reliefweb.int/sites/reliefweb.int/files/resources/policy-brief-theimpact-of-covid-19-on-wo men-en.pdf
- 4. Stiglitz, J. A.-P. (2007). Report on the Commission on the Measurement of Economic Performance and Social Progress. *Paris: Commission on the Measurement of Economic Performance and Social Progress*.
- 5. Whose time to care? Unpaid care and domestic work during Covid-19. (n.d.). Retrieved from:
  - $https://data.unwomen.org/sites/default/files/inline-files/Whose-time-to-care-brief\_0.pdf$
- 6. Women, work and pandemic: An impact study of Covid-19 lockdown on working women inIndia. (n.d.). Retrieved from:https://onlinelibrary.wiley.com/doi/epdf/10.1111/aswp.12240

## **COVID-19 AND DIGITAL DIVIDE: AN IMMINENT THREAT**

-Chandraboli Das, Ranadeep Das and Subholaxmi Roy 3<sup>rd</sup> Year, UG

## **Abstract**

The pandemic has denuded some of the extant detrimental impediments to mankind—digital divide, undoubtedly, being one of the worst of its kind. Digital Divide, although not having remarkable short-term impacts, can be one of the potential deterrents to the growth trajectory of any country in the long run. With its multifaceted dimensions, the phenomenon has posed severe threats to human capital formation, gender equality, access parity and so on. Through this paper, we explore this pernicious issue and attempt to suggest some of the crucial, yet not exhaustive, policies to combat this.

## **Keywords**

Digital Divide, Gender Inequality, Internet Access, Mobile Penetration

## JEL classification

F63, F68, I24, I25, J24, O15

## **Introduction**

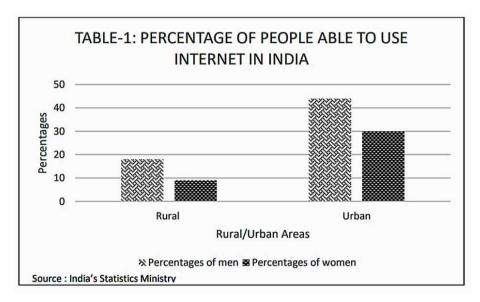
The year 2020 had been scarred by the indelible impact of the SARS-CoV-2 virus, popularly known as the COVID-19 virus. The reverberations of this invisible foe have been felt in almost every dimension, not just on health. Thereafter, like many other countries, India went into a complete lockdown on March 24, 2020 disrupting the normal way of life to every extent. It can be noted, however, that by government mandate, all the necessary commodities were made available for the general public. The new normal encompassed a sudden shift from the hitherto offline to the online mode, as physical presence was not feasible, with all the educational institutions and workplaces closing for an indeterminate stretch of time. Such an abrupt transition has aggravated an already existing, yet impactful, form of divide - the Digital Divide.

## **Digital Divide and its impacts**

Organisation for Economic Co-operation and Development (OECD) defines the term 'digital divide' as "the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard to both their opportunities to access information and communication technologies (ICTs) and to their use of the Internet for a wide variety of activities". This digital inequality has been magnified post-pandemic due to the lack of access to smart devices and internet facilities. It has contributed to the separation of individuals in the

society across age, gender, race, ethnicity, etc. Low literacy and income levels, topographical restrictions, lack of motivation and digital illiteracy contributed to this divide. Some types of Digital Divide that are prevalent in the society are as follows:

• Gender Divide: In low-income countries, 90 out of 100 men are more likely to own a mobile phone than women. This is equivalent to almost 184 million women across the world who don't have access to mobile connectivity. In India, it was observed that women are 15% less likely to possess a mobile phone and 33% less likely to use internet services as compared to men (Nikore et al., 2021). A recent study in 2020 found that about 25% of the total adult female population had smart phone accessibility vis-à-vis 41% of adult men.



- Social Divide: Internet helps to create bonds, relationships and social circles among people who share mutual interests. Social media platforms like Twitter, Facebook, Instagram and many others began to increasingly act as substitutes for physical interactions and gatherings (Steele, 2019). The number of Internet users in India has increased to a mammoth 624 million in 2021, which is roughly 45% of the total population of India. People without internet access feel isolated due to the dearth of interactions and connectivity, thereby often facing mental health issues.
- Universal Access Divide: When it comes to accessing the internet, the relatively disadvantaged ones are those with physical disabilities and mental retardation. Even if they have all the relevant skills, they are unable to operate with the available hardware and software. The scarcity of digital literacy skills and disparities in education has amounted to a rising global inequality. 12% of the global internet consumption is accounted for by Indians,

notwithstanding half of its population lacks internet access, and even if they avail online services, a mere 20% are aware on how to use such facilities (Upadhyay, 2021). Moreover, poor broadband infrastructure contributes to several hardships faced by a large section of the population in the Less Developed Countries (LDCs) more than often. A rural-urban digital divide is also prominent when it comes to broadband penetration, with only 29% in the rural areas versus the national average of 51%. A study conducted by Pew reveals that 47% would like to own a smart phone but cannot due to security, financial, and linguistic reasons.

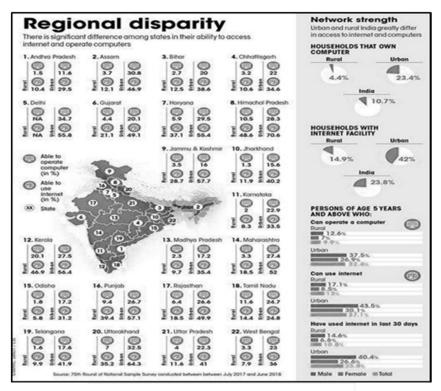
The world witnessed a switch in the medium of imparting education, as traditional classrooms became defunct and 'online learning' through software like Microsoft Teams, Zoom, Google Classroom, Webex, etc., emerged as the new alternative. However, due to the divide, the unfortunate ones were refrained from any further education and in extreme cases, even leading to dropouts. The Azim Premji Foundation, an Indian Non-profit organization, reported that almost 60% of school-going children in India were not able to retrieve online educational facilities.

## Why we need to bridge the gap?

According to Digital Divide Council (DDC), the digital inequality affects the economy as telecommunications and internet connectivity aids many economy-boosting activities along with generating employment and human capital formation. Technology literacy is a challenge that is confronting students, teachers and parents across the country and a substantial portion rely on non-smart gadgets. One of the reasons for the widening gap between the 'information rich' and 'information poor' is the absence of technological amenities. Thus, it becomes crucial to initiate steps that would act as a catalyst for bridging this striking gap.

## **Conclusion and Way Forward**

PICTURE 1: DIGITAL DIVIDE IN INDIA – REGIONAL DISPARITY



Source: National Sample Survey Organistaion

There are various governmental and non-governmental initiatives taken, both pre and post pandemic, so as to ensure a holistic digital inclusion across the nation. However, the pandemic taught us that more needs to be done. It is not logistically possible for the government to provide mobiles to every child (Nikore et al., 2021). But a gadget-library can be constructed in every block and panchayat samiti where students without smart-devices, can borrow the gadgets and later return them. Along with this, the youth can step forward and conduct village-tours; providing the children, from the marginalized and economically backward sections, with free education and their old functional smart-devices. Not just mobiles or laptops, lack of internet access is an important issue that needs to be tapped. 5G towers, built jointly by the telecommunication and IT industries, can provide free/subsidized internet packs and connection services. Finally, investments in digital infrastructure along with cooperation of both public and private sectors to create more digital inclusion in broadband plans will be a tremendously impactful step to bridge the ever-widening digital inequality. The benefits of closing the digital divide, such as increased human capital formation, greater economic development and enhanced productivity far outweigh the costs of building and providing

smart-devices and internet connections. The key to bridging the digital divide is realizing the fact that each individual, irrespective of gender, caste, or income level, must have equal access and rights. Above all, awareness and individual sensitization shall help us traverse into a better and more equitable world.

- 1. Nikore.M, Uppadhayay.I, (2021). India's gendered digital divide: How the absence of digital access is leaving women behind. Available from https://www.orfonline.org/expert-speak/indias-gendered-digital-divide/ (Accessed on November 14th, 2021)
- 2. www.online.maryville.edu (Accessed on November 14th, 2021)
- 3. Upadhyay.A. (2021). Covid-19: How online classes have widened the digital divide for under-privileged students. Available at www.timesofindia.indiatimes.com (Accessed on November 14th, 2021)
- 4. www.digitaldividecouncil.com (Accessed on November 14th, 2021)
- 5. www.livemint.com (Accessed on November 14th, 2021)

## A TRAVELLER'S DILEMMA: ASSESSING THE IMPACT OF COVID-19 ON THE TOURISM INDUSTRY

Sohini Roy, 3<sup>rd</sup>Year, UG

## **Abstract**

The COVID-19 pandemic has resulted in global challenges, economic and healthcare crises, and posed spill over impacts on the global industries, including the tourism industry. In anticipation of recovery in the tourism industry post COVID-19, this essay examines the economic impact of tourism with special reference to the Indian economy.

## Keywords

COVID-19, Foreign Exchange Earnings, Travel Risks, Sustainability

## **JEL Classification**

F60, Z32

## Introduction

The COVID-19 pandemic has left a protracted negative impact on all areas of economic activities across the world. The restrictions imposed on both domestic and international travels, severely impacted the global travel and tourism industry, with varying negative effects across countries. Tourism has a worldwide contribution to job creation as well as socio-economic and cultural development. Given the crucial role it plays in economic activities, other areas of the economy are also affected directly and indirectly, especially in tourism dependent economies. The industry plays a vital role in customer satisfaction and economic activities. However, this industry always experiences the hardiest hits of various diseases, seasonal influenza, epidemics, and global pandemics. COVID-19, being a contagious and mutating virus, poses a high infection risk for the tourists, thus making travelling difficult in the absence of effective vaccines. Earlier studies have identified that travel restrictions are the most helpful and effective interventions in the early and late phases of infectious disease to contain its spread and control transmission rate in communities.

## Global tourism and Pandemic

Tourism's impact on the economy spreads beyond economic growth. The connection to growth through the sectoral interlinkages has positive <u>spill over effects</u>. These spill over effects include, but are not limited, to increased employment, a source of government revenue added income earnings, foreign exchange earnings (FEE) and a support of <u>balance of payment</u>

(Scarlett, H. G,2021). The economic fallout resulting from COVID-19 is reflected in the declining global gross domestic product (GDP) as well as deterioration in other key macroeconomic variables. Putting this into context, international tourist arrivals [World Tourism Organisation] (UNWTO, 2021) and global growth (International Monetary Fund, 2021) are estimated to decline in 2020 by 74% and 3.5%, respectively. The fallout from the COVID-19 pandemic is far reaching, especially among developing economies, as limited international trade has slowed down foreign exchange inflows. This has resulted in the International Monetary Fund (IMF) providing emergency financial assistance to a number of these countries to meet their balance of payments needs (IMF, 2020).

The global tourism industry flourished, observing an accelerating growth rate in 2010s due to many countries' active participation. The whole of the European region, the US and China remained the key market players, contributing primarily to the growth in the said sector. In 2019, UNWTO reported that travel and tourism contributed growth of 9.3 trillion US dollars to it, with a direct contribution of 2.9 trillion US dollars. However, this industry observed a 98% sharp decline in May 2020, when worldwide travel bans and restrictions were imposed to contain the quick transmission of the pandemic. Compared to the 2019 data for the same period, the records given by destinations showed a drastic decline of 56% in arrivals of global tourists in the first five months of 2020 (Abbas et al,2021).

Asia and the Pacific region recorded a steep 60% decline in arrivals from January to May 2020. The travel and tourism industry in Europe was the second-highest affected sector and recorded 58% fewer arrivals, while the Middle Eastern countries experienced a decline of 51% arrivals. In comparison, Africa and the Americas both reported a 47% dip in tourist arrivals at the same time (World Tourism Organization, 2021).

Tourism-dependent countries will likely feel the negative impacts of the crisis for a much longer period than other economies. Contact-intensive services, key to the tourism and travel sectors, get disproportionately affected by the pandemic and will continue to suffer till people feel safe to travel again.

#### The case of Indian tourism-A close look

Tourism in India has a heterogeneous portfolio ranging from adventure, cruises, and wellness, historical and religious tourism. Owing to this potential, India attracts both domestic and international tourists.

Tourism in India is a potential employment generator and a significant source of foreign exchange for the country. Since the outbreak of the COVID-19 pandemic and implementation of the nation-wide lockdown in early March 2020, the tourism companies have been experiencing a miserable journey of cancelled bookings which have resulted in a 'paralysis' of the market. A study conducted by the National Council of Applied Economic Research has reported that the pandemic recorded a significant job loss of around 38 million in the tourism sector, which is 70% of the total workforce, after the implementation of the lockdown. A decline in Foreign Exchange Earnings (FEE) by 76.3% is also reported during the months between January and December 2020 in comparison to corresponding period in 2019.

The foreign exchange earnings (FEE) from tourism are a major revenue source for the Government of India. The FEE is the revenue generated by inbound foreign tourists, and decrease in the number of foreign tourists leads to a reduced FEE. A declining FEE is alarming and calls for a restructure in the tourism sector along with the formulation of necessary policies to manage the activities better. Studies have proved that if the policies are not restructured properly, the FEE will decline below 1790.53 million USD and will eventually lose to the economy (Jaipuria et al, 2020).

Representatives of the tourism sector including tour guides and tour operators have appealed multiple times to the government with petitions highlighting the deep financial stress caused by the pandemic on the tourism and hospitality sector during 2020-21. In view of reviving the tourism enterprises and jobs, FAITH, the Federation Of Travel And Hospitality Businesses in the country, made a waiver of statutory obligations. FAITH suggested that states should offer a 100% waiver, without penalties, to travel and hospitality businesses on all utility charges fixed electricity, excise duties, property taxes, interstate tourist transport taxes, SGST waiver, and all local taxes. The industry body also guaranteed them unutilised GST credit for the travel sector's liquidity needs. Many studies have further suggested that the union government can offer their assistance to hotels by occupying their empty rooms. Moreover, the union government in collaboration with the state governments need to work jointly to deal with the issues of the tourism sector regarding unemployment, wages, liquidity shortages and payment of salaries.

#### A way forward

Every sector of the economy has somehow been affected by the pernicious COVID-19 pandemic. Unlike other sectors, tourism mainly depends on trust of people so tourism industry

must first provide high-quality sanitation measures to avoid the risk of infection. For example, all hotels may require protective masks, gloves and disinfectants for both employees and visitors. Restaurants should serve their customers in shifts to avoid overcrowding. To maintain social distance beaches can be divided into blocks and separated from each other. If financially possible, travel companies and their partners in each region can recently start using their time to make their proposals more sustainable. The time has come to change the tourism products and reposition the tourism industry. Moreover, the governing body should develop a significant initiative and programme with specific policies and proposals to improve travel and tourism in the short run. Potential strategies may include promoting domestic tourism, as well as creating 'travel bubbles'. This will allow travel to resume between certain destinations. Moreover, the introduction of vaccine passes can further accelerate recovery. However, these measures are temporary boosts to the industry. For long-term recovery, UNWTO's Zoritsa Urosevic stressed on the importance of building new finance architecture to adopt and build "innovative, low carbon, circular, safe, and inclusive business policies, and instruments for recovery" (UNWTO,2021). At the same time, the UNWTO reiterated the need of both harmonization of policies and international cooperation, to restart global tourism and then to monitor future growth to ensure the sector delivers on its full potential to drive sustainable development.

#### References

- Abbas, J., Mubeen, R., Iorember, P. T., Raza, S., & Mamirkulova, G. (2021). Exploring the impact of COVID-19 on tourism: transformational potential and implications for a sustainable recovery of the travel and leisure industry. *Current Research in Behavioral Sciences*, 2, 100033.
- 2. Jaipuria, S., Parida, R., & Ray, P. (2020). The impact of COVID-19 on tourism sector in India. *Tourism Recreation Research*, 1-16.
- 3. Scarlett, H. G. (2021). Tourism recovery and the economic impact: A panel assessment. *Research in Globalization*, *3*, 100044.
- 4. https://www.imf.org (Accessed on Nov, 14, 2021)
- 5. https://www.imf.org/external/index/.htm(Accessed on Nov, 14, 2021)
- 6. https://www.unwto.org/impact-assessment-of-the-covid-19-outbreak-on-international-tourism (Accessed on Nov, 14, 2021)
- 7. https://www.unwto.org/taxonomy/term/347 (Accessed: November 14,2021).
- 8. https://tourism.gov.in.(Accessed: November 14,2021).

### BEARING THE BRUNT OF PANDEMIC: LOOKING INTO TOURISM SECTOR THROUGH INDIA'S EYES

Pragati Sharma, 3<sup>rd</sup>Year, UG

#### **Abstract**

The Indian tourism industry was in a phase of recovery, after being hit by geopolitical issues and "global economic slowdown headwinds", since September 2019, until it was struck by the onset of COVID-19 pandemic, leading to a further drop in its performance. This article aims to describe and analyze the impact of COVID-19 pandemic, an external 'shock' on the tourism and its related sectors, and the behaviour of consumers and firms in such a situation. It is seen that the pandemic has caused disruption and huge losses in the tourism sector. In order to revive the sector, proper restructuring and support of the government is required.

#### **Keywords**

Contact-Intensive, Recession, Shocks, Tourism, Travel

#### **JEL Classification**

L83, D15, D61, E26

#### Introduction

India, known for its rich culture, traditions and heritage, is a popular tourist destination attracting millions of visitors (both domestic and foreign) every year. With a heterogeneous portfolio of products to offer, 'hotels and tourism' is one of the biggest and rapidly growing industries in India, being ranked 10<sup>th</sup> among 185 countries by WTTC (World Travel and Tourism Council) in terms of contribution of travel and tourism to GDP in 2019, amounting to 6.8% of the total economy and sustaining 8% of employment.

With a stringent nationwide lockdown and restrictions on travelling (including bans on international flights and suspension of visas), the industry had to bear the brunt of the inevitable. Implementation of measures like social distancing, stay at home and self-quarantine to contain the spread of the virus further aggravated the pressure. The major factors attributable to such a trend are the sudden internal and external shock as well as demand and supply side shocks. As said by EY India's Chief Policy Advisor, gross value added from tourism and allied industries like hotels, transport, communication recorded a 34.3% jump this year for Q1 after dipping 48.1% in the same quarter last year. The figures do not seem to be much promising as the evident growth owes to the low base effect. Moreover, this sector is still 30.2% below 2019-

20 levels, leaving back nothing to rejoice about and suggesting a contraction of Rs. 2.1 lakh crore.

The remaining article explains the impact of the above mentioned figures on different aspects of the economy and economic agents, followed by some observations and then finally concludes.

#### **Effect on Foreign Exchange Earnings**

Being one of the nations whose tourists are largely pilgrims, India is suffering a lot as the places of pilgrimage are still under a lot of restrictions. The number of foreign tourists fell drastically last year leading to steepened loss of foreign exchange earnings, export revenue and enormous tax loss charged on their visits, landing the economy into severe financial problems. Jaipuria et. al (2021) used forecasting models to predict a fall in foreign exchange earnings for India below USD 1790.83 million. This arises out of evident fall in foreign tourist arrivals, thereby reducing the demand for tourism products.

#### **Behaviour of the Consumers**

With the imposition of lockdown, the demand for non-essentials and contact-based services subsided greatly. People started saving more with a precautionary motive. Loss of employment in millions has greatly reduced the demand for extravaganza such as travelling. This has been true for middle and low income classes, who are perceived to explore new places within the country if not outside it. Though the rich continued to trail on their demand, it is not strong enough to boost the entire sector. For those travelling even then do so for business purposes and/or exigencies (Patel et al.).

Even after a year when the rational expectations have been adjusted, other factors like consumption smoothening and life cycle hypothesis does not seem to be true due to disruptions in the labour market, with no guarantee of when they would get a permanent job and the previous PayScale, to judge the casualty at the least. Under these circumstances, it seems prudent to spend cautiously and save for an uncertain future with the hanging sword of health emergency looming over their minds.

#### **Macroeconomic Effects**

The nation could evidently perceive the backward and forward linkages in aggregate demand leading to fall in output in the second round of transmission of effect, the first round of disruption being caused by bans on international and domestic movements. The employment-

and contact-intensive nature of the sector has aggravated the situation with the pandemic affecting regional developments, job opportunities and thereby disrupting the local communities. Loss of jobs resulted in greater income inequality, in certain cases pushing a section of people below poverty line. The figure below shows clearly the high unemployment rate at the onset of the pandemic.

25.00%

20.00%

15.00%

10.00%

5.00%

0.00%

91.4ep

91.4ep

10.4ep

Figure 1: The Unemployment Rate In India 2016-2020

The private consumption spending has posted a 19.3% year-on-year growth, again deceiving due to low base effect. All this has gone to essential commodity demand, leaving little space for tourism to come into the picture. The second wave did much to worsen the conditions.

#### **Observations and Analysis**

There is a need to restructure this sector, rebuild the trust and win over the confidence of people, at least of the domestic target group if not international ones right away (Twinkal et al). Focusing on sanitation, personal health care, social distancing norms and masks can work a great deal to solve this problem. The administrative front needs to step up and keep an effective check to confirm the operationalities at ground level. However, it is to be noted that this means a higher operational cost and even after implementation of such measures, units may find it difficult to survive in this hour of crisis.

Situation seemed to be better after unlocking with the DigiYatra initiative of the Government of India providing a bit of relief. Hotels have been transformed into quarantine centres to make full use of the available resources. The Government of Odisha came up with a road campaign to encourage tourists from nearby states to visit the domestic places alongside taking all the necessary precautions to prevent the spread of the disease (Jagdale et al). Release of pent-up demand, especially by contact-intensive services is expected to lead to growth gaining momentum on cyclical tailwinds between October and March.

#### Conclusion

As rightly said by Robert H Schuller, 'Tough times never last but tough people do', new marketing skills and ideas to handle this crisis effectively needs to be chalked out. The government has a tightrope to walk on to efficiently balance the health and economic concern, with none having the ability to overpower others. Both are of equal importance to sustain the economic growth and development. Given the predicament of the government at this crucial time, considering all the aspects and weighing each against others will help to reach a more viable and sustaining policy.

India has great inherent potential and resources at its end which can help it stage performances of global excellence. The prime requirement at this phase of world history is to remain resilient, maintain a positive outlook, tap the resources to ensure its full employment and keep growing with the aid and coordination among sectors, and pull the economy out of the losses incurred since the onset of pandemic.

#### References

- 1. Jagdale, D. V., & Ganatra, H. (2021). Impacts of COVID-19 Pandemic on Tourism Industry of India. Asian Microeconomic Review, 1(1), 39-45.
- 2. Jaipuria, S., Parida, R., & Ray, P. (2021). The impact of COVID-19 on tourism sector in India. Tourism Recreation Research, 46(2), 245-260.
- 3. Patel, P. K., Sharma, J., Kharoliwal, S., &Khemariya, P. (2020). The effects of novel corona virus (COVID-19) in the tourism industry in India. International Journal of Engineering Research & Technology (IJERT), 9(5), 780-788.
- 4. Twinkal, D. (2020). Impact Of Covid-19 On The Tourism Industry In India. Int. J. of Adv. Res. 8 (Nov). 273-278.

#### SECOND WAVE IMPACT ON INDIAN ECONOMY

-Devesh Agarwal 2<sup>nd</sup> Year, PG

#### **Abstract**

The second wave of COVID-19 has led to devastating destruction and mental problems to India's population. The increased number of COVID-19 patients is causing hospitals and medical facilities to struggle to keep up. With the gradual reporting of its many systemic impacts from every country, the direct impact of the COVID-19 pandemic on life is quite well understood around the world. The problems and resurrection measures of covid-19 are discussed in this research. In addition, there are difficulties of health, food scarcity, domestic issues, and educational pain and hurdles. Because of the high population burden, insufficient reporting of COVID-19 cases to the health infrastructure will result in the novel virus spreading across the community. COVID-19 will have a long-term impact on India's economy in numerous sectors.

#### **Keywords**

Covid-19, Challenges, Health Problems, Vaccination, Precaution Measures, Indian Economy, Lockdown

#### **JEL Classification**

E240, H510, I150, I180

#### Introduction

It's been almost a year already since the COVID-19 pandemic wreaked havoc on world population. We thought we had regained control over the situation in India after first wave, however the second wave left us in need of basic essentials like oxygen and medical supplies. It may appear that the second wave is winding down, with daily instances dropping to about 60,000 from heights of nearly 4 lakhs, but COVID-19 has already claimed the lives of over 3.8 lakhs people. With the anticipation that the medical situation will dramatically improve, it is now time to examine the second wave's macroeconomic impact. The administration has taken two approaches to coping with the two waves. The second wave's approach has been more localised and directed by the states, whereas the first wave's response was a nationwide lockdown. This, I believe, is due to the hard-hit national government's economic constraints

and the virus's progressive spread. The second wave began in Maharashtra in the west, moved north, and is now reaching its apex in the country's south. A countrywide lockout would be economically ineffective due to this distributed travel (Kumar, 2021).

#### **Analysis**

Let's take a look at the first wave's economic impact to get a sense of how the second wave will affect the economy. We had a protracted national lockdown and a substantially lower number of peak cases during first wave. Manufacturing and the urban sector had ground to a halt, while the rural sector remained active due to less restrictions. As a result, agriculture, which employs 58 percent of our population and is the primary factor of our rural economy, has continued to develop. Agriculture gained even more from a good rainfall and cheaper and more readily available labour. In FY21, our agricultural economy increased by 3.4 percent while the entire economy decreased by 7.7 percent, according to GDP estimates. The spread of the first wave was predominantly urban. During the first five months of the outbreak, metropolitan areas reported more cases than rural regions. Rural areas began reporting higher cases than metropolitan areas in the second wave as early as the second month. In a study of the 50 most badly affected districts, 26 were found to be in rural areas. The worst-affected areas were rural districts in Maharashtra, Andhra Pradesh, and Kerala. The issue was made worse by the lack of medical facilities in rural areas and the influx of patients from nearby villages to large cities. In just a few months, many rating agencies and banks have cut their estimates for India's FY22 GDP.

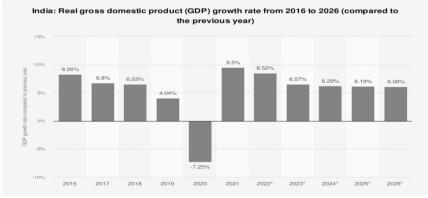


Figure 1 – India's GDP Projection of next 5 years

Source - International Monetary Fund (2021)

While India's GDP growth rebounded in the March quarter (Q4FY21), economists predict the gains have been erased by the pandemic's second wave. The State Bank of India (SBI) lowered the country's FY22 growth prediction to 7.9% from 10.4% previously. In light of the

destruction caused by the second Covid-19 wave, numerous international banks and credit bureaus have cut India's growth forecast for the current fiscal year. In 2020-21, the first wave already has left its mark on India's GDP. While India's economy was predicted to recover faster than the rest of the advanced economies in FY22, the second wave has already slowed growth in the first quarter.

Advanced economies, such as the United States and China, have fared far better. Bangladesh, India's neighbour, has outperformed India in terms of per capita income. The lower per capita income not just reflects expanding disparity between the rich and the poor, but it also reflects India's growing poverty. During the second Covid-19 wave, rising unemployment has become as the most pressing economic worry, affecting primarily the informal economy and poorer households. While there was no worldwide lockout this time, the statebystate limitations have had a similar disastrous effect on small firms and their staff. One crore Indians lost work during the second wave, according to the Mumbai-based research tank Centre for Monitoring Indian Economy, and the number is still climbing. The second wave has also resulted in a significant increase in healthcare spending, leaving 97 percent of households in the country with reduced savings. Given the current state of affairs, nations may require additional time to fully unlock critical economic activities. This could result in poorer households losing even more jobs and money. Given the money people had to spend on healthcare, the first wave of the coronavirus pandemic had forced many people into poverty, and the second wave could exacerbate the situation (Mangla, 2021).

Other issues that will make India's economic recovery more difficult include a lack of demand and decreasing consumer confidence during the second wave. Due to rising healthcare prices and costs of vital products such as edible oil, the lack of demand during the second wave could remain longer.

Demand spiked rapidly when the pandemic faded in the first wave, bolstered by the festive season in October 2020. Nonetheless, given the health and financial crises that hit families during the second wave, people are not in the mindset to spend freely at this moment. The combination of poor demand growth and low consumer confidence could seriously derail the economy, as individuals are likely to delay spending on discretionary products for a longer length of time. Fears of a third coronavirus outbreak have risen as a result of a lack of immunizations, and citizens are likely to save more to prepare for the unknown. The lack of a significant relief package this time could exacerbate the situation. India offered a variety of relief packages last time to assist affected citizens and industries, but no similar steps have been revealed this time. The government, on the other hand, says that many of the measures included in the first wave of support have been prolonged. However, reports indicate that the help has not reached the country's poorest citizens. The Reserve Bank of India (RBI) announced the sole significant relief action during the second wave. However, the lack of demand and people's inability to repay loans demonstrate that the policies are now ineffective. Official data on mounting loan defaults and check bounces is one of the most telling indicators of economic instability. During the second wave, banks reported an increase in loan defaults and check bounces. It indicates that many people are struggling to pay off their debts. The incidence of cheque bounces for debt payments has doubled to over 20% from the previous year, whereas credit card defaults have increased to 18%. Meanwhile, numerous banks have predicted an increase in retail credit defaults in the coming months (Das, 2021).

#### Conclusion

To summarise, we may expect the second wave to have a less severe impact due to less rigorous, localised lockdowns and a shorter time to achieve the peak number of illnesses. Agriculture saw a deeper cut from the second wave compared to the first wave where it grew. The expectations for economic recovery are hinged on a mass immunisation campaign that eliminates the threat of a third wave and restores consumer confidence and expenditure.

#### References

- 1. Das, K. (2021, June 3). Explained: How Covid-19 battered Indian economy during2ndwave.IndiaToday. https://www.indiatoday.in/business/story/explained-how-covid-19-battered-indian-economy-during-2nd-wave-1810532-2021-06-03
- 2. Kumar, A. (2021, June 21). Impact on Indian economy after the COVID-19 second wave. Financial Express. https://www.financialexpress.com/economy/impact-on-indian-economy-after-the-covid-19-second-wave/2275353/
- 3. Mangla, S. (2021, July 11). Impact of Covid-19 on Indian economy. The Times of India. <a href="https://timesofindia.indiatimes.com/readersblog/shreyansh-mangla/impact-of-covid-19-on-indian-economy-2-35042">https://timesofindia.indiatimes.com/readersblog/shreyansh-mangla/impact-of-covid-19-on-indian-economy-2-35042</a>

## THE FACE OF INDIAN ECONOMY POST SECOND WAVE OF COVID-19 PANDEMIC

-Ginia Chatterjee, Krish Sharma and Soumyadeep Chatterjee 3<sup>rd</sup> Year, UG

#### **Abstract**

The COVID-19 pandemic is not only a public health crisis but has resulted in an unprecedented economic distress around the globe. The novel virus gradually started spreading all over the country affecting all aspects ranging from a human body to even the Indian economy. The Indian economy suffered immensely mainly due to the lockdowns that were imposed to control the COVID situation. In this article, we aim to draw an accurate picture of our economy post-second wave COVID-19 pandemic and mention things that people of this country should be wary of.

#### **JEL Classification**

E31, H20, H62, I15, I18, O31

#### **Keywords**

Pandemic, Covid-19, IMF, Inflation

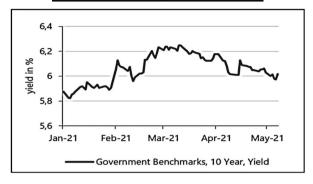
#### **Introduction**

The Indian economy contracted by 7.3% of the April-June quarter of the fiscal year. However, a decline in the COVID cases was reported from mid-September, 2020. But from April 2021, 3 lakhs fresh cases of COVID were daily reported and thus began the 2nd wave in India. The 2nd wave brutally exposed and worsened the existing vulnerability of the Indian economy. The informal sectors were the worst hit along with the tourism industry, automobile industry, aviation industry etc. However, the Indian economy is recovering steadily after the second wave of the COVID-19 pandemic. The International Monetary Fund (IMF) projected that the global economy will grow by 6% in 2021, and forecasted 9.5% growth in the Indian economy.

#### **Impact of the crisis**

Economic recovery is directly related to how a country responds to the crisis. According to the IMF, the strength of the recovery varies significantly across countries based on access to medical support, the effectiveness of policies, disclosure to cross-country spill overs, and structural characteristics entering the COVID crisis.

#### Government Bond yields close to 6%

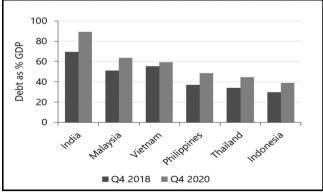


Source: Macrobond

This implies that India needs to keep its vaccination drive going and ensure that it reaches a majority of the mass sooner than later. Many surveys show that job creation in the Indian economy has gained pace. According to the Centre for Monitoring Indian Economy's (CMIE) Consumer Pyramids Household Survey, September, 85 lakh additions to employment were noted, which took employment in September 2021 to the highest point since the Covid-19 shock in March 2020.

However, India needs to be alarmed that the projections are based on certain macroeconomic factors staying stable. The IMF has predicted that the current account deficit will be under 1.5% in 2021-22 (1%) and 2022-23 (1.4%). Similarly, it is expected that government borrowing will not skyrocket and the combined fiscal deficit of the Centre and states will be reasonably contained. We should also be mindful of inflation as tenacious supply disruptions in the post-pandemic period and increasing geopolitical tensions between the US and China, has escalated inflation in India. The rupee will be under pressure to depreciate further with crude oil prices surging again.

#### **Government Debt as Percentage of GDP**



Source: IIF global debt monitor

This could push the economy into a negative cycle of a plunging currency, increasing the current account deficit and expanding the fiscal deficit. The government needs to come up with newer ways to curb inflation. The traditional approach of increasing tax to account for more money and narrowing the fiscal deficit will hurt the people of the economy. Instead, incentives could be given out to encourage people to save and invest more in government debt. The administration must continue to monetize India's unproductive fixed capital, which would in turn help to reduce the deficit. With rising global fuel prices, tackling inflation will be a challenge ahead.

The need of focusing on scientific research and technological growth for an increase in productivity is of utmost importance. India needs to strengthen research efforts. The IMF's report states that there exists a direct relation between scientific research and productivity growth. A 10% increase in research stock increases productivity significantly by 0.3%. Given India's long-term growth objectives, the country must invest in scientific innovation in order to gain higher productivity.

Keeping in mind the speed of COVID vaccinations, the finance ministry on 3rd of November gave an optimistic report towards the economy. Furnished with essential macroeconomic, as well as microeconomic development stimuli, the stage is about for India's investment cycle to launch, it said, further adding that this might catalyse its healing towards turning into the fastest developing huge economy. In its monthly money survey for October, the Department of Economic Affairs (DEA) aforesaid additional demand incitement along with additional full reconstruction of supply chains, limiting of demand-supply disruptions, and additional outstanding work-age area unit within the offing. India's economy is about to associate accelerated dealing with employment generation and demand, supported by solid potentialities of a restoration in investment, an increase in bank credit and facilitating inflationary pressures, the Finance Ministry said. The Ministry anticipates food inflation, which had hit a 30-month low in September, to fall further in October and bring retail inflation within 4% recorded the earlier month. The facilitating of inflationary pressures, mirrored within the retail inflation remaining near the median of RBI's financial policy goal, could be an honest indication towards development, the survey analysed.

In its October survey, the ministry communicated that the new cut in central excise duty on fuel and diesel would relax inflationary tensions applied by rising crude oil rates. The uptrend in GST revenue assortment is anticipated to stay sturdy post festive season driven by dealing in economic activity and strong tax administration, the survey planned, alluding to the second most noteworthy GST assortment 1.3 lakh crore in October, for transactions in September. October denoted a month of resplendent growth in e-way bills with resurgent economic activity amplified by the festive season, the Ministry mentioned. As much as 73.5 million e-way bills were generated within the month, which is over 40% more than pre-COVID era of October 2019, and close to 10% more than that of September 2021. In quantitative terms, the spike was considerably keener with e-way bills of 2.12 lakh crore issued, 9.4% over September and 49% more than October 2019. Power consumption in October 2021 rose at 3.1% year-on-year (YoY) vis-a-vis 0.8% in Sep and 15.6% higher than pre-COVID levels of 2019. This reflected a sustained growth in activity levels since the second wave, the Ministry mentioned.

#### Conclusion

Given the intensity and scare of the initial days of the pandemic, low level of economic activity worked well as an instant response. But given the situation of our pre-pandemic economy and the GDP contraction, stimulating investment and growth was of utmost importance. This article provides an overview of the same post 2nd wave.

#### References

- 1. Chatterjee, P., Dey, S., & Jain, S. (2021). Lives and Livelihood: An Exit Strategy from Lockdown for India. 14 November 2021, http://dx.doi.org/10.2139/ssrn.3582497
- 2. Jobs, demand, bank credit growth to kick-start investment cycle: Finance Ministry. The Hindu. (2021). Retrieved 14 November 2021, from https://www.thehindu.com/business/Economy/jobs-demand-bank-credit-growth-to-kick-start-investment-cycle-finance-ministry/article37413597.ece.
- **3.** What to watch out for as the Indian economy recovers. https://www.livemint.com. (2021). Retrieved 14 November 2021, from <a href="https://www.livemint.com/opinion/online-views/what-to-watch-out-for-as-the-indian-economy-recovers/amp-11634748052721.html">https://www.livemint.com/opinion/online-views/what-to-watch-out-for-as-the-indian-economy-recovers/amp-11634748052721.html</a>.

# ANALYSING THE SHAPE OF INDIA'S ECONOMIC RECOVERY AFTER EXITING LOCKDOWN AND ESTIMATING THE ECONOMIC COSTS FOR INDIVIDUAL INDIANS IN 2025

-Yashita Banka 2<sup>nd</sup> Year, UG

#### **Abstract**

India is gradually exiting out of the COVID-19 lockdown that started on 24 March 2020. As the Modi government prepares to ease out the economic deadlock period, the question that rings is: Will India's economic recovery be V, U or L-shaped? This paper aims to describe two possible exit trajectories focusing on the labour, capital and productivity mechanisms that underpin these trajectories and estimates the economic costs for individual Indians in 2025.

#### **Keywords**

Economic Costs, Exit Strategy, Jobless Recovery, Participation Rates

#### **JEL Classification**

E24, E62, H51, J21

#### Introduction

The lockdown's financial repercussions are growing. Leaders are being encouraged to make plans for safe and staged 'exit strategies' to reopen society as COVID-19 instances in certain countries begin to plateau and societies work hard to 'flatten the curve.' With a pre-pandemic GDP growth rate of 6% to 6.5%, India's real growth rate for 2021-22 is unlikely to exceed 2% and may even be lower. This implies that, at the very least in the short term, 40 to 50 million jobs are at risk.

The lockdown is being partially eased and then gradually phased out, with the exception of red zones, which will remain shut. However, it must be followed by a substantial increase in the relief budget for the neediest, which is now around 0.5 percent of GDP. Existing social assistance programmes, such as the Public Distribution System (PDS), the National Rural Employment Guarantee Act (NREGA), and pensions, require increased funding.

#### **Two-fold Trajectory**

A major economic crisis can have two effects on a country's growth trajectory. To begin with, the immediate crash creates a level shift in GDP, which is particularly tied to labour market shocks and lower investment. Second, variations in the trajectory's growth rate are linked to three factors: labour, capital, and productivity.

#### **Recovery Curves**

The recovery of Indian economy can be seen in two scenarios:

- A relatively significant baseline recovery from the crisis in 2021, as indicated by a V-shaped recovery, with hopes of a robust recovery in the services sector and forecasts for robust growth in consumption and investment. Due to the strict lockdown implemented during March-April 2020, the economy contracted by 23.9 percent in Q1: FY 2020-21 and 7.5 percent in Q2: FY 2020-21. The economy's fundamentals remain robust, due to the progressive lifting of lockdowns and the astute backing of the 'Atmanirbhar Bharat Mission', which has put the economy firmly on the road to recovery.
- Social distancing measures are required in the second situation. India's economy could only begin to recover by August, indicating a 'U-shaped' turnaround from the second wave's downturn. For the next two months, economic activity will most likely remain at current low levels before picking up. Demand is unlikely to respond as strongly to the lifting of restrictions as it did last year, because the most severe impact has been on the urban middle class and upper income parts.

Economic losses total more than 23 lakh crores in the social distancing scenario with a stronger U-shaped recovery implying that GDP per capita in 2025 will be INR 16,000 lower than the 'no corona' baseline. The economic loss is more persistent in this case, as yearly average structural growth falls from 5.7 percent to 5% between 2022 and 2030. The economic losses in terms of missed economic growth would end up being approximately 11 lakh crores in 2025 meaning that, on average in 2025, the COVID-19 crisis will cost each Indian INR 8,000 of missed wealth.

#### Mechanisms behind these two exit trajectories?

The COVID-19 pandemic has created a complex interaction between supply and demand shocks in the Indian economy. The consequences on the labour market, capital stock, and productivity are discussed below.

**Labour market:** The size of the effects on demand, both short and long term, is partly determined by labour market dynamics. Employment does not always rise in lockstep with production, and some unemployed workers will be unable to find work right away. Downward pressure on real wages will ultimately clear the labour market, but in the case of an inflexible labour market like India's, this will take a long time, and the potential of a 'jobless recovery' is significant. According to CMIE data, participation rates fell from 41.9 percent in March to 36.6 percent in April, showing that people who are unemployed in the official sector are turning to the informal economy for jobs. Finally, young Indians in particular may experience 'scarring effects,' which occur when people are pushed to accept occupations that are below their skill level, resulting in an increase in the number of people who are 'stuck' in lower-paying employment.

Capital: Uncertainty and a greater risk premium during an economic crisis led to lower investment and, as a result, lesser capital accumulation, resulting in a downward shift in GDP. We currently do not expect India to face a financial crisis as a result of the Reserve Bank of India's (RBI) far reaching interventions, but we do expect the pandemic to stifle capital stock growth.

**Productivity:** When it comes to fluctuations in the growth rate trajectory, productivity loss is the most critical issue. It's impossible to say how the COVID-19 situation will affect production in the long run. Changes in company models and geopolitical problems may have both good and negative implications on future productivity development.

#### Conclusion

It is impossible to predict when the pandemic will be over. However, we are seeing evidence of the curve flattening in countries which were severely hit by the pandemic, as a result of the efforts taken. The pandemic is both a health crisis and an impending economic calamity. As an initial response, India's extended lockdown with very limited economic activity certainly worked effectively, but that strategy may not be realistic in the long run. In particular industries, the government should continue restricted economic activities with proper protections. The goal is to use regional, occupational, and other industry-specific data to identify industries and districts that can start operating in a limited capacity. As integrated supply chains unravel, the pandemic will hasten the reshoring of tasks that are currently performed overseas by multinationals. While corporations leaving China or diversifying their overseas manufacturing activity may assist India, the impact of globalised reshoring and a general drop in foreign investment appetite will exceed the positives.

#### References

- Anon., 2021. Business Standard. [Online] Available at: https://www.business-standard.com/article/economy-policy/india-s-gdp-growth-rate-for-2019-20-revised-downwards-to-4-from-4-2-121012902037 1.html [Accessed November 2021].
- 2. Anon., n.d. [Online] Available at: https://www.cmie.com/ [Accessed November 2021].
- 3. Anon., n.d. *Centre for Monitoring Indian Economy Pvt. Ltd.* [Online] Available at: https://www.cmie.com/ [Accessed November 2021].
- 4. Chatterjee, P., Dey, S. & Jain, S., 2020. *Economic and Political Weekly*. [Online] Available at: https://www.epw.in/journal/2020/22/special-articles/lives-and-livelihood.html [Accessed November 2021].
- 5. Sood, B., 2021. *Readers Blog- Times of India*. [Online] Available at: https://timesofindia.indiatimes.com/readersblog/my-contemplations/impact-of-covid-has-not-been-same-on-the-middle-class-34279/ [Accessed November 2021].

# ROUTE TO NORMALCY: AVERTING INDIA'S LOPSIDED RECOVERY

-Johns George Binson, Siyan JohnyMundackal, M Shanayasmin, Romit Ghosh 2<sup>nd</sup> Year. UG

#### **Abstract**

In India, the alarming divergence in the recovery prospects from the perils of COVID-19 remains a vital cause of concern. Many segments and sectors faced with bitter revival paths are experiencing larger shortfalls in income and output. In this article, we explore the factors behind our economy's enormous imbalance, as well as some remedies for supporting balanced growth. This would promote India's inclusive growth and serve to raise the country's overall level of life, which was hindered by the pandemic.

#### Keywords

Fluctuations in recovery, Economic inequality

#### **JEL Classification**

E31, I38, J63

#### **Introduction**

The Indian economy was suffering headwinds and COVID-19 has aggravated existing disparities, which were further exacerbated by high inflation, low aggregate demand and vaccination divide. As the recovery from the wounds of the pandemic and the effects of the induced lockdown continues, the pace still remains stifled in many sectors and the process can be well described as hobbled and K-shaped for some sections. Here, we summarize the current binge and spree in the Indian economy as a result of sprints in certain sectors.

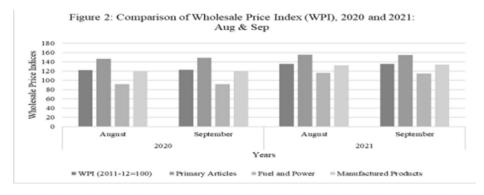
#### **Problems and Predicaments**

In April 2020, as per the report of the Centre for Monitoring Indian Economy, the COVID-19 induced economic recession resulted in around 122 million people losing their jobs in India, and the second wave further added another 10 million to the numbers. Even if the small traders, daily wage workers, MSMEs, and the unorganised sector in general, ended up being affected the most, a considerable number of salaried workers and business persons were also gravely hit (Kesar etal., 2020). According to the Ministry of Statistics, the rates were notably high for women, with the percentage of working women falling to a historic low of 15.5% in the second quarter of 2020. The urban areas also witnessed a significant scarcity of opportunities, and as a result, the migrant labourers who returned from their rural homes couldn't find satisfactory

jobs (Mukhopadhyay, 2021). The labour market hasn't fully recovered yet from the crisis created by the pandemic and the employment growth will not be able to compensate for the loss at least until 2023.

India's GDP shrank by 7.3% in 2020-21 as per the National Statistical Office, due to bottlenecks in many sectors like agriculture, trade, transportation and tourism, many of which remain sluggish even today. The impact of the pandemic cutting into the public's wallets had a detrimental impact on spending. In the recovery phase, consumer confidence indices have remained stifled much below the pre-pandemic levels. A low consumer confidence index (CCI) signifies pessimistic consumers, reflecting reduced spending and skewed demand (Consumer Confidence Survey - Bi-Monthly, n.d.). Lower CCI and high stock market spree, on the other hand, pinpoint the huge disparity prevailing in the economy. Research and sample surveys also present evidence for dramatic increases in inequalities with rich households rebounding spectacularly from the ravages of the great lockdown (Kesar et al., 2020).

The industrial sector has provided a considerable boost to the economy as the restrictions were relaxed, although increasing prices are a barrier to the full recovery of the sector. High inflation rates were reported for both essential and non-essential commodities. The Wholesale Price Index (WPI) soared to 12.94%, as per the Ministry of Commerce and Industry, in May 2021. Different parts of the country reported a 40-100% rise in prices of various food supplies.



Source: RBI Weekly Statistical Supplement

Even though on the 21st of October 2021, India attained the 1 billion vaccine milestone, the issue of vaccine divide cannot be left unaddressed. While India vaccinated 21% of its population (291million) fully, 51% (707 million) just had their first dose (as per Bloomberg's vaccine tracker), which itself is a yawning gap. A large fraction of the beneficiaries are of the middle-class or upper-middle-class groups, which draws attention to the fact that the poor substantially fall behind. Lack of appropriate information about the vaccine and the obstruction

of online registrations are some of the plausible explanations for this (Chakraborty et al., 2021). Also, children below the age of 18 and women are falling behind in vaccine coverage.

#### **Policy Reforms**

While we consider the efficacy of interventions to alleviate the pain and consequences of the outbreak, the overwhelming imperative to vaccinate the public remains unassailable. Supply shortages and vaccine hesitation are to blame for the poor vaccination coverage in rural regions and among low-income groups (Chakraborty et al., 2021). Public awareness activities to bring about large-scale perceptional changes towards vaccination are to be encouraged. To fix deficiencies in healthcare coverage and assure last-mile delivery, the health system and supply - chain should be rebuilt.

Vaccination and improved health care facilities will indeed boost productivity amongst the affected workforce. Yet, when we look at the lingering effects on the Indian labour market, it is evident that the present measures aren't adequate. As a result, policymakers must work even harder to tackle economic restraints and socioeconomic disparities. The government can provide transfer payments such as employment subsidies for workers and lending support for small and medium-sized enterprises (Hershbein & Holzer, 2021). Under the MGNREGA scheme, the number of working days can be increased from 100 to 200 to compensate for the loss of livelihood caused by the pandemic (Kesar et al., 2020). Also in the corporate sector, unemployment insurances can help people maintain their budget more smoothly.

Investing in our economy has the potential to shorten the long haul of economic misery, and hence the government can help struggling firms by offering credit guarantees, equity financing, and other forms of support. Furthermore, to stimulate commercial activity, it can enhance its present stimulus and infrastructure expenditure (Hershbein & Holzer, 2021). The RBI can also revise its accommodative policy in the limelight of increasing inflation rates, but this shouldn't occur at the expense of a demand contraction.

The cost of these above-mentioned exercises will be substantial, with the precise amount depending on the trajectory. As a result, the government will have to increase the tax slabs for affluent households and firms, relinquish attempts to shrink deficits and eliminate superfluous projects and expenditures to concentrate more on COVID-centric policy measures.

#### Conclusion

The pandemic has put forward a socio-economic choice between managing livelihoods and handling economic constraints. This trade-off poses a strenuous challenge for India, being the second-most populous country. Though we are gradually recovering from the trauma of the pandemic, only a more concerted effort from the people, government, and the medical authorities can help us in a sustainable recovery.

#### References

nce%20Sur vey%20-%20Bi-monthly

- 1. Chakraborty, C., Sharma, A. R., Bhattacharya, M., & Agaromoorthy, G. (2021). *The current second wave and COVID-19 vaccination status in India, Brain, Behavior, and Immunity*,. Science Direct. Retrieved November 7, 2021, from https://doi.org/10.1016/j.bbi.2021.05.018
- Consumer Confidence Survey Bi-monthly. (n.d.). Reserve Bank of India. Retrieved November
   10,
   2021, fromhttps://m.rbi.org.in/Scripts/BimonthlyPublications.aspx?head=Consumer%20Confide
- 3. Hershbein, B. J., & Holzer, H. J. (2021). *The COVID-19 Pandemic's Evolving Impacts on the Labor Market: Who's Been Hurt and What We Should Do.* Upjohn Research. Retrieved November 5, 2021, from https://doi.org/10.17848/wp21-341
- 4. Kesar, S., Abraham, R., Lahoti, R., & Nath, P. (2020). *Pandemic, informality, and vulnerability:* Centre for Sustainable Employment. Retrieved November 11, 2021, from https://cse.azimpremjiuniversity.edu.in/wp-
- content/uploads/2020/06/Kesar\_et\_al\_Pandemic\_Info rmality\_Vulnerability.pdf
- 5. Mukhopadhyay, A. (2021). *Post-Pandemic Economic Recovery: Seven Priorities for India* | *ORF*. Observer Research Foundation. Retrieved November 10, 2021, from https://www.orfonline.org/research/post-pandemic-economic-recovery-seven-prioritiesindia/

#### AN EXIT STRATEGY FROM THE LOCKDOWN

Annie Keerthana P, Rajvee Parekh

2<sup>nd</sup>Year, UG

#### **Abstract**

This article talks about the strategy in which the activities should be resumed in India as we come to the end of the COVID-19 lockdown. Our clauses are supported by geographical and occupational specific data. The ways in which there can be resumptions of life close to the pre pandemic levels is discussed below.

#### Keywords

Coronavirus, Economic Growth, Economic Activities, Geographical Distribution, Lockdown, Occupation, Workforce

#### **JEL Classification**

I15, I18, J11, J21, J40

#### **Introduction**

COVID-19 has not only affected millions of lives but also the economy as a whole. On 24<sup>th</sup> march 2020, lockdown was imposed in India which saved the lives of many but also pushed masses into poverty. This has caused severe repercussions by forcing a large fraction of workforce into involuntary joblessness and has shut down many thriving businesses. Being a developing country with miles to go to achieve the status of a developed country, the lockdown took away "at least two years" of India's economic growth as is obtained on comparing the current data with pre pandemic levels (Samrat Sharma, 2021). However, the lockdown cannot go on forever and the economic activities have to be resumed. The crucial question is the manner in which the activities must be resumed so as to sustain the economy.

#### **Geographical Distribution of the Infection**

One of the most crucial questions is which geographical areas must be opened up. It is necessary to find out which locations must be kept under lockdown and which ones must be relieved from it. Using inputs from the health professionals, the districts in India can be classified into 3 zones—high, medium and low risk based on infection rate cut offs. Activities carried out in these 3 zones would be of different nature. However, basing our decision only on the infection rate cut-offs will not be enough. Workplaces are the most common areas where chances of contracting COVID-19 are the highest. Thus, it is likely that infection will spread

to those areas which generate more income and are densely populated. It has been observed by WHO that the places which were affected the most by this virus were Mumbai, Delhi, Indore and Noida.

In order to check whether areas with high economic activity have higher infection rates, EPW carried out an analysis where the number of COVID-19 infections in a district, as of 12 April 2020 using the data from the Ministry of Health and Family Welfare, was regressed on night light data from 2013 for each district. Night light data represents the visible lights which were left switched on throughout the night and acts as a proxy for economic activity in that district. Higher density of night lights implies more economic activity in that district.

**OLS Estimates of the Effect of Night Light and COVID-19 Infections** 

Variables	Number of Reported Cases of COVID-19				
Average Night Light	1.631***	3.282***	3.32***		
2013	[0.24]	[.38]	[.39]		
Constant	1.202	3.17	0.37		
	[4.04]	12.85	14.63		
State fixed effects	N	Y	Y		
With covariates	N	N	Y		
Observations	320	320	320		

Standard errors in brackets.

Source: vol LV no 22, Economic & Political Weekly p.39

Based on their calculations, there is a positive correlation in all three regressions between night light density and the number of COVID-19 infections in a district. Thus, we can conclude that the spread of infection is more in areas which have higher productivity. Therefore, if those districts which have high and medium risk of infection are shut down, it means activities in those districts are being shut down which are more productive than low or no infection areas.

#### Part of Workforce Which Can Continue Work from Home

Work from home is a term that several people have got used to, but the extent of which is yet to be determined. Unfortunately, not all jobs can be done remotely and thus "identifying which jobs can and cannot be performed from home is useful as policymakers try to target social insurance payments to those that most need them" (Neiman, 2020 p.12).

The data on the classification of the number of workers and employees along with the sectors they are employed in is obtained from the O\*NET database. It focuses hundreds of standardised and occupation specific descriptors on nearly 1,000 different occupations. In India, the National

<sup>\*\*\*</sup>p<0.01. \*\* p<0.05. \* p<0.1.

Sample Survey Office (NSSO) surveys are conduced once in a decade. The last data was conducted in 2011-2012 and thus these numbers will be used to estimate the number of people who can work from home for each type of occupation. The data includes people working in both the formal and informal sector.

Occupation	Number of	Share of	Work from	Workfrom
	Workers	Total	Home Score	Home Nos
Computer and mathematical occupations	14,33,664	0.39	1	14,33,664.00
Education, training, and library occupations	84,43,946	2.32	0.98	82,75,067.08
Legal occupations	5,32,536	0.15	0.97	5,16,559.92
Business and financial operations occupations	60,11,561	1.65	0.88	52,90,173.68
Management occupations	3,50,44,624	9.65	0.87	3,04,88,822.88
Arts, design, entertainment, sports, and media occupations	5,65,001	0.16	0.76	4,29,400.76
Office and administrative support occupations	18,70,891	0.52	0.65	12,16,079.15
Architecture and engineering occupations	15,40,818	0.42	0.61	9,39,898.98
Life, physical, and social science occupations	9,26,413	0.26	0.54	5,00,263.02
Community and social service occupations	10,69,812	0.29	0.37	3,95,830.44
Sales and related occupations	2,01,55,490	5.55	0.28	56,43,537.20
Personal care and service occupations	40,66,056	1.12	0.26	10,57,174.56
Protective service occupations	24,38,263	0.67	0.06	1,46,295.78
Healthcare practitioners and technical occupations	22,97,608	0.63	0.05	1,14,880.40
Transportation and material moving occupations	1,67,43,618	4.61	0.03	5,02,308.54
Healthcare support occupations	92,073	0.03	0.02	1,841.46
Farming, fishing, and forestry occupations	6,72,90,246	18.53	0.01	6,72,902.46
Installation, maintenance, and repair occupations	48,43,430	1.33	0.01	48,434.30
Production occupations	3,08,96,466	8.51	0.01	3,08,964.66
Food preparation and serving related occupations	10,01,66,075	27.58	0	0.00
Building and grounds cleaning and maintenance occupations	3,28,53,826	9.04	0	0.00
Construction and extraction occupations	2,29,05,311	6.31	0	0.00
Customs	1,71,041	0.05	0.52	88,086.12
Misc	8,80,680	0.24	0	0.00
Total	36,32,39,449	100		5,80,70,185.39

Source: Vol LV No 22, Economic & Political Weekly P.40

Using O\*NET, the share of working population that can work from home is calculated with respect to the total number of workers of each occupation working from home. Based on the author's findings, we see that every occupation demands different range of activities which may require one to be on-site regardless of minding any externalities.

The food servicing occupations, construction sites, security & protective services, etc. are some examples which cannot operate when on a complete lockdown. The supply chains in respect of farm products were severely hit towards the early stages of lockdown, because transportation across the country was brought to a standstill. Agriculture being the backbone of the economy took a severe hit in these stages. Thus, to keep the supply chain intact, there should be a heavy emphasis on the reopening of the manufacturing and agricultural sector.

#### Conclusion

The world saw another pandemic after the Swine Flu influenzas of 2009, and this time, it is far more severe and has had a harsh effect on the economy. Continuation of the strategy of

lockdown is not viable for a developing country like India. Prolonged loss of business and income will have catastrophic impacts. Therefore, this article emphasises on the resumption of limited economic activities with necessary precautions.

#### References

- 1. Chatterjee, P., Dey, S., & Jain, S. (2020). Lives and livelihood: an exit strategy from lockdown for India. Available at SSRN 3582497.
- 2. Dingel, J. I., & Neiman, B. (2020). How many jobs can be done at home? Journal of Public Economics, 189, 104235.
- 3. Ghosh, S. (2020). Examining the Covid-19 relief package for MSMEs. Economic & Political Weekly, 55(22), 11.
- 4. McNicholas, C., &Poydock, M. (2020). Who are essential workers? A comprehensive look at their wages, demographics, and unionization rates. Economic Policy Institute, 19.
- Kissler, S. M., Tedijanto, C., Goldstein, E., Grad, Y. H., & Lipsitch, M. (2020). Projecting the transmission dynamics of SARS-CoV-2 through the post-pandemic period. Science, 368(6493), 860-868.
- Mehrotra, S. (2021). An Alternative Fiscal Package to Mitigate India's COVID Economic Crisis. The Indian Economic Journal, 00194662211021366.
- Sharma, S. (2021). COVID takes away at least two years of India's growth, GDP still below pre-pandemic levels. India Today. Retrieved 10 November 2021, from https://www.indiatoday.in/diu/story/covid-two-years-india-growth-gdp-pre-pandemic-levels-1847686-2021-08-31

# INTERVIEWS

*In conversation with* 



Former Deputy Governor Reserve Bank of India

Viral V. Acharya was the former Deputy Governor of Reserve Bank of India for a period of three years, between 2017 to 2019. He also served as a member of the advisory council of the RBI Academy and was a member of the Academic Council of the National Institute of Securities Markets (NISM), Securities and Exchange Board of India (SEBI).

An alumnus of IIT Bombay, he had the prestige of receiving the President of India Gold Medal for attaining the highest grade point average in his batch. After obtaining his PhD, he worked at the London Business School (LBS) from 2001 to 2008

where he also served as the Academic Director of the Coller Institute of Private Equity. Since 2008, he has been attached to the New York University Stern School of Business.

His primary research interest is in theoretical and empirical analysis of systemic risk of the financial sector, its regulation and its genesis in government-induced distortions, an inquiry that cuts across several other strands of research – credit risk and liquidity risk, their interactions and agency-theoretic foundations, as well as their general equilibrium consequences. He has published articles in the American Economic Review, Journal of Finance and many other prestigious journals. Some lesser known facts about him are that was ranked fifth nationally, in 1991, in the Joint Entrance Examinations and has also composed a music album titled 'Yaadon Ke Silsile'.

1. The pandemic period has been often termed as the 'new normal'. With new variations of the virus taking place and the threat of future waves still considerable, people, markets and policymakers are expected to shoot at virus management without much data. What do you think is really ahead for the global economy in this newer 'normal' world we live in now?

There are three things here that are worth keeping in mind -Even in the vaccinated countries, the delta variant was really a pandemic of the unvaccinated for the most part. While of course there is a small percentage of people who are vaccinated but are getting infected, there is a smaller percentage of those who are getting hospitalized and eventually succumbing to fatalities. In the grand scheme of things, the gap between serious hospitalization and fatalities between the vaccinated and the unvaccinated is a



multiple factor of the order of 5 to 10 sometimes. So first and foremost, it essentially implies that whether it is the original vaccine that has some efficacy against the new variant or whether we need a separate vaccine for this. That is going to be quite crucial in wake of the new variant that we have.

The second point related to this is that of course there is a country level separation in the availability of vaccines in the first place. Some countries are now extremely well vaccinated, not just on first but even on the second dose and increasingly even the booster dose after that. But there are parts of the world that are simply not vaccinated well. You could argue that a part of India's response to the delta variant became difficult partly because the vaccination policy was on a very slow train despite the full capacity that we had to vaccinate the country well. And so, the world ideally needs to find out some ways to pool resources and transfer vaccines to the poor countries of the world that are not getting it right now. Because what we have been observing is that the global supply chains are not normalizing until the pandemic has normalized everywhere, so in some sense, the weakest link in the supply chain could actually be the problem as far as the delivery of goods, the eventual cost of goods and the impact of consumption are concerned. So, for us to take a slightly global view of the pandemic, this has not received enough attention and many developed countries instead of devoting a significant chunk of resource to vaccinating those who are not having any decent rates of vaccinations are actually focused a lot on booster doses etc. But maybe the two don't need to be at the cost of each other. Perhaps there is a way of pooling resources in a manner that is feasible. There is an estimate from the IMF that about 50 billion dollars could go a very long way and given the grand scheme of things, it is actually not a lot of money compared to the kind of money that goes into wars and such emergencies.

The last point I would make here is that, in the early phase of the pandemic, we don't know where we are because then you see that the number of cases growth is very exponential, and the property of the exponential curve is that not knowing where you are in the sharpest phase of the curvature can lead to massive errors in knowing the exact real rate of that curve. The second derivative is so strong that if you don't get the first derivative right, then you are sort of off the curve. It could be growing very fast compared to what you think it would. In the case of the delta variant in countries like India, this was the error. There is no substitute for data. You have to keep the antibody testing on the table all the time, which India has done quite well on a repeated basis, to know the true segment of the population that is affected, because testing

may or may not be available in many parts of the country on a real time basis. In my opinion, the first dose of the vaccine has reached a very large part of India, It is time now to focus on ensuring that immunity building gets completed and that second doses are delivered as well, because we have to wait for guidance from Pfizer, AstraZeneca, Moderna etc, as to what they think is the situation with respect to efficacy of these existing vaccines that were developed keeping in mind the old variants only. So, all in all it is a challenging situation but there is no substitute for data dependent decision making. Testing and tracing are the most important steps in that case, to know where we are if we don't want to be late. And one thing that the pandemic has exposed both in advanced and the developed economies is that healthcare infrastructure needs to have buffers. The moment we get towards the hump of the pandemic curve, everyone just wants to get back to life as normal because there is this pent up demand, and we say it is a thing of the past. But the problem is exactly what the pandemic has exposed. It didn't expose that bad things can happen. We have always known that. What the pandemic exposed is that medical systems did not have enough medical infrastructural buffers in order to deal with the systemic onslaught of the pandemic and it is a little bit like we are repeating the cycle six months after each wave. Healthcare infrastructure expansion is not on the table in any country, be it the United States or India. The only thing that's on the table is how to stimulate the economy to get food or high demands as soon as possible. People are very quickly dismissive of the recent past, maybe because it is unpleasant to think about it or maybe because it takes stronger will and execution capacity to build and invest in health infrastructure. But if we don't invest in it, these shocks will happen again if the new variants show. We are not very sure if this is the last variant, maybe there could be another one which is even wiser to surprise and the vaccines would have lost their efficacy because the antibodies are shown to be wailing, not all of them are getting into the long-term memories of our cells. So possibly these are some of the challenges. But - vaccination of poor countries, data dependent decision making and investments in healthcare infrastructure capacity - these are the most crucial steps to deal with the risk of these sorts of episodes that occur.

2. In the aftermath of the pandemic, we observed central banks across the world trying to revive economic activity. The Federal Reserve had been purchasing USD 120 bn worth of Asset Backed Securities (ABSs) every month for a long time and other central banks have also maintained an accommodative stance. How do you see the roll-back of these policies in the near future, taking into consideration the threat of

# new variants and the looming uncertainty? How do you see policymakers and central banks tackling this situation?

History does not exactly tend to repeat itself in Economics, but it tends to rhyme. So, the taper tantrum of 2013, that is when the Federal Reserve started normalizing its policy after the global financial crisis is an interesting strawman to think about if we consider the present scenario. There are similarities between the current juncture and 2013, but they are not identical.

The similarity is that the Federal Reserve has macroeconomic parameters on growth and inflation such that it can consider tapering – in fact that's a given. Recent data prints suggest that the stock market is tight, inflation is very high in the US. So, there is no doubt that the Federal Reserve will taper. The question is whether they will have to increase the pace of tapering, reducing the pace of their liquidity injection faster than they had thought. Since they are unlikely to increase interest rates before they scale back the purchase of Treasuries fully, they might eventually have to retrench some of the liquidity. Thus, they have to get to the point of not purchasing any assets or very small quantities of assets every month.

The difference is that the global financial crisis was an impairment shock to the financial sector of the developed economies. Usually, impairment of the balance sheets of the banks or non-banks takes some while. Such surgery doesn't happen overnight. And as a result of banks and non-banks being impaired, the transmission of the policy to the real economy was quite slow post the global financial crisis. In contrast, the pandemic was a health shock and so it was a direct shock to the corporate sector. It was not fundamentally a shock that emanated from the excesses of the financial sector. This results into two things. First, monetary policy has been quite effective in its transmission to the real economy because the transmission engine, which is the financial sector, is in good shape. Second, because of this being a health shock, the fiscal policy has been very aggressive. Both of these together, mean that this is going to be the shortest-lived recession in the US, which seems like a paradox given the scale of the response that has been put in place.

The terms that are being used today are – high inflation, overheating, demand running ahead of the supply chain stabilization – all of this means that the policy room for the Federal Reserve to delay the taper is not that high. This is a crucial difference with the taper tantrum. When the taper tantrum happened in the emerging markets, the Federal Reserve scaled back on its decision to taper. In fact, the taper didn't even happen during Chairman Bernanke's term, who

had announced it. It had only started later on during Chairman Yellen and then Chairman Powell's term. Right now, the space to maneuver for the Federal Reserve to push back on the tapering is very limited. One can wonder if the interest rate hikes might actually get advanced.

Thus, the emerging markets are mentally better prepared because of the taper tantrum. They are to be prepared for a faster than anticipated tightening of the US Monetary Policy, which in turn will reflect into a faster than expected tightening of their financial conditions. As the purchases by the Federal Reserve come down, and as eventually the interest rates rise, these dollars will start finding their way back to US Savings Instruments rather than being in the emerging markets investments offering higher yields.

We must also look at the liquidity front i.e., what kind of dollar reserves the emerging markets have, relative to their external debt. Most emerging markets look better today than at the time of the taper tantrum with the few exceptions of Turkey, Argentina.

But one indicator where the emerging markets don't look as good as at the time of the taper tantrum is the Debt to GDP ratio. This is because they increased debts in response to the Global Financial Crisis and most emerging markets did not actually unwind that debt situation even after normalization of growth and trade post the crisis. Then in the wake of the pandemic, lower taxes and fiscal programs added further to their Debt to GDP ratio. A large number of emerging markets are at the cusp of investment grades - in BBB rated category. In fact, there are close to 25-30 countries that are in just the Asia-Pacific that lie in this basket.

What remains to be seen is whether this time around the debt situation actually becomes a bigger problem. If monetary conditions tighten, the rollover costs of these debts will rise. And if growth is not strong enough, then that could start pushing the Debt to GDP ratios into regions where the emerging markets have to engage in financial compressions. They have to keep rates high and simultaneously force all the savings into government bonds. Basically, the corporate sector and private borrowers get choked on both dimensions – price and quantity. They get choked on price dimension since interest rates are being raised to retain some of the foreign flows which are going back into United States due to increase in interest rate debt. They get choked on quantity front because all the savings are being channeled into the government bond markets through some forms of moral suasion or direct regulation.

We have to wait and see if emerging markets are indeed positioned well to fight the normalization on the fiscal front this time. Dollar liquidity, in an external debt to dollar liquidity sense is less of a concern this time. The inflation numbers are also looking somewhat better than at the time of taper tantrum even though they are high in some cases. However, emerging markets now have negative real rates. Their monetary policy has kept rates below the current levels of inflation, implying that their tightening is also going to have to pick up speed at the same time as that of the Federal Reserve. That is like a triple whammy for the private sector.

3. In the year 2020, global FDI collapsed by 42%, that is to an estimated USD 859 billion from USD 1.5 trillion in 2019. However, amidst this global collapse, India recorded a 13% growth in Foreign Direct Investment (FDI) in 2020. Is this because of cheap money floating in the global financial system or India's inherent strengths?

It is usually a combination of both. Especially long-term money of the FDI type does seek out for the most attractive opportunities so there is no doubt that investors are looking for higher yields in India, especially the Indian Fintech base. The Fintech base offers, right now, a very attractive potential long term growth avenue for this money. A lot of unicorns are getting formed in India. Not just in fin tech, but even in Ed tech and digital tech also, a lot is happening in India right now. So, all this is very good and also adds a very stable component of the foreign inflows that we have because the FDI money doesn't just fly out of the door at the first sign of a taper tantrum or things like that. One thing to keep in mind is that India could have been a beneficiary this year especially because of the crackdown in China on its tech space. As we know the stock market is corrected for the tech space in a very sharp way in response to the Chinese regulatory crackdown, and both due to the desire for a China plus one economy as well as the need for these displaced investors who find other countries to invest in where the growth potential maybe high, India has been a natural beneficiary.

What needs being said here is that we should not necessarily take either of these as given – one that foreign money will be available as easily and two that China will just continue to be in a crackdown mode rather than wake up at one point and also stabilize. In fact, there are signs that investors are now saying that Indian valuations are too aggressive or too rich and that they need to refocus back some money on China because the valuations now look very attractive. However, flagging one question here that wasn't directly asked, there is a concern about the money that has come in through equity through the FPI route. There is also probably \$30-40 billion a year that comes through the FPI route and traditionally we have thought of this money as long-term permanent flow because it is equity and not debt. This time around we cannot be very sure of that because the Indian valuation looks very aggressive and rich, That FPI money

has been on the back of the dollar expansion because of Federal Reserve monetary policy injections and the equity asset price inflation also happened because the real rates are very negative and fixed income securities are not yielding very high yields. If you look at long term US treasuries, or even look at yields in India relative to the current inflation, you can see they are practically zero. It means the real rates in fixed income investments are very negative. Then there's inflation equity, oftentimes thought to be a better head, because the cash flows which are the revenues of the companies also increase with inflation. So, while the interest rate could go higher, there is some hedging in the cash flows. But in the case of a bond, the nominal cash flows are fixed and when inflation rises, the denominator, which is the discount rate, increases and that affects the value of the bonds in an adverse manner. So, we have to be a little careful such that we do not necessarily count the FPI money in equity as being stable in value. We need to evaluate whether we are ready to actually tighten the monetary policy if required at that point of time or will that be a very bad time to start doing it. Therefore, my preference would be if monetary policy reacts in anticipation to the risk of the taper, which is now a given, and manages the risk of the taper happening at a faster pace than what is anticipated. A little bit of proactive calibration of the monetary policy is required rather than leaving it in a back ended manner, with too much to do all at once because there could be things like a stock market correction that we might be simultaneously dealing with at that point of time.

Lastly, I would say here that perhaps some of the investments in India may have also happened in the space of crypto, crypto exchanges and all such things. After the ruling in 2020, crypto is starting to get involved in settlements of crypto transactions etc, and crypto has exploded. I am not sure if it makes sense, the levels of valuation and activity that are being seen, but there could be a correction in the valuation of crypto assets as well, potentially if there is a global asset price correction and again those slows that may not be stable. So even the FDI money may not keep coming in, in that space if there is a regulatory crackdown on crypto in India, as now is being signaled by the Central Government.

4. In one of your past interviews, you had stated that recapitalizing the banking sector and the NBFS is the key to India's economic recovery post covid. The Indian banks have been severely affected by the ballooning NPAs in the past, and the government this year launched the Bad Banks initiative to help clear this huge mess. How should the government also bring changes to the structure and the functioning of the banks in addition to the creation of the "bad bank", as the banks may operate with even less

#### caution as they would now have the cushion of these "bad banks"? Will allowing corporates to enter into the banking domain help in increasing efficiency of the sector?

Ans. I have written on both of these issues with Raghuram Rajan at the University of Chicago. On the bad banks I would say that if the idea is to just shift the bad loans from one balance sheet to another, both of which are supported by the government, then it's just cosmetic financial engineering, and I don't think that would add much. The idea should be to resolve the NPAs, to get these assets when they are valuable to be financially restructured, if they are not valuable to be liquidated so that they go into the hands of better operators of these assets. To do that well, a bad bank could help because it coordinates the cleanup process on a single balance sheet, rather than having a variety of lenders trying to perform that function subject to their own incentive problems in cleaning up their balance sheets. But to do it well, it will require professional asset managers, most likely from the private sector rather than just appointing a bureaucrat to be in charge of this, who doesn't have expertise in this space. So I think the structure, the expertise and the intent to clean up the underlying assets for me is the most important thing we need to see in the government's bad bank plan.

As far as the entry of corporates is concerned, I think it could be a very bad decision in my view. The Indian industry is already becoming very concentrated in several sectors. I don't want to take specific names, but there are few names which are emerging as national champions and very soon they will be too big to fail. Some of them take on very large quantities of debt, both from the banks and in the bond markets. If they have their own banks, the level of NPA problems and conflicts we have right now without banks owning businesses, imagine how bad that problem would be if banks owned the businesses. So, I think it's a complete no-no in my view. We should not confuse the level of lack of credit growth that has happened in the economy because of lack of resolution of NPAs, lack of recapitalising the banks etc., with there being a lack of intermediation expertise in the economy. Look at some of the private banks that have done well - I am not saying all the private banks have done great; there are also private banks that have not done well. But we have amongst the most valuable private banks in terms of market to book ratio in the world. To me that is a sign that a well-run private bank, which is not an industrial enterprise, can actually perform the function if we have the right level of entry, right level of economic health and so on. So, I have no doubt that the idea to get corporates into banking is a very loaded proposition; it is going to favour some of these national champions who are already becoming heavily concentrated. In my view it doesn't make sense. I think this

is not a risk that India needs to take on, I think there are simpler ways to kickstart growth and credit and investments in India. In fact, I would say that the banking situation on the capital front has improved substantially because of the very low interest rates and high inflation environment, which has deflated the debt away and has made the corporates become more stable because their borrowing costs have become very low. They have been amongst the biggest beneficiaries of the monetary and fiscal policies because sales and revenues have been growing at a fast pace due to inflation, besides the formalisation of the economy that has also been taking place has also helped the larger companies more than the smaller ones. So, I think on a variety of fronts banks are probably in the right position to support the growth of the economy. I think the question is that can we open up some other valves that have remained sort of choked in order to push growth and my thing has always been that in a country like India, there has to be infrastructure, health and education. I think that is what the government should focus on rather than hoping that giving an industrial house a banking license will somehow create credit and growth for the economy. The industrial houses would be owning banks in all parts of the world, but we don't typically see that. I think this "tukka giri" - as I like to call it we always somehow think that "oh let us not do the difficult thing. I am so clever I will come up with a new fix in economics or finance to unlock tremendous quantities of growth." This doesn't happen. What research shows is that for a country to grow well for a sustained amount of basis, what it ultimately means is high quality of institutions and good provision of public goods. These are the most important. If you want to be like a Scandinavian country for your quality of life, you have to adhere to the rule of law, you have to provide basic welfare to every citizen so that they have equality of access in a democratic society. I think these are the things we have to focus on rather than thinking that somehow, we can do this "tukka giri" and open up huge potential for growth through my tricks here and there.

#### 5. What is your view on liquidity now? The banking system is flush with funds; the unused liquidity in the banking system is very significant. Do you think there is a need for course correction?

I tend to think so because as we discussed in the context of the global monetary policy, dollars have been flooding into India, they have contributed to rupee liquidity because the central bank has been purchasing a huge quantum of these dollars and then releasing rupees in exchange. There have been liquidity injections and on top of that India has run its own programmes. All of this means that financial conditions in India have never been actually so easy in its recent history. Inflation is high, it is higher than the targeted rate or the rate required for India's monetary policy of 4% on a durable basis and it is not just that this is temporarily caused by just food or fuel, actually core inflation has been higher than 4% at least for most of the last three years. So India runs the risk of having left too much to do right at the back end.

Most of the emerging markets have actually started normalizing their interest rate policies this year. India has not yet done so. Like the Federal Reserve, India will also have to start mopping up the excess liquidity, (more than ten trillion rupees of the surplus liquidity) that is in the system. This also means that the money market rates have been very soft, they have been raised gradually over the past few months, but they are still very low in terms of inflation. The real rates in India are still extremely negative and that's both because of where the policy rate is, as well as because of how low the money market rates were pushed through the excess liquidity policy.

India seems on a better growth trajectory; the large corporate sector has done very well and the savers in the economy have paid for this through low interest rates on a variety of fixed income instruments. Some of them have gone and started speculating heavily in equities and crypto markets, probably explaining the froth and the valuation one sees there. What one does not want in this scenario is a confluence of bad shocks, for instance a tightening of the US policy, or maybe a Turkey style emerging market problem that spills over to other emerging markets and that leads you to tighten your domestic monetary policy at the exact same time.

It may be a morbid analogy, but when a patient of covid has many other conditions, it becomes very hard for the medical practitioner to actually treat the patient because there is a very tiny space in which you can deliver the treatment without affecting any other comorbidity and causing some other stress in the patient's body. The same way, the whole idea in policy making is to leave enough space to manoeuvre, so you are not fighting four or five fires at the same time because if you do that, you try to fix one fire while another remains unattended or gets fueled, by your attempt to cease the first fire. My worry is that monetary policy in India is leaving too much to do at the back end when the Fed taper starts and then accelerates, global interest rates rise, the dollar starts flooding out the equity market or there is some other correction to worry about. But why leave everything so late? We really think India has recovered well this year despite the delta variant. It is on a path of strong, high, close to double digit growth and everyone believes it will be so in the next fiscal. So why not calibrate the pace

of normalisation given that everything is on the horizon. We'll have to wait and see what the monetary policy committee decides.

6. Sir, during the course of the pandemic, the government launched a number of welfare schemes, which has come at a huge cost to the government exchequer. As a result, there has been a rising fiscal deficit. Recently, the Government of India announced the national monetization pipeline, which would not only help in generating revenue for the government, but will also help in putting the public enterprises to good use. On the face of it, this seems like a win-win situation for both the stakeholders. But is there something the common public should be concerned about? What are your views about this initiative?

Many would opine that the government in India didn't spend as much directly, fiscally, as it should have given the pandemic, and that Indian policy response was more lopsided towards monetary policy rather than fiscal policy. Nevertheless, because we have been running these deficits, and high debt to GDP numbers even pre pandemic, I think there is no option but to do asset monetisation. As I jokingly say sometimes "it is better to monetise your assets than to demonetise your liabilities." So, I think that should help, it will not only improve the fiscal situation for the government but will also grow the productivity of the public sector enterprises if the government stakes come down, and gradually better processes, better labour, more productivity enhancing investments can be made at these enterprises. I think it's a win win. We have to hope that the conviction of the bureaucracy stays in place even if there are market fluctuations, even if the state and national elections come closer, even if there is resistance from labour in these companies to actually privatise them. Usually labour, the existing or the incumbent, is one segment that does not want these entities to be privatised sometimes. So in my opinion, they have to fight through a few resistances and let's hope that they have the courage of conviction to push through given that they have so much popularity and majority in this term.

*In conversation with* 

## Reetika Khera

Associate Professor IIT Delhi



Dr. Reetika Khera is a noted development economist. Having completed her M.A. from Delhi School of Economics, M.Phil. in development studies from Institute of Development Studies at the University of Sussex and Ph.D. in economics from Delhi School of Economics. She is currently working as an Associate Professor in IIT Delhi having previously worked in the same post at IIM Ahmedabad.

She is a great advocate for improved welfare programs in the country and has actively helped in the implementation of National Rural Employ-

ment Guarantee Act (NREGA). An important part of her work has been to encourage and train students to participate in these activities More than 300 university students from across the country have participated in surveys and other field activities under her guidance. Her research areas mainly include social policy in India including education, health, nutrition, poverty, inequality and much more. Among her notable works are "Mid-Day Meals Looking Ahead", Economic and Political Weekly, August 2013; "Regional Patterns of Human and Child Deprivation", Economic and Political Weekly, September 2012 etc. She also often collaborates with noted economist and activist, Dreze.

1. In one of your interviews you mentioned closure of educational institutions and switching to online mode of education has led to reduction in learning and retaining capacity. We would like you to elaborate on the different aspects of human capital loss as a result for our readers.

In our SCHOOL report (which looked at children in classes 1-8), we pointed out that a child who was in class 4, but whose reading/writing abilities were lower (say, class 3) has experienced learning loss and slipped to the level of a class 2 child. Meanwhile, because of automatic promotion policies, that same child is now going to have to cope with the syllabus of class 6. It is very likely that such children will soon feel so demotivated that they lose the will to go on. So yes, dropouts are something we need to worry about.

Similarly, I feel that there has been a huge loss in terms of what students get from online classes (among those who have access to online facilities). While there is widespread acknowledgement of this

loss among teachers, you are unlikely to see the pressure to return to offline classes coming from teachers themselves. That is because among teachers online teaching is 'easier', done from the comfort of their homes, with flexible timings, etc. The pressure to return to classrooms will have to come from students and their parents.

2. As we all know that the students during this pandemic period have already been tagged as the "2020 batch" or the "covid batch", what kind of repercussions will they face in the job market with the corporates being more skeptical about hiring them?

It is hard for me to comment on this except to say that at least where I teach there wasn't a significant difference in the placements last year. More importantly, and I guess students don't really have an alternative, but it is disappointing that because of the social/economic structure we have created, students tend to view education only through the instrumental lens of job opportunities. Education is not just about learning to read and write (in school), or to acquire expertise in a particular field (in college). It is much more than that – peer learning, acquiring social skills, forming new friendship ("networking"), exploring ideas at endless addas – all this is the essence of education.

3. Do you think that a new type of gender prejudice has been created or has there already existed such a discrimination which has manifested itself to a greater extent during the pandemic with respect to education?

We cannot shy away from the existence of gender bias in the pre-pandemic offline world. Online-everything has made visible one more dimension where such biases exist – i.e., in online access and access to devices. The move to online-everything, to work-from-home, etc. has been harsher on women than men. In education too, given that there is poor access overall (for instance, data suggests that only 60-80% households own a smartphone) it is hardly surprising that girls/women are accorded lower priority. Where I work, we were onboarding students very selectively if they experienced difficulties in studying at home, and among the female students it was common to hear that they would like to onboard as were being expected to help with household chores. This did not come up with male students. Note also that, to the extent that women's presence in the online world is restricted/lower, the move to onlineeverything will exacerbate gender biases.

4. Drawing from the previous question, do you think that there may be a way to channelize the online education system in such a way that may enhance the extent of skill formation or increase the numbers of people who are educated?

I think there is a serious infrastructure bottleneck in using online education in India for mass education and literacy. Overall, according to National Family Healthy Survey 5 (2019-21), only 25% of adult women aged 15-49 years had used the internet. The average for men and women was 33%. Relying on online education is bound to increase inequalities. Given that good education is the surest path for social mobility, I feel we should be talking about how to manage offline education, even if the pandemic persists.

5. How do you think that the COVID scenario has affected the mental health of teachers and students of all ages and how it may have long run impacts?

My own understanding of mental health issues was enhanced over the past year or so, by accident, because the counselling services at IIT Delhi has been reporting to me. Through this, I have begun to understand how widespread mental health issues are, how varied the triggers can be, and how debilitating mental health issues can be. I think there is a lot of evidence now that the pandemic has also led to a mental health crisis, but in my limited experience/exposure, health seeking behaviour for mental health issues has changed for the better. There is a long way to go in accepting mental health as a public health issue, but there has been some change.

6. Since this pandemic is no less than a war that has been fought globally for the past two years, can we draw any parallel of this situation to the "lost generation" that was observed in many World War weary countries or in Maoist China? Is there any possibility of similar consequences that might be faced as a result?

In general, I prefer not to use the 'war' analogy and vocabulary for the pandemic. One similarity between the World Wars, the Great Depression and the current pandemic is that they're unprecedented in terms of their scale and in impacting almost all parts of the world. Both crisis have created an opportunity to 'reset' social, political and economic systems.

In the earlier crisis, however, the opening was used - at least in the Western European countries, and possibly in the US too - to put in place welfare systems that created the conditions for the emergence of a more equal society. What we are observing today is that the

opportunity arising from the pandemic is being captured by powerful corporations and governments in ways that will exacerbate inequalities.

7. Do you believe that, given the multi-dimensional challenges that arose during the pandemic, the education sector is to some extent disregarded in government policy reactions? Finally, do you believe that combating such a broad and deep range of problems caused or exacerbated by a pandemic will necessitate a concerted effort by the government, the media, non-governmental groups, and the corporate sector? What, in your opinion, is the way forward in this situation?

Definitely. More than "to some extent" neglected. For almost all of the first year of the pandemic in India, hardly anyone talked about reopening schools. I recall being very upset in December 2020 when cinema halls were reopened, when we had been urging states to reopen anganwadis (like pre-schools that provide other essential services also). To the extent that education was discussed, the focus was on higher education, the 'board' classes (classes 10 and 12), which I feel was the wrong end to focus on. Younger children who are at the stage of learning to hold a pencil are the ones who need their schools much more than those in higher classes.

Coming to the next part, I do not think that NGOs and CSR can deal with the scale of the problem facing society. I don't think this is a bad thing because at least with governments there is a mechanism in place (no matter that its not perfect, that its weak) to hold them accountable. I'm not sure how one is supposed to hold CSR/NGO activities to account. The conversation should be around fair taxation of the rich who are currently getting away very lightly.

*In conversation with* 



Aditya Sharma, Arghya Banerjee

On 29.11.21

## Dr. Rajeswari Sengupta

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Dr. Rajeswari Sengupta is an Associate Professor of Economics at the Indira Gandhi Institute of Development Research (IGIDR) in Mumbai, India. In the past she has held research positions at the Institute for Financial Management and Research (IFMR) in Chennai, the Reserve Bank of India, and the International Monetary Fund (IMF) and the World Bank in Washington D.C. She was a member of the research secretariat for the Bankruptcy Law Reforms Committee (BLRC) that recommended the Insolvency and Bankruptcy

Code for India. Her research focuses on policy-relevant, macro-financial issues of emerging market economies in general and India in particular in the fields of international finance, open economy macroeconomics, monetary policy and banking, financial markets, firm financing and national accounts measurement. She has published in reputed international journals and has also written chapters in various books published by the Asian Development Bank, G20, the Centre for International Governance Innovation (CIGI), among others.

Dr. Sengupta completed her M.A. and Ph.D. in Economics from the University of California, Santa Cruz (UCSC). She holds two previous degrees in Economics from India, a Bachelors degree from Presidency College, Calcutta and a Masters from Delhi School of Economics. Details of her work can be found here.

1. Prolonged lockdowns and restrictions on economic activities have adversely affected the repayment capacity of borrowers. The RBI's Financial Stability Report states that the gross non-performing asset (GNPA) ratio of banks may increase up to 9.5% under severe stress scenarios. For the Indian banking sector which had been riddled with an NPA crisis even before Covid struck, what is your assessment of the way forward and what steps would you recommend to ameliorate the situation?

To answer the question, let's take a quick step back and see what was happening with the banking sector before the pandemic.

As you have correctly pointed out, the banking sector was going through a very big NPA crisis for a very long period of time. However, prior to the pandemic, in 2017, the IBC was enacted and a lot of attention and focus was being given to the 'Twin Balance Sheet Crisis. (The Twin Balance Sheet problem refers to the situation of overleveraged companies on one hand and bad-loan-encumbered banks on the other. This has been an issue lingering for decades in the Indian economy, albeit in different forms and names.)

A lot of steps were being taken for the last 2-3 years in the run-up to the pandemic which sort of helped the banking sector in a large way. For example, we have the IBC and many of the large NPAs were being sent to the IBC for resolution. So that process was already underway. On top of that, there was some amount of recapitalization of the public sector banks that the government had done. That helped the banking sector to some extent. And most importantly what had happened was that the large companies in the private corporate sector had started deleveraging. Existing debt on corporate balance sheets was being repaid with no significant uptake of fresh credit which was also reflected in the limited demand for new investments and slowdown of economic activities.

For example, we all heard this very important news around the start of the pandemic when Reliance declared that they are going completely debt-free. Most of the large companies were deleveraging and they were just reducing their debt. So, the bottom line is that by the time the pandemic hit the economy, the corporate sector, especially the large companies were in a relatively healthier balance sheet situation, both because of the IBC resolution being underway and because of deleveraging. Simultaneously the banking sector, again because of IBC, recapitalization and because of the fact that no big firm was taking substantial credit and there was no incremental growth of new NPAs happening, the banking sector was also doing relatively fine. This was the backdrop against which the pandemic hit the economy.

After the pandemic hit the economy, the RBI, Supreme Court and the government took multiple steps to ensure that large-scale defaults don't take place in the very first year of the pandemic. These measures were taken owing to the high levels of uncertainty of that period.

The RBI declared a loan moratorium, Supreme Court declared that no NPA is going to get announced or recognized in the first year of the pandemic, the IBC was suspended as well and RBI came up with a restructuring scheme to help borrowers restructure their debt. Essentially, in the first one year, even if there was a lot of financial stress for firms—especially mid-sized firms, what we call MSME firms or even for individuals—we didn't really get to see any direct financial impact of insolvencies. Everything was sort of getting pushed out in the future. This is basically why the RBI settled for a scenario analysis because it was not possible to exactly predict what would be the NPA as everything was sort of getting postponed.

Now we are in a situation where the restructuring schemes that RBI announced have been extended to March 2022. The MSMEs have gotten a lot of credit support from the government. The government had announced that they would get a credit guarantee scheme which means whatever credit they are getting from the banking system will be guaranteed 100% by the government. So once again we are not seeing the actual extent of financial stress in the MSME sector. We are not seeing the actual extent of stress in large firms, because as I said, the large firms fixed their balance sheets. They were not making any new investment during the pandemic of course, and they were not taking any new credit. If anything, they have been performing very well. To summarize, I guess we are still not out of the woods as far as the banking sector is concerned. We won't know the actual extent of the financial stress at least for the next 2-3 quarters because we have pushed everything out in the future. So, that's why it is very difficult to say what will be the actual extent of NPA or whether it will be a severe stress for the bank balance sheet or not.

Having said that, I think there is some silver lining which is that in the earlier NPA cycle, the majority of the defaults were by very large companies. So, the overall NPA crisis became a very serious problem for the banking sector. Now as I just explained, because the defaults are not going to be happening from the large firms, it's possible that much of the defaults would be happening either from MSMEs or from consumers. Why's that? Because just as the banks were not lending to the large companies, consumer credit had increased significantly over the last 5 or 6 years. In fact, now consumer credit is roughly 30-33% of the total bank credit, which is a big increase from let's say 2010-11. It seems that instead of lending to large companies, banks are lending to consumers and MSME's which is where future defaults could take place. Now these are small ticket items—these are not large defaults by large companies. While it is still 30% of the bank balance sheet/bank credit, it's not completely trivial either, but the ticket size of the defaults are still going to be much smaller than before. One can view that as a silver lining.

However, the problem still exists because it is still 30% of the bank credit and one-third of that is what we call unsecured lending—these are credit cards, personal loans, etc. which is a very vulnerable section of credit because it is not backed by any collateral. These loans are coming under a lot of stress because people's incomes have been impacted. So we might end up seeing some stress and default in this unsecured part of consumer lending because we don't have a bankruptcy law for consumer credit. We have a bankruptcy law for corporate defaults but we have no bankruptcy resolution mechanism for individual default in the consumer credit space. That is a bit of a worry because right now if a large-scale consumer default happens, we don't have any resolution mechanism to deal with it and banks will just have to accept that loss. Again, there's a silver lining that banks today are relatively better capitalized then they were in, let's say, 2014-15. Because of the entire NPA crisis, the public sector banks today are better capitalized and also because they are not giving out any new credit, they have basically shored up capital. The private sector banks have raised capital from the market. Hence, capital-wise the banks are in a much healthier situation today than what they were in 2014-15.

So, my sense would be even if we had consumer defaults, even if we had MSME defaults, provided it's not like a wave of default happening, it's probably a problem that should be managed by the banks themselves using their capital position. But at the same time, in India, we have never had a consumer default crisis. That is a bit of an unknown to us as well. In summary, I think the banks are in a better situation today than what they were in the previous NPA crisis. Defaults are most likely not going to be very large-scale and they are not definitely going to be from the large firms. IBC will come back sooner or later, so even if there are corporate defaults happening, IBC can take care of it. The worrisome area is the part where if consumer defaults happen, we don't have a resolution mechanism. Thus, regarding steps to ameliorate, I think it's not a big problem that needs to be ameliorated but there are structural problems of the banking system and we can talk about that in subsequent questions as well.

2. The stock market is now trading at all-time high levels. A concern has been voiced time and again by various economists that the behaviour of the stock market does not represent the reality of the state of the economy. What are your views on this, especially in the backdrop of a jubilant market and investors fearing an imminent correction? Do you think we are seeing a bubble driven by unfounded optimism?

The stock market in the short term typically always reacts to liquidity and funding situations. In the medium to long term, the stock market reacts to the fundamental performance of firms and the economy. So, what we are seeing now, this short-term huge rally of the Indian stock market, I don't think there is any doubt that we are in a bubble. If I look at the price to earnings ratio, the average PE ratio for the last couple of years has been two standard deviations higher than the historic mean, which basically translates into the fact that valuations in the stock market have been very high over the last couple of years.

The reason why this is happening of course, as we already understand, is that there is a huge amount of liquidity floating around in the global financial system. The massive liquidity is because of the money pumped by the US Federal Reserve, the ECB and other developed country central banks - all of this liquidity, to a large extent, has found its way into emerging markets like India. Foreign institutional investors investing in the Indian stock market have definitely pushed up the valuations. Secondly, what we have seen over the last few years is that retail investment by Indian domestic investors into the stock market has gone up significantly. Indian households are investing a lot more in the stock market today than what they were doing 10 years ago. The reason is that, of course, one is the ease of investment just a few clicks of the button and you can invest in the stock market. It is no longer a function that you have to go to the stock market and buy physical shares- all of that has been taken away. It's extremely easy to invest in the stock market through mutual funds today, for example. Third, what has happened in the pandemic is that there is a percentage of the population, let's say in the 95th – 98th percentile of income distribution who haven't lost their jobs in the pandemic and haven't experienced much of a cut in income either, but have also experienced a lot of savings because they are not spending as much, they are not traveling as much. What do you do with all the savings? You're not putting it in fixed deposits because fixed deposit in the bank is giving a very low rate of interest. What all these people, all the households have done is that they have invested in the stock market through mutual funds, SIP, etc. So, there has been a huge inflow of retail money from Indian domestic investors that has come into the stock market and simultaneously there has been a lot of inflow from FIIs into the stock market. Along with that, there's been the fact that in the pandemic period, the large companies of India performed very well. If you look at the profitability - the profits of the large firms, the top 50 or 100 firms of India, they have done very well in the pandemic. They have been able to cut costs because they are cutting costs on travel expenses of employees, they are also saving costs because people are not really going to offices anymore – they are working from home. So, they have been able to cut costs and the revenues have not been impacted much, particularly in the services sector because people are just doing everything online. So, the profitability of the large firms has gone up which has pushed up the valuations and we have all these supplies of money coming into the stock market. All of these factors together have undoubtedly triggered a bubble in the stock market in the short term.

The worry now is that from this year onward, we are going to enter into - what I call an interest rate upswing, because the Reserve Bank of India is most likely going to normalize monetary policy which means it has to absorb all the excess liquidity floating around in the system. The US Fed will most definitely normalize monetary policy and maybe even increase interest rates, and the moment that happens, all of these FIIs which have invested in the stock market will start pulling out. There will be a sell-off by FIIs in emerging market stock markets and even if the retail investment in the stock market has been high, it is not high enough to compensate for the sell-off the FIIs will undertake. So, there will be a stock market correction this year, there is no doubt about that, because we are already in an upswing of interest rate cycle and that means all the sort of "new retail investors" who have come into the stock market hoping to make money - they are going to get very badly burnt because they are not experienced investors in the stock market and that could be a scarring that might impact their investment strategy going forward. All of these new households may then withdraw from the stock market never to come back again. That is going to be a very serious damage because ultimately, we want retail investors to come into the stock market, but these kinds of shortrun bubbles - particularly if they are expecting to just make money in the short term and then they get burnt - that is going to be discouraging and that's definitely a worry. I don't think that there is any doubt that we are in a bubble. I also think that there is no doubt that there is going to be a correction starting this year. It remains to be seen what will be the extent of correction and what will be the extent of sell-off by FIIs, etc., but this is something that keeps happening. It is nothing unprecedented, nothing new - just a part of being in a market system.

3. In context of the previous question, many economists have observed that the bull run in the Indian stock market is fueled by footloose foreign capital coming to India for quick returns, and fears are there that the imminent tightening by the Federal Reserve might lead to a repeat of a taper tantrum-like situation. What are your thoughts on that?

I find the term "footloose" to be quite interesting. In economics we often term these capital flows as "hot money flows", the idea being capital will come in very quickly and the capital will also leave very quickly. And what happens is that whenever we see something like that happen (and it happens quite often) we have a knee-jerk reaction. We think foreign capital is bad, it is dangerous, it is subjecting the economy and the domestic financial system to a lot of vulnerability and, therefore, we should stop foreign capital from coming in. That is unfortunately the risk in our academic, economic policy thinking that is almost always associated with these kinds of episodes where we see hot money flows leaving. So, that is the background against which I am going to answer the question.

Now, it is true that foreign capital (or any capital for that matter) will go where the returns are attractive. It is just a fundamental principle of economics that money chases yields, capital chases returns. So wherever returns are high, capital will find its way there. There has been a lot of capital injection across the last couple of years to emerging markets because emerging markets, by definition promise high returns. We are a high risk (market) but we are also high return markets.

Now, if the Federal Reserve will (and the Federal Reserve will in fact) increase the interest rate there will be a sell off because this is what we call in economics the "risk-on-risk-off cycle". So, the hot money flows will leave. Having said that, I think while the taper tantrum episode may seem similar to a large extent because we had capital outflows at that point of time, there is a little bit of a difference between 2013 and now. The difference being that in 2013 our macroeconomic fundamentals were much weaker. We had a much larger current account deficit (in general), we were also at a very high inflation scenario which forced us to raise domestic interest rates, the fiscal deficit (even though it is higher now) was high back then. Many things had gone wrong simultaneously in 2013 and the economic growth cycle was also declining. Of course, what is happening now is that, because of the pandemic, our growth is not doing particularly well but that is a situation that is happening all over the world.

India is not unique in suffering a growth collapse neither is India unique in having a high fiscal deficit. In fact, our fiscal deficit might be in a relatively better position compared to a lot of other emerging countries particularly because our government has not given a large fiscal stimulus during the pandemic compared to the other countries. Our debt to GDP ratio is, of course, very high (it is about 90%) and that is worrisome. But again, our current account deficit (because our exports have increased this year) is doing relatively better. And inflation (while it's still increasing) is still not as high as it was before the taper tantrum. So, the macro fundamentals are still doing relatively better compared to 2013 and it is a global shock that has affected all emerging markets. Unlike 2013 when India was clubbed as "The Fragile Five" (five emerging market countries were particularly doing very badly), today this is not the situation because all countries are doing badly. If anything, the pandemic this time (the third wave for example) seems to have affected India much less compared to many developed countries. So, there are some factors which are working in favour of India. We also have a large stock of foreign exchange reserves that the Reserve Bank of India has accumulated. I am not in favour of using reserves to defend the currency because I think that can lead to a lot of other problems. But at least from a foreign credit ratings agency's perspective or a foreign investor's perspective, these things do matter.

So, I think compared to 2013 we are in a relatively better situation. I also think that the magnitude of the shock is going to be much more muted because in 2013 we were all taken aback when Ben Bernanke announced the taper tantrum, we had not seen it coming. Now, for the last one year, there has been a lot of discussion in the media, in the academia and in the policy circles that the Fed is going to normalize, that the US is going to increase the interest rate. So, it is already getting factored in in foreign investors' decisions, in financial markets' decisions, etc. It is not going to hit us as an unprecedented shock or an announcement that we had not predicted.

The Fed is also designing the announcement in such a way because it is also aware of what happened in 2013. So, while the Fed may not be thinking so much about what is going to happen to emerging markets, the Fed also does not want to shock its own financial markets in a very big way. So, I think this will be a much more muted and calibrated shock this time which will play out over a period of time, its impact will not be as serious as it was in 2013.

Lastly, I would like to say that we should not use these episodes to impact our understanding

of what foreign capital is and what foreign capital does because at the end of the day we are a capital scarce country, we have huge investment requirements, our domestic savings are only about 30% of GDP, we need foreign capital for investment. Also, in India, the extent of hot money flows is much less because we do not allow FIIs to invest in short term debt, we already have capital controls in place for that.

4. The government, in 2020, exempted all Covid-related debts from the definition of default, and stalled the invocation of Insolvency and Bankruptcy Code (IBC), 2016 for one year, to allow ailing enterprises to cope with the crisis. How do you think it affected the economy? Did it actually help the enterprises cope, or does it pose a future burden to them?

Firstly, the steps that were taken to provide relief or some breathing space to the economic agents were nothing really different from what most other countries were doing. Other countries (including the developed countries) also had put their bankruptcy laws in suspension, provided loan moratoriums, the reason being that this was an unprecedented shock that nobody really understood when it first hit us. It would have been quite unreasonable to subject economic agents to bankruptcy immediately after the shock hit us because, of course, it was a massive financial stress particularly for the MSMEs and individuals. To not fully understand the nature and the extent of the shock but to subject them to bankruptcy and defaults would have been quite unwise. So, I think in hindsight what the government and the RBI did made perfect sense because we needed to give the economic agents the required breathing space for them to figure out what is their financial wherewithal to deal with the crisis, how long the crisis will last to begin with, what is the nature of the pandemic, etc. All of that took a lot of time to evolve for us to actually get a grip on the nature and duration of the economic shock. So, it made perfect sense to suspend IBC, to give loan moratorium, to not declare defaults, to do the restructuring scheme. In hindsight we can always criticize and say we should not have suspended IBC for one year, maybe we should have been more strict about the restructuring schemes. But when you are doing announcements and policies at such a big level and you have very little information, it is not very easy to design a perfect policy mechanism. We have seen all countries of the world, including the developed world struggle with this.

Now, what did this mean for the MSMEs and the consumers when this was done? I think the MSMEs definitely benefited a lot from the fact that the government announced a credit

guarantee scheme. Much of the credit that the banking sector gave out in the last few quarters was actually to the MSMEs and they probably would not have gotten this credit had the government not announced a credit guarantee scheme. They were definitely the worst affected because the MSMEs have also been affected by demonetisation and GST. They have been facing a series of shocks so they needed support and I think that (suspension of IBC and credit guarantee scheme) might have helped. We will have to wait a couple of quarters to see what is the extent of financial distress they are facing.

As far as the consumers are concerned, I will remain worried about the consumer credit problem because consumer credit has gone up phenomenally over the last few years. We have never seen an episode of a consumer credit crisis in India. We have always seen corporate loan crises. What happens when consumer default happens in a big wave, if it happens? I do not think we have the knowledge or the expertise to deal with it nor do we have a legal framework to face such resolutions. We actually do not have a solution mechanism. So that would be my worry.

But again, if we look at consumer credit, roughly 80 lakhs of the 3 crore households in India are taking this debt. So, it is actually a very small percentage of the overall households which are getting indebted to the banking system. Primarily, if we look at the income distribution, the bottom 60-70% of the households do not really borrow from the formal financial system. They are borrowing from micro finance institutions or they are living from hand to mouth. So they do not matter, per say, for the formal financial system. Who really matters are the (one's belonging to the) 95th-98th percentile of income distribution because they are the ones who have borrowed from the banks, be it home loans, education loans, etc. But they are also the ones whose incomes have not been that affected by the pandemic. They have not lost jobs; their salaries have not been cut. So, they are probably in a better situation to deal with the debt.

It remains to be seen when the tide goes away, how all the restructuring schemes, and credit guarantee schemes play out. We know what is the impact on income, etc. It remains to be seen what happens to consumer credit. And the hope is that it is not going to be a very big wave of default this time. But if it happens, with so much unsecured debt and no resolution mechanism, that will be a bit of a worry.

5. In your opinion, what kind of a fiscal stimulus by the government would help boost the economy in the current scenario? Also, how effective were the recent monetary policies by the RBI? Could the RBI have done something differently to help the country in these dire times?

I think that so far what the government has done to deal with the pandemic has actually worked very well. I know there are people who would have preferred the government to provide a lot more income transfers, a lot more subsidies, a lot more income support to the poor and vulnerable sections of the society, but we also have to keep in mind the fiscal situation of the government itself. We entered into the pandemic with a reasonably high fiscal deficit. If I look at central deficits, state deficits and all the off-balance sheet borrowing, the fiscal deficit by 2020 March was almost close to 9% of GDP which was extremely high. By any estimate I would say the consolidated deficit was close to 12 to 13% GDP in 2020-21., And as I said, the debt to GDP ratio of the Indian government is close to 90%, which is the highest ever.

Thus, I think the government did the right thing by not overspending. Excess spending would have resulted in the government purse being overstretched for years to come. And high government debt always acts as a tax for future generations. The US government can provide such a large fiscal stimulus because they enjoy a level of credibility and stability that the Indian government does not. This is simply because we are an emerging market country, leading to weak demand for our government bonds as compared to a global demand for US bonds. So, it was prudent in hindsight that the government did not announce a big fiscal stimulus because then our debt to GDP ratio would've been even higher and we would have had serious trouble repaying that debt. Particularly in a situation where we might face rising interest rates going forward. So, I think what the government did was right, what the government did in terms of providing credit guarantee to the MSMEs was the right step to take. So, I would say that it was a good thing that we did not push up the fiscal deficit anymore by providing a lot of fiscal stimulus.

Had the government been fiscally prudent for the last decade we would have enough savings to spend extensively to fight the pandemic. However, it is a policy of any central government in India to constantly spend money on subsidies and schemes. Spending when times are good naturally leads to a lack of savings when times are rough. This is a lesson for the future.

With the new budget being announced in a few weeks' time, I think one area where the government definitely needs to spend and signal some intention of spending, is capital expenditure, not subsidies and schemes, not transfers because they don't really lead to the production of any productive asset per se. We definitely need a boost from the government with regards to CapEx spending because the private sector is not doing any investment. And that kind of a situation, it's a typical Keynesian kind of fiscal stimulus, where you need a bit of a boost in investment spending from the government, because that has a trickle down, multiplier impact. There is worry about the crowding out of private investment as well. But given that private investment is in such a stagnant situation for years, I think the CapEx boost from the government is required. But there is a factor that the government has to keep in mind that given the high fiscal deficit and debt, it needs to rationalise its expenditure on all the discretionary spending like subsidies and schemes.

On the Monetary policy of RBI, again, on hindsight, as I said, it's always easy to criticize the authorities and we often think it's our job to do so, but if we were in the RBI, what would we have done faced with the kind of uncertainty that RBI was faced with? I guess we would've done exactly what RBI did.

The RBI cut the policy rate to 4%, very early in the pandemic, which was the right thing to do irrespective of the fact that monetary policy transmission was not really happening because nobody was demanding credit, bank credit growth was at an all-time low of 6%. So that cut didn't really transmit per se to the rest of the economy. But at least it was a signal by the RBI that it is willing to go into easy monetary policy because demand had completely collapsed in the pandemic. Also, the injection of liquidity is something that all central banks did and RBI did the same thing. In fact, if RBI had not done that it would've been criticized. Of course, it's another thing that given the Indian situation that liquidity injection did not really translate into much because the private sector was not investing and there was no demand for credit. Essentially, RBI followed the textbook steps that needed to be taken to fight the sudden shock. It is true that credit did not grow substantially, but certainly RBI is not to be blamed for this since there were other factors—weak bank balance sheets and slow growth—which also played a part.

However, one thing I feel that RBI perhaps could've done a little bit differently was to deal with inflation better. I mean, people would say, but your inflation is still within the band of 6% and it's still not worrisome. I would argue that at a time when aggregate demand has collapsed in the pandemic, basic economic principles would suggest that when aggregate demand collapses, inflation should also go down. But we had a situation when growth collapsed. We had negative growth of 7% and aggregate demand had collapsed. Ideally, we should have seen inflation go down a lot, but we did not. In fact, we saw inflation go beyond 6%, for three consecutive quarters in 2020. And the reason was that we had supply chain constraints and that was putting a lot of pressure on inflation. And I would say we are definitely not out of the woods on inflation.

In fact, if anything, now inflation is a serious worry because globally inflation is becoming a big problem. The US is seeing an inflation that it has not seen in 40 years. So, I think that the era of low global inflation is over, commodity prices are increasing, oil prices are going up, and US inflation is increasing.

We are going to be importing that inflation, we already are. If you look at WPI inflation, it is in double digits. So, inflation has definitely been a worry throughout the pandemic. I think that RBI has not paid sufficient attention to inflation, and remember RBI's primary objective in an inflation targeting regime is to look at inflation first. Of course, in a situation of a pandemic growth becomes important and RBI has paid attention to it. But one can also argue that for the longest time, RBI was more focused on lowering the long-term government bond yields in order to make it cheaper for the government to borrow. So, all its liquidity injection activities were essentially targeted at keeping the long-term bond yields low so that the government could find it cheaper to borrow. Not sure that is something that RBI should continue in the future as it does not align with its official objective.

So, I think the fact that RBI maintained an accommodative stance of monetary policy for this long and has not been changing its stance, and even the normalisation of monetary policy signal that it is sending is not strong enough. That is a bit of a worry for me. And my fear is that RBI will be required to suddenly increase interest rates and normalise monetary policy. And that might act as a shock for the economy, especially in a growth recovery cycle.

#### 6. The Union Budget is scheduled to be presented in a few days from now. What do you think should be the focus areas of fiscal policy in the current scenario?

So, as I was saying I think expenditure wise capital expenditure spending, is something that the government already did in the last budget. The finance minister did announce increasing CapEX spending by quite a bit, which was a very good signal. I think they should continue on that trend, figure out more ways of allocating money towards capital expenditure, simply because as I said, investment is the biggest vehicle for boosting growth in an emerging country like India. We basically have two levers to boost growth, one is exports, and one is investment. And investment has been sluggish from the private sector for a very long time now partly because of the twin balance sheet crisis. We need to revive private sector investment. Without that, we are not going to be able to grow at whatever rate that we want to grow in order to reach a \$5 trillion economy by the next few years. So, I think that is something that the government needs to focus on.

The recovery of the economy has led to some recovery in government revenues. The large companies have fared very well in the pandemic. Thus, the government could utilise corporate tax revenues and GST collections to fund capital expenditure. But we also have to keep in mind that the next fiscal year is going to be completely uncertain, right? All the reasons why revenue has been higher this year may not continue in the next year. The corporate sector may not continue to do so well because you know, all the things about work from home that may come to an end sooner or later, all the things about being able to cut costs and earning profit may not continue in the next year and also, we don't know what's going to be the situation with GST if growth slows down. What we have seen this year is simply a recovery of growth. That is not 'growth per se', because we are still back to let's say, 2019 levels. Basically, that means we have lost two years of growth. That is very serious. We have no idea what's going to happen to the actual growth scenario in the next fiscal. So that puts the fiscal situation into uncertainty. So I think the government needs to keep in mind while planning its spending the fact that the fiscal deficit and the debt are still in a very, very tricky situation. And that might call for some rationalisation of expenditure on discretionary items like subsidies. Tradeoffs between welfare and capital expenditure can be expected.

# 7. According to you, what are the major lessons learnt regarding the current crisis of lives and livelihood? How can this time be utilised to build a valuable economy for the future?

I think that the pandemic has raised some very serious questions about some aspects of the broader economy that we should have paid much greater attention to over the last 10-20 years but we did not and the two sectors that immediately come to my mind would be health and education. I think the pandemic has exposed some very serious and fundamental flaws in the healthcare system of India. There is no doubt in anybody's mind about that. We have seen some really scary moments when the health system was completely falling apart and collapsing. We have all had personal stories from friends, neighbors and families and we have felt helpless. There is no Indian family that can claim that the situation was not really very scary and deeply worrisome, irrespective of what income percentile you belong to, because in some sense the state failed us, the health sector or system was definitely not up to the mark to face a challenge like the pandemic, and that is something that needs urgent attention. We barely spend 2% of our GDP on health. I think that is something that needs to be rectified, not just to be prepared for any other such shock that may come in the future but just in general, I think as citizens we deserve to have a good and affordable health care system. Now, be it government provided health care system, be it private health care system, I am not going to go into that debate, but I think health is one sector that has definitely shown its flaws and cracks in the pandemic. That's one part of the economy that I would be thinking about after the pandemic.

The second of course, is education. You guys are all students and you have experienced and you have been on the receiving side of what it means to be in a situation where you don't have access to teachers in person or friends in person, and I am sure you guys have struggled. I know my students have struggled. As teachers, we have struggled. We are still the elite percentage of the population who can afford computers, phones, an internet connection, and a room in the house where we can sit and work. Think of the millions of people who don't have access to such facilities and how they might have fared. I know there are families in rural households and I have interacted with them who have almost given up hope of their kids returning to the education system. This is a damage that can impact generations. It is not something that we will see today or tomorrow in GDP numbers, but this is going to have an adverse impact for generations, which is very bad for a country like India, which always boasts of a demographic dividend. What are we doing with the demographic dividend if we can't

even educate and train our young kids, our young people and we can't even provide them with the right kind of facilities? So, I think the education sector definitely needs a very big rethinking. Once again, should the public sector get into it, should the private sector get into it, that's a very different debate but I think that is something that has definitely come into question, and we need to think very seriously about, as a civil society, as a government, as an economy, as a country, what can we do to improve that particular sector.

These would be the two main chunks of questions that keep me awake at night after the pandemic because that really worries me and I think it should worry all economists and policymakers. Other than that, the silver lining—I don't want to end on a very gloomy note the silver lining of course is that, for those of us who can afford it, and I would say even for people who can't afford it, there has been some advantage of the digital lives we have all adopted. We have seen a large number of start-ups and unicorns come up, in the last couple of years, which is very encouraging, that basically means that the entrepreneurial spirit of young people is getting encouraged despite all the problems of the pandemic etc. We had also seen, you must have experienced, just in the neighbourhood, different towns, townships, not even in big cities, households, families and individuals are coming up with ideas, using the phone, using the apps, going digital, starting businesses, that is also very encouraging. We have also seen a lot of advantages of digital presence, because even the chaiwala, or the auto guy are benefiting from digital services, because they are using digital payment mode and WhatsApp, etc. for whatever is helping their businesses. I think that is definitely a huge boost that is going to be ushering in a lifestyle change going forward. I do not think we will go back to the kind of lives we led pre-pandemic. I think there is going to be a permanent shift in the way we are thinking and living our lives, and that will percolate across all strata of the society and my hope is that this will be a positive change. Also, I think businesses have learned what it means for them to be in this era where the majority of the employees may prefer to work from home. That is a sea change in the way businesses would visualize the future going forward. I think businesses will re-think and revisit what it means to have an office and what it means to have a company, what it means to have employees and how to make the most of it. This enhanced use of technology and consequent transformation of the workplace may lead to immense productivity benefits and is a definite silver lining.

The fourth thing I would like to mention here is that, while the pandemic has triggered a lot of fundamental thinking about the way of life going forward, and the economy going forward, at the same time it still remains, a temporary blip. It is a temporary shock. Let's assume and let's hope by the end of this year we all normalise, whatever normalisation means. We will look back; we will think of this as a big shock but it is not a permanent shock. It happened, lasted a couple of years, it will go away, and we will all go ahead with our lives. We need to then go back to a lot of structural problems that the economy was still facing before the pandemic. We should not ignore and forget all of that, and just get lost in what the pandemic left for us because remember, the economy was not doing very well by the time the pandemic hit us. I do not trust the GDP numbers, but even the official GDP numbers show that economic growth was less than 5% by 2019. That's worrisome. So, I think there are a lot of structural problems in the economy that need to be addressed going forward and we shouldn't let the pandemic distract our attention away from those. Those would be the main lines of thought I would have after the pandemic.

*In conversation with* 



Additional Excise Commissioner, Systems, Government of West Bengal

Sabnam Mukhopadhyay is a graduate in Economics from the University of Calcutta, she has served in the State government for 30 years. She has been associated with taking part in revenue policy making for drafting Narcotic and Liquor laws. She has also headed the inception and implementation of e-governance, the digital module for West Bengal government. She has also been a Training Instructor at the Administrative Training Institute, Kolkata. Her interests include drama, music, and recitation.

1. Given your experience in Systems, do you think India is ready for a large-scale digitization of the governance system? How has the pandemic exacerbated this situation?

Interviewed by-

Pragati Sharma,

On 9.01.22

**Ritasree Dey** 

To answer the first part of your question, we find that all over the world Indians are at the backbone of world class software. Indians have always been very much involved in the digitization revolution of the world, especially Indians working in advanced countries. And there is a world of benefits and ease that digitization has to offer. In my opinion, India is very much ready for large scale digitization at the government level. In most of the important fields, like GST, Income Tax filing, and major revenue earning departments, India has already introduced digitized governance. Earlier, we used to have lawyers and accountants to file Income Tax returns, and now digitization has made it a matter of minutes. GST recovery has been digitized in such a way that it ensures maximum coverage and recovery, and other revenue generation in excise has also increased a lot, because of the transparency brought in by digitization. The coverage of applications is done in such a way so that as far as possible, nobody is left out, along with online payments and actions. All this has contributed a lot to the economy too. Given that there has been so much success, of course India is ready for large scale digitization!

Of course, the pandemic has exacerbated this, and not just for the revenue department, but for all other departments and sections of the economy. Suppose someone wants to start a business. In order to get a license, they would have to visit the office, make an application, wait for the file to move, pay with a

treasury challan, and then receive it. It would take around 4-5 days. Now they can get it within 20-25 minutes by an online payment, and the trade license is generated at his or her fingertips. So, when people are not being able to go outside, due to the contagious nature of this virus, people are forced to stay indoors, but still, they have to do something! Whatever is being done is being done online. Of course, the pandemic has exaggerated its scope to a great extent.

#### 2. Now that we are ready for it, what do you think are the difficulties of implementing a digitized system of governance in India?

Right, this is a very interesting question. See, let me give you an example; in a government, there are different layers. This is the 30<sup>th</sup> year of my service in the government. When I joined, there were hardly any computers, and the computer used to be a substitution for a typewriter machine. Most of the offices had no broadband or internet connection, no such thing as Wi-Fi at that time. So those days, people needed to be specially trained to use a computer, it wasn't a day-to-day thing as it is today. So those days had certain office practices, many of them continuing till date. First thing which I personally think, is required, is a process re-engineering in the different layers of administration. This age-old system of documenting in a hard file, going from this table to that table, waiting for so and so time, all this; people got used to this. So now, one day, they are informed, they have to take a petition, scan it and put it in an e-file, if they were working on a filing system, and if it is an application, like license or permit generation, or any kind of say, approval, starting from a receding petition or any higher level, it will be met with resistance. The whole process gets reduced to one-or-two days, if no other conditions are pending, instead of 15-20 days. But whenever such a big change is made, it involves a lot of process re-engineering. The process of online governance is a lot easier that it was before. However, it depends a lot on the readiness and adaptability of the officers in the government departments. I remember when I was an instructor in the training, the first objection that came was that "I have never touched a computer before, how do you expect me to do this?"

This kind of blockage is the problem in the system. And the other problem is the infrastructure. The department I am working right now is very eager for digitization and e-governance, so it has relentlessly been providing for infrastructure in different pathways, but that is not to be the case of all such government departments in the rest of India. But that is a later problem. Even with limited infrastructure, some basic aspects of digitization can be implemented, and the process of e-governance can start. These are the major two challenges. And capacity building.

That is somewhat related to the first part of my reply; this blockage is a major hindrance to the building of capacity, because people have to have that acceptability. So that has to be fought out before you implement an e-governance process. For a dealing assistant who is on the verge of retirement, introduction of a new application which he has to do is a difficulty; to make him, to train him, to process his attitude towards it, e-governance, this is a challenge.

Whenever you are going to implement something, you are bound to receive some resistance from the stakeholders. So, the implementation authority should be very rigid in their decision, no flexibility should be allowed and when the implementation authority takes that kind of attitude, only then it is possible to successfully implement an e-governance process. These two are the common difficulties.

Expectation towards government is another problem, it is a major challenge. Say you are buying something over Amazon, and you pay extra for shipping, and you don't receive it. So, you write a mail, they will take some time, they will take three months to give your money back to your account, right, they may. But here, people expect that you will get the results then and there; because it is government, there is an office, and it is approachable. You cannot go to the Amazon office and ask them to return your money within one week! But here, people can come, they can request such and such, within 3 or 4 days, within 5 days. This amount of expectation, or the reliance on the process they were used to, is a challenge. In this transformation from one challenge to another, the advantage of this system, and the reminiscence of the advantage offered by the previous system, you cannot enjoy both. That is a challenge.

#### 3. Ma'am, what are the benefits of digital governance in India?

Enormous. Enormous benefits that one can get. Number one, time. Government departments can maximize its output, or performance, by shifting to the digital process and e-governance. This is my experience. That is number one. Number two is that, as far as the revenue of the government is concerned, secure online payment method can ensure maximum recovery. And having the stakeholders into your database, and all the data which you are getting, the process through which it is going, or any application they are using, it is creating a lot of data. It gives you a pattern, and you can use that data in formulation of the government policy. So, time, recovery of government revenue in a secured method, and the data which is generated, these are the enormous benefits.

Also, there is the convenience of the citizens. We have something called G2C, that is, government to citizen services, for which they have to come to the office, wait for days together, because all offline processes do take some time to get the approval or the draft ready. So, if they get it in the comfort of their home or office, it is definitely going to add a lot of value to their work.

#### 4. Going with what you said, what are the more benefits that the public can expect from this system of governance?

SMD: Let me talk about G2B, government to business organizations and services. So, in a digitized system, a lot of data is being created which is very useful for the business organizations. Previously they probably had to maintain one or two or three people to maintain this sort of database, but now that they are doing everything through these online applications, this data of their different requirements and transactions is being automatically generated and the MIS, which is very important, it is like the backbone of the system, like it is important for the government policy-formulation, it is important for business decision making. Say you are paying taxes, or you are paying GST. When you go to the portal and see the MIS of the GST you are paying, then you can plan your business accordingly, or you can keep track of the possible amount that you will be playing, or you can keep track of the possible funds that you have to keep aside for the payment of GST. This kind of business decisions can be taken effortlessly from the data which is being generated at their end too. It is a win-win situation for both the government and the business side, or the citizen's side. Any pending tax is documented and reflected. If the tax is missed, and there is piling up of tax, and if anyone goes for any kind of say, reconstruction of house, or waterline, or any big loan, then it gets revealed that so many taxes are pending, and the decision also becomes delayed. These situations are very common, there have been so many cases where this is a cause of delay or dispute and many resulting problems. This MIS, Management Information System, which gives you the data, whether it is specific to the business organization or to the government, or to the citizen, is very important in decision making, for all these three sections.

#### 5. Could you explain how all this looks like in the purview of the pandemic, both for the government and for the people? Could you talk about the G2C aspect?

I'll give you another example. In this pandemic situation, many people had to do business from home, and quite a few of them lost their jobs and had to look for alternatives. Many of them started small initiatives, like home delivery. And if you start a home delivery, and you have to

go by Swiggy or Zomato, or if you are situated in a more formal or sophisticated area, you will need a food license and a trade license. At that time, it was not possible to travel to government office and go through the offline process, because of the restrictions. Even if the offline process were done, it would have taken a lot more time than general because offices are functioning at 50% attendance. But you cannot delay this, it is a matter of families staying afloat! So when the government came out with this kind of application, the person concerned can apply from their home and get their license generated at their end, keep a pdf of it in their mobile phone, and send it to their customer to prove authenticity or use it for registration in the delivery system, it is benefitting the customer, it is benefitting the business, and it is benefitting the government also. The government is getting their revenue related to all kinds of licensing; e-governance keeps things going! Otherwise, in a pandemic, how can you proceed?

Yes, we have a long way to go, to completely digitize the government process, but what matters is that we are very keen on it. There is an Ease of Doing Business Cell that looks after the progress of the digitization of e-governance, and its implementation, in the different government departments, and its action has been very effective.

# 6. Yes Ma'am, as students we are glad to know of these initiatives, and everything that is going on behind the scenes. In your experience, how did the needs of a digital system change during the pandemic?

Those changes were basically in the software line. Earlier, if it was important to deliver something to the citizens or the business organizations, some physical material, or any sort of goods provided under government supervision, they had to come and collect it physically. The collection of the provision was still citizen-centric, or business organization centric. But the need of the hour in the pandemic is that the good that are delivered under government supervision normally, would be delivered to their footsteps. For that, the different changes in the application software were needed, and a new procedure had to be generated in a very short amount of time. Those were accordingly done; maybe it has taken 15 or 20 days, but that was it. After that, it was done, it was put in place. The need for e-governance has been felt long before in this state. In the digitization of governance, West Bengal is in a very good position, in the upper ladders of the states that have attempted to implement this.

The pandemic situation triggered some introduction of more user-friendly software, and some changes in the applications that made it more fluid, or some extension of the applications. These minor tweaking and fine-tuning of the system were needed, in the pandemic situation, but the

basic structure was always there. On that basic structure, more development was done, and that benefitted the people.

7. Ma'am, lastly, we would like to ask, what are your recommendations for the challenges we face, how to overcome that? How can we as citizens help in that?

It is my suggestion to the citizens that, please welcome online governance. Instead of going to government offices in the middle of the pandemic, please learn the user manuals that are provided in different government websites and get yourself equipped for Do-It-Yourself facilities. All the government websites have a Do-It-Yourself guide, a helpline number and a chat box in their user manual, but we citizens are not paying enough attention to go through them, and people go to the offices only to hear, "The guide is already there, Sir or Madam, please go through the User Manual, and you will be able to do it! Until and unless you apply online, we won't be able to provide your license!"

They have to accept this online governance and be more thorough in reading the user manual and attempting to use the portal. See, if they want to order from Swiggy, or get a premium YouTube enhancement or renew Netflix subscription, they cannot go to the Netflix office and ask the officials to do it for them! The accessibility of the government should not be misused when provisions have already been made. My recommendation would be that people should be aware of the fact that when they can do it from their home, they should not go to the offices during the pandemic and risk their fitness and health.; just for the sake of going to a government office.

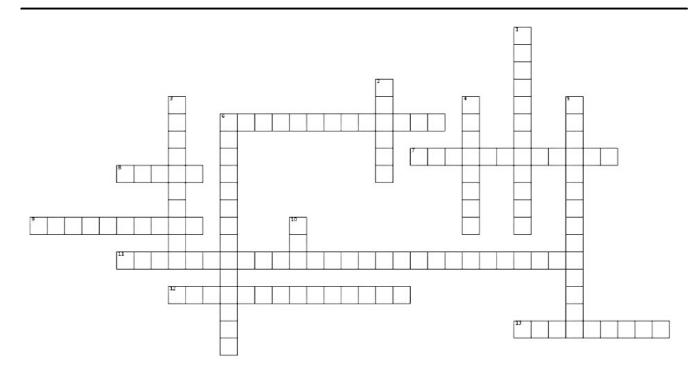
8. Ma'am this is not a question, but an observation, that what you said about the MIS software, and the generation of data, it is very beneficial for people like us, who want to study more; it gives us a lot more data to do research on. I was just thinking, how many ways are opened by this. This ready availability of data through system generated records is very important for research based on reliable data resources.

Very true, I think as students, this is just the tip of the iceberg of the benefits and the opportunities that we are realizing.

Yes, true, see documentation is always a plus point. If you have a record of everything, the benefits are immense, for all the people involved.

# TRIVIA

### **ECO CROSS**



#### **ACROSS**

- 6. A person who transmits an infectious disease to an unexpectedly large number of other people.
- 7. When a large portion of a community becomes immune to a disease.
- 8. The first known infections from SARS-CoV-2 were reported here.
- 9. Time between when a person being exposed to the virus and when their symptoms first appear.
- 11. Equipment worn to minimize exposure to hazards (illness/injuries).
- 12. The process of attempting to identify people who have recently been in contact with someone diagnosed with an infectious disease.
- 13. Strategy to look for as-yet-unrecognized conditions or risk markers.

#### **DOWN**

- 1. Infected with no symptoms.
- 2. Mathematical term indicating how contagious an infectious disease is.
- 3. Transmissible by direct or indirect contact with an infected person.
- 4. Disease that affects a large number of people within a community, population, or region.
- 5. A non-pharmaceutical infection prevention and control intervention.
- 6. To refrain from any contact with other individuals for a period of time during the outbreak of a contagious disease.
- 10. An acronym for the International Organization responsible for International Public Health.

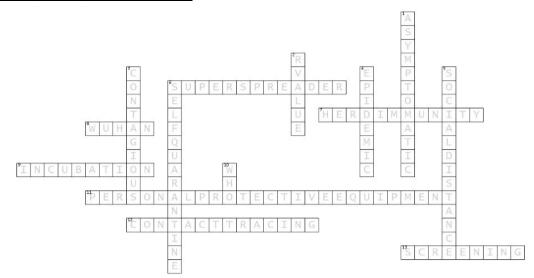
## **ECO SCRAMBLE**

- 1. IOAELNRTF
- 2. GEICTYNNCNO
- 3. TOOAINCNG
- 4. YLSPPU TORHAGES
- 5. AGLBLO LAEVU CAHNI

- 6. INCAECV
- 7. CRNOCOMIEOCMA CSRISI
- 8. CVIOD GLON ARUSEHL
- 9. DPCNEMIA
- 10. MNPNYEOTMEUL

#### **ANSWERS**

#### **Eco Cross Solution:**



#### **Eco Scramble Solution:**

- 5. Global Value Chain
  - 4. Supply shortage
    - 3. Contagion
    - 2. Contingency
      - 1. Reflation

- 10. Unemployment
  - 9. Pandemic
- 8. Covid long haulers
- 7. Macroeconomic crisis
  - 6. Vaccine

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