*For the Year July 1, 2019 to June 30, 2020**

PART ONE: THE ECONOMY - REVIEW AND PROSPECTS

I ASSESSMENT AND PROSPECTS

I.1 Well into the second quarter of 2020-21 (April-March), COVID-19 continues to stalk the earth, imprisoning close to 210 countries in its deadly embrace. In its wake, the pandemic leaves a trail of destruction – at the time of release of this Report, it had claimed 7.90 lakh lives, 73.59 lakh active infections and counting out of 2.25 crore confirmed cases worldwide (as on August 20, 2020), driven human societies into unfamiliar isolation, halted economic activity globally and extinguished jobs and incomes. At the first tentative signs of relief – 'green shoots' being the operative term – people fatigued by asphyxiating social distancing/masks/sanitisers and the 'lockdown syndrome' have unlocked in varying degrees, desperate to regain control over their lives and livelihood. In several countries, a renewed surge of infections and deaths has triggered re-clamping down of containment procedures. It is difficult to distinguish whether the first wave of virus has intensified or if a second wave has hit.

I.2 COVID-19 has also hit India hard. Until recently, six cities – Mumbai; Delhi; Ahmedabad; Chennai; Pune; and Kolkata – accounted for half of all reported cases. Over recent weeks, however, the curve has arched upwards in lower tier cities/towns and the virus is penetrating even further into the interior regions. Unlike peers, India had responded quickly and forcefully, with two months of nation-wide lockdown starting March 25. From the first case reported on January 30 and the first death on March 12, the movement was relatively moderate to a little less than 1000 confirmed cases and 19 deaths three days after the lockdown. By mid-May, the pandemic had taken hold; confirmed cases crossed 85,000 surpassing China. At the end of July when Unlock 3.0 was about to begin, confirmed cases were nudging 16.50 lakh, with 35,747 deaths, which have subsequently increased to 28.36 lakh and 53,866 deaths, respectively (as on August 20, 2020).

I.3 India's experience has also yielded hope and an innate belief in the unconquerable character of humanity and the institutions that serve it. Notwithstanding large gaps in health infrastructure, the death rate in India is one of the lowest in the world (1.9 per cent as against the world average of 3.5 per cent as on August 20, 2020). Testing, clinical management and hospital support are being ramped up. The recovery rate has crossed 70 per cent and is climbing. The challenges that face the country are to flatten the curve, restore employment, especially to displaced migrants, rebuild supply chains, repair and revive the stricken economy and return life to normalcy. There is a widespread recognition that only in close coordination among all stakeholders will the people of India be able to determine the

* While the Reserve Bank of India's accounting year is July-June, data on a number of variables are available on a financial year basis, *i.e.*, April-March, and hence, the data are analysed on the basis of the financial year. Where available, the data have been updated beyond March 2020. For the purpose of analysis and for providing proper perspective on policies, reference to past years as also prospective periods, wherever necessary, has been made in this Report.

shape of the recovery. While the path ahead is still shrouded with high uncertainty, sifting through the experience of the year gone by could fortify this resolve and marshal the grit and resources to deal with the challenges that confront us in 2020-21 and beyond over the medium-term.

Assessment of the 2019-20 Experience

I.4 Looking back, global developments in 2019 offer several pensive reflections that have implications for the prospects for India, as for all other economies. It is now clear that the global economy recoupled in its downturn in 2019, dispelling the fissiparous movements that seemed to suggest differentiation in growth profiles of constituents in the year before. Notably, the slowdown was more pronounced across emerging market economies (EMEs) relative to advanced economies (AEs). Over the course of the year, the weakening of the growth momentum became increasingly broad-based geographically from which individual countries, including India, had no escape. The global slowdown was marked by a close co-movement in the slumps in industrial production, trade and investment at national levels, given that investment is concentrated in intermediate and capital goods that are heavily traded. In addition, trade tensions dented business sentiment in the manufacturing sector. The weakening of global imports was significantly influenced by the downturn in EMEs. In turn, these forces reduced export growth, which is intensive in imports, and relies heavily on the state of global supply chains. For a while, as manufacturing lost steam, services held firm and helped to support consumer confidence, but eventually the inexorability of the global downturn took over.

I.5 Despite these headwinds, some indications emerged toward the closing months of the year that the slowdown may be bottoming out. With the easing of monetary policy continuing into the second half of 2019, bolstered by fiscal stimulus in some countries, expectations that global activity could recover in early 2020 rose. In fact, high frequency indicators for the fourth quarter (October-December 2019) suggested that momentum was stabilising at a sluggish pace. One-off factors that had impacted global manufacturing - new emission standards for the auto sector; inventory accumulation - appeared to fade. Business sentiment and manufacturing purchasing managers' indices (PMIs) ceased deteriorating, world trade growth seemed to be bottoming out, and service sector PMIs remained in expansionary territory.

I.6 The finance channel was also at work and, intertwined with the confidence channel, amplified global spillovers. Positive impulses, transmitted through real sector channels described in the foregoing, initially boosted financial markets, and diminished fears of trade war and a hard Brexit supported investors' risk appetite. Equity prices appeared to regain poise, sovereign bond yields declined, and portfolio flows returned to EMEs. Currency movements between September 2019 and early January 2020 reflected the general strengthening of risk sentiment. Financial conditions had thus turned broadly accommodative across AEs and EMEs and conducive to a modest recovery before the pandemic broke out.

I.7 The finance and confidence channels abruptly reversed transmission at the end of 2019 with the onset of COVID-19. Financial markets froze, financial institutions started bracing up for a brutal onslaught of balance sheet impairment, extreme risk aversion set in and as incomes stopped flowing, especially to the defenceless, households and businesses alike made a dash for

cash. COVID-19 was bringing to bear the dark side of global integration. In the event, global growth at 2.9 per cent in 2019 was the lowest since 2009. The year 2019-20 (April-March) also marked India's lowest gross domestic product (GDP) growth since the global financial crisis (GFC). Amidst the influential global developments referred to earlier, the Indian economy was hit by specific domestic factors from the second quarter of 2019 onwards, including downturn in its automobile and real estate sectors and pangs of distress among micro, small and medium enterprises (MSMEs).

I.8 Turning to domestic developments, the previous year's Annual Report posed an existential question: are we dealing with a soft patch, or a cyclical downswing, or a structural slowdown? Even as data were being awaited to disentangle the nature of the slowdown, a soft patch was ruled out as the loss of pace became entrenched sequentially with each ensuing quarter. Going back in time, the Indian economy had experienced a V-shaped recovery from the GFC, but this stimulus-driven upturn failed to sustain: average GDP growth slumped from 8.2 per cent in 2009-11 to 5.3 per cent in 2011-13. From 2013-14, a cyclical upswing took hold and it turned to be one of the longest in the post-independence period, reaching 8.3 per cent in 2016-17. Ahead of the cyclical global downturn which commenced in 2018, however, India's real GDP growth showed signs of slowdown during 2017. Favourable statistical base effects delayed the onset of the cyclical downturn during the second half of 2017-18 in spite of slowing momentum. Eventually, however, India joined the global slowdown from Q1:2018-19 and lost speed continuously over the next 8 quarters, reaching 3.1 per cent in Q4:2019-20, the lowest in the national accounts series based to 2011-12.

I.9 Thus, until the onset of COVID-19, the moderation in India's growth trajectory reflected cyclical forces, both global and domestic. The global drivers included softer external demand, new automobile emission standards in several parts of the world, weaker macroeconomic conditions because of idiosyncratic factors in a group of systemic EMEs, trade tensions and broader global trade policy uncertainty, the possibility of a no-deal Brexit and the slowdown in China. The domestic factors took the form of inventory overhang in the real estate sector, followed by unfavourable terms of trade sapping rural demand, a slump in gross fixed capital formation from Q4:2018-19 and contraction in merchandise exports from Q1:2019-20 and imports from Q2:2019-20. The deceleration phase (Q4:2018-19 to Q4:2019-20) was accentuated by idiosyncratic events such as auto emission norms/axle norms for commercial vehicles and credit events in the NBFC space.

I.10 Pre-emptively reading the underlying cyclical nature of the growth slowdown, monetary policy committee undertook a series of policy rate reductions, starting as early as February 2019 and cumulating to 135 basis points by February 2020; switched the stance of policy from calibrated tightening to neutral to accommodative; and infused the system with abundant liquidity from Q2:2019-20. Monetary transmission, typically lagged and incomplete in India, improved significantly in the second half of the year under comfortable liquidity conditions and the mandated linking of the interest rates on new floating rate loans to select sectors to external benchmarks in October. Illustratively, the weighted average lending rate (WALR) on fresh bank loans declined by 71 basis points (bps) during February 2019-February 2020, of which 31 bps occurred during October 2019-February 2020. The counter-cyclical shift in the monetary policy stance to support growth

was enabled by inflation turning benign in the first half of the year; in spite of a spike in food prices that caused headline inflation to rise beyond 6 per cent during December 2019-February 2020, it averaged 4.8 per cent for the year as a whole, a little above the target of 4 per cent.

I.11 Fiscal policy had also turned counter-cyclical from Q4: 2016-17, with government final consumption expenditure in the form of the 7th pay commission award and one rank one pension providing steady support to GDP. From Q2:2019-20, the fiscal policy stance became expansionary, with a momentous corporate tax regime change that made India comparable with Asian peers. This fiscal impulse, together with the cyclically induced shortfall in revenues, eventually produced a sizeable deviation in the central government's gross fiscal deficit (GFD) from the target for the year – 4.6 per cent of GDP as against 3.3 per cent budgeted – warranting the usage of the escape clause under the revised Fiscal Responsibility and Budget Management (FRBM) Act. Subnational fiscal policy remained within the Fiscal Responsibility Legislation (FRL) thresholds, primarily *via* expenditure cuts in the face of large scale revenue shortfalls, a feature observed in previous years as well. Automatic stabilisers, particularly on the tax front, however, would have played a counter-cyclical role. On the whole, both the centre and states had much less fiscal space to deal with COVID-19 than during the GFC.

I.12 Circling back to the formation of domestic demand during 2019-20, consumption turned out to be relatively resilient. Government consumption put a floor underneath the downturn as discussed earlier - without it, real GDP growth would have fallen from the headline of 4.2 per cent to barely 3.3 per cent in 2019-20. Private consumption, which is the bedrock of domestic demand with a share of 57 per cent of GDP, withstood the overall loss of pace and started decelerating only from Q4:2019-20. The main drivers of the slowdown in 2019-20 were investment and exports.

I.13 A slowdown in fixed investment set in from 2011-12 and became entrenched from Q4:2018-19, slumping into contraction from Q2:2019-20. A combination of stress in balance sheets of corporates and banks, defaults in the NBFC sector, slowing income growth of households leading to a large inventory overhang of unsold homes, and the global slowdown weighed heavily on animal spirits.

I.14 Underlying the contraction of 5.1 per cent in exports in US dollar terms during the year was a drop in export prices by 4.7 per cent. Sectoral analysis throws up valuable insights. For instance, a group of exports – electronic goods; drugs and pharmaceuticals; iron ore – held firm in the face of a combination of weakening external demand and country-specific impediments. Each of these sectors has considerable export potential, especially in the fast-changing dynamics of the international environment.

I.15 As regards the evolution of aggregate supply conditions in 2019-20, agriculture and allied activities provided a silver lining, with record foodgrains and horticulture production and favourable terms of trade for the farm economy. The challenge of managing supply gluts in cereals exposed the shortcomings of policy interventions in the form of price support and buffer stocking. Paradoxically, disruptions in agricultural supply chains and restrictions affecting transportation of agri-produce from farms to markets produced demand-supply mismatches that fuelled price flares in the second half of the year. The recent spate of reforms to agricultural marketing and infrastructure could open up new opportunities

for agriculture if they could be complemented by trade policies that are predictable, expose the farm sector to international terms of trade and shift emphasis to processing and value addition.

I.16 A perceptible slowdown in the industrial sector has set in after 2015-16, with its epicentre in manufacturing. Structural rigidities in labour, land, and product markets have made Indian manufacturing uncompetitive in global markets and unable to reap the demographic dividend embodied in a young but under-skilled labour force. Large gaps in the physical infrastructure have also impacted productivity and overall efficiency. More recently, high leverage and solvency concerns have produced stressed balance sheets, which appear to have overwhelmed bankruptcy processes. In addition, some of the past issues remain formidable drags such as delay in land acquisition, environmental concerns and various impediments in MSMEs sector.

I.17 The services sector has remained the prime mover of the Indian economy over the last three decades. Until 2019-20, it had exhibited resilience and productivity; however, idiosyncratic developments, both domestic and global - grounding of an airline; financial sector stress; stalled construction projects; revenue-related issues in telecom; port activity impeded by muted foreign trade; coal production losses impacting railway freight traffic - operated in conjunction with the slowdown in aggregate demand to pull the sector's output to its lowest growth in two decades. The performance of the services sector in the year gone by reflects the emergence of structural impediments specific to each sub-sector. Services exports have, however, outperformed goods exports and maintained global share in 2019-20, with software providing the cutting edge. Indian IT majors could benefit from re-prioritising investments towards automation and efficiency gains from cloud computing and digitalisation, as well as new alliances with global companies.

I.18 During the year, several initiatives were undertaken to develop various segments of the financial market spectrum that are under the jurisdiction of the Reserve Bank. In the foreign exchange market, the focus turned to incentivising access, bridging the segmentation between on shore and off shore activity, simplifying the hedging regime within an overall rationalisation of regulations, and enhancing the ease of doing business in a principles-based regulatory framework. In the debt market, specified securities issued by the Government of India were opened to non-residents under the fully accessible route (FAR), among other initiatives to liberalise foreign portfolio investments. The market borrowing programmes of the central and state governments were conducted in alignment with the objectives of minimising cost and mitigation of risks. The development of the debt market was carried forward through liquidity enhancement, expanding the investor base and improving debt management strategies. In the money market, a revised liquidity management framework was put in place to empower the Reserve Bank to actively manage liquidity conditions with the use of conventional and unconventional instruments. Notably, longer term repo operations and special open market operations (OMOs), on top of currency swaps that were launched in 2018-19, were added to the Reserve Bank's arsenal of liquidity management tools.

I.19 In the regulatory and supervisory domain, several steps were taken during the year to strengthen financial intermediaries and preserve financial stability. These initiatives were presented in the Bi-annual Financial Stability Report which

monitors the financial system by assessing risks to financial stability through systemic stress tests, financial network analysis and appraisal of the overall regulatory framework. With regard to the banking system, the ongoing efforts to align the prudential regulatory framework with global standards were carried forward. Alongside improvements in corporate governance, risk management and credit delivery, cyber security was strengthened while leveraging on technology. Past efforts for resolution of stressed assets seemed to start showing results: after reaching a peak of 11.5 per cent at end-March 2018, a decline in the gross non-performing assets (GNPA) ratio of scheduled commercial banks (SCBs) set in, taking it down to 8.5 per cent by end-March 2020. The provision coverage ratio of SCBs improved significantly for the third consecutive year to reach 65.4 per cent in March 2020.

I.20 The capital to risk-weighted assets ratio (CRAR) of SCBs improved to 14.8 per cent in March 2020 (14.3 per cent a year ago). Initiatives were taken to strengthen the regulatory and supervisory framework of the cooperative banking sector through review of trigger-based supervisory action, constitution of boards of management for urban cooperative banks (UCBs) with deposits of ₹100 crore or above, rationalisation of exposure norms for single and group borrowers of UCBs and amalgamation of district central cooperative banks in Kerala and development of Central Fraud Registry (CFR) for UCBs. Further, the regulatory powers of the Reserve Bank were strengthened by the amendments in certain sections of the Banking Regulation Act 1949, thereby bringing additional areas of functioning of cooperative banks under its regulatory purview.

I.21 The asset-liability management framework for non-banking financial companies (NBFCs) was strengthened, including revisions in liquidity risk management to align it with that of the banking sector. Regulation of housing finance companies (HFCs) and wider supervisory powers over NBFCs were vested with the Reserve Bank. Technology-enabled customer services, customer protection and strengthening of fraud detection were concurrent pursuits.

I.22 Financial inclusion was taken forward with the release of the National Strategy for Financial Inclusion, 2019-24 and measures were undertaken for deepening the digital payment ecosystem. Further, efforts towards enhancing financial literacy were also intensified. Under the roadmap for providing banking services in villages, as on September 30, 2019, 99.2 per cent of the identified villages across the country with population less than 2,000 had been provided with banking services, while 94.4 per cent of the identified villages with population more than 5,000 were provided access to banking services.

I.23 Driven by the Payment and Settlement Systems Vision 2019-21, efforts were made towards developing efficient and secure payment and settlement systems with focus on the availability of user-friendly platforms at affordable costs. The Reserve Bank worked towards expanding the reach of Unified Payments Interface (UPI) and *RuPay* cards globally. Incentives were designed to promote digital payment usage. Improvements in customer service included availability of National Electronic Funds Transfer (NEFT) on 24x7x365 basis, increase in operating hours of Real Time Gross Settlement (RTGS), e-mandates on cards, Prepaid Payment Instruments (PPIs) and UPI, expansion of biller categories under the *Bharat* Bill Payment System (BBPS) and enhancing the usage of National Electronic Toll Collection (NETC) system. The share of digital transactions

in the total volume of non-cash retail payments increased to 97.0 per cent during 2019-20, up from 95.4 per cent in the previous year. Currency management was strengthened by replacement of currency verification and processing systems and integration of currency management functions with the core banking solution of the Reserve Bank.

I.24 Turning the page back to the existential question, the available evidence did seem to converge on detecting a cyclical downturn in India – synchronised globally – through 2018-19 and 2019-20, following one of the longest expansions in recent history. Just as the decelerating phase of the cycle appeared to be troughing towards the close of 2019-20, COVID-19 arrived and wrenched the narrative asunder. Today, the jury is out on a wide array of possibilities that can characterise the future. They span from a V-shaped rebound due to a volcanic eruption of pent-up, unlocked demand that sets the stage for a rising trajectory of renewed expansion, through a diversity of intermediate iterations; to a structural stagnation brought about by behavioural and demographic changes. On this sombre note, it is appropriate to gaze at what lies ahead in 2020-21 and beyond.

Prospects for 2020-21

I.25 After plunging off a precipice in March and undergoing a contraction in the first half of 2020 that is widely regarded as deeper and more destructive than the Great Depression and the GFC, the global economy is starting to break out of the free fall. Activity is beginning to bottom out in Q3:2020 as unlocking of economies begins in varying degrees and pent-up demand is released. The easing of containment and social distancing has, however, been hesitant, and has stalled in various countries due to fresh waves of infections and mortality. All around, supply chains and production structures are in disarray and commodity prices, especially those of metals, are reflecting the supply shock. The bigger impact of the pandemic has been on demand. The prices of non-discretionary essential items have surged even as many discretionary items have gone out of transactions. Precautionary saving instincts have gripped businesses and households amidst heightened risk aversion, while the appetite for investment has evaporated. The pandemic has also exposed new inequities - white collar employees can work from home while essential workers have to work on site, exposed to the risk of getting infected. In some areas of work such as hospitality, hotels and restaurants, airlines and tourism, employment losses are more severe than in other areas. The poorest have been hit the hardest.

I.26 A defining feature of the COVID-19 experience has been the unprecedented policy response. According to the IMF, the total stimulus package (liquidity and fiscal measures) for G20 countries averaged 12.1 per cent of GDP (5.1 per cent of GDP for EMEs and 19.8 per cent of GDP for AEs). The policy fight back has calmed financial markets and even produced asset price inflation out of sync with the underlying state of economic activity, prevented financial institutions and corporations from collapsing, and provided some protection to household incomes. Fiscal rules have been set aside. The unparalleled expansion of central bank balance sheets, unbridled by conscience-keeping inflation, has implied that they may be tacitly financing the stimulus, including by keeping interest rates unusually low while debt, both public and private, swells in the virtual absence of servicing constraints. The outcome is that governments and central banks are increasingly taking on the role of resource allocation that has traditionally been performed by markets. This can inevitably bring in

political consequences unless these authorities fashion timely and credible exits after the virus has been overcome and the vaccine found. In the rain shadow of these developments, the role of banks and non-banking financial entities as primal financial intermediaries has waned while capital and bond markets have taken over. In all this, the usual risks are relegated to the background where they may be sinisterly mutating – fiscal dominance; inflation; leverage; market failure. Meanwhile, the crisis presents opportunities and the shape of the future will depend on how well they are exploited.

I.27 Global economic activity is well below pre-COVID levels. In Q1:2020, GDP contracted in the range of 1.2-13.6 per cent among AEs; among EMEs, growth varied between 4.5 per cent and (-) 6.8 per cent. Early GDP releases and high frequency indicators suggest that contractions have been severe in Q2, while for Q3 the near-term outlook remains clouded with available high-frequency indicators presenting a mixed picture. The global manufacturing PMI emerged out of a 5-month contraction and rose to 50.3 in July. The global services PMI also posted a rise into expansion at 50.5 in July. According to the World Trade Organisation (WTO), the volume of merchandise trade shrank by 3.0 per cent year-on-year in Q1, but early estimates suggest a fall of 18.5 per cent in Q2. Global primary commodity prices (released by the IMF) contracted in the first half of the year, going down by 13.4 per cent in July 2020 over December 2019. Crude oil prices have recovered after sharp falls in March and April on continuing supply cuts by OPEC plus countries and improved demand prospects on gradual easing of lockdown restrictions - Brent crude oil prices averaged at $42.8 per barrel in July 2020, up from a low of $23.3 per barrel in April 2020. Gold prices had a remarkable performance, increasing by 25 per cent in July 2020 over December 2019, with the ultra-high level of uncertainty spurring flights to safety. Apart from metals, food prices have surged since May, reflecting supply disruptions. These factors have also moved inflation outcomes. In AEs, sizeable slack in demand has kept inflation muted, whereas in several EMEs, spikes in food prices have shown up in headline inflation firming up relative to recent history.

I.28 In its latest update (June 2020), the IMF has projected global growth at (-) 4.9 per cent for 2020, with a steeply negative impact on economic activity in H1 and more gradual recovery than expected earlier. India's growth is projected at (-) 4.5 per cent for 2020-21. The projections set out by the OECD on June 10, 2020 present two scenarios – single hit and double hit[1] - the latter being one in which a second wave of rapid contagion erupts later in 2020. Global growth is projected at (-) 6.0 per cent in the single hit scenario and (-) 7.6 per cent in the double hit scenario [India's growth is projected at (-) 3.7 per cent and (-) 7.3 per cent, respectively, in 2020-21]. In the Global Economic Prospects, the World Bank has projected the deepest global recession in eight decades in 2020, almost three times as steep as the global recession of 2009, despite unprecedented policy support. Some developments suggest that the shrinkage of world trade may be bottoming out in the third quarter of 2020. Global commercial flights, which carry a substantial amount of international air cargo, had slumped by (-) 74.0 per cent between January and April, but they rose

[1] Under a single hit scenario, the current containment measures are assumed to be sufficient to overcome the outbreak. In the double-hit scenario, a second wave of virus outbreak hits before the year end (October/November) requiring return to another general lockdown.

58.0 per cent through mid-June. Container port throughput also appears to have staged a partial recovery in June, along with new export orders in PMIs. In April 2020, the WTO set out a relatively optimistic scenario in which the volume of world merchandise trade in 2020 would contract by 13.0 per cent in 2020 and a pessimistic scenario in which trade would fall by 32.0 per cent. Given the contractions in global trade in Q1 and Q2, meeting the optimistic projection for the year would require 2.5 per cent growth per quarter for the rest of the year.

I.29 Turning to India, the NSO's estimates of GDP for Q1:2020-21 are slated to be released on August 31. Meanwhile, high frequency indicators that have arrived so far point to a retrenchment in activity that is unprecedented in history. Moreover, the upticks that became visible in May and June after the lockdown was eased in several parts of the country, appear to have lost strength in July and August, mainly due to reimposition or stricter imposition of lockdowns, suggesting that contraction in economic activity will likely prolong into Q2. The total e-way bills issuance, an indicator of domestic trading activity, increased by 70.3 per cent in June 2020 on a month-on-month (m-o-m) basis; in July, however, it increased by only 11.4 per cent m-o-m and remained 7.3 per cent lower than a year ago. During June 2020, inter-state e-way bills had increased by 91.3 per cent, but in July they rose only by 15.3 per cent. Similarly, intra-state e-way bills, which had risen by 60.1 per cent (m-o-m) in June, increased only by 9.1 per cent in July. The Google mobility trend, which tracks movement of people as a reflection of underlying economic activity, picked up in June 2020 from its levels in April and May. Mobility around groceries and pharmacies reached pre-COVID-19 levels, while mobility relating to retail and recreation was around 60.0 per cent and transit activity was 40.0 per cent lower than that of February 2020 levels. In July, however, moderation set in, with retail and recreation mobility stagnant, and some slide in people's movement around groceries and pharmacies.

I.30 Going forward, government consumption is expected to continue pandemic-proofing of demand, and private consumption is expected to lead the recovery when it takes hold, with non-discretionary spending leading the way until a durable increase in disposable incomes enables discretionary spending to catch up. An assessment of aggregate demand during the year so far suggests that the shock to consumption is severe, and it will take quite some time to mend and regain the pre-COVID-19 momentum. Private consumption has lost its discretionary elements across the board, particularly transport services, hospitality, recreation and cultural activities. Behavioural restraints may prevent the normalisation of demand for these activities. The Reserve Bank's survey for the month of July indicates that consumer confidence fell to an all-time low, with a majority of respondents reporting pessimism relating to the general economic situation, employment, inflation and income; however, respondents indicated expectations of recovery for the year ahead. Urban consumption demand has suffered a bigger blow - passenger vehicle sales and supply of consumer durables in Q1: 2020-21 have dropped to a fifth and one third, respectively, of their level a year ago; air passenger traffic has ground to a halt. Rural demand, by contrast, has fared better. Among underlying indicators, tractor sales picked up by 38.5 per cent in July, spurred by the robust pace of *kharif* sowing, while the contraction in motorcycle sales eased in July (from 35.2 per cent in June to 4.9 per cent in

July). The decline in production of consumer non-durables turned positive in June. A fuller recovery in rural demand is, however, being held back by muted wage growth which is still hostage to the migrant crisis and associated employment losses. Initiative under the *Pradhan Mantri Garib Kalyan Rojgar Abhiyaan* is likely to generate employment in rural areas. Along with increased wages under the *Mahatma Gandhi National Rural Employment Guarantee Act* (MGNREGA), they should provide a fillip to rural incomes.

I.31 Government consumption spending has provided a measure of relief, with central government's revenue expenditure, net of interest payments and major subsidies, having risen by 33.7 per cent in the first quarter of the year. Public finances have, however, been stretched by the imperative to mitigate the impact of COVID-19 and headroom for continuing support to aggregate demand may be severely diminished. In the case of state finances, space is likely to be squeezed so much that cuts in growth-giving capital expenditure seem quite probable. The future path of fiscal policy is likely to be heavily conditioned by the large overhang of debt and contingent liabilities incurred during the pandemic. A credible consolidation plan, specifying actionables for reduction of debt and deficit levels, will earn confidence and acceptability, rather than just extending the path of touch-down. As the wind-down begins and consolidation resumes, it is prudent to expect lower contributions of GFCE to overall demand. In order to boost fiscal revenues and mitigate the pains of this transition, big data and technology can be leveraged to track and identify tax defaulters, increase the tax payer base by tracking their income and wealth parameters, and by addressing the challenges confronting the GST regime through rationalisation, simplification of returns and procedures, including automatic invoice matching, intelligence, enforcement, inspection and audit. It is worthwhile to consider an evaluation of the experience with GST by an independent committee which can draw on the lessons gained so far to recommend the way forward. Fiscal incentives for industry can be re-aligned in favour of productive labour-intensive companies so as to generate employment.

I.32 Indicators of investment demand – the production of capital goods contracted by 36.9 per cent in June 2020 (-64.4 per cent in April-June 2020) and import of capital goods contracted by 24.7 per cent in July 2020 (-46.7 per cent in April-June 2020). The construction sector exhibited a sharp downturn, as reflected in consumption of steel in July 2020 (-29.1 per cent and -57.9 per cent in April-June 2020) and production of cement which contracted by 6.9 per cent in June 2020 (-38.8 per cent in April-June 2020). Declining capacity utilisation, the weakening of consumption demand and the overhang of stressed balance sheets are restraining new investment. The corporate tax cut of September 2019 has been utilised in debt servicing, build-up of cash balances and other current assets rather than restarting the capex cycle. These underlying developments suggest that the appetite for investment is anaemic and in need of more reforms.

I.33 Targeted public investment funded by monetisation of assets in steel, coal, power, land, railways and privatisation of major ports by central and state governments under an independent regulator can be the way forward to revive and crowd in private investment. In fact, goods and services tax (GST) Council type of apex authorities can be set up in respect of land, labour and power to drive structural reforms. They could include speedier implementation of the national

infrastructure pipeline, a north-south and east-west road corridor together with a high-speed rail project that build on the successes of the golden quadrilateral, alongside steps to improve business sentiment and the environment for investment. States can be encouraged to publicise the availability of litigation-free land in their jurisdictions with access to modern infrastructure. In the power sector, the opportunity has arrived to leapfrog India into becoming the world leader in renewable energy by incentivising the domestic production of solar panels and connecting dispersed transmission links with remote areas. For the sector as a whole, elimination of cross-subsidisation through the tariff structure and provision of subsidy, if any, through direct benefit transfer (DBT) should be a priority, along with due consideration to the privatisation of electricity distribution companies (DISCOMS). With regard to railways, there is a strong case for manufacturing units to be corporatised. The growth potential of land banks can be exploited, particularly in metropolitan areas, by long-term leasing to the private sector, including for development of commercial real estate. FDI into railways can be encouraged by removing bottlenecks in the access to infrastructure - land; procurement rules; project risk-sharing mechanisms. A comprehensive policy is needed with regard to building adequate reserves of strategic materials, including the initiatives undertaken for crude oil.

I.34 There is clearly a need for diversifying financing options. Alternatives to bank finance have to be assiduously cultivated - capital markets and FDI offer opportunities to bring in investors with a relatively longer-term view that is conducive to attracting durable capital as well as embedded technology. The setting up of the National Investment and Infrastructure Fund (NIIF) in 2015 is a major strategic policy response in this direction. Promotion of the corporate bond market, securitisation to enhance market-based solutions to the problem of stressed assets, and appropriate pricing and collection of user charges should continue to receive priority in policy attention. There is also a need for expanded footprints for specialised NBFCs classified as Infrastructure Finance Companies.

I.35 The progress made on building a modern physical infrastructure in the country over the last five years has been noteworthy in the areas of roads, civil aviation and airport connectivity, telecommunication (including internet and broadband penetration), and ports. India has also recorded an impressive growth in metro rail projects for urban mass transportation. Nonetheless, the infrastructure gap remains large, needing around US $4.5 trillion of investment by 2040, as per the Economic Survey 2017-18, with emphasis on upgrading the poor quality of infrastructure. India is currently ranked 70 out of 140 countries for infrastructure quality in the Global Competitiveness Index and logistics performance. India's ranking in the World Bank's Logistics Performance Index (LPI) is also low at 44 among 160 countries. Non-performing assets (NPAs) relating to infrastructure lending by banks has also remained at elevated levels. In the context of COVID-19, a big push to certain targeted mega infrastructure projects can reignite the economy.

I.36 It is also time to turn to the unlocking of entrepreneurial energies and risk appetite by improving the business environment. Faster enforcement of contracts, including through expansion of judicial and insolvency capacities, would be a game changer. Property registrations can be speeded up from the current 58 days, and a centralised website can provide real

time information on all regulatory compliance requirements. In general, the compliance burden can be streamlined substantially. The COVID-19 crisis can be converted into an opportunity by using online provision of education and training to implement reforms in the social infrastructure by skill development and reskilling so as to prepare a labour force equipped to keep pace with a big thrust on infrastructure.

I.37 Information and communication technology (ICT) has been an engine of India's economic progress for more than two decades now. Leveraging on ICT has to be a key element of the future development strategy by reducing transaction and communication costs and by improving the quality of capital. This could generate productivity gains all around, with competent, reliable, and low-cost supply of knowledge-based solutions in India and overseas. Indian IT firms are at the forefront of developing applications using artificial intelligence (AI), machine learning (ML), robotics, and blockchain technology. This niche advantage needs to be leveraged to strengthen India's position as an innovation hub, coupled with India's 'Start-up India' campaign which recognises the potential of young entrepreneurs of the country and aims at providing them a conducive ecosystem. While HealthTech and FinTech are the leading segments, Indian entrepreneurs can capitalise on opportunities across other sectors and markets, and increase the depth and breadth of this ecosystem, especially in serving small and medium businesses, and low and middle-income groups. Even before COVID-19, a global technological churn was underway, with rapid advances in digital technologies and state-of-the-art computing/analytical capabilities. While non-tariff barriers and issues relating to data privacy and data security may pose challenges, creative destruction is an integral feature of a robust dynamic economy. The IT sector is best placed to drive this process and also manage its consequences. Promoting young firms and start-ups and ensuring their survival will be critical for greater employment generation and higher productivity-led economic growth in India. It will be essential to reorient resources and policy focus in this direction. Dynamic entrepreneurship, innovation and the ability to nurture ideas to actualisation embodied in start-ups are the hallmarks of success in ICT.

I.38 Exports hold the key to a viable balance of payments and a dynamic manufacturing sector. The pandemic has transformed the international environment for global value chains, with implications for the choice of product-destination mix underlying a dynamic export strategy. Rather than spreading resources thinly and widely, it is time to identify sunrise export categories that are reaping productivity gains and have dynamic linkages, both horizontal and vertical, that strengthen footholds in emerging global value chains. For electronic goods for instance, the ongoing diversification of production bases presents opportunities, provided India is able to leverage on FDI into high-end segments in order to compete with currently preferred destinations for companies on the look out for new locations for their manufacturing facilities. India has always enjoyed a comparative advantage in generic drugs and pharmaceuticals exports, being the largest supplier in the world. India needs to regain its market share in active pharmaceutical ingredients (APIs) by developing cost-effective and high-quality manufacturing processes compliant with global standards. Another group of exports in which India's competitive edge is progressively being lost to new competition

- readymade garments; gems and jewellery - is traditionally labour-intensive; regaining competitiveness hinges around labour reforms that unfetter scale economies.

I.39 Foreign trade policy should increasingly focus on leveraging exports *via* free/preferential trade arrangements. In this context, completion of the India-EU free trade agreement and a post-Brexit free trade agreement/ preferential arrangement with the UK may confer early mover advantages. India also needs to tie up special trade arrangements with countries supplying rare materials that are essential to new export products which are gaining ascendency in the competitiveness ladder. Designing a robust framework for promoting already identified sectors - auto parts; drugs and pharmaceuticals; electronics; textiles; food processing - to enhance their productivity should be a central feature of the export strategy, alongside exploitation of productivity gains from sectors such as ICT, finance and business services. The strategy will also require more efficient logistics through achievement of the targets set under the National Trade Facilitation Plan, which aims to transform the trade ecosystem by reducing the time and cost of doing business. For many of India's traditional exports, especially agricultural and allied products, stability in trade policy is critical, alongside a better alignment with the goal of doubling farm incomes. In the context of exports of manufactures, a renewed focus on special economic zone (SEZ) type cluster-based manufacturing export launching pads may be apposite to establish centres of manufacturing excellence which also leverage on the natural link between exports and FDI.

I.40 Turning to production activity, Indian agriculture is undergoing a distinct transformation, notwithstanding headwinds. The total production of foodgrains reached a record 2,966.5 lakh tonnes in 2019-20, while total horticulture production - accounting for about 40 per cent of GVA in the farm sector - also reached an all-time high of 3,204.8 lakh tonnes. India is now among the leading producers of milk, cereals, pulses, vegetables, fruits, cotton, sugarcane, fish, poultry and livestock in the world. These achievements stand out in the overcast of gloom on the outlook. They have provided the confidence to enact and continue with the historic National Food Security Act (NFSA) which converts food security programmes into legal entitlements of subsidised foodgrains to two-thirds of the population. Moreover, in the wake of the nationwide lockdown, the Government of India announced the world's largest food security scheme, the *Pradhan Mantri Garib Kalyan Anna Yojana*, for 80 crore ration card holders. For non-ration card holders - particularly migrant labourers, stranded and the needy families - a provision of 8 lakh tonnes of foodgrains has been made under the *Atmanirbhar Bharat Abhiyan* package.

I.41 Going forward, shifting the terms of trade in favour of agriculture is the key to sustaining this dynamic change and generating positive supply responses in agricultural production. Experience shows that in periods when the terms of trade remained favourable to agriculture, annual average growth in agricultural gross value added (GVA) exceeded 3 per cent. Hitherto, the main instrument of incentive has been minimum support prices, but the experience has been that price incentives have been costly, inefficient and even distortive. India has now reached a stage in which surplus management has become a major challenge. The priority is to move to policy strategies that ensure a sustained increase in farmers' income alongside reasonable food prices for consumers. An efficient domestic supply chain becomes critical here. Accordingly, the focus must now turn

to the major reforms that are underway to facilitate free trade in agriculture. First, the amendment of the Essential Commodities Act (ECA) is intended to encourage private investment in supply chain infrastructure, including warehouses, cold storages and marketplaces. Second, the Farmers' Produce Trade and Commerce (Promotion and Facilitation) Ordinance, 2020 is aimed at facilitating barrier-free trade in agriculture produce. Third, the Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance, 2020 will empower farmers to engage with processors, aggregators, wholesalers, large retailers, and exporters in an effective and transparent manner. With this enabling legislative framework, the focus must turn to (a) crop diversification, de-emphasising water guzzlers, however politically difficult it may be; (b) food processing that enhances shelf life of farm produce and minimises post-harvest wastes; (c) agricultural exports which expose the Indian farmer to international terms of trade and technology; and (d) public and private capital formation in the farm sector.

I.42 Indian manufacturing has been locked in a structural slowdown for quite some time. Reversing this decline warrants a complete rethink. The quality and efficiency of the physical infrastructure, which still significantly lags behind the global median, has to be enhanced to help manufacturing take off. Benchmarking systems and procedures with the best in the world could galvanise growth in the sector, aided by cleaning up of stressed balance sheets of corporates by raising the efficiency of bankruptcy and solvency procedures. Large Indian firms need to diversify their financing needs and reduce their excessive dependence on bank-based system, particularly for infrastructure financing. The need for a workable public-private partnership model specific to India cannot be over emphasised. Legacy issues of the Indian economy, *viz.,* lengthy processes of land acquisition and payment of compensation, environmental clearances, and time and cost overruns due to delays in project implementation, need to be resolved with urgency. Reforming labour regulations and increasing female participation in the work force through affirmative actions will bring down cost of production and improve productivity.

I.43 The MSME sector has the potential to become the engine of growth, but it has been underperforming for too long owing to various structural reasons. This sector has been constrained by high cost of credit due to lack of adequate information, lack of modern technology, no research and innovations, insufficient training and skill development, and complex labour laws. Key reforms relating to MSMEs, *viz.,* removal of definitional difference between manufacturing and service-based MSMEs, increased threshold limit to define an enterprise as an MSME, and adding turnover as another criteria to define MSMEs, besides investment scale, could turn out to be harbingers of far reaching changes that can transform manufacturing in India.

I.44 Over the last two decades, the Indian economy has been driven by the services sector, which comprises a heterogenous group of economic activities with varying degree of skill and organisational requirements across banking and finance, education, healthcare, information technology, tourism, transport, telecom, trade including e-commerce and space. After a peak

[2] Services sector inclusive of construction.

in 2014-15, however, the services sector has undergone a sustained moderation. Apart from generating productivity gains that boost output, the role of services in India assumes importance from the point of view of employment generation as it is the biggest employer with a share of 44.4 per cent[2] in measured employment.

I.45 During the last three decades, the successes achieved in ICT need to be expanded in other sectors, particularly in healthcare and tourism, where India has an inherent advantage. There is also an urgent need to nurture talent which can exploit emerging opportunities in space technology, internet of things (IoT) and cyber security as well. It would be essential to reorient resources and policy focus in this direction. Innovation and the ability to nurture ideas into reality would be the key challenge. In this context, private enterprise and investment have the major role.

I.46 Under the flexible inflation targeting framework adopted in 2016, headline CPI inflation has averaged 3.9 per cent up to 2019-20, closely aligned with the target of 4 per cent. This has imparted credibility to the conduct of monetary policy, instilled investor confidence and anchored inflation expectations. It has also enabled the re-orientation of monetary policy to support growth which has been decelerating continuously for eight consecutive quarters. Accordingly, the repo rate has been reduced by a cumulative 250 basis points since February 2019, supported by liquidity injections of close to 5.0 per cent of GDP. The level of the repo rate is at its lowest ever. This coordinated strategy has kept financial markets and financial institutions functioning normally, alleviated liquidity stress due to the outbreak of COVID-19, provided households and businesses with confidence by substantially easing financial conditions, and has kept the lifeblood of finance flowing.

I.47 In its early August 2020 meeting, the MPC noted the heightened uncertainty surrounding the macroeconomic outlook on account of supply chain disruptions and cost push pressures. It expected headline inflation to remain elevated in Q2:2020-21, but likely to ease in H2:2020-21, aided by favourable base effects. As regards the outlook for growth, the MPC expected real GDP growth for the year 2020-21 as a whole to be negative. The MPC was of the view that an early containment of the COVID-19 pandemic may impart an upside to the outlook. A more protracted spread of the pandemic, deviations of the monsoon from the forecast of a normal and global financial market volatility are the key downside risks. In this environment, the MPC observed that supporting recovery of the economy assumes primacy in the conduct of monetary policy. While space for further monetary policy action is available, it is important to use it judiciously to maximise the beneficial effects for underlying economic activity.

I.48 At the same time, the MPC was conscious of the upside risks to its medium-term inflation target. With headline inflation ruling above the upper tolerance band around the target, but with economic activity and the outlook remaining weak and uncertain, the MPC noted that the cumulative reduction of 250 basis points was working its way through the economy, lowering interest rates in money, bond and credit markets, and narrowing down spreads. Accordingly, the MPC decided to stay on hold, while awaiting a durable reduction in inflation to use available space to support the revival of the economy.

I.49 Turning to the financial sector, Indian banking has to be liberated from the risk aversion that is impeding the flow of credit to the productive

sectors of the economy and undermining the role of banks as the principal financial intermediaries in the economy. The deterioration in the macroeconomic and financial environment is impinging on asset quality, capital adequacy and profitability of banks. Regulatory dispensations that the pandemic has necessitated in terms of the moratorium on loan instalments, deferment of interest payments and restructuring may also have implications for the financial health of banks, unless they are closely monitored and judiciously used. Although gross and net non-performing asset ratios had come down in March 2020 along with receding slippage ratios, the economic fallout of the pandemic is likely to test this resilience, especially since the regulatory accommodations announced in the wake of the outbreak have masked the consequent build-up of stress. Macro stress tests reported in the July 2020 Financial Stability Report suggest that non-performing assets may surge 1.5 times above their March 2020 levels under the baseline scenario and by 1.7 times in a very severely stressed scenario. The system level CRAR can drop to 13.3 per cent in March 2021 from its March 2020 level under the baseline scenario and to 11.8 per cent under the very severe stress scenario.

I.50 Against this backdrop, a recapitalisation plan for public and private sector banks assumes critical importance. The minimum capital requirements, which are calibrated on the basis of historical loss events, may no longer suffice to absorb post-pandemic losses. The Reserve Bank has already advised banks and NBFCs to carry out COVID-19 stress tests and take necessary remedial measures proactively. The ability to raise capital as well as build resilience to ensure financial stability in anticipation of more frequent, varied and bigger risk events than in the past shall be contingent on the governance standards in banks, particularly on strength of risk governance framework. In this regard, the Reserve Bank has released a discussion paper on "Governance in Commercial Banks in India" with the objective of aligning the regulatory framework with global best practices while being mindful of the context of the domestic financial system. The main emphasis of the discussion paper is to empower the Board of Directors. The Board, on its part, should set the culture and values of the organisation; recognise and manage conflicts of interest; set the appetite for risk and manage risks within that appetite; exercise oversight of senior management; and empower the oversight and assurance functions through various interventions. In tandem with the evolving regulations, the supervisory approach of the Reserve Bank will have to be two-pronged - first, strengthening the internal defences of regulated entities; and second, greater focus on identifying the early warning signals and initiating corrective action. Greater emphasis will need to be placed on the assessment of business models, governance and assurance functions (compliance, risk management, internal audit and vigilance functions). It is important to reiterate that post-containment of COVID-19, a very careful trajectory has to be followed in orderly unwinding of regulatory measures and the financial sector should return to normal functioning without relying on the regulatory relaxations as the new norm.

I.51 Coming to the NBFC sector, non-traditional and digital players are entering this space to deliver financial services by way of innovative methods involving digital platforms. The goal of the Reserve Bank is to strengthen the sector, maintain stability and reduce the scope for regulatory arbitrage. An optimal level of regulation and supervision is sought to be achieved so that the NBFC sector

is financially resilient and robust, catering to financial needs of a wide variety of customers and niche sectors, and providing complementarity and competition to banks. The NBFC sector largely depends on market and bank borrowings, thereby creating a web of inter-linkages with banks and financial markets. As Housing Finance Companies (HFCs) now fall under the regulatory purview of the Reserve Bank, the process of harmonising regulations for HFCs with those applicable for NBFCs assumes priority. A robust liquidity risk management framework is in place for NBFCs and should, in time, apply to HFCs as well, with the objective of ensuring proper governance and risk management structures, including functionally independent chief risk officer (CRO) with clearly specified role and responsibilities. Due recognition of the systemic importance of NBFCs/HFCs and their inter-linkages with the financial system and ensuring higher credit flow by appropriately modulating exposure limits, enabling commercial bank lending to NBFCs and co-financing, and fostering active engagement with stakeholders are the hallmarks of the evolving engagement with the sector.

I.52 In the wake of COVID-19, lockdowns and the requirement of social distancing are providing an impetus to the wider adoption of digital payments. The operationalisation of the Payments Infrastructure Development Fund (PIDF) is expected to provide the impetus to deployment of acceptance infrastructure across the country, more so in underserved areas, and facilitate digitisation of payment transactions. The Reserve Bank will promote development of offline payment solutions to further deepen the digital payments across the country. The recently released framework for authorisation of new pan-India Umbrella Entity for retail payment systems will provide a fillip to innovation and competition in the payments landscape and minimise concentration risk in retail payment systems.The establishment of self-regulatory organisation(s) will be encouraged to increase industry participation in the regulatory and supervisory process. Other initiatives include encouraging authorised payment system operators to put in place Online Dispute Resolution (ODR) system for failed transactions.

I.53 Several initiatives are underway to transform the payments landscape in the country. Centralised payment systems, *viz.*, the RTGS system is available for customer transactions from 7 am to 6 pm; and since December 2019, the NEFT system operates round the clock - 24x7x365. Another objective has been to drive down the cost of digital transactions. Accordingly, processing charges for NEFT/RTGS applicable to member banks have been waived and they, in turn, have been advised to extend this benefit to their customers. The path ahead will involve establishing an Innovation Hub for the financial sector for innovative idea generation, licensing of National Payments Corporation of India (NPCI)-like umbrella organisation(s) to foster competition and the development of payment systems.

I.54 Under '*Utkarsh* 2022', which sets out the medium-term strategy of the Reserve Bank consistent with its core purpose, mission and vision, the major deliverables adopted for the year ahead in various functional areas cover a wide canvas. A dashboard will be developed for monitoring strategy execution. In the area of regulation and supervision, a specialised cadre will be developed with the requisite skills and expertise, and it will be backed up by a comprehensive supervisory database by linking up existing databases. Guidelines on securitisation and operational risk will be set out

in conformity with Basel III standards. Financial inclusion will be taken forward by developing online financial literacy modules targeting specific sections of society. Consumer protection will be bolstered by the financial education framework for creating awareness among members of public and by implementing the recommendations of the in-house Committee for integrating three existing Ombudsman Schemes[3] into one Scheme. Financial market development will include developing a credit derivative market, introduction of separate trading of registered interest and principal of securities (STRIPS) in State Development Loans (SDLs) and the rationalisation of FEMA regulations for overseas direct investment. These initiatives would be supported by technological developments in the form of upgrading Structured Financial Messaging Solution (SFMS), improving penetration of acceptance infrastructure and the facilitation of point of sale (PoS) in smaller centres. Training policies to upgrade the skill set of the Reserve Bank's personnel will focus on issues related to supply (courses offered for training), delivery (who delivers which courses, where and how) and assessment (of institutions, trainers and trainees). In the context of developing the physical infrastructure, the goal will be to obtain relevant ratings from Indian Green Building Council (IGBC)/ Green Rating for Integrated Habitat Assessment (GRIHA) for at least one existing office and five existing residential buildings.

I.55 These future strategies will also require the Reserve Bank to be logistically empowered. The Reserve Bank is in the process of revamping its data warehouse system into a new state-of-the-art Centralised Information Management System (CIMS) covering data acquisition to dissemination and analytics spread across most business areas of the Reserve Bank. A separate testing environment (sandbox) has been set up for simulating new technologies in a secure manner. It will be used for testing system-to-system integration of banks' Management Information System (MIS) servers with the CIMS. The Central Information System for Banking Infrastructure (CISBI), which supports banking network and financial inclusion policies, will be expanded by including co-operative banks, ATMs and fixed-location business correspondents (BCs). The Central Fraud Registry (CFR) portal of SCBs, augmented with new features is at an advanced stage of development. The Reserve Bank's Data Science Lab (DSL) will work towards improving data quality, forecasting, surveillance, early warning detection abilities, and employing big data analytics to provide inputs for policy formulation and monitoring. The DSL will be expanded to consist of an interdisciplinary team of experts comprising data scientists, statisticians, economists and IT personnel, who would use various techniques encompassing programming, statistical methods, text and data mining and machine learning in various areas of interest to the Reserve Bank. A Granular Data Access Lab (GDAL) has been planned in the CIMS environment in which techniques of data masking and other access restrictions are envisaged to protect confidentiality of granular data.

I.56 The pandemic will inflict deep disfigurations on the world economy. The shape of the future is heavily contingent upon the evolving intensity, spread and duration of COVID-19 and the

[3] Includes Banking Ombudsman Scheme, 2006; Ombudsman Scheme for NBFCs, 2018; and Ombudsman Scheme for Digital Transactions, 2019.

discovery of the elusive vaccine. Post-COVID-19, the overwhelming sense is that the world will not be the same again and a new normal could emerge. As in the rest of the world, India's potential output can undergo a structural downshift as the recovery driven by stimulus and regulatory easing gets unwound in a post-pandemic scenario. Moreover, this recovery is likely to be different – the GFC occurred after years of robust growth with macroeconomic stability; by contrast, COVID-19 has hit the economy after consecutive quarters of slowdown. Furthermore, the GFC was essentially a financial meltdown whereas the pandemic is a health crisis, which have deleterious ramifications across real and financial sectors. So far, policy authorities have responded with an unprecedented defence, involving conventional and unconventional measures in order to mitigate the unconscionable human and economic casualties. As stimulus is unwound in a calibrated and non-disruptive manner in a post-pandemic scenario, deep-seated and wide-ranging structural reforms in factor and product markets, the financial sector, legal architecture, and in international competitiveness would be needed to regain potential output losses and return the economy to a path of strong and sustainable growth with macroeconomic and financial stability.