

UNDOING THE LOCKDOWN: DATA DRIVEN SOLUTIONS FOR THE POST-COVID INDIAN ECONOMY

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DOI: 10.46609/IJSSER.2022.v07i07.006 URL: <https://doi.org/10.46609/IJSSER.2022.v07i07.006>

Received: 9 July 2022 / Accepted: 17 July 2022 / Published: 20 July 2022

ABSTRACT

With the Indian and global economy steadily improving and recovering after the initial slump caused by the Covid-19 pandemic, the usage of big data analysis to drive policy solutions for economic recovery has emerged as a key method for targeted intervention. Governments in India and globally have underscored the importance of data collection to create evidence-based measures to understand the trends emerging from the pandemic. The trends observed are economic growth, and a steep rise in internet adoption, digital transformation in multiple varied sectors, and automation of work as well as the rise in gig work. This has also consequently led to positive trends in relation to the rise in digital entrepreneurship and new business models, including social entrepreneurship. However, there are also significant avenues for improvement in relation to data collection for the most underserved and marginalised communities in India, and workers in the informal economy. This paper analyzes the available data on trends in relation to economic recovery and highlights the key issues and pitfalls of data driven approaches. This paper argues for the prioritisation of poor and informal workers who are often left behind in the narrative of digital transformation and provides policy recommendations for future research to address these key data gaps for a more sustainable economic recovery model.

Keywords: Population, Entrepreneurship, Covid-19 ,GDP, Data.

Introduction

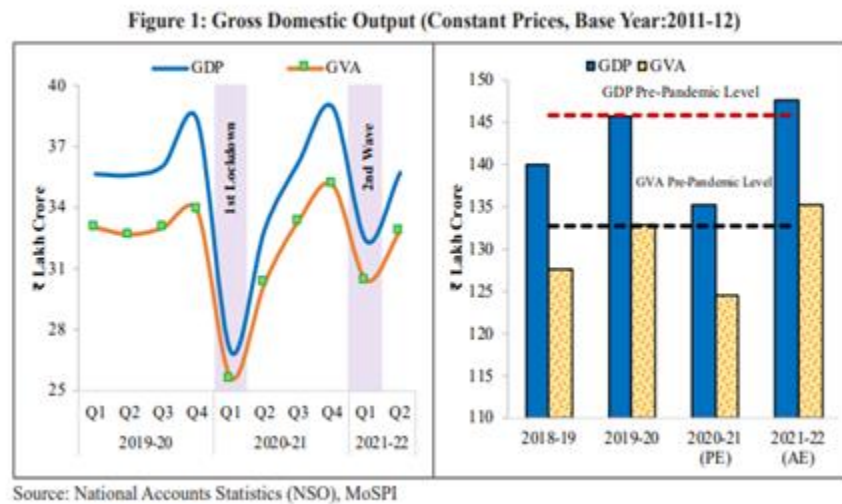
Both in India and globally, the post Covid-19 economic recovery has seen varied approaches. Increased digitization fueled by remote work and online opportunities, has been observed globally. Especially in relation to service sectors which had to adapt to moving their business models online, there has been a large uptick on businesses which have digitized their models

entirely (Heuvel, 2021). Economies all over the world have recognized that harnessing the potential of the digital, cashless and service economy is crucial to understanding economic recovery post Covid-19 (Kumar, 2020). Studies conducted during the course of the pandemic have also revealed that the pandemic has led to a rise in opportunities and avenues for entrepreneurship in the digital space, especially in the sectors of education technology, financial technology, cybersecurity and data protection, online healthcare and diagnostics, virtual care, entertainment and social media, and e-commerce (Modgil et al, 2022).

The changing paradigms of the economy post Covid-19, has underscored the importance of data in understanding such changes and seeking to address the challenges which have emerged in data collection. The COVID-19 crisis provides an opportunity to reorient the existing methods and methodologies for data construction. Such a move will also help gradually transit from a data deficit to a data-driven and empirical economic policymaking (Veerasha, 2021). Data driven decision making played a key role for governments in India and globally, to rapidly respond to the pandemic through contact tracing and isolation, data driven healthcare models, and providing targeted intervention as well as financial aid and work resumption and re-opening policies (Yu et al, 2022). India, with its wide disparities and unique cultural and socio-economic contexts must harness the potential of data analysis to drive intervention and recovery to the most vulnerable sections of the population, enable entrepreneurship and innovation, improve service delivery, and drive better governance overall (Pachisia and Gutta, 2021). This paper analyzes the foundations of data driven approaches towards understanding economic growth, with focus on the Indian economy. The paper will analyze the manner in which data collection has been harnessed for economic recovery post the pandemic, and the challenges that continue to be prevalent in the Indian context. The paper concludes with policy recommendations in relation to data driven approaches for economic policy.

Background

On a foundational level, data driven decision making is the process of using evidence and insights derived from data to guide the decision making process and to verify a plan of actions before it is committed, and has played a vital role in effective decision making (Yu et al, 2022). In India, the data has demonstrated that there is large potential for economic recovery. The Union Budget 2021-22 has forecasted that the Gross Domestic Product (GDP) will expand by 9.2 per cent in 2021-22. This implies that the level of real economic output will surpass the pre-COVID level of 2019-20 (shown in Figure 1 below):



As per official statistics, sector wise growth for the next five years in the Indian economic also forecasts a positive growth trend (Union Budget, 2021). However, policy makers and researchers have criticized the data driven approaches which are used by official statistical agencies, pointing out the prevalent data gaps which continue to exist. The COVID-19 pandemic specifically highlighted inadequate urban service delivery brought about by information gaps in three areas: public health, transportation and the protection of migrant populations. Public officials in India spent weeks during the initial stages of the pandemic, gathering basic data on location of health facilities, and affected patients (Pachisia and Gutta, 2021).

Therefore, it is also crucial to understand the political nature of data driven approaches and ensure objectivity in the data collection process to produce evidence based trends which will allow for more informed decision making in relation to economic growth. In this regard, the COVID-19 crisis has pushed the economies across the globe to rethink the traditional estimations of the gross domestic product (GDP), including the revision methods and statistical models. The unprecedented delays caused by the measures such as lockdown, social distancing, restrictions on the mobility, stagnation of business activities and closure of industries have contributed to the data deprivation during the COVID-19 pandemic period (Veerasha, 2021).

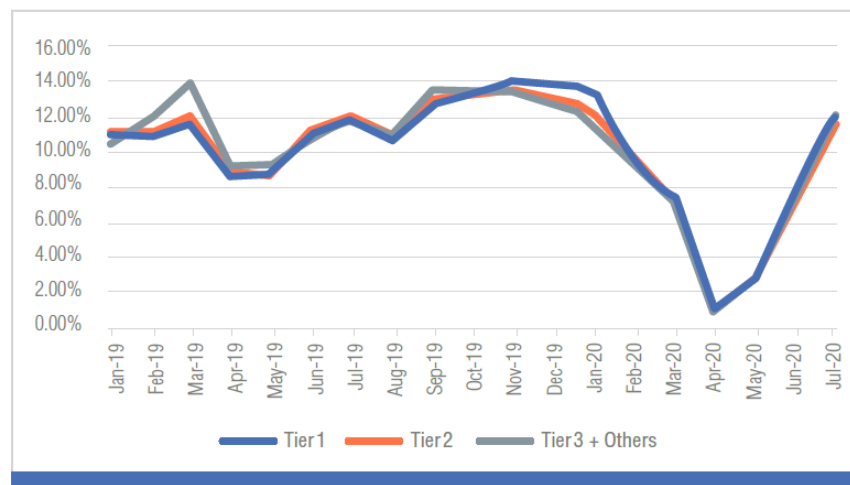
What is clear from data driven forecasting models is the phenomenal growth of the internet and internet based industries due to pandemic restrictions. Digital entrepreneurship has expanded in an unprecedented manner. A study conducted in 2020 showed that the pandemic brought a surge in e-commerce and internet usage saw a surge after the initial slump during the peak of the

Covid-19 lockdowns (Kumar, 2020). The study notes that a large part of digital consumption and growth comes from both tier-two and tier-three cities in India.

Figure 2: Source (Kumar, 2020).

Figure 1.2

Tier-wise Percentage of Internet Users Shopping Online



The aforementioned study is an apt example for bringing about more holistic data driven approaches. The study acknowledges that while e-commerce sales and internet usage may have risen steadily before and during the pandemic which indicates a rise in digitization, as per the best estimates currently available, only about 500 million people have internet access, leaving most of the populace out of the digital economy (Kumar, 2020). Therefore, it is important to adopt data driven approaches which analyse economic trends from a holistic lens, which are inclusive of marginalised communities and not only measuring GDP growth and entrepreneurship, which tends to be focused on educated, urban and affluent communities with access to internet, among basic resources. Moreover, qualitative research is as important as quantitative research in developing holistic data and evidence driven policy decisions (Modgil et al, 2022).

For example, the tragedy faced by migrant workers who were stranded during the Covid-19 lockdowns in India, was in large part exacerbated by the lack of accurate estimates on the number of migrants affected, which led to lack of public service delivery and effective intervention. That the government was still using the 2011 census as the point of reference for a

highly mobile population led to large-scale exclusion from social protection systems (Pachisia and Gutta, 2021). The following sections of this paper will discuss these contrasting dimensions of data driven approaches, focusing on the context of excluded sections of the population and with specific reference to the changing landscape of labour, work and automation.

Discussion

As discussed above, the Covid-19 pandemic led to an initial slump of the economy, which was followed by an uptick and steady recovery as per official statistics. Digital growth and consumer adoption rose to levels during the pandemic, which may have otherwise taken a few years to achieve in the Indian context. A study conducted by the World Economic Forum in October 2020, businesses with operations in India are accelerating automation and digitization above the global average. While 58% are accelerating automation of tasks, compared to 50% globally, as many as 87% are accelerating digitalization of work processes, above the global average of 84% (IBEF, 2020). However, this has conversely led to deepening inequalities in the labour market, with certain sectors of the economy unable to make the digital shift. The aforementioned study estimated that even for those industries transitioning to increased digitization, approximately 50% of employees will need re-skilling (IBEF, 2020). Both in India and on a global scale, entrepreneurship has risen in large part due to the minimal investment and overhead requirements which is a consequence of remote-first policies during the pandemic. This has made it easier for digital entrepreneurs to scale (Modgil et al, 2022).

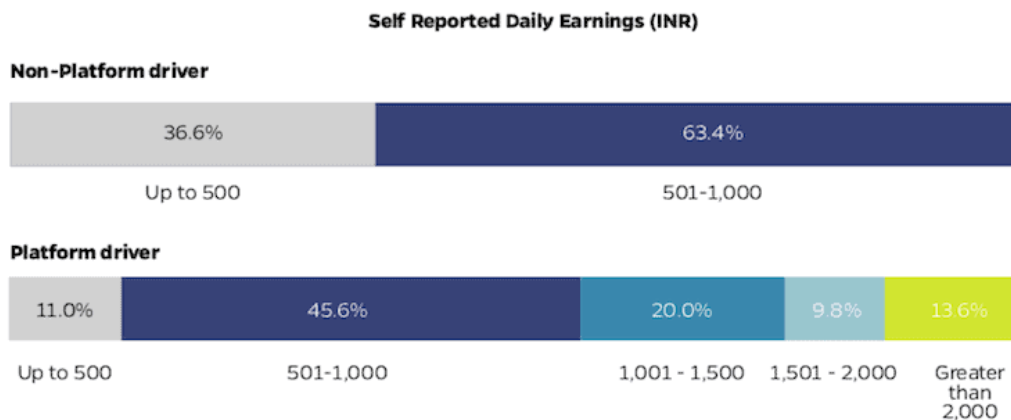
Although the studies above provide useful trends, the data on other sectors of the economy, specifically informal economy, continue to be sparse. For example, data shows that the value of digital transactions made through the Unified Payment Interface system alone doubled from Rs 21.3 trillion (\$284.2 billion) in 2019-2020 to Rs 41.04 trillion (\$547.09 billion) in 2020-2021 (Banswal, 2021). However, similar accurate data is not present with respect to the cash run, informal economies, which represents a large portion of India's source of business and income. The Union Budget also does not make a mention of these sectors.

Therefore, while it is a positive development that data driven approaches towards new business models and entrepreneurial endeavors have taken root, a truly sustainable economic recovery from the pandemic, must involve the most marginalised groups in India who have been most adversely impacted by the changing economic trends and left behind during digital transformation – namely, the urban and rural poor, migrant workers, daily wage labourers, domestic workers, local vendors, and anganwadi workers, sex workers, among several other similar categories (Mishra, 2021). A lacuna in the Indian response has been the absence of

reliable data about contact points with its huge informal labor force. In the absence of information, it was next to impossible to reach out to these people to inform them about “dos and don’ts,” provide them food assistance or even provide them cash assistance (Mishra, 2021). There has been a lack of information about them and it is reflected at each step in the process. It is essential that the dichotomy between social support for the informal labor sector and productive initiatives must be bridged, which could be done by providing help in stimulating productive development of small and micro enterprises by providing them market access as well as resources (Mishra, 2021).

Robust data has been collected for the platform sector and gig-worker sector, which has emerged as a key avenue for displaced and unemployed workers to find employment during the pandemic. The government’s Economic Survey 2020-21 highlighted that India has emerged as one of the world’s largest countries for flexi-staffing (i.e., gig and platform work), and that this work will likely continue to grow due to the influx of e-commerce platforms amid the pandemic. A study conducted by the Ola Mobility Institute showed that platform drivers had a larger earning potential than non-platform drivers, which steered such drivers away from the informal sector due to reliability in payments (Figure 3, Banswal, 2021).

Figure 3:



Source: Banswal, 2021.

While such data is available, in one part due to efforts for data collection by the private sector, it is crucial to also collect data on a more structural level to safeguard the rights and livelihoods of

vulnerable populations, address key data gaps and data quality issues (such as standardisation and interoperability), and prioritise the adoption of sustainable technology and solutions (Mishra, 2021; Pachisia and Gutta, 2021). This will assist in developing novel solutions for economic recovery, as well as better existing schemes which are underutilised and inaccessible to increase overall efficiency and reach in the governance delivery (Banswal, 2021).

Conclusion

This paper has sought to shed light on the importance of data driven approaches for future businesses as well as economic policy. While data collection has shown some positive trends for the economy, it is clear that there is a large scope for improvement to ensure equitable policy making which reaches not only a few sectors of the economy. In this regard, it is key to acknowledge the limitations of data driven approaches, for policy makers to address these issues for more sustainable decision making. Data quality and integrity is a crucial aspect of evidence based policy making. Systems must be developed to ensure that data collected is current, accurate and unbiased with increased coordination and capacity building amongst government and data collection agencies (Pachisia and Gutta, 2021; Yu et al, 2022). Policy makers must also acknowledge that the data emerging from Covid-19 in various sectors of the economy is complex and varied, touching issues of health, transport, social welfare, financial inclusion, and cultural experiences of discrimination and marginalization which cannot be quantified. further studies should pay additional attention to data analysis of highly dynamic, heterogeneous, multi-sources, as well as unpredictable sources, including new processing methods and analytic tools (Yu, 2021).

Lastly, future data collection must necessarily take into account the element of fairness in decision making. Algorithms which are developed through biased data sets will produce unfair decisions, especially in relation to those populations who lack legal recognition and social protections, and with whom there is no comprehensive channel of communication (Mishra, 2021). Therefore, data driven approaches supporting economic growth and a rise in entrepreneurship must necessarily account for the sectors of society which tend to be left behind in boosting revenue and digital transformation.

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