01

CHAPTER

State of the Economy

The last two years have been difficult for the world economy on account of the COVID-19 pandemic. Repeated waves of infection, supply-chain disruptions and, more recently, inflation have created particularly challenging times for policy-making. Faced with these challenges, the Government of India's immediate response was a bouquet of safety-nets to cushion the impact on vulnerable sections of society and the business sector. It next pushed through a significant increase in capital expenditure on infrastructure to build back medium-term demand as well as aggressively implemented supply-side measures to prepare the economy for a sustained long-term expansion. This chapter explains how this flexible and multi-layered approach is partly based on an "Agile" framework that uses feedback-loops, and the monitoring of real-time data.

Advance estimates suggest that the Indian economy is expected to witness real GDP expansion of 9.2 per cent in 2021-22 after contracting in 2020-21. This implies that overall economic activity has recovered past the pre-pandemic levels. Almost all indicators show that the economic impact of the "second wave" in Q1 was much smaller than that experienced during the full lockdown phase in 2020-21 even though the health impact was more severe.

Agriculture and allied sectors have been the least impacted by the pandemic and the sector is expected to grow by 3.9 per cent in 2021-22 after growing 3.6 per cent in the previous year. Advance estimates suggest that the GVA of Industry (including mining and construction) will rise by 11.8 per cent in 2021-22 after contracting by 7 per cent in 2020-21. The Services sector has been the hardest hit by the pandemic, especially segments that involve human contact. This sector is estimated to grow by 8.2 per cent this financial year following last year's 8.4 per cent contraction.

Total Consumption is estimated to have grown by 7.0 per cent in 2021-22 with significant contributions from government spending. Similarly, Gross Fixed Capital Formation exceeded pre-pandemic levels on the back of ramped up public expenditure on infrastructure. Exports of both goods and services have been exceptionally strong so far in 2021-22, but imports also recovered strongly with recovery in domestic demand as well as higher international commodity prices.

With the vaccination programme having covered the bulk of the population, economic momentum building back and the likely long-term benefits of supply-side reforms in the pipeline, the Indian economy is in a good position to witness GDP growth of 8.0-8.5 per cent in 2022-23.

Nonetheless, the global environment still remains uncertain. At the time of writing, a new wave in the form of the Omicron variant was sweeping across the world, inflation had jumped up in most countries, and the cycle of liquidity withdrawal was being initiated by major central banks. This is why it is especially important to look at India's macro-economic stability indicators and their ability to provide a buffer against the above stresses.

Despite all the disruptions caused by the global pandemic, India's balance of payments remained in surplus throughout the last two years. This allowed the Reserve Bank of India to keep accumulating foreign exchange reserves (they stood at US$ 634 billion on 31st December 2021). This is equivalent to 13.2 months of merchandise imports and is higher than the country's external debt. The combination of high foreign exchange reserves, sustained foreign direct investment, and rising export earnings will provide an adequate buffer against possible global liquidity tapering in 2022-23.

The fiscal support given to the economy as well as to the health response caused the fiscal deficit and government debt to rise in 2020-21. However, a strong rebound in government revenues in 2021-22 has meant that the Government will comfortably meet its targets for the year while maintaining the support, and ramping up capital expenditure. The strong revival in revenues (revenue receipts were up over 67 per cent YoY in April-November 2021) means that the Government has fiscal space to provide additional support if necessary.

The financial system is always a possible area of stress during turbulent times. However, India's capital markets, like many global markets, have done exceptionally well and have allowed record mobilization of risk capital for Indian companies. More significantly, the banking system is well capitalized and the overhang of Non-Performing Assets seem to have structurally declined even allowing for some lagged impact of the pandemic.

Vaccination is not merely a health response but is critical for opening up the economy, particularly contact-intensive services. Therefore, it should be treated for now as a macro-economic indicator. Over the course of a year, India delivered 157 crore doses that covered 91 crore people with at least one dose and 66 crore with both doses. The vaccination process for boosters and for the 15-18 year age group was also gathering pace at the time of writing.

Inflation has reappeared as a global issue in both advanced and emerging economies. India's Consumer Price Index inflation stood at 5.6 per cent YoY in December 2021 which is within the targeted tolerance band. Wholesale price inflation, however, has been running in double-digits. Although this is partly due to base effects that will even out, *India does need to be wary of imported inflation, especially from elevated global energy prices.*

Overall, macro-economic stability indicators suggest that the Indian economy is well placed to take on the challenges of 2022-23. One of the reasons that the Indian economy is in a good position is its unique response strategy. Rather than pre-commit to a rigid response, Government of India opted to use safety-nets for vulnerable sections on one hand while responding iteratively based on Bayesian-updating of information. This "barbell strategy" was discussed in last year's Economic Survey. A key enabler of this flexible, iterative "Agile" approach is the use of eighty High Frequency Indicators (HFIs) in an environment of extreme uncertainty.

Another distinguishing feature of India's response has been an emphasis on supply-side reforms rather than a total reliance on demand management. These supply-side reforms include deregulation of numerous sectors, simplification of processes, removal of legacy issues like 'retrospective tax', privatisation, production-linked incentives and so on. These have been discussed in detail in the respective chapters. Even the sharp increase in capital spending by the Government can be seen both as demand and supply enhancing response as it creates infrastructure capacity for future growth. This year's Survey particularly highlights the importance of process reforms in a number of sectors while Chapter 11 provides a brief demonstration of the use of satellite images and geo-spatial data, both recently deregulated sectors, for gauging economic development.

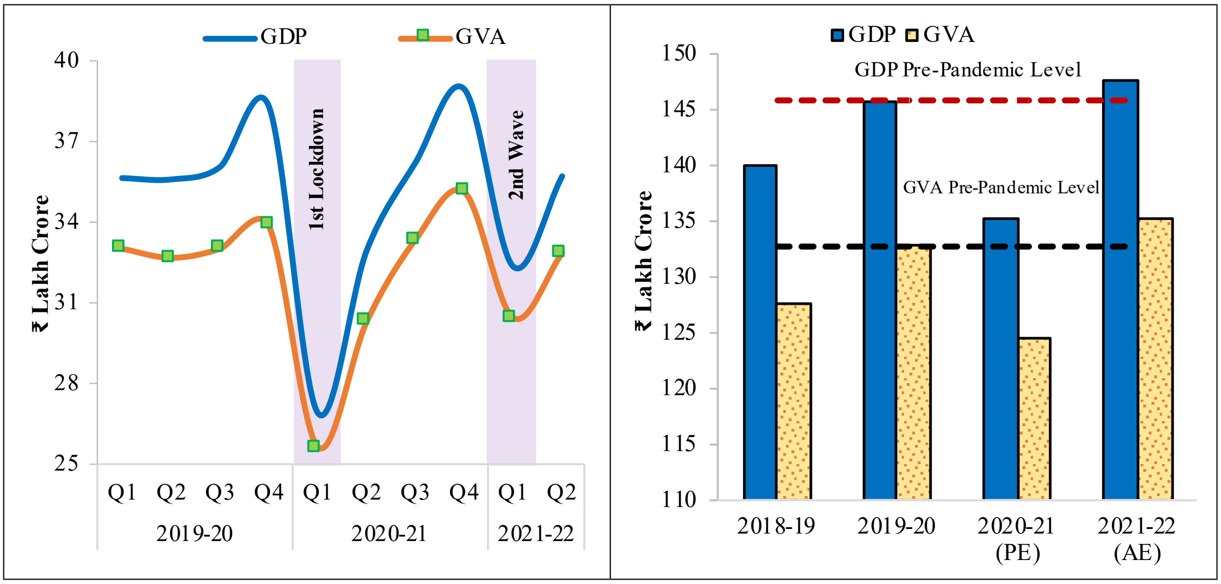
INTRODUCTION

1.1 Two years into the COVID-19 pandemic, the global economy continues to be plagued by uncertainty, with resurgent waves of mutant variants, supply-chain disruptions, and a return of inflation in both advanced and emerging economies. Moreover, the likely withdrawal of liquidity by major central banks over the next year may also make global capital flows more volatile. In this context, it is important to evaluate both the pace of growth revival in India as well as the strength of macro-economic stability indicators. It is also essential to look at progress in vaccination as this is not just a health response but also a buffer against economic disruptions caused by repeated waves of the pandemic.

Economy recovers past Pre-Pandemic levels

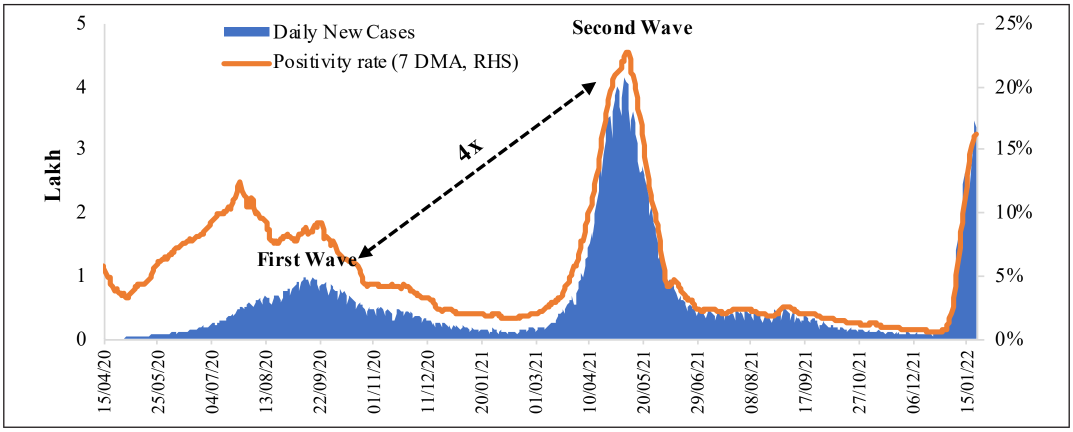
1.2 The Indian economy, as seen in quarterly estimates of GDP, has been staging a sustained recovery since the second half of 2020-21. Although the second wave of the pandemic in April-June 2021 was more severe from a health perspective, the economic impact was muted compared to the national lockdown of the previous year (see Figures 1 & 2). Advance estimates suggest that GDP will record an expansion of 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.

Figure 1: Gross Domestic Output (Constant Prices, Base Year:2011-12)



Source: National Accounts Statistics (NSO), MoSPI

Figure 2: Waves of COVID-19



Source: Data accessed from Ministry of Health and Family Welfare (MoH&FW)
Note: DMA stands for Daily Moving Average

SECTORAL TRENDS

1.3 Not surprisingly, the agricultural sector was the least impacted by the pandemic-related disruptions (Figure 3). It is estimated to grow 3.9 per cent in 2021-22 on top of 3.6 per cent and 4.3 per cent respectively in the previous two years (Table 1). This sector now accounts for 18.8 per cent of GVA.

Table 1: Annual Growth of GVA at constant (2011-12) prices (per cent)

Sectors	2019-20 (1st RE)	2020-21 (PE)	2021-22 (1st AE)	Recovery over 2019-20
Agriculture & Allied Sectors	**4.3**	**3.6**	**3.9**	**107.7**
Industry	**-1.2**	**-7.0**	**11.8**	**104.1**
Mining & quarrying	-2.5	-8.5	14.3	104.6

Manufacturing	-2.4	-7.2	12.5	104.4
Electricity, gas, water supply & other utility services	2.1	1.9	8.5	110.5
Construction	1.0	-8.6	10.7	101.2
Services	**7.2**	**-8.4**	**8.2**	**99.2**
Trade, hotels, transport, communication and services related to broadcasting	6.4	-18.2	11.9	91.5
Financial, real estate & professional services	7.3	-1.5	4.0	102.5
Public administration, defence and Other Services	8.3	-4.6	10.7	105.6
GVA at basic price	**4.1**	**-6.2**	**8.6**	**101.9**

Source: NSO

Note: RE - Revised Estimates, PE - Provisional Estimates, AE - Advance Estimates

1.4 As shown in Figures 5 and 6 below, the area sown under Kharif and Rabi crops, and the production of wheat and rice has been steadily increasing over the years. In line with the longer term trend, the area sown in the Kharif cycle of 2021-22 was again higher than in the previous year (the Rabi cycle data was incomplete at the time of writing). In the current year, food grains production for the Kharif season is estimated to post a record level of 150.5 million tonnes. Procurement of food grains under the central pool accordingly maintained its rising trend in 2021-22 along with minimum support prices, which augur well for national food security and farmers' incomes. Importantly, the strong performance of the sector was supported by Government policies that ensured timely supplies of seed and fertilizers despite pandemic related disruptions. It was also helped by good monsoon rains as reflected in reservoir levels being higher than the 10-year average (Figure 4).

Figure 3: Real GVA of Agriculture & Allied Sectors

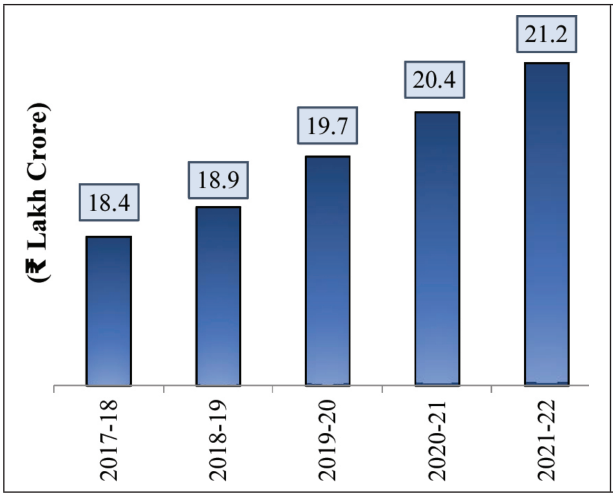
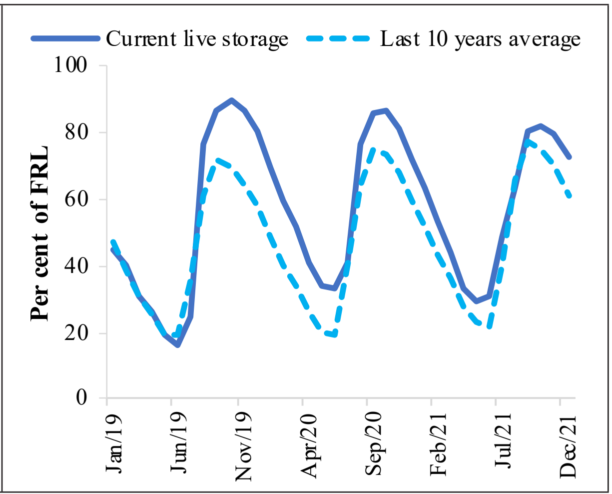


Figure 4: Reservoir Levels



Source: NSO, Central Water Commission

Note: FRL stands for Full Reservoir Level

Figure 5: Area Sown under Foodgrains

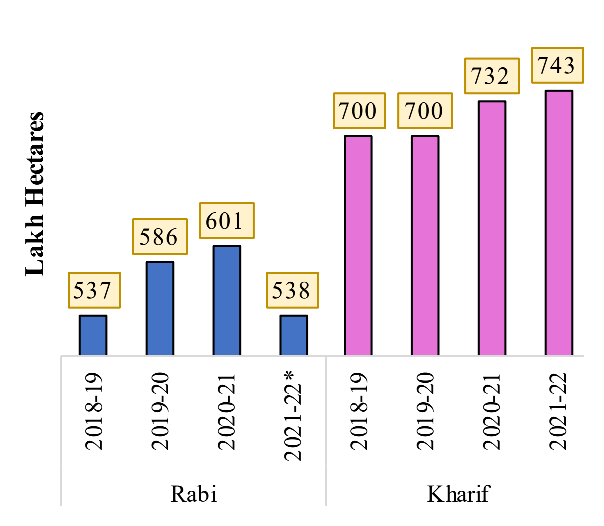
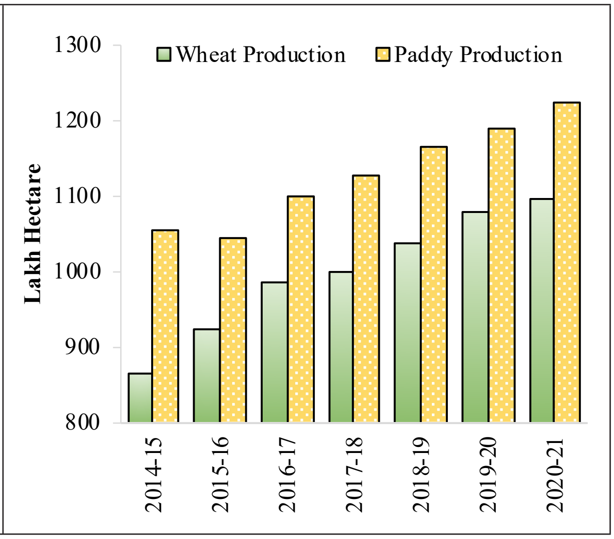


Figure 6: Production of Wheat and Rice



Source: M/o Agriculture & Farmers Welfare; *till 31st December 2021

1.5 In contrast to the steady performance of the primary sector, the industrial sector went through a big swing by first contracting by 7 per cent in 2020-21 and then expanding by 11.8 per cent in this financial year. The manufacturing, construction and mining sub-sectors went through the same swing although the utilities segment experienced a more muted cycle as basic services such as electricity and water supply were maintained even at the height of the national lockdown. The share of industry in GVA is now estimated at 28.2 per cent (Table 2).

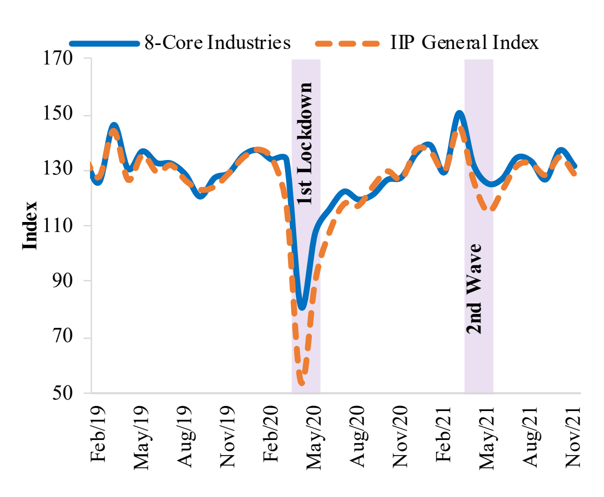
Table 2: Share of Sectors in Nominal GVA (per cent)

Sectors	2019-20 (1st RE)	2020-21 (PE)	2021-22 (1st AE)
Agriculture & Allied Sectors	**18.4**	**20.2**	**18.8**
Industry	**26.7**	**25.9**	**28.2**
Mining & quarrying	1.9	1.6	2.3
Manufacturing	14.7	14.4	15.4
Electricity, gas, water supply & other utility services	2.6	2.7	2.5
Construction	7.4	7.2	8.0
Services	**55.0**	**53.9**	**53.0**
Trade, hotels, transport, communication and services related to broadcasting	18.9	16.4	16.9
Financial, real estate & professional services	21.2	22.1	20.9
Public administration, defence and Other Services	14.9	15.4	15.2
GVA at basic price	**100.0**	**100.0**	**100.0**

Source: NSO
Note: RE: Revised Estimates, PE: Provisional Estimates, AE: Advance Estimates

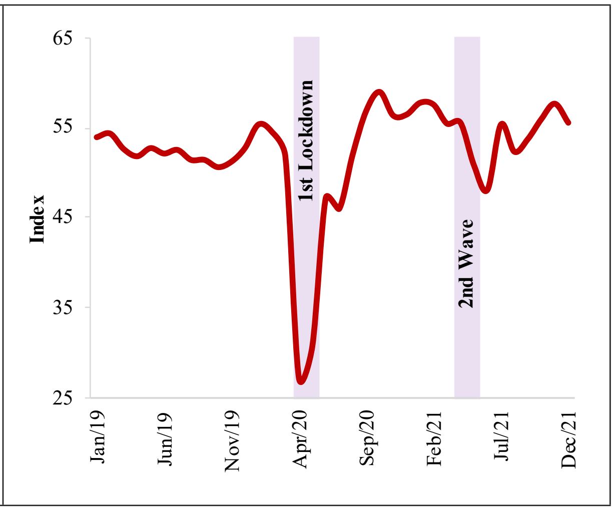
1.6 Since January 2021, the widely used Purchasing Managers' Index-Manufacturing has remained in the expansionary zone (i.e. over 50) except for one month when the second wave had slowed down economic activity (Figure 8). The Index of Industrial Production (IIP) and Core Industry indices have both followed a similar pattern and, in November 2021, went past their pre-pandemic level for the corresponding month in 2019 (Figure 7).

Figure 7: Industrial Output



Source: MoSPI, DPIIT

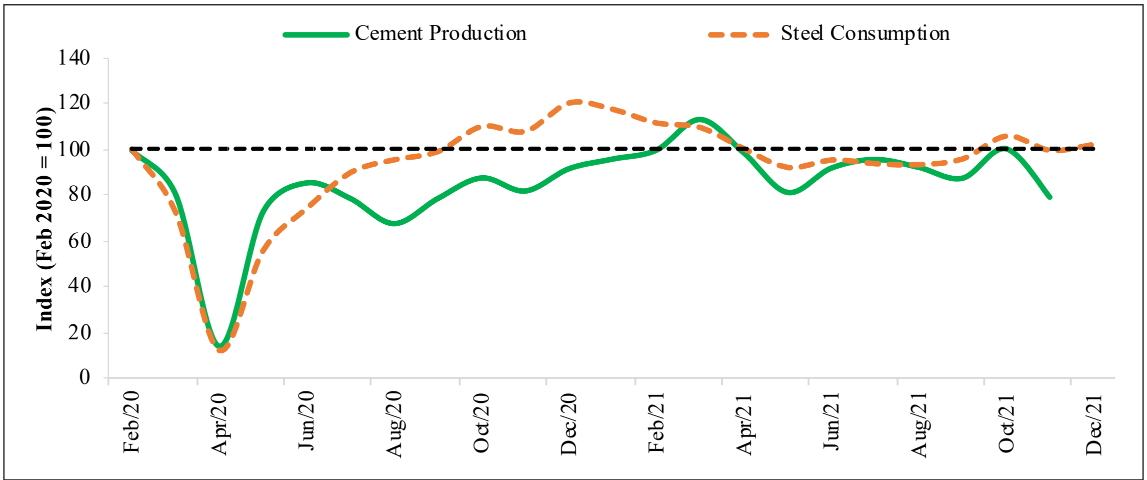
Figure 8: PMI Manufacturing



Source: IHS Markit

1.7 Rising capital expenditure by the government on infrastructure and an uptick in the housing cycle have been responsible for reviving the construction sector. This has allowed the consumption and production of steel and cement consumption to revert to pre-COVID levels (Figure 9). Statistics provided by RBI and leading real estate companies' show significant revival in the Indian residential real market in 2021 in terms of growth in sales, prices and new launches (Figure 10 and 11).

Figure 9: Construction Sector Indicators



Source: Joint Plant Committee; and O/o Economic Advisor, DPIIT

Figure 10: Housing Sales and New Launches in Top 8 Cities

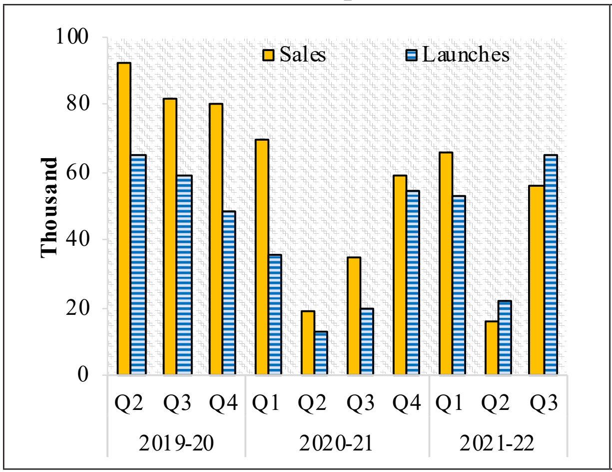
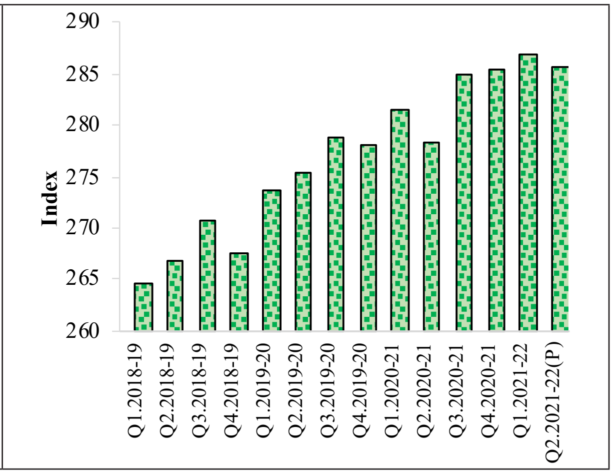


Figure 11: RBI Housing Price Index: All India

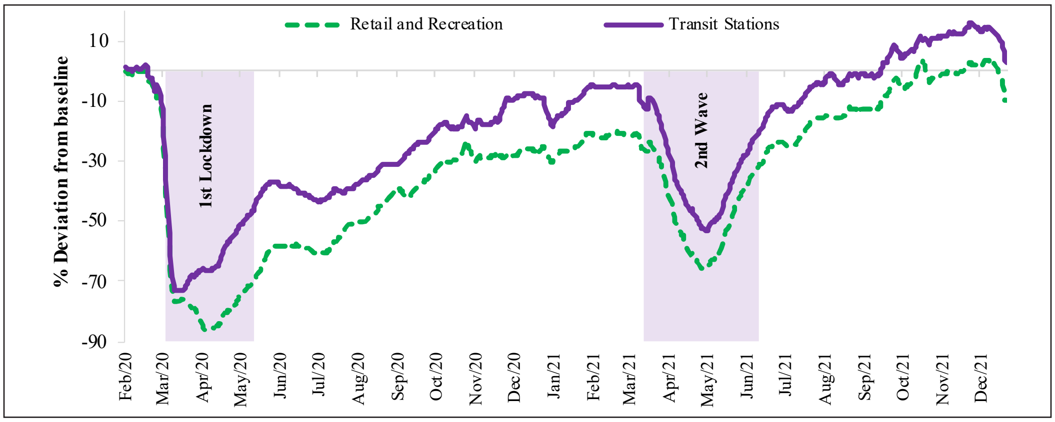


Source: Anarock, Proptiger, RBI
*Top 8 cities include: Ahmedabad, Benguluru, Chennai, Delhi NCR, Hyderabad, Kolkata, Mumbai, Pune

1.8 Services account for more than half of the Indian economy and was the most impacted by the COVID-19 related restrictions, especially for activities that need human contact. Although the overall sector first contracted by 8.4 per cent in 2020-21 and then is estimated to grow by 8.2 per cent in 2021-22, it should be noted that there is a wide dispersion of performance by different sub-sectors. Both the Finance/Real Estate and the Public Administration segments are now well above pre-COVID levels. However, segments like Travel, Trade and Hotels are yet to fully recover. It should be added that the stop-start nature of repeated pandemic waves makes it especially difficult for these sub-sectors to gather momentum.

1.9 Despite contact-sensitive services still being impacted by COVID, there has been a strong recovery of the Purchasing Managers' Index-Services since August 2021 (Figure 13). In this context, it is important to note the role of new forms of High Frequency Indicators to gauge real-time trends. For example, the Google mobility indicators for retail and recreation (i.e., restaurants, cafes, shopping centres, etc.) and transit stations (public transport hubs such as subway, bus, and train stations), measuring percentage deviation from pre-pandemic levels of mobility, has exceeded pre-pandemic levels in December 2021 before the Omicron wave again led to restrictions (Figure 12). Similarly, the hotel occupancy rate has recovered substantially, reaching 56-58 per cent in October 2021, from 30-32 per cent in April 2021 (Figure 14).

Figure 12: Trends in Mobility



Source: Google Mobility
Note: Baseline corresponds to Jan-Feb 2020 Level

Figure 13: PMI Services

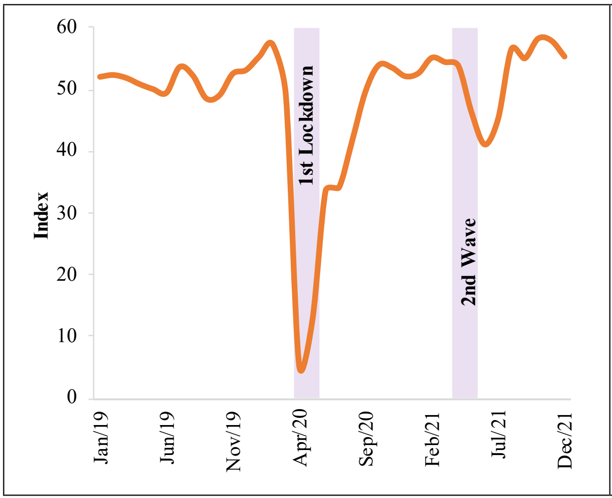
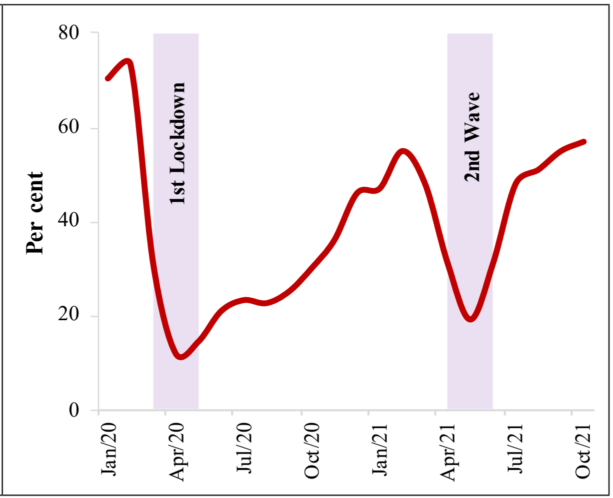


Figure 14: Hotel Occupancy Rate



Source: IHS Markit, Anarock

1.10 In contrast to contact-based services, distance-enabled services have increased their share with the growing preference for remote interfaces for office work, education and even medical services. Indeed, there has been a boom in software and IT-enabled services exports even as earnings from tourism have declined sharply (see Figures 15 & 16).

Figure 15: Quarterly Trend in Services Exports

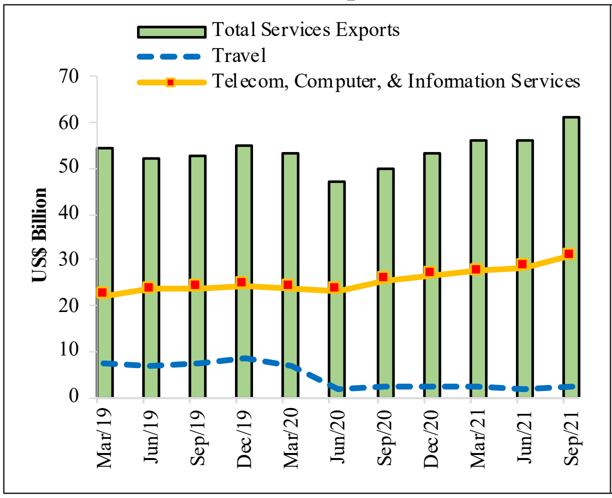
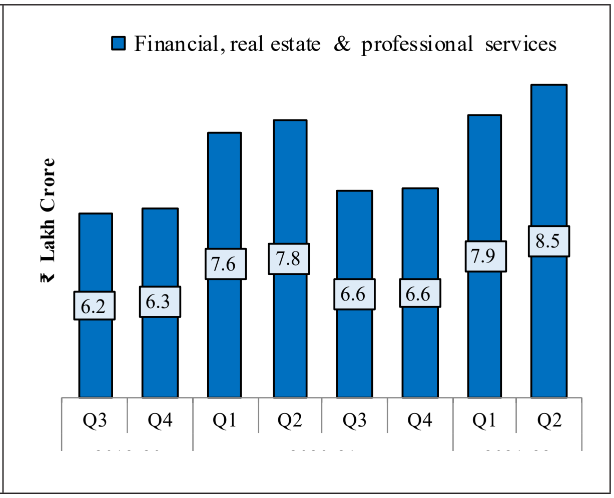


Figure 16: Real GVA of Distance Enabled services



Source: RBI, NSO

DEMAND TRENDS

1.11 Latest advance estimates suggest full recovery of all components on the demand side in 2021-22 except for private consumption. When compared to pre-pandemic levels, recovery is most significant in exports followed by government consumption and gross fixed capital formation. However, an equally strong recovery was seen in imports (Table 3 and Table 4).

Table 3: Annual Real growth in demand side of GDP and its components (per cent)

Components	2019-20 (1st RE)	2020-21 (PE)	2021-22 (1st AE)	Recovery over 2019-20
Total Consumption	5.9	-7.3	7.0	99.2
Government Consumption	7.9	2.9	7.6	110.7
Private Consumption	5.5	-9.1	6.9	97.1
Gross Fixed Capital Formation	5.4	-10.8	15.0	102.6
Exports	-3.3	-4.7	16.5	111.1
Imports	-0.8	-13.6	29.4	111.8
GDP	**4.0**	**-7.3**	**9.2**	**101.3**

Source: NSO
Note: RE - Revised Estimates, PE - Provisional Estimates, AE - Advance Estimates

Table 4: Share of Sectors in Nominal GDP (per cent)

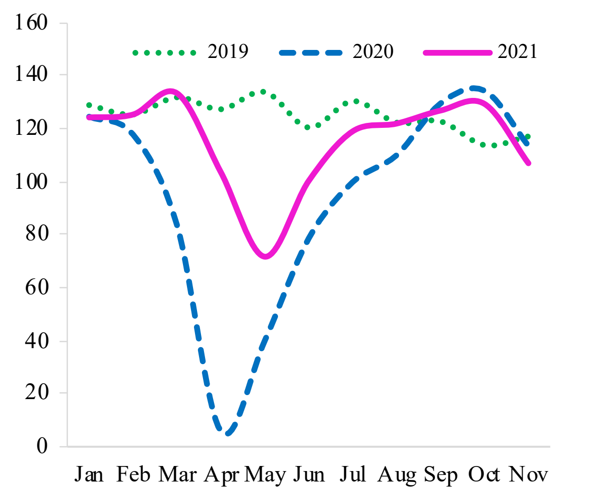
Sectors	2019-20 (1st RE)	2020-21 (PE)	2021-22 (1st AE)
Total Consumption	71.7	71.1	69.7
Government Consumption	11.2	12.5	12.2
Private Consumption	60.5	58.6	57.5
Gross Fixed Capital Formation	28.8	27.1	29.6
Net Export	-2.5	-0.5	-3.0
Exports	18.4	18.7	20.1
Imports	21.0	19.2	23.1
GDP	**100.0**	**100.0**	**100.0**

Source: NSO
Note: RE: Revised Estimates, PE: Provisional Estimates, AE: Advance Estimates

Consumption

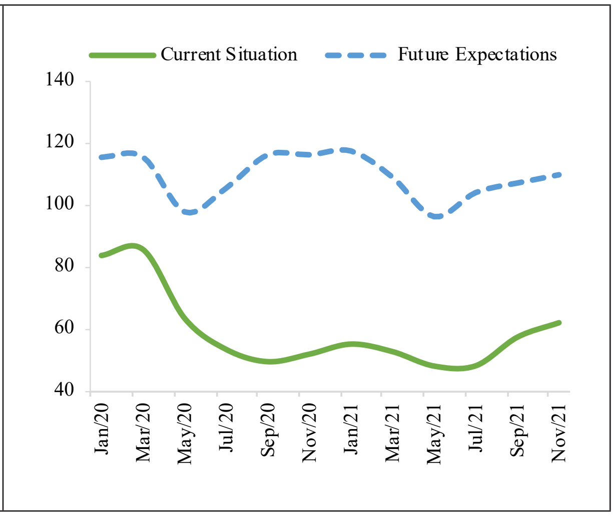
1.12 Total consumption is estimated to have grown by 7.0 per cent in 2021-22 with government consumption remaining the biggest contributor as in the previous year (Table 3). Government consumption is estimated to grow by a strong 7.6 per cent surpassing pre-pandemic levels. Private consumption is also estimated to have improved significantly to recover 97 per cent of corresponding pre-pandemic output level. This is supported by a sharp rebound in HFIs like IIP Consumer Durables (Figure 17). However, the recent dip in vehicle registrations reflects persistent supply-side constraints owing to the shortage of semi-conductor chips rather than lack of consumption demand. This is illustrated in Box 2 on global supply-side disruptions. Further, RBI's consumer confidence survey results on both the present situation and future expectations suggest sustained uptick in consumer sentiments (Figure 18). Also indicative of uptick in consumer sentiments is the steep rise in digital transactions, notably in UPI payments owing to the pandemic induced shift to contactless payments. Private consumption is poised to see stronger recovery with rapid coverage in vaccination and faster normalisation of economic activity.

Figure 17: IIP Consumer Durables Index



Source: O/o Economic Advisor, DPIIT

Figure 18: RBI's Consumer Confidence Index

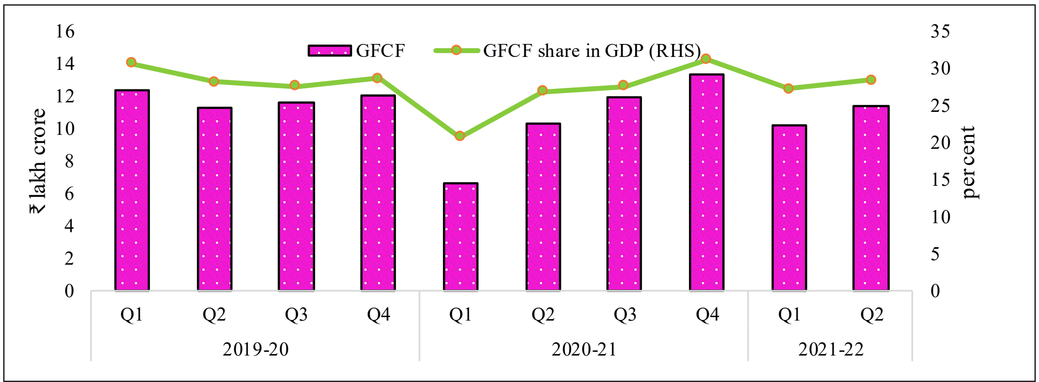


Source: RBI

Investment

1.13 Investment, as measured by Gross Fixed Capital Formation (GFCF) is expected to see strong growth of 15 per cent in 2021-22 and achieve full recovery of pre-pandemic level. Government's policy thrust on quickening virtuous cycle of growth via capex and infrastructure spending has increased capital formation in the economy lifting the investment to GDP ratio to about 29.6 per cent in 2021-22, the highest in seven years (Figure 19).

Figure 19: Gross Fixed Capital Formation (GFCF)



Source: NSO, MoSPI

Note: Absolute figures at constant (2011-12) prices, shares as per current prices

1.14 While private investment recovery is still at a nascent stage, there are many signals which indicate that India is poised for stronger investment. The number of private investment projects under implementation in manufacturing sector has been rising over the years (Figure 20). Companies hitting record profits in recent quarters and mobilization of risk capital bode well for acceleration in private investment (Figure 21). A sturdy and cleaned-up banking sector stands ready to support private investment adequately. Expected increase in private consumption levels will propel capacity utilisation, thereby fuelling private investment activity. RBI's latest Industrial Outlook Survey results indicate rising optimism of investors and expansion in production in the upcoming quarters.

Figure 20: Investor Sentiment in Manufacturing

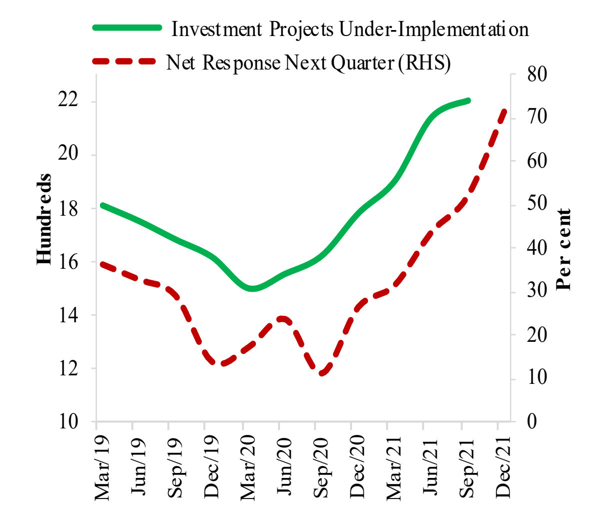
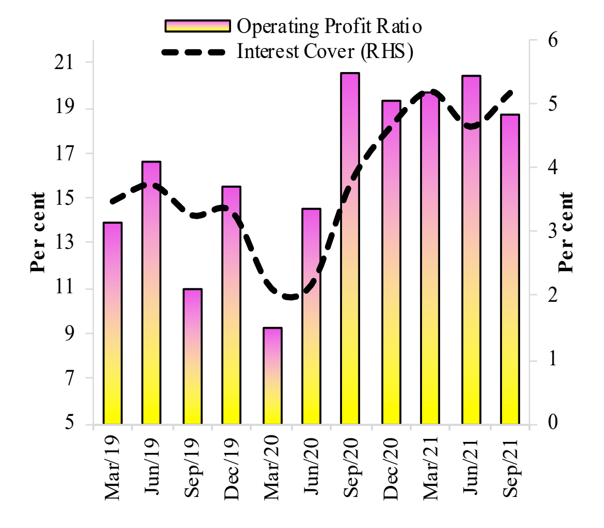


Figure 21: Non-Financial Sector Profitability Ratios



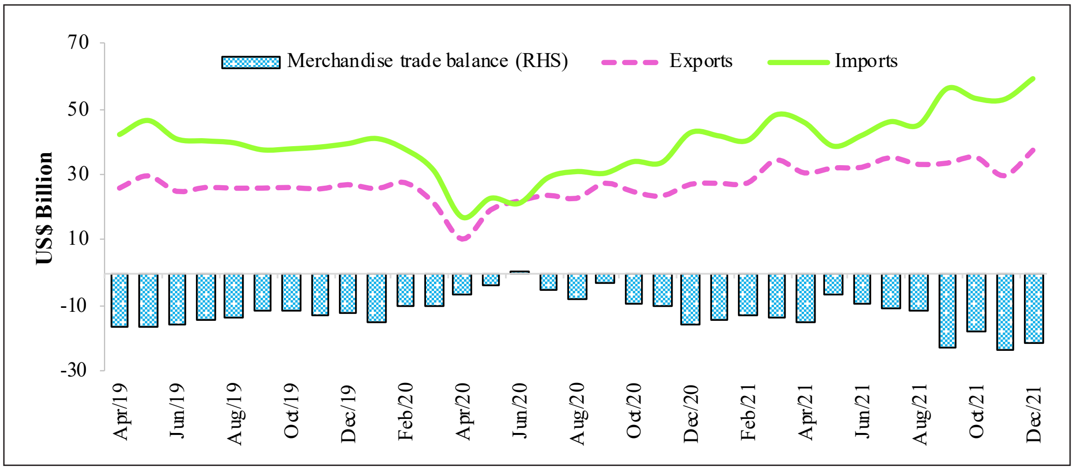
Source: CMIE Capex Database, RBI Industrial Outlook Survey, Prowess Database

Exports and Imports

1.15 India's exports of both goods and services have been exceptionally strong so far in 2021-22. Merchandise exports have been above US$ 30 billion for eight consecutive months in 2021-22, despite a rise in trade costs arising from global supply constraints such as fewer operational shipping vessels, exogenous events such as blockage of Suez Canal and COVID-19 outbreak in port city of China etc. (Figure 22). Concurrently, net services exports have also risen sharply, driven by professional and management consulting services, audio visual and related services, freight transport services, telecommunications, computer and information services (Figure 23). From a demand perspective, India's total exports are expected to grow by 16.5 per cent in 2021-22 surpassing pre-pandemic levels. Imports also recovered strongly with revival of domestic demand and continuous rise in price of imported crude and metals. Imports are expected to grow by 29.4 per cent in 2021-22 surpassing corresponding pre-pandemic levels.

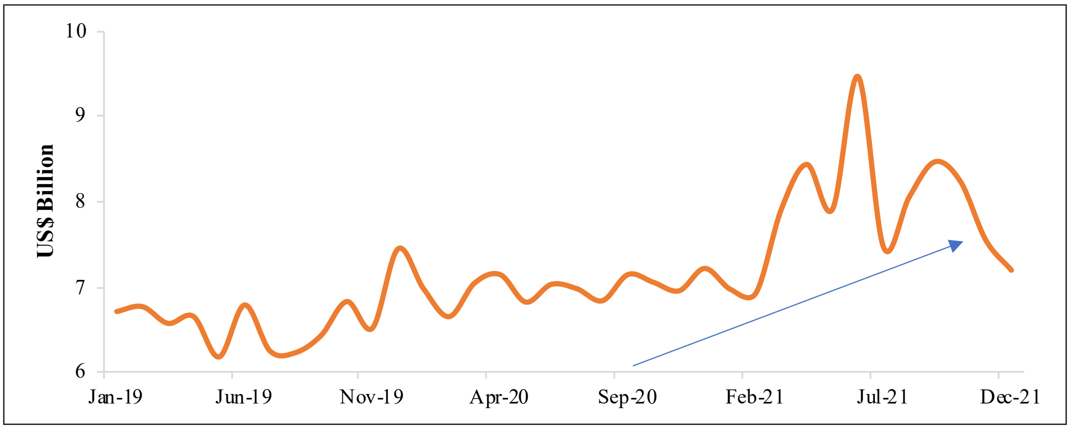
1.16 Resultantly, India's net exports have turned negative in the first half of 2021-22, compared to a surplus in the corresponding period of 2020-21 with current account recording a modest deficit of 0.2 per cent of GDP in the first half (Figure 24). However, robust capital flows in the form of continued inflow of foreign investment were sufficient to finance the modest current account deficit. Elevated global commodity prices, revival in real economic activity driving higher domestic demand and growing uncertainty surrounding capital inflows may widen current account deficit further during the second half of the year. However, it is expected to be within manageable limits.

Figure 22: Merchandise Trade



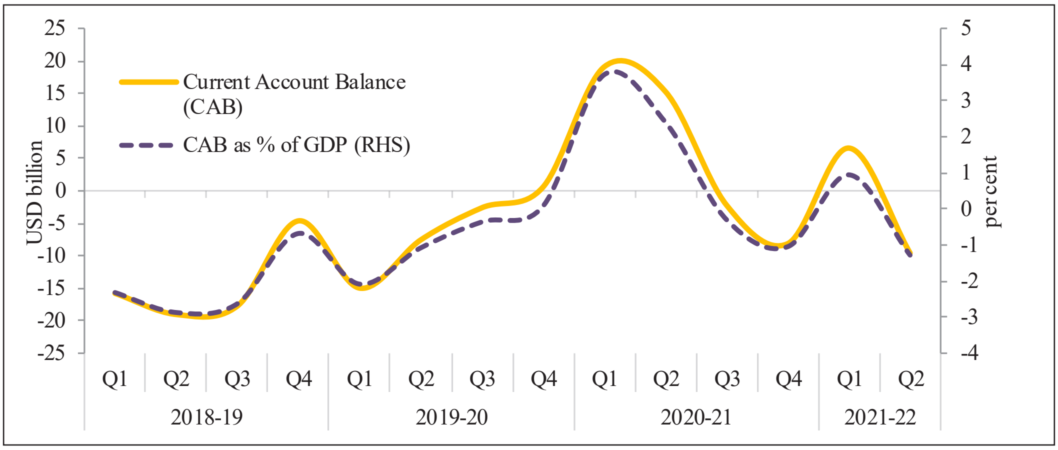
Source: M/o Commerce and Industry

Figure 23: India's International Trade in Services, Net



Source: RBI

Figure 24: India's Current Account Balance



Source: RBI

BARBELL STRATEGY, SAFTEY NETS & AGILE RESPONSE

1.17 The last two years have been particularly challenging for policy-making around the world with repeated waves from a mutating virus, travel restrictions, supply-chain disruptions and, more recently, global inflation. Faced with all this uncertainty, the Government of India opted for a “Barbell Strategy” that combined a bouquet of safety-nets to cushion the impact on vulnerable sections of society/business, with a flexible policy response based on a Bayesian updating of information. As explained in last year’s Economic Survey, this is a common strategy used in financial markets to deal with extreme uncertainty by combining two seemingly disparate legs. As some readers will have guessed, the iterative leg of this strategy is the same as the “Agile” approach that uses feedback-loops, and real-time adjustment.

1.18 The Agile approach is a well-established intellectual framework that is increasingly used in fields like project management and technology development. In an uncertain environment, the Agile framework responds by assessing outcomes in short iterations and constantly adjusting incrementally. It is important here to distinguish Agile from the “Waterfall” framework which has been the conventional method for framing policy in India and most of the world. The Waterfall approach entails a detailed, initial assessment of the problem followed by a rigid up-front plan for implementation. This methodology works on the premise that all requirements can be understood at the beginning and therefore pre-commits to a certain path of action. This is the thinking reflected in five-year economic plans, and rigid urban master-plans.

1.19 While some form of feedback-loop based policy-making was always possible, it is particularly effective at a time when we have wealth of real-time data. Over the last two years, Government leveraged a host of High Frequency Indicators (HFIs) both from government departments/agencies as well as private institutions that enabled constant monitoring and iterative adaptations. Such information includes GST collections, power consumption, mobility indicators, digital payments, satellite photographs, cargo movements, highway toll collections, and so on. These HFIs helped policy makers tailor their responses to an evolving situation rather than rely on pre-defined responses of a Waterfall framework.

1.20 Notice that the flexibility of Agile improves responsiveness and aids evolution, but it does not attempt to predict future outcomes. This is why the other leg of the Barbell strategy is also needed. It cushions for unpredictable negative outcomes by providing safety nets. This explains why the Government’s initial measures in 2020-21 were mostly about making food available to the poor, providing emergency liquidity support for MSMEs and holding the Insolvency and Bankruptcy Code in abeyance. Once these were in place, the Government made its way forward by regularly announcing packages targeted at specific challenges. Contrast this with the approach adopted by many other countries pre-committing to a particular response path. The following discussion provides an overview of the safety-net measures used to cushion the economy, while Chapter 2 provides a detailed analysis of how the fiscal mix changed over time towards supporting demand through capital expenditure and the supply-side through measures like production linked incentives. In line with Agile approach, this mix can be changed again as per the requirements of an evolving situation.

Safety Nets used to Cushion Vulnerable Sections

1.21 The recognition of extreme uncertainty associated with a ‘once-in-a-century’ pandemic meant that the Government opted for a careful mix of emergency support and economic policy actions to provide a cushion against pandemic induced shocks while flexibly adapting to an evolving situation.

1.22 In early 2020, when the first wave of the pandemic was making its way around the world, the Government focused on saving lives through emergency policy actions. The first among these actions was the imposition of a stringent lockdown in March 2020 when cases were still few. This provided the necessary time to ramp up testing infrastructure, create quarantine facilities and so on. Most importantly, it gave time to understand the COVID-19 virus, its symptoms and how it spread.

1.23 The government recognised that lockdowns and quarantines disrupt economic activity. Therefore, it quickly put in place economic safety nets comprised of world's largest free food program, direct cash transfers and relief measures for small businesses (details in Table 5). The Reserve Bank of India simultaneously provided monetary support to the economy. Many of these safety net provisions continued during the second wave and have been extended further as appropriate. This was combined with a rapid ramp-up of the vaccination programme as discussed later in the chapter.

Table 5: Key Safety Net Measures to Prevent Distress during COVID-19

Cash Transfers	₹500/month for 3 months to women Jan Dhan Account holders	• ₹30,944 crore released to 20.64 crore women beneficiaries
	₹1000 to vulnerable sections (widows, Divyangs, elderly)	• ₹2814 crore released covering 2.82 crore beneficiaries
	Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)- ₹6000/- per year in three instalments	• ₹ 1.8 lakh crore transferred to more than 10 crore farmer families as on 1.1.2022, since Feb 2019, i.e., 6 instalments since COVID-19
Food Security	**Pradhan Mantri Garib Kalyan Anna Yojana -** Additional free-of-cost food grains to 80 Crore National Food Security Act (NFSA) beneficiaries @ 5 Kg per person per month, over and above the regular monthly NFSA foodgrains	• Launched in March 2020, extended till March 2022 under Phase-V • From Mar-2020 to Nov-2021, 600 LMT foodgrains allocated to States/ UTs equivalent to ₹ 2.07 Lakh Crore in food subsidy
	One Nation One Ration Card to ensure PDS benefit for people in transit, especially migrant workers.	• Enabled in 34 States/UTs by August 2021 covering 94.3 per cent National Food Security Act population • 24.32 crore portability transactions carried out between 1.4.2020 and 30.9.2021
	Cooking gas cylinders under **Ujjawala**	• 3 free cylinders to 8 crore beneficiaries for April to June 2020. • First refill and hotplate free under Ujjwala 2.0 (launched 10.8.2021) with simpler procedures

Employment	**Pradhan Mantri Garib Kalyan Rojgar Abhiyaan** (PM-GKRA) for immediate employment & livelihood opportunities to returnee migrant workers across 6 States of Bihar, Jharkhand, Madhya Pradesh, Odisha, Rajasthan and Uttar Pradesh	• Generated 50.8 crore man-days employment as on 27.07.21 with expenditure of ₹ 39,293 crore
	Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)	• 2020-21 employment provided to 11.2 crore persons generating 389.2 crore person days. Funds of ₹1,11,171 crore released • 2021-22 (as on 25.11.2021): employment provided to 8.85 crore persons generating 240.4 crore person days. Funds of ₹ 68,233 crore released.
	MGNREGS wage increased by ₹20 over the wage rate of 2019-20	• Wage rate revised w.e.f. 1.4.2020 to benefit nearly 13.62 crore families
	Contribution of 12 per cent employer and 12 per cent employee's share under **Employees Provident Fund** (EPF) for 6 months for establishments with upto 100 employees with 90 per cent earning less than ₹ 15000/-	• Protected employment in EPFO registered establishments post-COVID
	Aatmanirbhar Bharat Rojgar Yojana (ABRY) to reduce the financial burden of the employers and encourages them to hire more workers, implemented by EPFO	• As on 20.11.2021, benefit provided to 39.43 lakh beneficiaries through 1.15 lakh establishments
Housing	**Pradhan Mantri Awas Yojana – Gramin** (PMAY-G)	• 2020- 21: 33.99 lakh houses completed • 2021-22 (as on 25.11.21): 26.20 lakh houses completed
	Pradhan Mantri Awas Yojana – Urban (PMAY-U)	• 2020-21: 14.56 lakh houses completed • 2021-22: 4.49 lakh houses completed (upto Dec-21)
Skill Development	**Deen Dayal Upadhyaya Grameen Kaushalya Yojana** (DDU-GKY) and Rural Self Employment Training Institutes (RSETIs) - skill development programmes for rural poor youth	DDU-GKY • 2020-21: 38,289 candidates trained and 49,563 candidates placed in jobs • 2021-22 (till Oct'21): 14,568 candidates trained and 21,369 candidates placed in jobs RSETI • 2020-21: 207712 candidates trained and 138537 candidates settled

		• 2021-22 (as on 30.10.2021): 114640 candidates trained and 61546 candidates settled
	Fresh skilling and upskilling of the returnee migrant workers under Pradhan Mantri Kaushal Vikas Yojana (PMKVY) covering 6 states	• 1.24 lakh migrant workers trained as on 21.11.2021
MSMEs	6-month moratorium and deferment of interest for 1.3.2020 to 31.8.2020 for all term loans by RBI	• Availed by 77.2 per cent of MSME borrowers and 43.7 per cent of individual borrowers of SCBs, as on 31.08.2020
	Restructuring of MSME default loans – Aug 2020 and May 2021 Schemes of RBI	• Aggregate restructured portfolio of ₹78,591 crore as on 12.11.2021 by SCBs • Resolution/restructuring by PSBs in 9.8 lakh MSME accounts amounting to ₹58,524 crore
	Emergency Credit Line Guarantee Scheme – 100 per cent guarantee for additional funding of up to ₹ 4.5 lakh crore to businesses (esp. MSMEs) for COVID affected sectors	• ₹ 2.28 lakh crore disbursed to 95.2 lakh borrowers, impacting 5.45 crore employees as on 19.11.2021 • 66 per cent of guarantee amount disbursed to MSMEs • Extended till 31.03.2022
	Credit Guarantee Scheme (CGS) for MSMEs	Credit / Margin Money provided • 2020-21: ₹ 36,899 crore • 2021-22: ₹22,959 crore (as on 30.11.2021)
Credit ₹	Suspension of initiation of corporate insolvency process under Insolvency and Bankruptcy Code for 1 year, and increasing minimum threshold from ₹ 1 lakh to 1 crore	• Defaults during 25.3.2020 to 24.3.2021 remained as *non-est*
	Term Liquidity Facility of ₹50,000 crore for Emergency Health Services by RBI up to 31.3.2022	• Announced on 31.04.2021
	Credit Guarantee Scheme to Micro Finance Institutions (MFIs) for on-lending	• Fully utilized in 75 days of launch (28.6.2021), ₹ 7500 crore sanctioned
	₹ 45,000 crore Partial Credit Guarantee Scheme 2.0 for NBFCs, HFCs and MFIs for fresh lending to MSMEs & individuals	• As on 25.9.2020, portfolio of ₹ 25,505 crore approved by banks. • PSBs: portfolio of ₹27,794 crore purchased as on 4.12.2020

	Special Long Term Repo Operations for Small Finance Banks available till 31.10.2021	• Announced on 31.04.2021
Credit ₹	Lending by Small Finance Banks (SFBs) to MFIs for on-lending to be classified as priority sector lending up to 31.3.2022	• Announced on 31.04.2021
	₹30,000 crore Additional Emergency Working Capital Funding for farmers through NABARD	• ₹25,000 crore disbursed as on 25.9.2020 • Balance ₹5,000 crore allocated to NABARD by RBI for smaller NBFCs and NBFC-MFIs.
	Nationwide Credit Outreach Programme launched on 16.10.2021	• ₹ 96,063 crore loans sanctioned as on 26.11.2021
	Kisan Credit Cards Special Drive- ₹2 lakh crore Concessional credit boost to 2.5 crore farmers	• More than 1.5 crore KCCs issued with credit limit of ₹1.35 lakh crore
	PM SVANidhi Scheme to provide working capital loan to urban street vendors to resume their businesses	• Credit worth ₹3,054 crore to 30.2 lakh street vendors as on 30.11.2021
	Self-Help groups (SHGs)	• Collateral free lending limit increased from ₹10 lakhs to ₹20 lakhs for 63 lakh women SHGs, who supported 6.85 crore households.
	Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM) to reduce poverty by organizing the rural poor women into Self Help Groups (SHGs)	• 2020-21: loans worth ₹ 84,143 crores disbursed to SHGs. • 2021-22 (till September 2021): 21.6 lakh SHGs credit linked with ₹ 43093 crores.
	₹ 30,000 crore Special Liquidity Scheme for NBFCs/HFCs/MFIs	• As on 30.9.2020, 39 proposals approved involving ₹11,120 crore - ₹7,227 crore disbursed. Scheme closed.
	₹1.1 lakh crore loan guarantee scheme for COVID affected sectors – health infrastructure, tourism, etc.	• Cabinet approval on 30.06.2021 • Applicable till 31.03.2022, or till ₹50,000 crore is sanctioned, whichever is earlier

Source: Various PIB releases and Parliament questions

Monetary and Financial Support

1.24 Monetary policy since the outbreak of the pandemic was calibrated to provide a cushion and support growth, but carefully controlled in order to avoid the medium term dislocations of excess liquidity. The Monetary Policy Committee (MPC) cut the policy repo rate by 115 basis points (bps) during February to May 2020, on top of a reduction of 135 bps in the preceding twelve months. Since then, the MPC has maintained status quo on the policy repo rate keeping it unchanged at 4 per cent. The Marginal Standing Facility rate and the bank rate have also remained unchanged at 4.25 per cent and so has the reverse repo rate at 3.35 per cent. RBI in its latest MPC statement has further decided to continue with this accommodative stance as long as necessary to revive growth on a durable basis. A number of additional steps were taken throughout the period to ensure that there was adequate liquidity in the system to allow the central and state governments to finance themselves at lower rates.

1.25 An important aspect of the safety-net was the use of Government guarantees to provide access to financial support to the economy in general and MSMEs in particular (see Table 5). Combined with a moratorium on insolvency proceedings, the Government was able to avoid a payments logjam that could have caused a cascade of defaults. Much of the support was extended into 2021-22 where needed, but RBI and the Government have allowed some of liquidity support to roll-off and the insolvency process to resume as the economy has recovered. It is important to do this as excess liquidity and a stalled insolvency process bring longer-term risks. This is discussed in detail in Chapter 4.

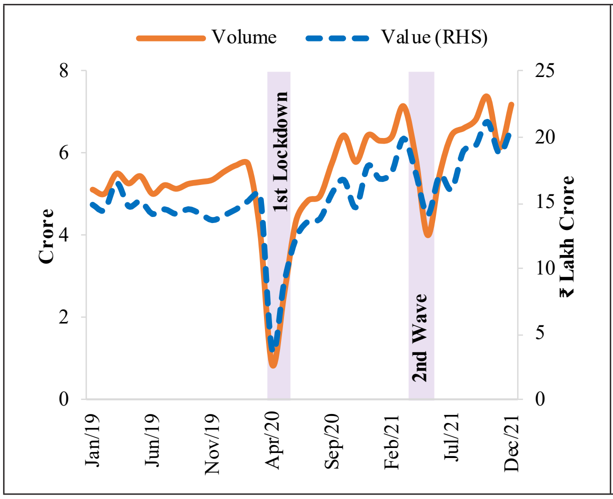
High Frequency Indicators

1.26 As mentioned above, in the last two years, Government leveraged an array of eighty HFIs representing industry, services, global trends, macro-stability indicators and several other activities, from both public and private sources to gauge the underlying state of the economy on a real-time basis. These include electricity generation, scheduled domestic flights, volume/value of financial transactions, capital flows, mobility indices, and so on. It also covers employment demanded under MGNREGA to gauge rural employment conditions, especially in the context of migrant workers. These indicators are regularly published in the Monthly Economic Report of Ministry of Finance and a full list is given in the Annex at the end of this chapter.

1.27 While HFIs have the advantage of being real-time and frequent, they need to be used with care. Each indicator provides, at best, a partial view of developments. Moreover, the noise-to-signal ratio can be higher than for national accounts and other slower moving data. In a rapidly evolving situation, policy-makers can pick up useful signals that allow for faster response and better targeting. Thus, using HFIs for gauging trends in the economy is as much an art as a science. The following charts provide a flavour of the HFIs being used (Figure 25). The specific interpretations and policy response are discussed in the relevant chapters.

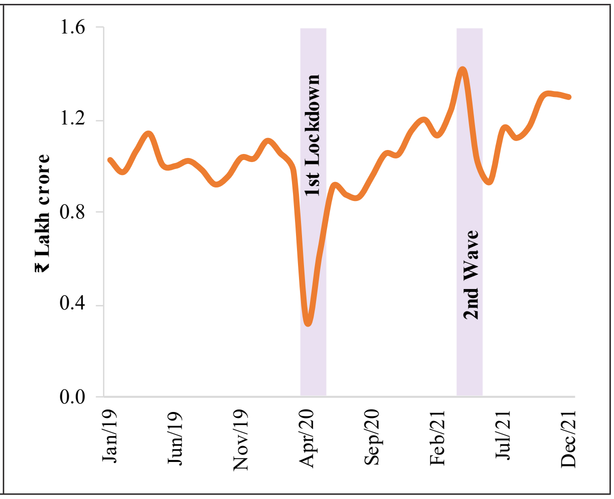
Figure 25: Performance of High Frequency Indicators

a. E-way Bill Generation



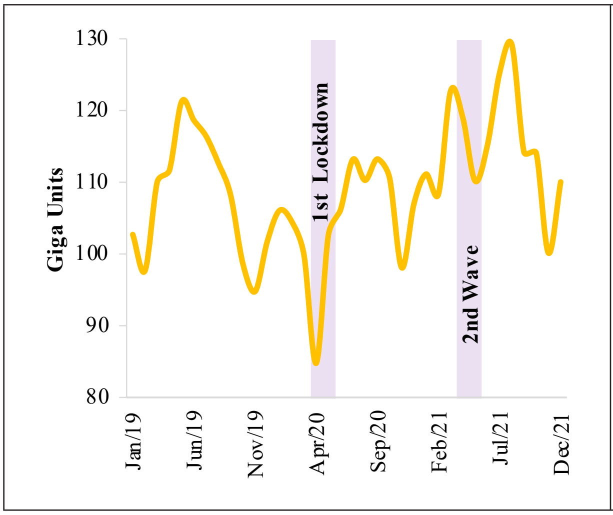
Source: GSTN

b. GST Collection



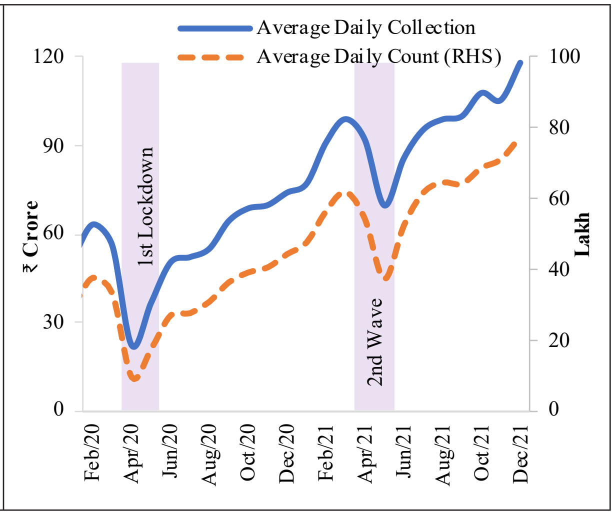
Source: Ministry of Finance

c. Power Consumption



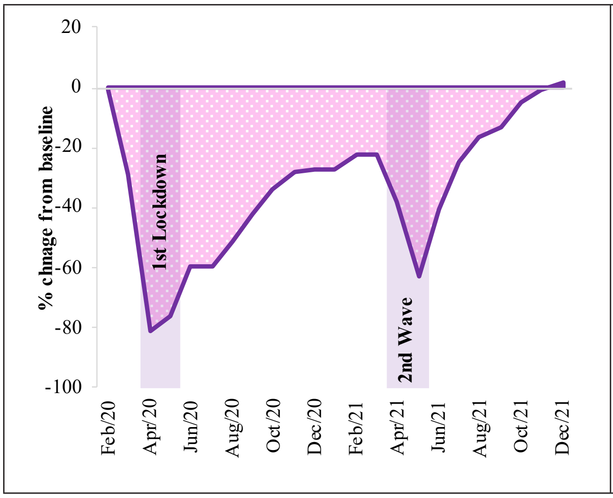
Source: POSOCO

d. Electronic Toll Collection and Count



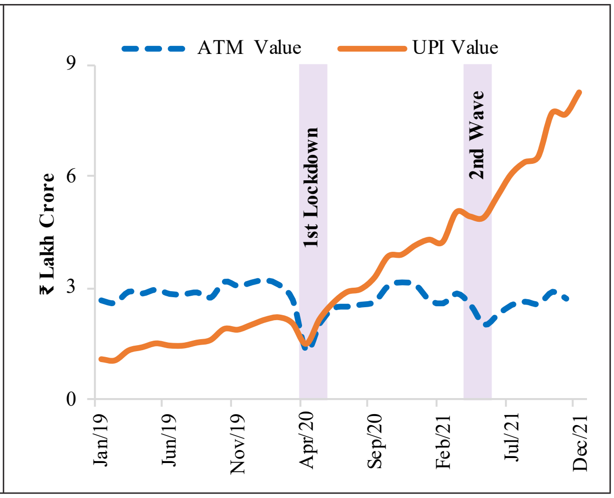
Source: IHMCL, MoRTH

e. Retail Mobility



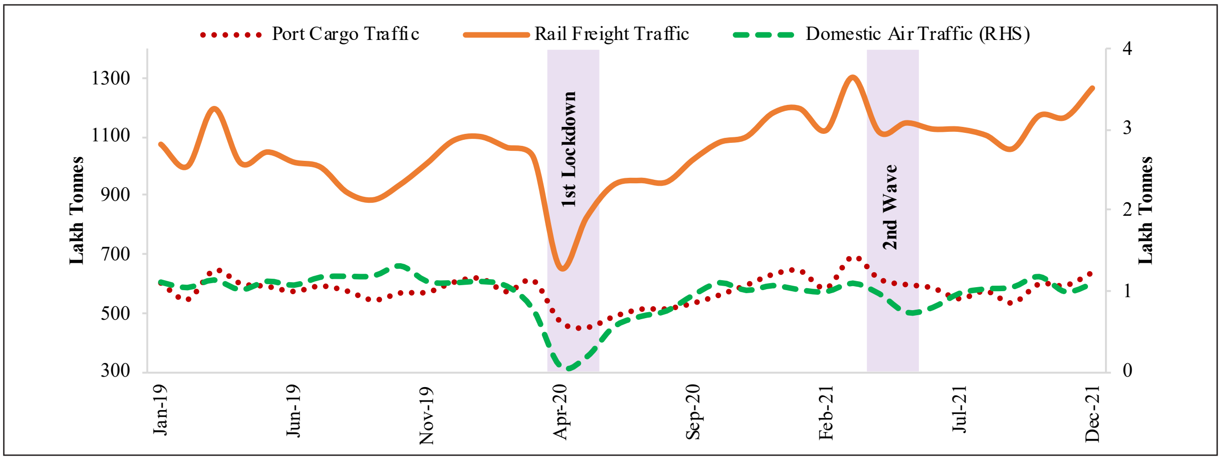
Source: Google Mobility

f. UPI and ATM Transactions



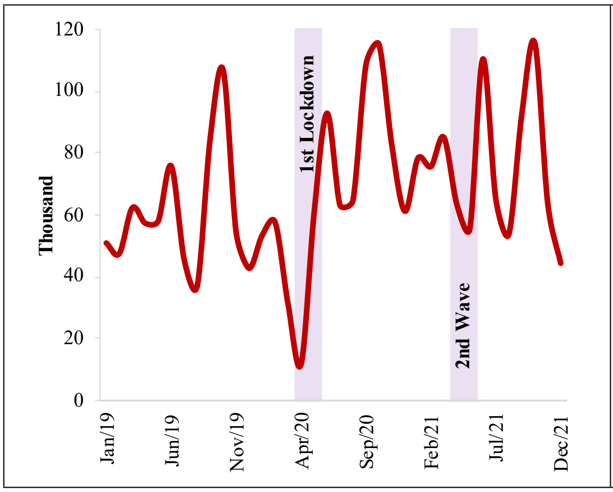
Source: NPCI, RBI

g. Freight and Cargo Traffic



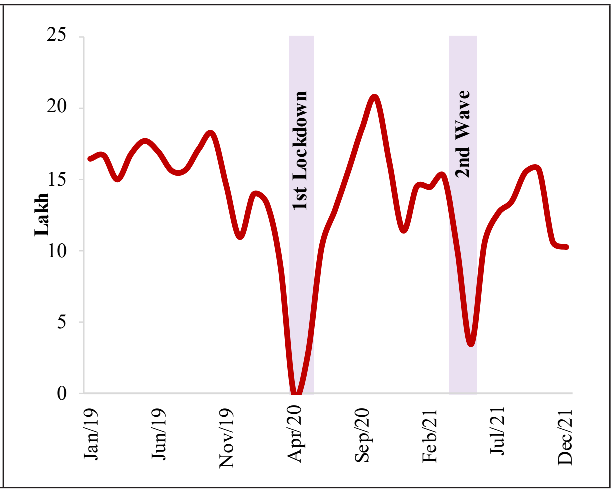
Source: IPA, AAI, Ministry of Railways

h. Domestic Tractor Sales



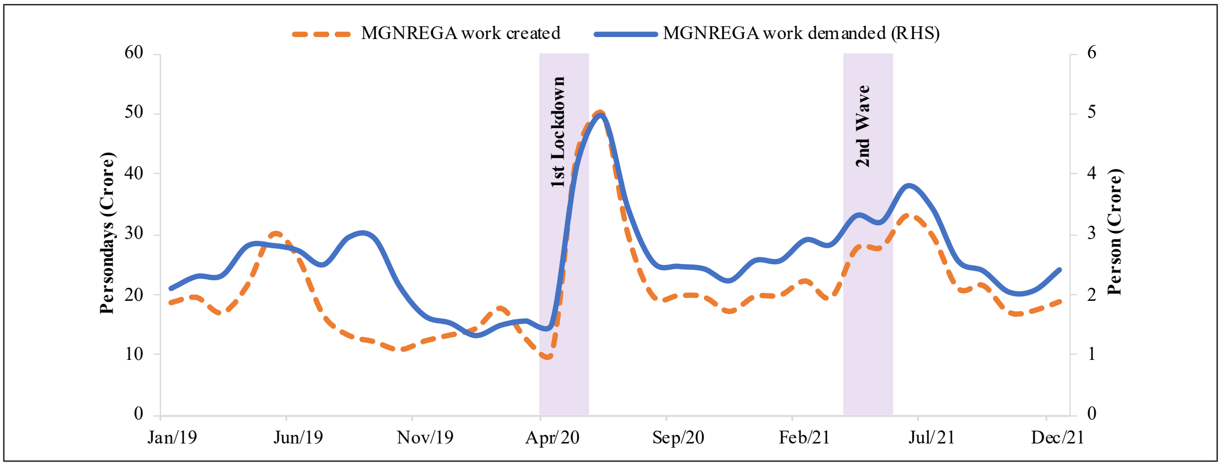
Source: TMA

i. Two and Three Vehicle Sales



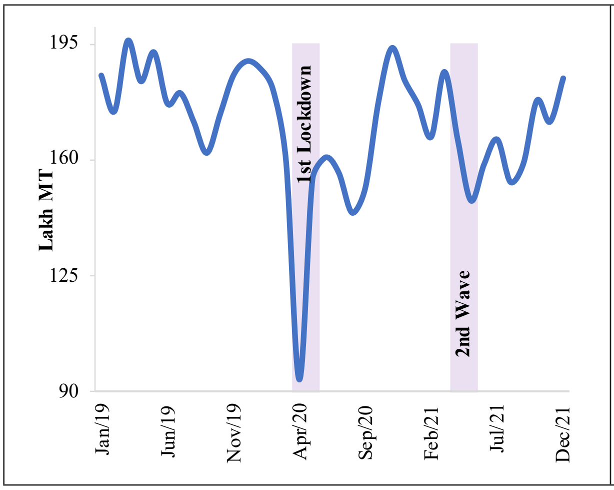
Source: SIAM

j. MNREGA work generated and demanded



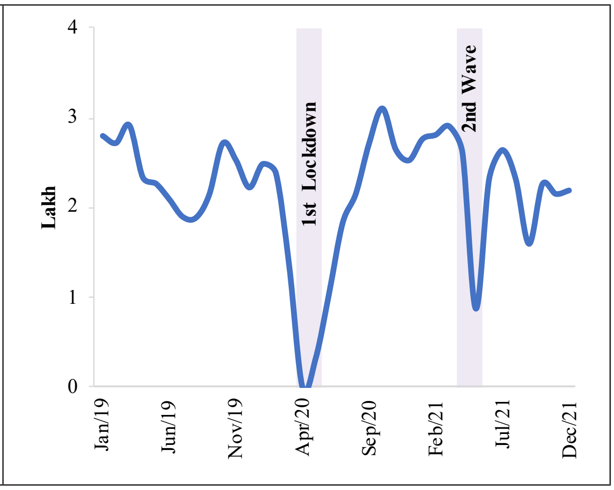
Source: NREGASoft

k. Fuel Consumption



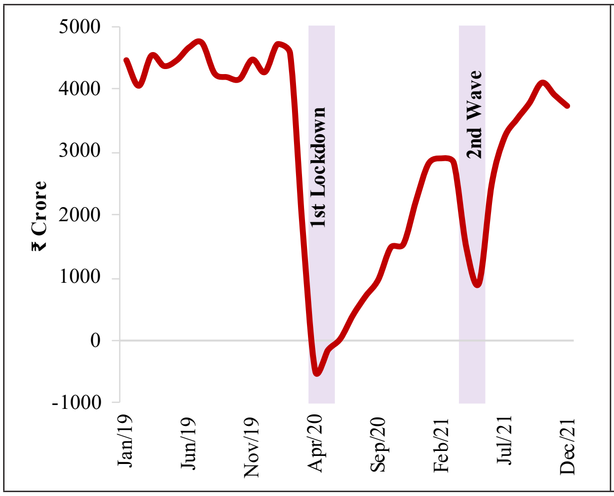
Source: PPAC, MoPNG

l. Passenger Vehicle Sales



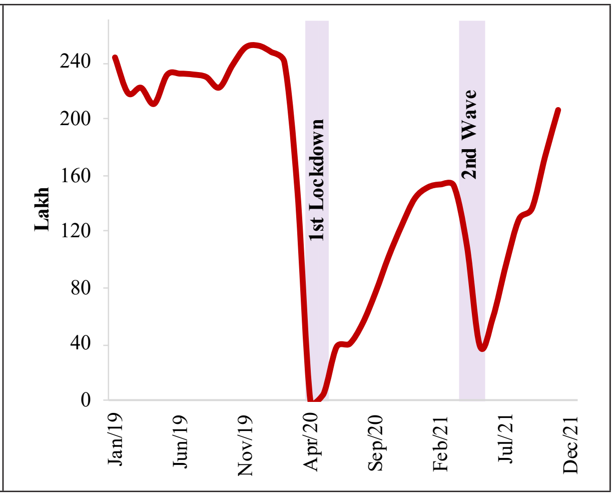
Source: SIAM

m. Railway Passenger Earnings



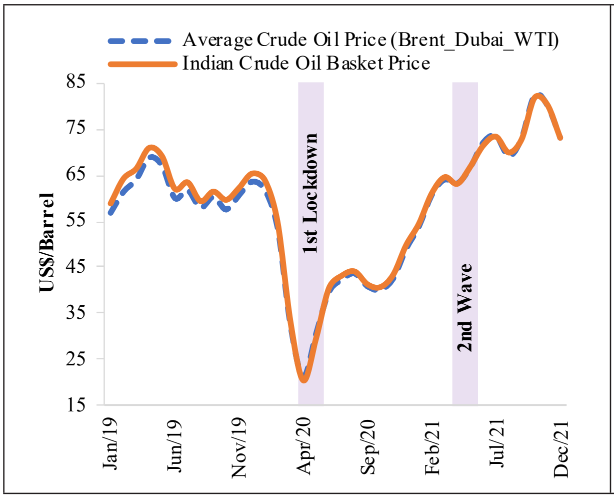
Source: Ministry of Railways

n. Air Passenger Traffic



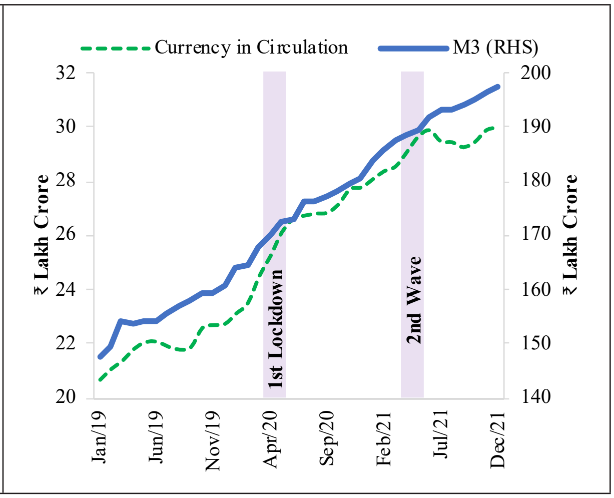
Source: AAI

o. Crude Oil Price



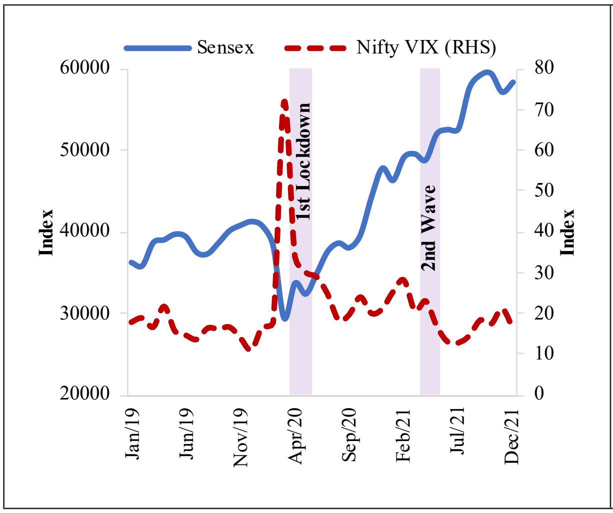
Source: PPAC, World Bank

p. Currency in Circulation and Money Supply



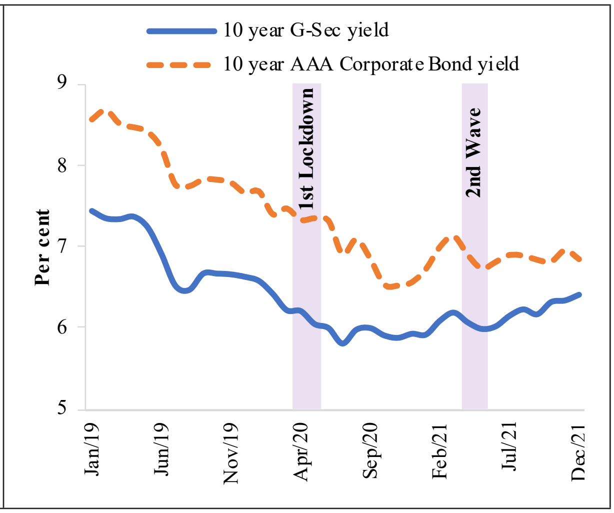
Source: RBI

q. Equity Markets



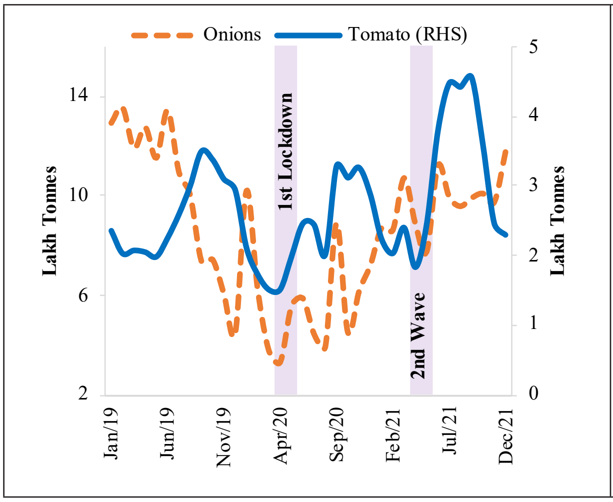
Source: NSE,BSE

r. Bond Yields



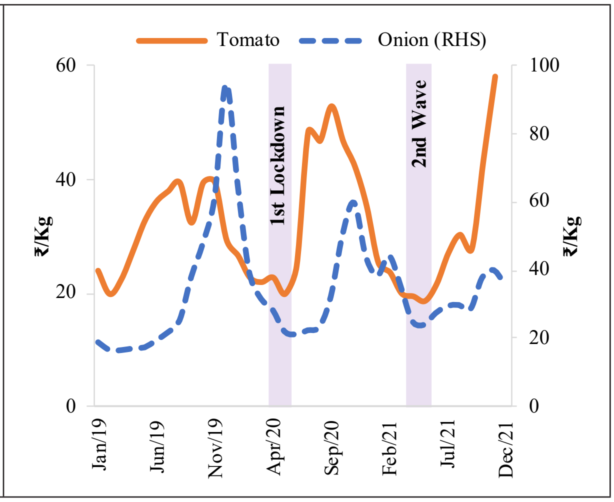
Source: CCIL

s. Mandi Arrivals



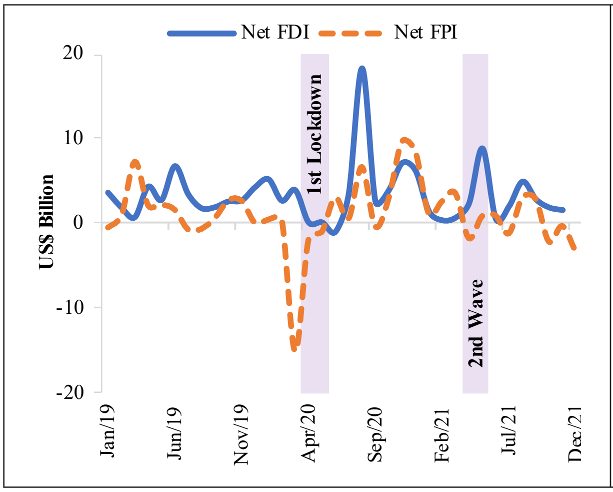
Source: Dept. of Consumer Affairs

t. Retail Prices



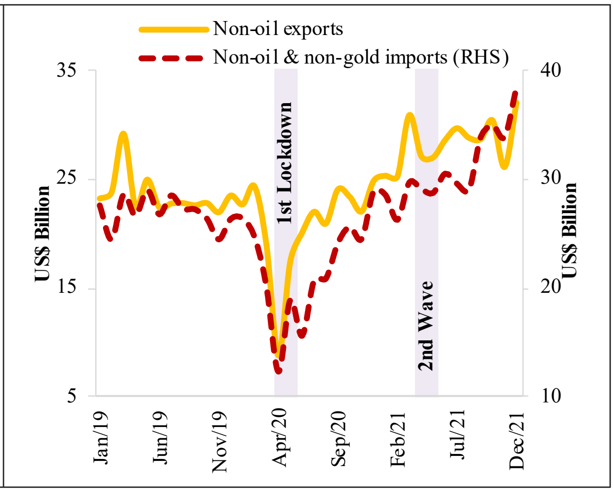
Source: Dept. of Consumer Affairs

u. FDI and FPI



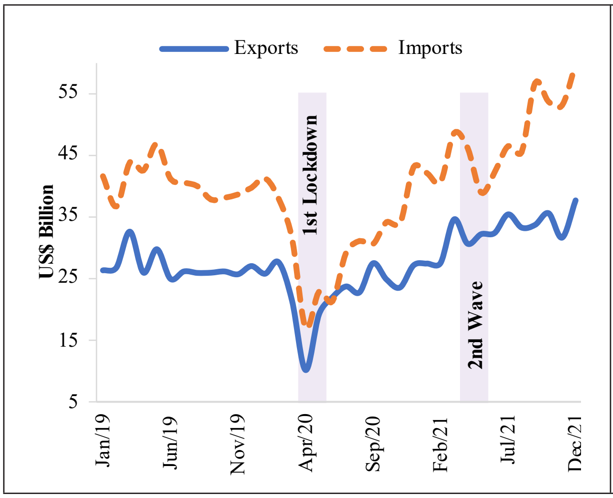
Source: CDSL, RBI

v. Non-Oil Import and Export



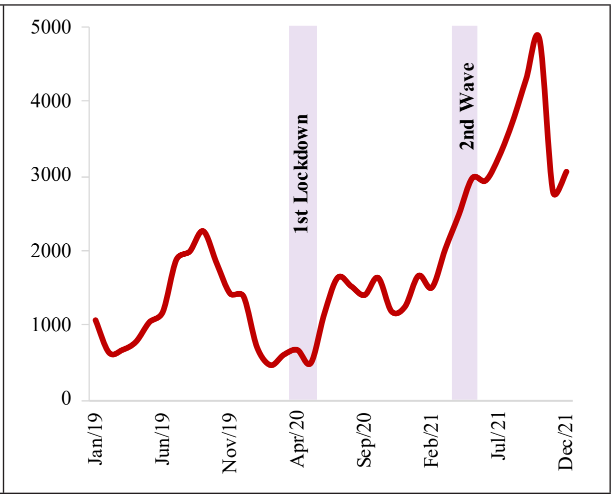
Source: Ministry of Commerce and Industry

w. Foreign Trade



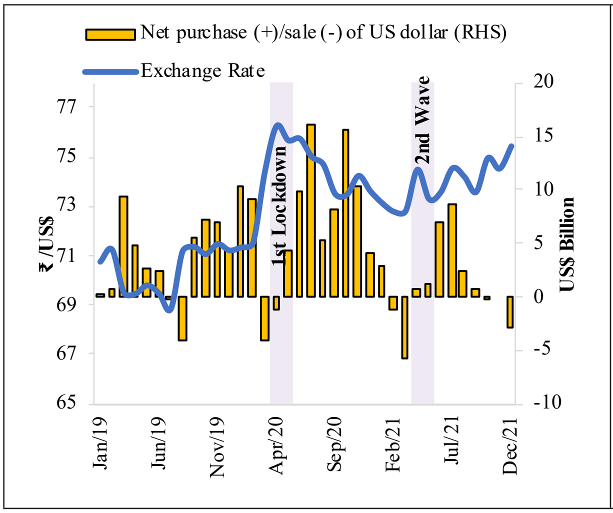
Source: Ministry of Commerce

x. Baltic Dry Index



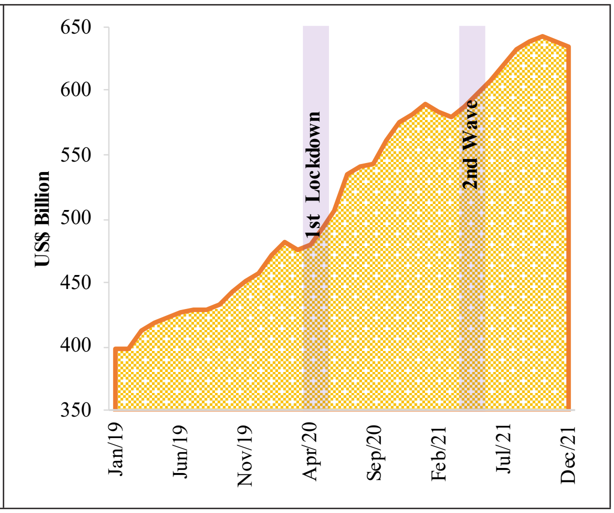
Source: The Great Eastern Shipping Co. Ltd.

y. Net Sale/Purchase of Dollar and Exchange Rate



Source: RBI

z. Foreign Exchange Reserves

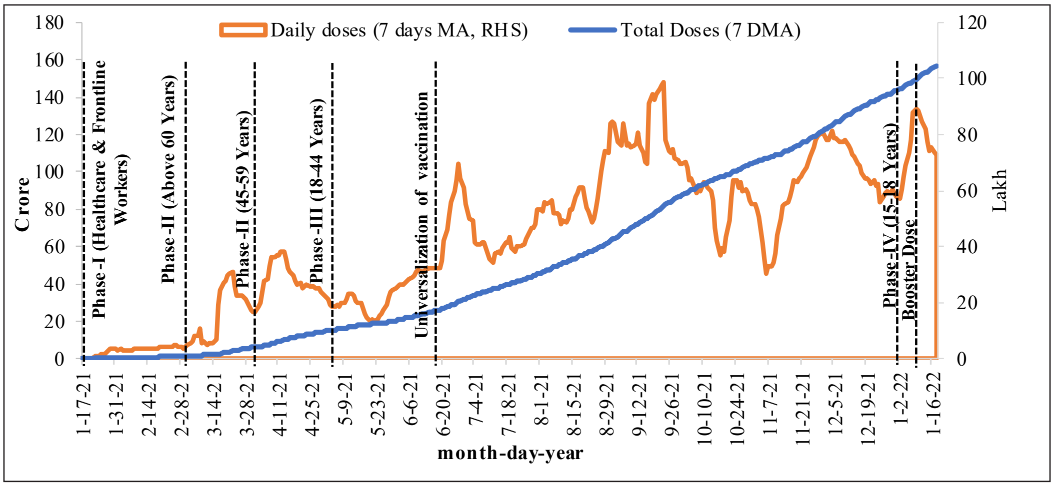


Source: RBI

VACCINATION

1.28 Vaccination has played a critical role (Box 1) in minimizing loss of lives, boosting confidence in the economy towards resumption of activity and containing the sequential decline in output due to second wave. As India completed one year of its COVID-19 vaccination drive on 16th January, 2022, it crossed the historic milestone of administrating more than 156 crore doses of vaccine (Figure 26). More than 88 crore people (93 per cent of the adult population) have received at least one dose of which around 66 crore people (70 per cent of the adult population) stands fully vaccinated. With vaccination drive further extended to the age group of 15-18 years starting 3rd January, 2022, more than 50 per cent of India's population in this age group have received their first dose of the vaccine as on 19th January. These measures have been discussed in detail in chapter 10.

Figure 26: Vaccination Coverage



Source: Survey Calculations using data from MoHFW

1.29 With India witnessing a resurgence in daily new cases since end-December 2021, marking the onset of Omicron variant induced third wave, rapid progress in vaccination coverage and further strengthening of testing and health infrastructure assume critical importance in protecting lives and containing the spread of the infection.

Box 1: India's vaccination drive

Vaccination has been an integral pillar of the comprehensive strategy of Government of India for containment and management of the pandemic. On 16th January 2021, India commenced the world's largest vaccination program with an ambitious target to inoculate its entire eligible population by 31st December 2021, with at least the first dose. In the first phase, the vaccination drive was sequentially expanded to cover Health Care Workers and Front Line Workers. The second phase started on 1st March (for above 60 years) and 1st April 2021 (from 45-59 years) making all persons aged 45 years and above eligible for vaccination. This cohort had accounted for more than 80 per cent of the COVID-19 mortality in the country. The third phase began on 1st May 2021 to vaccinate people in the age group of 18-45 years. From 3rd January 2022, the vaccination drive has been further extended to include those in the age group of 15-18 years. Taking cognisance of the recent global surge of the Omicron variant, the Variant of Concern declared by WHO on 26th November 2021, booster doses to healthcare and frontline workers as well as senior citizens above 60 years of age with co-morbidities have been allowed by Government from 10th January 2022. Vaccination access and pricing have been deregulated to quicken the pace of vaccination across states and all age groups.

The latest available data at the time of writing shows that 99 per cent of the registered Health Care Workers and 100 per cent of the Front-Line Workers, 87 per cent of the population aged between 18-44 years, 95 per cent of the population aged between 45-60 years and 89 per cent of the population above 60 years have been covered under the first dose. Vaccination drive continues to gather speed and breadth with the number of days taken to achieve an additional 10 crore doses reducing significantly from 86 days during the initial phase to 15 days now (Figure 1A). The average daily vaccination rate has increased four-fold from 19.3 lakh in May 2021 to 75.4 lakh as of 16th January 2021. As on 16th January 2022, eligible population (18 year and above) vaccinated in India with first dose was 93 per cent and with second dose 69.8 per cent (Figure 1C).

Figure 1A: Days to Reach Next 10 Crore Doses in India

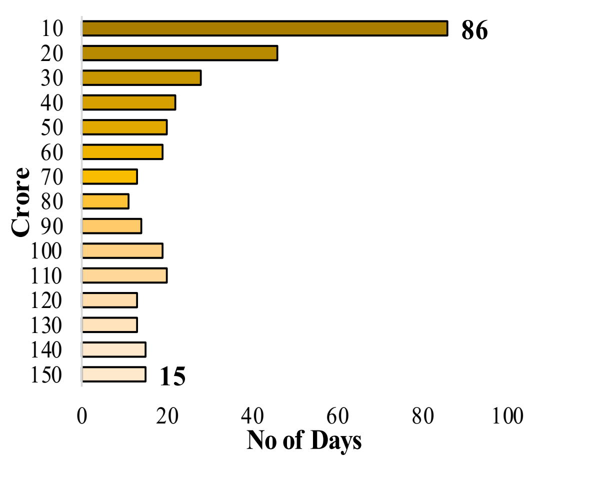
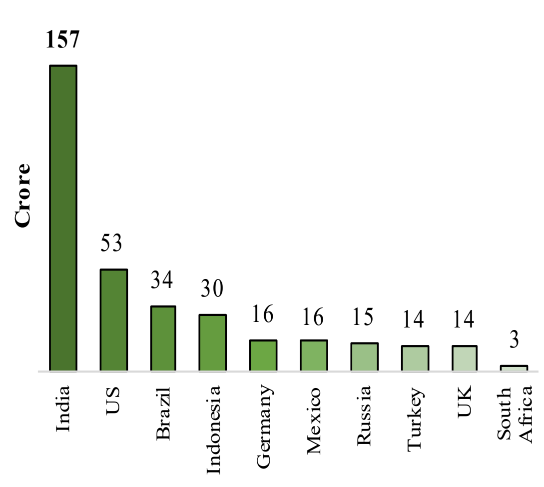
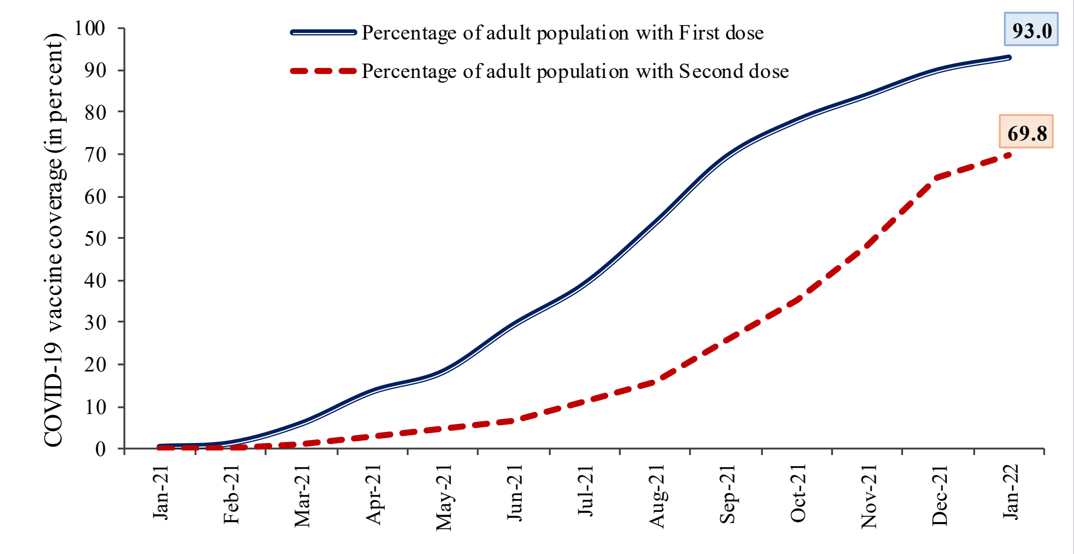


Figure 1B: Total Doses Administered across Countries



Source: Survey Calculations using data from MoHFW and WHO
Note: Figure 1B data as of 16th January 2022.

Figure 1C: Cumulative Percent of Adult Population with COVID-19 Vaccine (in per cent)



Source: Survey Calculations using data from MoHFW
Note: Data as of 16th January 2022.

MACROECONOMIC STABILITY

1.30 At the time of writing, a new wave in the form of the Omicron variant was sweeping across the world, inflation had jumped up in most countries, and the cycle of liquidity withdrawal was being initiated by major central banks. This is why it is especially important to look at India's macro-economic stability indicators and their ability to provide a buffer against the above stresses. Table 6 provides a quick comparison of various macroeconomic stability indicators in 2008-09 (Global Financial Crisis), 2012-13 (pre Taper Tantrum) and 2021-22 (second year of Covid-19 pandemic). This section analyses macroeconomic stability indicators on all fronts-external sector, fiscal indicators, financial sector and inflation.

Table 6: Comparison of Macroeconomic Indicators during Global Financial Crisis, Taper Tantrum and COVID-19

	Global Financial Crisis	Taper Tantrum	COVID-19 Pandemic	
Macroeconomic Indicators	2008-09	2012-13	2021-22	
CPI inflation	9.1	9.4	5.2	Apr-Dec 2021
India's Gross Fiscal Deficit as % of GDP	8.3	6.9	10.2	2021-22 (BE)
Fiscal Deficit of EMDEs (Asia) as % of GDP	1.6	1.7	7.8	2021
Current Account Balance as % of GDP	-2.3	-4.8	-0.2	Apr-Sept 2021
External Debt as % of GDP	20.7	22.4	20.2	June 2021
Forex Reserves (US$ billion)	252	292	634	31st Dec 2021
Govt Bond Yields 10-year	7.3	8.0	6.4	11th Jan 2022
Total FDI inflows (US$ billion)	8.3	34.0	48.4	Apr-Oct 2021
SCBs Capital to Risk Weighted Assets Ratio (CRAR)	13.2	13.9	16.5	Sept 2021
SCBs Provision Coverage Ratio	-	47.6	68.1	Sept 2021

Source: NSO, MoSPI, RBI, CGA, CDSL, Ministry of Finance, IMF.
Note: The taper tantrum happened in 2013. In the table above, 2012-13 is used to show the position just prior to taper tantrum as this is analogous to the present situation prior to withdrawal of liquidity in financial markets.

External sector

1.31 Despite all the disruptions caused by the global pandemic, India's balance of payments remained in surplus throughout the last two years (Figure 27). This allowed the Reserve Bank of India to keep accumulating foreign exchange reserves, which stands at US$634 billion on 31st December 2021). This is equivalent to 13.2 months of imports (Figure 28) and higher than the country's external debt. As of end-November 2021, India was the fourth largest foreign exchange reserves holder in the world after China, Japan, and Switzerland. A sizeable accretion in reserves led to an improvement in external vulnerability indicators such as foreign exchange reserves to total external debt, short-term debt to foreign exchange reserves, etc.

Figure 27: Surplus in BoP

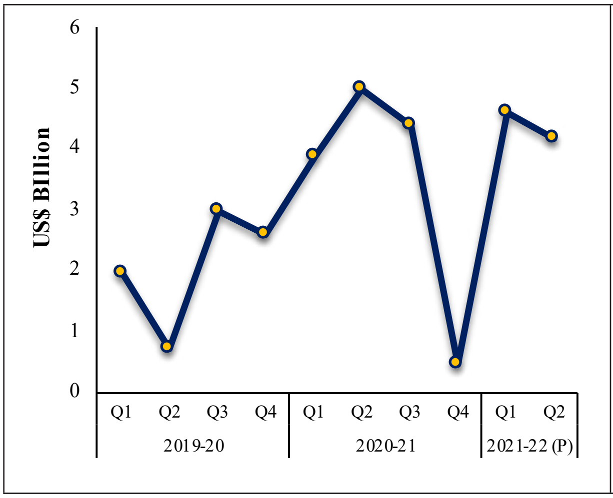
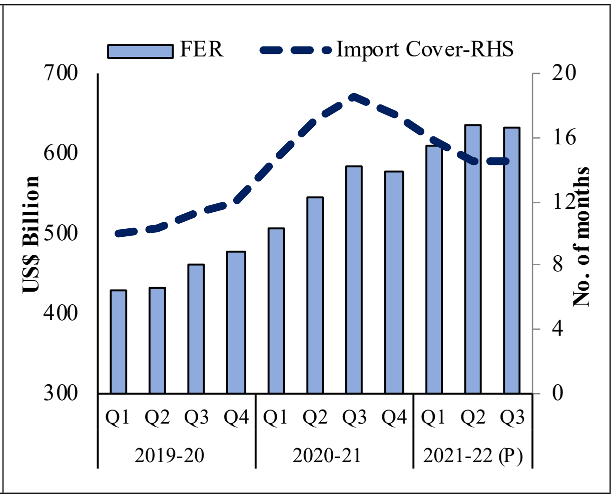


Figure 28: Forex reserves and Import Cover



Source: RBI

1.32 India's salient external sector sustainability indicators are strong and much improved as compared to what they were during the global financial crisis or taper episode of 2013 (Table). For instance, the import cover and foreign exchange reserves are more than double now. The combination of high foreign exchange reserves, sustained foreign direct investment, and rising export earnings will provide a good buffer against any liquidity tapering/monetary policy normalisation in 2022-23 (details in Chapter 3).

Fiscal Balance

1.33 The fiscal support given to the economy as well as the health response caused the fiscal deficit and government debt to rise in 2020-21. However, there has been a strong rebound in government revenues in 2021-22 so far. The revenue receipts of the central government during April- November 2021 have gone up by 67.2 per cent (YoY), as against an estimated growth of 9.6 per cent in the 2021-22 Budget Estimates. The tax collections have been buoyant for both direct and indirect taxes (Figure 29. The gross monthly GST collections have crossed ₹ 1 lakh crore consistently since July 2021 (details in Chapter 2).

Figure 29: Direct and indirect tax revenue

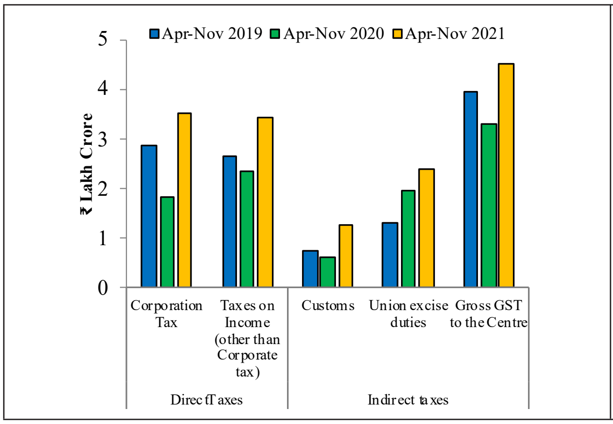
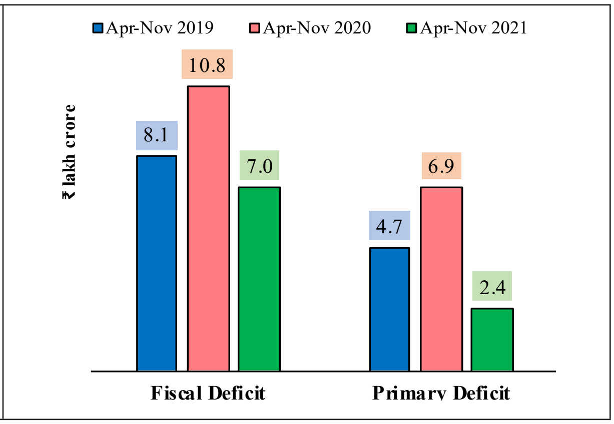


Figure 30: Fiscal and Primary deficit



Source: Office of CGA

Source: Office of CGA

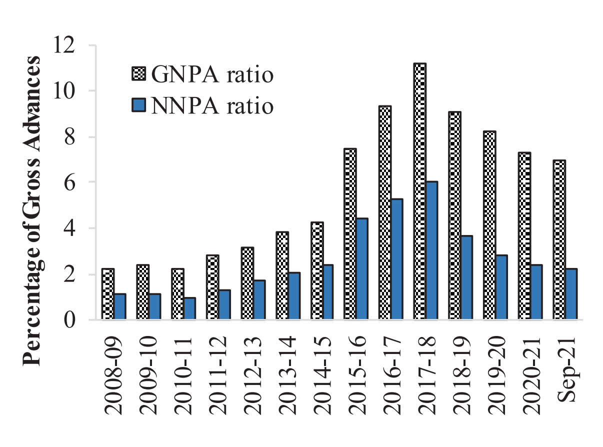
1.34 On account of a sustained revenue collection and a targeted expenditure policy by the Government of India, the fiscal deficit for April-November 2021 has been contained at 46.2 per cent of Budget Estimates (BE) which is nearly one third of the proportion reached during the same period of the previous two years (135.1% of BE in April-November 2020 and 114.8% of BE in April-November 2019). The primary deficit during the period April to November 2021 turned up at nearly half of the level it had reached during April to November 2019 (Figure 30) This implies that the Government has the fiscal capacity to maintain the support, and ramp up capital expenditure when required. The strong revival in revenues also provides Government with fiscal space to provide additional support as well, if necessary.

Financial Sector

1.35 The financial system is always a possible area of stress during turbulent times. However, India's capital markets, have done exceptionally well and have allowed record mobilization of risk capital for Indian companies. The Sensex and Nifty scaled up to touch its peak at 61,766 and 18,477 on October 18, 2021. Among major emerging market economies, Indian markets outperformed its peers in April-December 2021. The year 2021-22 so far has been an exceptional year for the primary markets with a boom in fundraising through IPOs by many new age companies/tech start-ups/unicorns. ₹ 89,066 crore was raised via 75 IPO issues in April-November 2021, much higher than in any year in the last decade (details in Chapter 4).

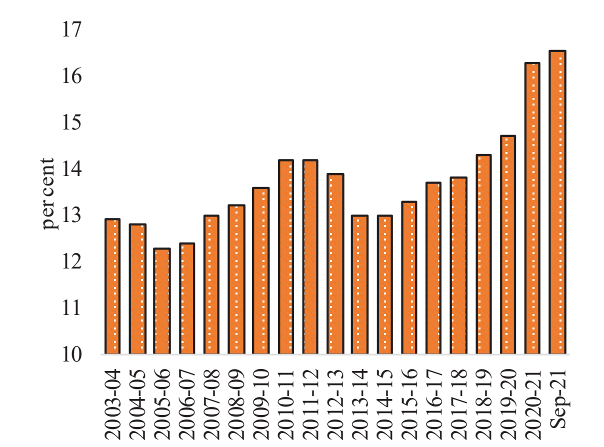
1.36 More significantly, the banking system is well capitalized and the overhang of Non-Performing Assets seems to have structurally declined even allowing for some lagged impact of the pandemic. The Gross Non-Performing Advances (GNPA) ratio (i.e. GNPAs as a percentage of Gross Advances) and Net Non-Preforming (NNPA) ratio of Scheduled Commercial Banks (SCBs) continued to decline since 2018-19. GNPA ratio of SCBs decreased from 7.5 per cent at end-September 2020 to 6.9 per cent at end-September 2021. NNPA ratio of SCBs also declined from 6 per cent at end of 2017-18 to 2.2 per cent at end-September 2021 (Figure 31). Simultaneously, the Capital Adequacy Ratio has continued to improve since 2015-16. The Capital to risk-weighted asset ratio (CRAR) of SCBs increased from 15.84 per cent at end-September 2020 to 16.54 per cent at end-September 2021 on account of improvement for both public and private sector banks (Figure 32).

Figure 31: GNPA and NNPA ratio of SCBs



Source: RBI

Figure 32: Capital Adequacy Ratio (per cent)

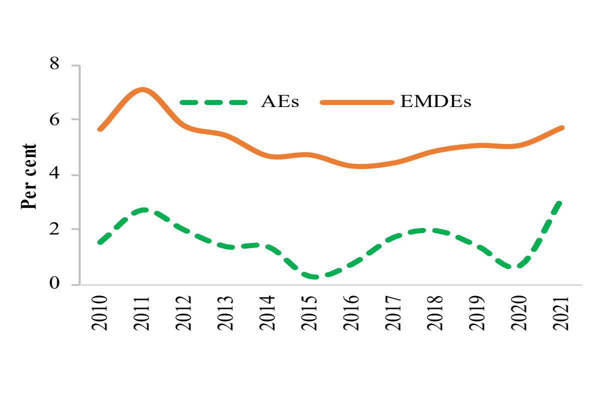


Source: RBI

Inflation

1.37 Inflation has reappeared as a global issue in both advanced and emerging economies (Figure 33). The surge in energy prices, non-food commodities, input prices, disruption of global supply chains, and rising freight costs stoked global inflation during the year. In India, Consumer Price Index (CPI) inflation moderated to 5.2 per cent in 2021-22 (April-December) from 6.6 per cent in the corresponding period of 2020-21. It was 5.6 per cent (YoY) in December 2021, which is within the targeted tolerance band (Figure 34). The decline in retail inflation in 2021-22 was led by easing of food inflation (details in Chapter 5). Wholesale Price Inflation (WPI), however, has been running in double-digits. The inflation in 'fuel and power' group of WPI was above 20 per cent reflecting higher international petroleum prices. Although the high WPI inflation is partly due to base effects that will even out, India does need to be wary of imported inflation, especially from elevated global energy prices.

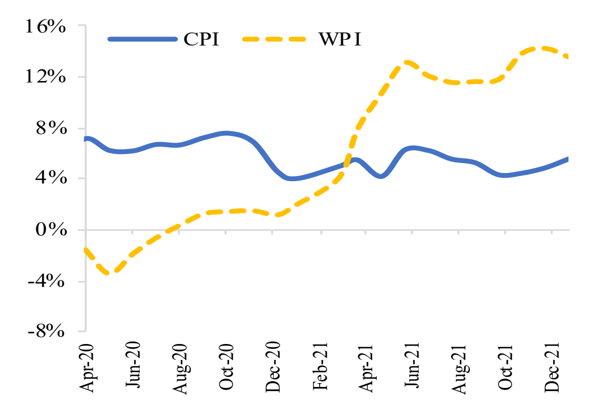
Figure 33: Consumer Price Inflation Rates



Source: World Economic Outlook, January 2022 Update, IMF

Note: Figures are annual averages; Figures for 2021 are projections. Advanced Economies include 40 economies and Emerging Markets and Developing Economies (EMDEs) include 156 economies as per IMF classification

Figure 34: CPI and WPI Inflation



Source: MoSPI, DPIIT

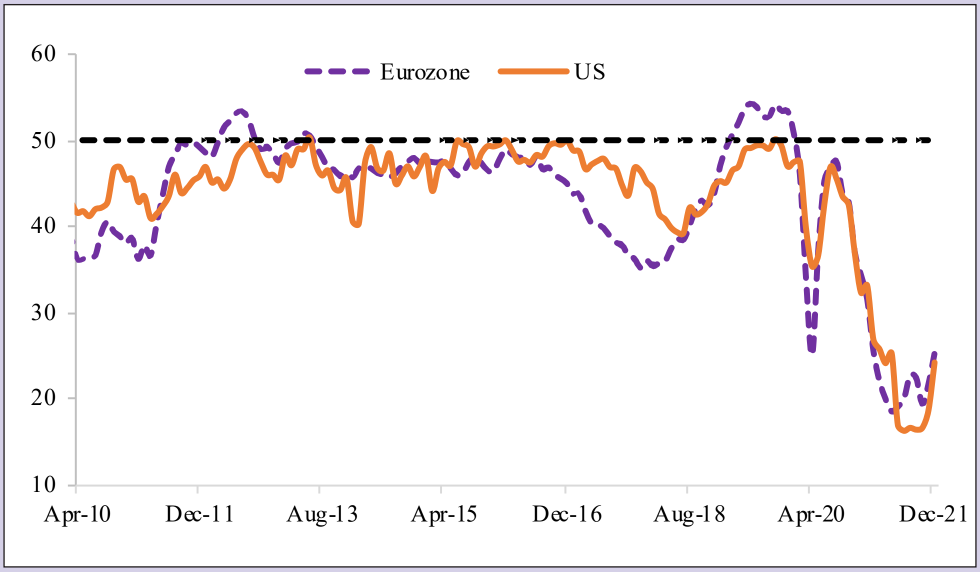
1.38 Overall, macro-economic stability indicators suggest that the Indian economy is well-placed to take on the challenges of 2022-23.

Box 2: Global Supply-Side Disruption

As the world economy recovered in 2021, it is faced with serious supply-side constraints ranging from delivery delays, container shortages and semiconductor chip shortages. According to the United Nations Conference on Trade and Development, "…*The COVID-19 pandemic led to a sudden dip in international seaborne trade. But by late 2020 there had been a swift rebound mainly in a container and dry bulk shipping. The recovery in container trade flows, which was mainly on East-West containerized trade lanes, created a series of logistical challenges and hurdles, pushed up rates and prices, increased delays and dwell times, and undermined service reliability*."[1] As shown by the IHS Markit suppliers' delivery times index (Figure 2A), delivery times in the US and the European Union (EU) have hit their worst ever performance since 2010[2].

[1]UNCTAD, Review of Maritime Transport 2021. Pg 57.
[2]https://m.rbi.org.in//Scripts/BS_ViewBulletin.aspx?Id=20628

Figure 2A: Purchasing Manager's Sub-Index for Delivery Time Index

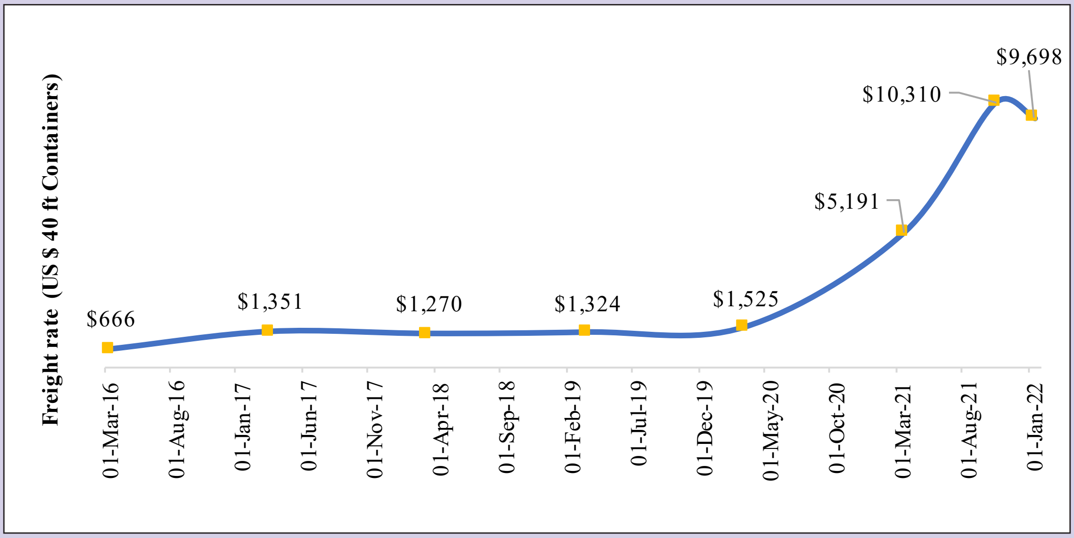


Source: IHS Markit.
Note: Readings above 50 indicate faster delivery times, readings at 50 signal no change, and below 50 indicate slower.

Shipping Container Shortage and Rising Trade Costs

The stress in the container shortages can be captured in the Drewry's[3] Composite World Container Index[4]. The Index stands at US$ 9,698.33 per 40ft container as of 20th January 2022 (Figure 2B). This is US$ 6,656 higher than the five-year average and remains 82 per cent higher than a year earlier. Such a significant rise in price for a prolonged period indicates that the disruptions in the global container market are not yet over and will continue to impact the global sea trade.

Figure 2B: World Container Index (US$ per 40ft container)



Source: Drewry Supply Chain Advisors (2022)

[3]Independent think tank on Maritime Transport
[4]https://www.drewry.co.uk/supply-chain-advisors/supply-chain-expertise/world-container-index-assessed-by-drewry

Also, the freight prices on major global sea routes have observed an upward trend during the same period. Table 2A below shows the prices and percentage change (YoY) from last year for major routes.

Table 2A: Spot freight rates by major route

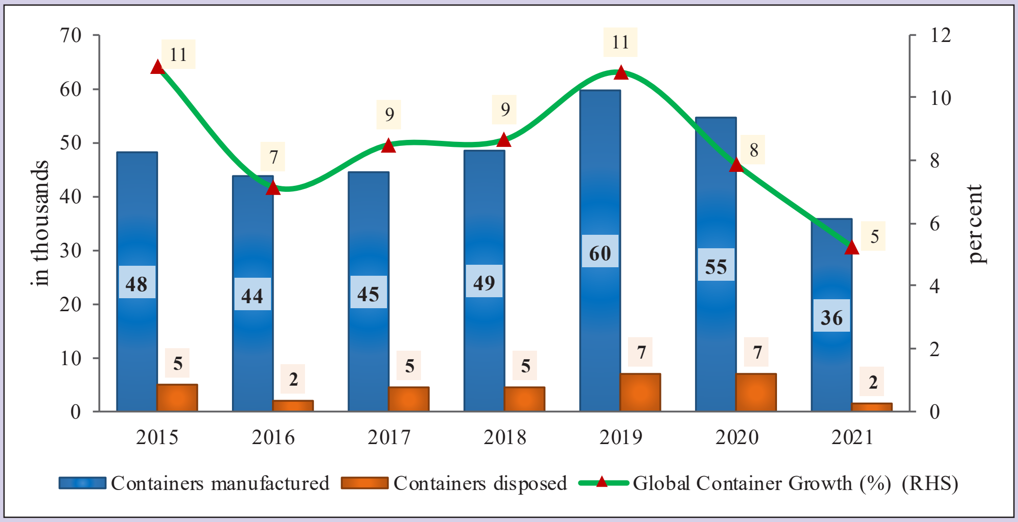
Route	As on 20th January 2022 (US$)	YoY change (per cent)
Composite Index	9,698	82
Shanghai - Rotterdam	14,053	55
Rotterdam - Shanghai	1,452	3
Shanghai - Genoa	12,794	46
Shanghai - Los Angeles	11,197	168
Los Angeles - Shanghai	1,262	138
Shanghai - New York	13,987	115
New York - Rotterdam	1,245	93
Rotterdam - New York	6,292	176

Source: Drewry, 2022

The shortage of containers has also impacted the Indian sea trade. According to the Federation of Indian Export Organisation set up under the Ministry of Commerce and Industry, the lack of containers has resulted in rising sea freight rates in the range of 300 per cent to 350 per cent[5].

Further, the production of the new containers has slowed since 2019 (Figure 2C). Simultaneously, a rise in the disposal of containers has also been observed for the same period. Thus, the overall growth in the containers has fallen from 11 per cent in 2019 to 5 per cent in 2021. Unless the production is ramped up significantly across the globe, this will remain a persistent problem.

Figure 2C: Manufacturing and Disposal of Containers



Source: 2021 Global Tank Container Fleet Survey, International Tank Container Organisation

[5]A Speech of FIEO President, Sept 2021. https://www.fieo.org/view_detail.php?lang=0&id=0,21&dcd=7452&did=16321181898hbfjpo6pvshqpu4f2sib0v776

Semiconductors industry spillover in the automobile industry

A report by investment bank Goldman Sachs 2021 states that the supply chain disruptions in the semiconductor industry have spillovers in over 169 industries. The manufacturing of semiconductors requires large amount of capital and has an average gestation period of 6-9 months. Moreover, it has a fairly long production cycle of about 18-20 weeks. Hence, any recovery from the supply chain disruptions will be a slow and costly affair.

The report further stated that microchips and semiconductors account for about 4.7 per cent of value added by the automotive industry[6]. With the delay in supply, the average lead time[7] in the automobile industry for 2021 has been around 14 weeks globally[8]. India has also experienced similar trends in the automobile sector. As per data from the Society of Indian Automobile Manufacturers (SIAM), carmakers sold 219,421 passenger vehicles in the domestic market in December 2021, down 13 per cent (YoY). This is not a demand problem but a supply-side issue. The information from various car manufacturer's websites reveals a cumulative pendency of over 7 lakh orders[9] , as of December 2021.

SUPPLY SIDE REFORMS

1.39 Another distinguishing feature of India's economic response has been an emphasis on supply-side reforms rather than a total reliance on demand management. These supply-side reforms include deregulation of numerous sectors, simplification of processes, removal of legacy issues like 'retrospective tax', privatisation, production-linked incentives and so on. Some of these have been listed in Table 7, and have been discussed in detail in the respective chapters. Even the sharp increase in capital spending by the Government can be seen as both demand and supply response as it creates infrastructure capacity for future growth.

1.40 An important theme that has been discussed through the course of the Economic Survey is that of 'process reforms'. It is important to distinguish between deregulation and process reforms. The former relates to reducing or removing the role of government from a particular activity. In contrast, the latter broadly relates to simplification and smoothening of the process for activities where the government's presence as a facilitator or regulator is necessary. Chapter 2 discusses the reforms undertaken in the public procurement policy- launch of Government e-Marketplace (GeM) in 2016 for standard routine use items and the new procurement guidelines issued in October 2021 for non-standard items and projects. Chapter 4 discusses for the need for simplification of voluntary liquidation process for corporates and for institutionalising a standard process for Cross Border Insolvency Process. Similarly, chapter 9 discusses the simplification of Drone rules and reforms in telecom sector, and the need for reforms in the patent application regime.

1.41 The emphasis given to the supply-side in India's COVID-19 response is driven by two important considerations. First, Indian policy-makers saw the disruptions caused by travel-

[6] https://www.msn.com/en-us/news/crime/global-chip-shortage-hit-these-169-industries-gs/vi-BB-1g4hv8

[7] Lead time: The difference between the date of order and actually receiving

[8] https://www.goldmansachs.com/insights/pages/the-daily-check-in/the-semiconductor-shortage-of-2021/transcript.pdf

[9] Various company websites.

restrictions, lockdowns and supply-chain breakdowns as an interruption of the economy's supply-side. Although this also squeezed demand, it is not correct to see the pandemic related economic slowdown as just a demand problem as happens with most economic cycles. Second, the post-Covid world will be impacted by a wide variety of factors – changes in technology, consumer behaviour, geo-politics, supply-chains, climate change and so on. All of these factors will also interact in unpredictable ways with each other. Therefore, the post-Covid economy will not be merely a re-inflation of the pre-Covid economy. Simply building it back with demand measures is not a solution.

1.42 There are two common themes in India's supply-side strategy: (i) Reforms that improve flexibility and innovation in order to deal with the long-term unpredictability of the post-Covid world. This includes factor market reforms; deregulation of sectors like space, drones, geo-spatial mapping, trade finance factoring; process reforms like those in government procurement and in telecommunications sector; removal of legacy issues like retrospective tax; privatization and monetization, creation of physical infrastructure, and so on. (ii) Reforms aimed at improving the resilience of the Indian economy. These range from climate/environment related policies; social infrastructure such as public provision of tap water, toilets, basic housing, insurance for the poor, and so on; support for key industries under Atmanirbhar Bharat; a strong emphasis on reciprocity in foreign trade agreements, and so on. Some commentators have likened the Atmanirbhar Bharat approach to a return to old school protectionism. Far from it, the focus on economic resilience is a pragmatic recognition of the vagaries of international supply-chains (see discussion in Box 2).

1.43 As the reader may have guessed, the two pronged approach of "flexibility" and "resilience" is analogous to the Barbell strategy used for the short-term response to the pandemic. This should not be surprising as they are both attempting to deal with the same issue – uncertainty about the future flow of events.

Table 7: Key supply side measures/reforms

Sectors	Measures/Reforms
Industry	• Production Linked Incentive Scheme approved for 13 sectors including (i) Automobiles and auto components, (ii) Pharmaceuticals drugs, (iii) Specialty steel, (iv) Telecom & Networking Products, (v) Electronic/ Technology Products, (vi) White Goods (ACs and LEDs), (vii) Food products, (viii) Textile products: MMF segment and technical textiles, (ix) High efficiency solar PV modules, (x) Advanced Chemistry Cell battery, (xi) Manufacturing of medical devices, (xii) Mobile manufacturing & specified electronic components and (xiii) Critical key starting materials/ Drug intermediaries & Active Pharmaceutical Ingredients • Retrospective tax repealed to promote tax certainty and foreign investment.

Business Process Outsourcing (BPO) sector	*Liberalized guidelines for Other Service Providers (OSPs)* ➢ Clear definition of OSP: The applicability of new guidelines is limited to entities that provide 'Voice based BPO services' to its customers. Voice based BPO services are defined to mean call centre services. ➢ Removal of registration requirement for OSP centres in India. ➢ No bank guarantee required for any facility or dispensation under these guidelines. ➢ Distinction between Domestic and International OSPs removed. ➢ Work from home and remote locations allowed: The agents at home/ anywhere shall be treated as remote agents of the OSP centre. The interconnection between remote agents is permitted using any technology including broadband over wireline/wireless. The remote agent can now directly connect to customer Electronic Private Automatic Branch Exchange (EPABX) /centralised EPABX without the need to connect with the OSP centre. ➢ Interconnection between two or more OSP centres of the same or unrelated company is now permitted. ➢ Infrastructure sharing among OSPs is now allowed. The guidelines allow the use of EPABX at foreign locations.
Telecom	• *Structural reforms* ➢ Rationalization of Adjusted Gross Revenue: Non-telecom revenue will be excluded from the definition of Adjusted Gross Revenue. ➢ Bank Guarantees rationalized: Huge reduction in Bank Guarantee requirements against License Fee and other similar levies. For auctions held henceforth, no Bank Guarantees will be required to secure instalment payments. ➢ Interest rates rationalized and penalties from delayed payments of License Fee or Spectrum Usage Charge (SUC) removed. ➢ 100 per cent FDI under automatic route permitted in telecom sector. ➢ No Spectrum Usage Charge (SUC) for spectrum acquired in future spectrum auctions. ➢ Spectrum sharing encouraged: The additional SUC of 0.5 per cent for spectrum sharing removed. • *Process Reforms* ➢ Requirement of customs clearance for import of wireless equipment removed and replaced with self-declaration to improve the ease of doing business. ➢ Standing Advisory Committee on Radio Frequency Allocation clearance process for installing towers shall be through self-declaration/ automated time-bound approvals on SaralSanchar portal of Department of Telecom. ➢ Self-KYC permitted now through an app/web- based process. ➢ Paper Customer Acquisition Forms will be replaced by digital storage of data.

	➢ Auction calendar fixed: Spectrum auctions to be normally held in the last quarter of every financial year. • Along with this, various measures were undertaken to address liquidity requirement of telecom service providers including moratorium/ deferment on payments of dues arising out of the adjusted gross revenue judgement or due payments of spectrum purchased in past auctions (excluding the auction of 2021).
Public procurement policy	*New guidelines for procurement and project management were announced in October 2021* ➢ Quality-cum-Cost Based Selection for the selection of bidders for works and non-consultancy services allowed as well. ➢ Stringent deadlines for making payments: The new guidelines stipulate timely release of payments of 75 per cent or more of bills raised within 10 working days of the submission of the bill. The remaining bill payment is to be made after final checking within 28 working days. ➢ Arbitration and dispute resolution: Procuring authorities to set a special board/committee to review the case before filing an appeal against any order. Government has allowed for the release of 75 per cent of the amount to contractors against a bank guarantee in cases where a procuring agency has challenged an arbitral award.
Aviation	*Drone Rules (announced in August 2021)* ➢ Extended applicability of rules: Drones up to 500 kg are now subject to regulations, compared to the earlier limit of 300 kg. ➢ Several approvals abolished with the total forms to be filled reduced from 25 to 5. ➢ Types of fees reduced from 72 to 4. ➢ Quantum of fees to be paid considerably reduced and delinked with the size of drone. ➢ Removal of requirement of prior security clearance. ➢ Earlier restrictions on all foreign entities owning, manufacturing or dealing with drones in India has been done away with. ➢ No remote pilot licence required for micro drones (for non-commercial use) and nano drones. ➢ Expanded area of drone operations: An interactive map on the Digital Sky platform specifies colour-coded zones on the map i.e. green, yellow and red, indicating free zones, those which require prior permission, and no-fly zones, respectively. The perimeters of these zones have also been liberalised to increase freely accessible airspace under the green category.
Financial sector	• *Banking: Reforms in Deposit Insurance* ➢ Increase in deposit insurance from ₹ 1 lakh to ₹ 5 lakh per depositor per bank. This led to 98.1 per cent of the total number of accounts being fully protected and 50.9 per cent of total deposits being insured at end-March 2021.

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➢ Introduced interim payments: Interim payment will be made by Deposit Insurance and Credit Guarantee Corporation (DICGC) to depositors of those banks for whom any restrictions/ moratorium have been imposed by RBI under the Banking Regulation Act resulting in restrictions on depositors from accessing their own savings.
➢ Timeline of maximum of 90 days has been fixed for providing interim payment to depositors.
● Expansion in the factoring ecosystem: The earlier condition of NBFCs whose principal business was factoring has been removed and now all NBFCs are permitted to undertake factoring business.
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<tr>
<td>Micro Small & Medium Enterprises (MSMEs)</td>
<td>
● Revised definition of MSMEs:
➢ Removal of distinction between manufacturing and service MSMEs.
➢ Upward revised definition of MSMEs in industry and service sector. The upper limit as per new definition is as follows:
<table>
<tr><th></th><th>Investment in Plant and Machinery or Equipment</th><th>Annual Turnover</th></tr>
<tr><td>Micro</td><td>< ₹1 crore</td><td>< ₹ 5 crore</td></tr>
<tr><td>Small</td><td>< ₹ 10 crore</td><td>< ₹ 50 crore</td></tr>
<tr><td>Medium</td><td>< ₹ 50 crore</td><td>< ₹ 250 crore</td></tr>
</table>
● Simplified registration process for MSMEs.
● Increasing market access to micro and small industries (MSEs) under public procurement policy: All Central Ministries, Government Departments and CPSEs are required to procure 25 per cent of their annual requirements of goods and services from MSEs. Further, no global tenders for procurement up to ₹ 200 crores.
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<tr>
<td>Space & Geospatial sector</td>
<td>
● Liberalizing the traditional Satellite Communication and Remote Sensing sectors for increased private sector participation.
● Guidelines for the creation, acquisition and use of geospatial data, including maps: Geospatial data was previously heavily regulated and required licenses to be obtained for the use of such data. Now the guidelines have been liberalised:
➢ Introduction of self-certification regime: All entities are now required to follow a self-certification process to show adherence to the guidelines, as opposed to obtaining prior approval or licenses for the use of geospatial data and maps.
➢ Relaxation of restricted areas: Mapping activities are prohibited only for specific attributes of highly sensitive locations, as opposed to restricted areas under the previous regime.
➢ Relaxation on export restrictions: The guidelines permit the export of maps with resolutions up to a 1:100 resolution thereby relaxing the previous threshold of 1:250000.
➢ Open access to publicly funded data: The guidelines require all geospatial data produced using public funds, including data produced by the Survey of India, to be freely accessible to all Indian entities.
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Disinvestment	• New Public Sector Enterprise Policy and Asset Monetisation Strategy New policy is for strategic disinvestment of public sector enterprises Public sector commercial enterprises are classified as Strategic and Non-Strategic sectors, with the policy of privatisation in non-strategic sectors and bare minimum presence even in strategic sectors. The identified strategic sectors are: (i) Atomic Energy, Space & Defense; (ii) Transport & Telecommunication; (iii) Power, Petroleum, Coal & other minerals; and (iv) Banking, Insurance & Financial Services Privatization of Air India. • National Monetisation Pipeline Aggregate monetisation potential of ₹ 6 lakh crore through core assets of the Central Government over a four year period from 2021-22 to 2024-25. Top 5 sectors including roads, railways, power, oil & gas pipelines and telecom account for around 83 per cent of the aggregate value. So far, CPSEs have referred ~3400 acres of land and other non-core assets for monetization.
Labour Reforms	• Central Government notified four labour codes.
Defence	• Corporatisation of Ordnance Factory Board (OFB) approved and 7 new Defence Public Sector Undertakings created. • FDI enhanced in Defence sector up to 74 per cent through the automatic route and up to 100 per cent by government route

GROWTH OUTLOOK

1.44 The Indian economy is estimated to grow by 9.2 per cent in real terms in 2021-22 (as per the First Advance Estimates), after a contraction of 7.3 per cent in 2020-21. Growth in 2022-23 will be supported by widespread vaccine coverage, gains from supply-side reforms and easing of regulations, robust export growth, and availability of fiscal space to ramp up capital spending. The year ahead is also well poised for a pick-up in private sector investment with the financial system in a good position to provide support to the revival of the economy. Thus, India's GDP is projected to grow in real terms by 8.0-8.5 per cent in 2022-23. This projection is based on the assumption that there will be no further debilitating pandemic related economic disruption, monsoon will be normal, withdrawal of global liquidity by major central banks will be broadly orderly, oil prices will be in the range of US$70-$75/bbl, and global supply chain disruptions will steadily ease over the course of the year.

1.45 The above projection is comparable with the World Bank's and Asian Development Bank's latest forecasts of real GDP growth of 8.7 per cent and 7.5 per cent respectively for 2022-23. As per the IMF's latest World Economic Outlook (WEO) growth projections released on 25th January, 2022, India's real GDP is projected to grow at 9 per cent in both 2021-22 and 2022-23 and at 7.1 per cent in 2023-24. This projects India as the fastest growing major economy in the world in all these three years (Table 8).

Table 8: Overview of the World Economic Outlook Projections

Country/Country groups	Year over Year (Percent change, unless noted otherwise)			
	Estimate		Projections	
	2020	2021	2022	2023
World Output	–3.1	5.9	4.4	3.8
Advanced Economies	–4.5	5.0	3.9	2.6
United States	–3.4	5.6	4.0	2.6
Euro Area	–6.4	5.2	3.9	2.5
Germany	–4.6	2.7	3.8	2.5
France	–8.0	6.7	3.5	1.8
Italy	–8.9	6.2	3.8	2.2
Spain	–10.8	4.9	5.8	3.8
Japan	–4.5	1.6	3.3	1.8
United Kingdom	–9.4	7.2	4.7	2.3
Canada	–5.2	4.7	4.1	2.8
Other Advanced Economies*	–1.9	4.7	3.6	2.9
Emerging Market and Developing Economies	–2.0	6.5	4.8	4.7
Emerging and Developing Asia	–0.9	7.2	5.9	5.8
China	2.3	8.1	4.8	5.2
India**	**–7.3**	**9.0**	**9.0**	**7.1**
ASEAN***	–3.4	3.1	5.6	6.0
Emerging and Developing Europe	–1.8	6.5	3.5	2.9
Russia	–2.7	4.5	2.8	2.1
Latin America and the Caribbean	–6.9	6.8	2.4	2.6
Brazil	–3.9	4.7	0.3	1.6
Mexico	–8.2	5.3	2.8	2.7
Middle East and Central Asia	–2.8	4.2	4.3	3.6
Saudi Arabia	–4.1	2.9	4.8	2.8
Sub-Saharan Africa	–1.7	4.0	3.7	4.0
Nigeria	–1.8	3.0	2.7	2.7
South Africa	–6.4	4.6	1.9	1.4

Source: IMF WEO, January 2022 Update

* Excludes the Group of Seven (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and euro area countries.

** For India, data and forecasts are presented on a fiscal year basis, with FY 2021/2022 starting in April 2021. For the January 2022 WEO Update, India's growth projections are 8.7 per cent in 2022 and 6.6 percent in 2023 based on calendar year. The impact of the Omicron variant is captured in the column for 2021 in the table.

*** Indonesia, Malaysia, Philippines, Thailand, Vietnam.

ANNEX

List of 80 High Frequency Indicators (HFIs)	
1	10 year AAA Corporate Bond yield
2	10 year G-Sec yield
3	8-Core Industries Index
4	Aadhar-enabled payment system (AePS) transactions
5	ATM withdrawals
6	Average Daily Electronic Toll Collection (ETC)
7	Average Retail price (Wheat, Rice, Tur, Sugar, Potato, Onions, Tomato, Groundnuts, Palm Oil, Eggs, Milk)
8	Baltic Dry Index
9	Bank credit
10	Capacity Utilisation
11	Capital Expenditure
12	Cement production
13	Commercial Papers (CP)
14	Corporate sector profits
15	Consumer Price Index
16	Consumer Price Index Core
17	Consumer Price Index Food
18	Crude oil Indian basket
19	Crudeprice Brent, Dubai, West Texas Intermediate
20	Currency in circulation
21	Demat accounts
22	Domestic Auto sales
23	Domestic Passenger vehicles sales
24	Domestic Tractor sales
25	Domestic air passenger traffic
26	Employees' Provident Fund Organisation Net Subscribers outstanding
27	E-way bills generated
28	Exchange Rate
29	External Commercial Borrowings
30	Fertilisers sales
31	Forex reserves

32	Fuel consumption
33	Government Market Borrowings
34	Global PMI Composite
35	Gross Foreign Direct Investment
36	Gross tax revenue (Central Govt)
37	Goods and Services Tax collections
38	Housing Launches
39	Housing sales
40	Index of Industrial Production General Index, Consumer Durables, Consumer Non-Durables
41	Merchandise Exports/Imports
42	MGNREGA work created
43	MGNREGA work demanded
44	Money supply
45	Natural gas production
46	Net FDI
47	Net Foreign Portfolio Investment
48	Net Liquidity injections
49	Net purchase (+)/sale (-) of US dollar
50	Nifty/Sensex
51	Nominal Effective Exchange Rate (NEER)
52	Non food credit
53	Non oil exports
54	Non oil non gold imports
55	Number of Telecom subscribers
56	Purchasing Managers' Index Manufacturing
57	Purchasing Managers' Index Services
58	Port Cargo Traffic
59	Power Consumption
60	Primary Issuances
61	Private placement of Corporate Bonds
62	Rail Freight Traffic
63	Rail Passenger Earnings

64	RBI's: Current Situation Index
65	RBI's: Future Expectation Index
66	Real Effective Exchange Rate (REER)
67	Real Estate Price Index-RBI
68	Total Retail financial transactions (NPCI)
69	Sales of Two/Three wheelers
70	Sector wise Nifty Index: Consumption, Fast Moving Consumer Goods, Infrastructure, Real Estate, Metal
71	Sectoral Bank credit
72	Steel consumption
73	Steel production
74	Total Mandi Arrivals (Wheat, Rice, Tur, Sugar, Potato, Onions, Tomato, Groundnuts, Palm Oil)
75	Unified Payments Interface transactions
76	US-Dow Jones Index
77	Vehicle registrations
78	Weighted Average Interest Rate on fresh bank lending
79	Wholesale Price Index
80	Yield spread across different maturities