India Economic Survey: Treading the path to recovery

The Economic survey for FY2020-21 lauded the Governments' efforts to stem the vagaries of the pandemic, resulting in controlling the infection spread as well as enabling a V-shaped recovery assisted by its 'four pillar strategy'. The survey underscores the need for counter-cyclical fiscal policies to drive growth and assist in debt-sustainability. It also alludes to the use of core CPI as the target for monetary policy, given that it reflects economic conditions better than the current CPI headline, which is often subject to volatility given the treatment of food basket within the index. The survey also covers certain themes on health, private investment in R&D and continued focus on growth drivers amongst others, which we have briefly summarised below, along with an overview on broad economic outlook as detailed in the document. Given that the Survey comes a couple of days before the Union Budget, it seems to confirm our expectations of a Budget focused on supporting growth through capex and building of health infrastructure, with our expectations of a fiscal deficit of 5-5.5% of GDP for FY2022.

Outlook on growth prospects

Pandemic response

- Lives vs. Livelihood - Focus on stringent lockdown to save lives with the realisation that "short-term" pain would lead to longer term gain, which is visible in the V-shaped recovery being seen. The early lockdowns have also led India to avoid a second wave even as the economy kept opening-up in tranches
- Accelerator while foot on the brake - Policy response to address both supply and demand side issues. Supply side reforms were introduced to address issues over the medium-long term. Demand side focus was on ensuring essentials and food and income support to the most vulnerable, without focusing on improving discretionary consumption, which would in any case be low given the high uncertainty, leading to high – forced and precautionary savings. With the economy opening up fiscal spending has increased assisted by monetary policy, leading to a "four pillar strategy" to assist India to a potential growth path
- FY21 GDP is expected to contract by -7.7% YoY, with a marginal positive growth in H2. Sectoral impact of the crisis has been witnessed more on non-essential activities, with higher impact on employment in high contact services sectors and the informal sectors. State-wise impact has been seen in states like 1) Maharashtra – large impact given 56% of output from high contact services, and large number of MSMEs) Tamil Nadu and Kerala – largely impacted by construction shock 3) Delhi and Telangana – services led informal shocks
- H2 recovery being seen in high frequency indicators, and will be assisted by the vaccination drive (fastest country to rollout 1 mn vaccines in 6 days), and recovery in services sector. V shaped recovery in manufacturing and industrial value is also being witnessed. Housing market saw gradual recovery, while agriculture has remained resilient through the pandemic

Outlook for FY22 – The survey expects a robust growth recovery of 11% YoY led by revival in consumption and investment sectors, leading to a nominal GDP growth of 15.4% YoY. Factors driving growth include 1) normalisation with vaccine rollouts 2) supply side reforms and ease of regulations 3) infrastructure push 4) manufacturing improvement through PLI schemes 5) recovery in high contact sectors and discretionary consumption 6) credit growth aided by liquidity and low cost of borrowing

Prices and inflation

Advocating CPI core as target for monetary policy - Need for change in focus from headline CPI given that food has a very high weight in CPI and given the fact that food prices are subject to supply side shocks, increase in food inflation, leads to large increases in headline numbers which are often not reflective of the underlying demand in the economy. This was evident in the divergence seen in CPI headline with WPI inflation and CPI core during the current pandemic. This asymmetric impact also has bearing on inflationary expectations that tend to follow headline CPI as it is the current target for monetary policy. Given this the survey advocates that monetary policy should target CPI core and some sticky components of food inflation. Moreover, it recommends that the current high allocation of food in the CPI basket is not in line with the changing consumption basket, which has a lower share in food and the weights need to change to reflect these changes. Moreover, it recommends the need to capture e-commerce transactions, given the increased number of transactions done through that route.

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Other recommendations

- Consistency in food import policy especially for items like pulses and edible oils as it leads to confusion and delays
- Review of buffer stock policies to control vegetable inflation along with policies to reduce wastage including building of logistic infrastructure.

Fiscal developments

- On the fiscal front, the Economic Survey laid out the nuances which guided income and expenditure of the Government over a year which required focus on multiple pain points. The fiscal policy response of India differed from other countries in that the Government preferred to focus on alleviating stresses faced by the most disadvantaged sections of the population via direct benefit transfers, providing emergency credit to the small businesses (MSMEs), and the substantial food subsidy programme. ***As it was obvious that demand for non-essentials would be low when overall uncertainty is high, the Government did not waste precious fiscal resources in trying to pump up discretionary consumption in the early part of FY2021. This was unlike many other countries which opted for a front-loaded grand stimulus package for economic revival.***
- As the economy gradually unlocked, fiscal stimulus focused on ramping up demand via step up in capital expenditure, Production Linked Incentives and other schemes to revive consumption demand. Low petroleum prices acted as an important fiscal shock absorber during FY2021, as it saved petroleum subsidies, as well as aided revenue collection from excise duties.
- Revenue collections suffered much from disruption in economic activity. However, a recent turnaround has been seen owing to the recovery of the economy over the past few months. The Survey acknowledged the need for opening up all the sectors to the private sector while keeping PSUs active in strategic areas. The Government's focus, as per the Survey, is to embark on a "significant privatisation exercise of CPSEs and speeding up big-ticket strategic sale/ privatisation of large CPSEs".
- The Government continues to prioritise productive domestic capital expenditure with high multiplier effect on the economy. The Survey states that the expenditure push has been timed such that "the growth bang for the fiscal buck has been maximized". To raise resources for increased spending commitments, the target for gross market borrowings of the Central Government was revised from the Budget estimate of INR 7.8 tn to INR 12 tn.
- Given the fallout of COVID-19 on the economy and incomes in the first half of FY2021, revenues may fall short of the Budget estimates during FY2021. In conjunction with the demand for higher expenditure during the year, the Government is expected to register a fiscal slippage in FY2021.
- However, the Survey states that "this deviation from the path of fiscal consolidation may however be transient as the fiscal indicators rebound with the recovery in the economy. Thus, focusing on boosting GDP growth would be pivotal for enabling a sustainable fiscal path in the medium term. "
- **The Survey questions that, in view of the COVID shock on the fiscal system, should the medium-term fiscal policy strategy focus on growth or fiscal restraint? The answer seems to be adoption of countercyclical expansionary fiscal policy, which boosts growth directly and indirectly through consumption and investment multipliers in times of crisis. With higher GDP growth would come higher revenue collection in the medium term, which would enable a sustainable fiscal path.**

Monetary Management and Financial Intermediation

- RBI/MPC has been at the forefront of the crisis with repo rate cut of 115 bps in the first two meetings post the start of the pandemic and then has provided ample liquidity support
- Proactive use of other conventional and unconventional tools – OMOs, OTs, LTROs, TLTROs
- This led to transmission of monetary policy reflected in "94 bps and 67 bps in Weighted Average Lending Rate on fresh rupee loans and outstanding rupee loans respectively from March 2020 to November 2020"
- Financial flows to the real economy has remained muted given risk averseness, leading to low money supply creation despite high reserve money growth. This is also reflected in the decline in the money multiplier from 5.8 in October 2018 to 5.5 in January 2021. Money multiplier adjusted for reverse repo declined even sharper given the large sums of money kept by banks with the RBI, under the reverse repo window.
- Gross NPA ratio of SCBs fell to 7.49% on September 2020 vs. 8.21% in March 2020, aided by the pandemic relief measures given in terms of asset classification to borrowers

- "Capital to risk-weighted asset ratio of Scheduled Commercial Banks increased from 14.7 per cent to 15.8 per cent between March 2020 and September 2020 with improvement in both Public and Private sector banks."
- Highlighting the progress made under the - IBC – Insolvency and Bankruptcy Code – the survey mentioned that the code has improved recovery of NPAs by banks – "RBI data indicates that as a percentage of claims, scheduled commercial banks (SCBs) have been able to recover 45.5 per cent of the amount involved through IBC for the financial year 2019-20, which is the highest as compared to recovery under other modes and legislations".

Agriculture

- India's agricultural sector has outshone all other sectors in terms of growth in the year of the pandemic. The agriculture and allied activities were the sole bright spot as GDP in other sectors contracted, and provided a significant prop to a stressed growth picture, with a 3.4% YoY growth.
- Unfortunately, gross capital formation (GCF) in agriculture and allied sectors relative to GVA in this sector has shown a fluctuating trend from 17.7% per cent in FY2014 to 16.4% FY2019. This implies investment in agriculture has not been steady, and requires a ramp up.
- The livestock sector's contribution in total agriculture and allied sector GVA (at Constant Prices) has increased from 24.32% in FY2015 to 28.63% in FY2019.
- The Gross Value Added (GVA) by the fisheries sector to the national economy constituted 1.24% of the total national GVA and 7.28% of the agricultural GVA.
- The agriculture credit flow target for FY2021 was fixed at INR 15 tn, and till 30th November, 2020, a sum of INR 9.73 tn has been disbursed.
- After the previous Budget announced the inclusion of livestock sector in Kisan Credit Card in February 2020, 15 million dairy farmers of milk cooperatives and milk producer companies were targeted to provide Kisan Credit Cards(KCC) as part of the Prime Minister's Atma Nirbhar Bharat Package.
- The PM Fasal Bima Yojana adds over 5.5 crore farmer applications every year. As on 12th January, 2021, claims worth INR 900 bn have already been paid out under the Scheme. During COVID lockdown, nearly 7 million farmers benefitted from the scheme.
- An amount of INR 180 bn was transferred to the bank accounts of 90 million farmer families of the country in December, 2020 in the 7th installment of financial benefit under the PM-KISAN scheme.
- Under the Pradhan Mantri Garib Kalyan Anna Yojana, 809.6 million beneficiaries were provided additional foodgrains, i.e. above the NFSA mandated requirements, of 5 kg per person per month free of cost till November, 2020. The fiscal outgo of the same amounted to over INR 750 bn.

Industry and Infrastructure

- Industrial sector had experienced a sharp plunge during the period of lockdown. However, as the restrictions were gradually lifted, the economic activity has started recovering with IIP as well as the Eight core industries index depicting a V-shaped recovery with activity normalizing towards pre-Covid levels.
- Industrial activities have recovered save mining activities, which have not yet reached pre-Covid levels.
- The recovery was supported by several measures, reforms and the stimulus packages announced by the government under Atmanirbhar Bharat, including collateral free credit lines for MSMEs, equity infusion and Tax refunds, sops for power sector, real estate, additional capital expenditure to ministries and the Production Linked Incentive (PLI) schemes for 10 key sectors. The scheme has been proposed with an overall expenditure estimated at INR 1.46 tn and imposes sector specific financial limits.
- In line with the Government position that "existence of Central Public Sector Enterprises should only be in strategic sectors" disinvestment and rationalization of CPSEs are on the anvil; Government has also allowed private players to enter in the railways sector via PPP mode and the initiative is expected to bring an investment of INR 3 tn from the private sector. Additionally, to provide for rapid and inclusive economic growth government has launched the **National Infrastructure Pipeline (NIP)**, jointly funded by the Central government, state governments and the private sector with a projected outlay of INR 111 tn during the period 2020-2025
- **The Ease of Doing Business** ranking of India has moved higher to 63 amongst 190 countries, from 77 in 2018, improving 67 ranks in a period of 3 years. Further, the government has implemented several initiatives to foster entrepreneurship and, as of December 2020, has recognized 41,061 startups.

- The industrial sector is expected to contract by 9.6% with an overall contribution of 25.8% to GVA in FY2021, and the contribution of the sector has been declining gradually since 2011-12 apart from the subsector of 'Electricity, gas, water supply & other utility services'. The economic crisis triggered by Covid-19 has affected the domestic as well as the global economy and recovery will require a concerted effort to include all stakeholders, requiring Government intervention and structural reforms at multiple levels.

Services

- Service sector currently accounts for 54% of the Indian economy and almost 80% of the total FDI inflows, with the latter increasing by 34% in H1 FY2021, as compared to the previous year to USD 23.6 bn.
- The ongoing Covid19 pandemic and the business disruption caused by it has impacted the service industry greatly, which contracted sharply in H1 FY2021 with the subsector trade, hotels, transport, communication & services related to broadcasting showing the maximum loss of traction.
- While the contraction was sharp in Q1 FY21, it moderated in Q2, in line with the indicators that pointed to a recovery as the restrictions were gradually lifted since June 2020. Services PMI, which contracted for 5 consecutive months since March, pointed to a recovery since September and while it has softened since, it has not fallen below 50.
- As the pandemic enforced restrictions caused the world trade in services and supply chains to be impacted greatly, India was also affected since India has a significant presence in service sector exports, accounting for 3.5% of global services. Compared to the merchandise trade, services sector remained less impacted, providing a steady flow of current receipts, even as some of the subsectors were severely affected (like travel receipts).
- Software exports, comprising of 49.3% of the total services exports grew as a result of increased demand for digital support, cloud services and infrastructure modernization due to challenges imposed by the pandemic, and gave a lifeline to many companies.
- Travel, tourism and forex earnings contracted sharply during the lockdown, and many subsequently recovered. Rail freight and port traffic have since recovered from their sharp nosedive in April, with the help of various concessions given by Indian railways while domestic passenger air traffic, which had fallen to zero following the grounding of airlines in March to enforce travel restrictions, has since June gradually increased on a monthly basis even though it remains subdued as compared to previous year.

Sub-sector wise performance and recent policies

- **Travel and Tourism:** Due to travel restrictions imposed to curb the spread of virus, this sector has significantly contracted over FY2021. The tourism sector has been undergoing a slowdown in 2018 and 19, before it fell sharply in 2020. The sector is expected to witness a gradual revival as the vaccination drive progresses.
- **IT BPM Services:** The sector has witnessed structural reforms including removal of telecom related regulations for IT BPO sector and introduction of consumer protection regulations for e-commerce sector. Despite the Covid-19 pandemic, the Indian start-up ecosystem has been progressing well with 12 entrants being added to the unicorn list, taking the number to 38.
- **Ports, Shipping and Waterways Services:** Shipping fell sharply in 2020, owing to the lockdown imposed in March 2020. Cargo traffic growth contracted in Q1 FY2020 and have since showed signs of revival, with the growth turning positive since September 2020.
- **Space Sector:** While the sector has grown exponentially, India still lags behind major players in the sector. This sector also witnessed policy reform as it was opened up to attract private players and investment

External Sector

- The COVID-19 pandemic has resulted in a sharp decline in global trade, with global merchandise trade expected to have contracted by 9.2% in 2020 *(WTO estimates)*. Meanwhile, India's external sector has emerged as a key cushioning area, while most other facets of the economy have seen significant stress.
- Surplus current account balances over three consecutive quarters, sturdy portfolio capital inflows, robust FDI inflows and sustained build-up of foreign exchange reserves have all led to a bright outlook for this aspect of the economy. The Survey posits that India will record an annual current account surplus of at least 2% of GDP, which would occur after a period of 17 years.
- On the capital account, FDI inflows remained robust, which validates India's status as a preferred investment destination amongst the global investors. Foreign portfolio investment (FPI) also saw a strong rebound especially in equity inflows. The on-going COVID-19 pandemic is expected to adversely impact export earnings of external commercial borrowers, affecting their repayment capacity, thereby creating a source of potential vulnerability going forward.
- The build-up of foreign exchange reserves provides the much-needed space for enhanced domestic investments to facilitate growth. The Survey also mentions that the disruption of global manufacturing value chains due to the pandemic presents an opportunity for India to engage in the chain (for example, in pharmaceuticals).
- Pharmaceuticals: An opportunity: Exports of pharmaceuticals (drug formulations, biologicals) have increased significantly in recent months. The Survey posits the Indian pharmaceutical industry to be currently valued at USD 41 billion and expected to grow to ~USD 120-130 billion by 2030. Advantages include a significant raw material base, availability of skilled workforce, and the largest number of US-FDA compliant pharma plants, all of which imply India can become an international manufacturing hub for generic medicines. Additionally, the demand India is facing for provision of COVID-19 vaccine to other countries has made India the epicentre for its manufacturing. While this bodes well, the pandemic also brought to light our excessive dependence on imports of Active Pharmaceutical Ingredients (APIs) and Key Starting Materials (KSMs). Further, Indian pharma exports are disproportionately dependent on USA and generics. Thus, pharmaceuticals drugs and bulk drugs and medical devices are under the Production Linked Incentive (PLI) Scheme.

The next section provides some details on key thematic analysis presented in the Economic Survey

Saving Lives and Livelihoods Amidst a Once-in-a-Century Crisis: Through "Short-term pain" for "Long-term gain"

- India's policy response towards the uncertainty brought by the Covid-19 pandemic was inspired by the learnings from the Spanish flu and its willingness to save lives and livelihoods by taking "short-term pain" in the form of deleterious impacts of early and intense lockdowns for "long-term gain" (saving lives and livelihoods via economic recovery in the medium to long-term). The strategy adopted by India was in line with its unique vulnerabilities to the pandemic comprising a huge population, high population density, high absolute elderly population and an overburdened health infrastructure
- India imposed the most stringent lockdown in the world at the onset of the pandemic which helped in flattening the pandemic curve and provided necessary time to the government authorities to ramp up health and testing facilities. This helped in pushing the peak of the pandemic curve to September, 2020 through the lockdown. After reaching the peak, India has been experiencing declining daily cases despite increasing mobility.

- The survey estimates the natural number of cases and deaths expected across countries on the basis of their population, population density, demographics, frequency of testing and health facilities available and compare them with actual numbers. The findings reveal that India restricted the Covid-19 spread by 37 lakh cases and saved more than 1 lakh lives by the adoption of “short-term pain” for “long-term gain” strategy. A 23.9 per cent contraction in GDP in Q1 followed by a 7.5 per cent decline in Q2 and the recovery across all key economic indicators clearly gives the evidence of a V-shaped recovery in the country.
- A “Stringency Index” constructed at the state level shows that the under-or-over performance in actual cases and deaths as compared to the expected numbers has a strong correlation with the stringency of the lockdown imposed. It further finds that the V-shaped economic recovery is strongly positively correlated with the degree of stringency of the lockdown imposed. It also depends on the timing of the imposition of the lockdown - countries where the imposition took place in the very early stages of the pandemic experienced a faster recovery
- A state wise analysis done in the survey shows that “Uttar Pradesh, Gujarat and Bihar have restricted the case spread the best; Kerala, Telangana and Andhra Pradesh have saved the most lives; Maharashtra has under-performed the most in restricting the spread of cases and in saving lives”. Overall, early and more stringent lockdowns have been effective in controlling the spread of the pandemic – both across countries and across States in India
- Recognizing that the pandemic will adversely impact both- the demand and the supply side, India announced several structural reforms to expand supply significantly in the medium-to-long term. Initially, the demand-side policies focused more on the necessities given the resultant precautionary motives of the households to save and economic restrictions during the lockdown. However, during the unlock phase, demand-side measures have been announced in a more calibrated manner
- “The upturn in the economy while avoiding a second wave of infections makes India a sui generis case in strategic policymaking amidst a once-in-a-century pandemic”.

Does Growth Lead to Debt Sustainability? Yes, But Not Vice-Versa!

In this chapter, the government’s primary aim is to explore whether the government should focus on whether further fiscal support will raise concerns about India’s debt sustainability in the medium to longer-term. This is a very important question at the current juncture given the hit that the Indian economy has taken from the COVID-19 crisis. The relationship of growth and debt sustainability is explored in several areas to make important inferences and conclusions. **In trying to arrive at an appropriate conclusion, the government uses the very common macroeconomic relationship for debt sustainability of the difference between interest rate and growth rate of the economy (referred to as IRGD or r-g).** The chapter also tries to explore whether there is any causality between growth and debt sustainability and vice versa and whether the risks of crowding out of private expenditure is a risk for the Indian economy. In most cases a cross-country analysis is used and compared with the findings in the Indian economy.

The general rule about IRGD or r-g is explained in the context of ensuring debt sustainability. In general, a negative IRGD in which growth is higher than interest rates would make it easier for a government to ensure debt sustainability while a positive IRGD would have the converse impact.

Hence, the government needs to examine the IRGD framework in deciding whether debt sustainability can become a concern in the medium-term. In this regard, an important observation is that over the last two decades, India has had a negative IRGD that has worked to push debt to GDP ratio lower.

Several statistical techniques have been used to assess the relationship. **The study found that for data taken over the last two and a half decades, real GDP growth and one-year ahead change in general government debt to GDP levels show a significant negative correlation while the correlation between change in general government debt to GDP levels against one year ahead growth rates is negligible.** A granger causality test that is a statistical test that is used to examine the causality between macroeconomic variables also affirmed the relationship that higher growth works to change public debt to GDP levels with a lag of one year and not the other way around. There is also some evidence of this relationship holding up in other countries. The study found a similar negative relationship between GDP growth rates and one-year ahead government debt levels to hold in high growth phases in several advanced economies such as the US, UK and Euro-zone over the last two decades while also showing up in most emerging market economies such as China, Malaysia, Indonesia, Thailand, Philippines, Vietnam and Turkey. In short, the results affirm that higher growth ensures sustainability of debt levels.

While the relationship has been established, the rationale for why this takes place also needs to be understood. In India's case that has unemployed resources, an increase in public spending tends to drive employment higher and might push private sector investments higher in order to meet the new demand created by the government. The concerns about crowding out of private sector resources are further dispelled. The study finds an insignificant correlation between changes in public investment and changes in private investment in the post-liberalization period of FY1991 to FY2019. Other macroeconomic parameters are explored to find that there is no clear evidence of 'crowding out' of higher public spending reducing private sector spending/investments.

The chapter states that the IRGD is expected to remain negative for India over the next five years that should subsequently allow the government to undertake 'pro-growth' policies. A particular emphasis was placed on the government moving forward with its National Infrastructure Pipeline Program (NIIP) to create jobs and boost growth. In short, the government should focus on supporting the recovery via appropriate fiscal policy and subsequently the improvement in growth will with a lag work to improve the government debt to GDP levels.

Does India's Sovereign Credit Rating reflect its fundamentals? No!

The main idea of this chapter is to explore the following questions: (a) whether the sovereign credit ratings of the Indian economy is justified, (b) historically has there been a mismatch in terms of macroeconomic performance of the Indian economy and its ratings provided by various agencies, (c) what effect changes in sovereign rates has on Indian markets and (d) should the government give significant weightage to sovereign credit ratings position while setting fiscal policy.

As a starting point, the reference was made to the fact that never before in history has the world's fifth largest economy, which currently is India, has such a low rating. The report compared the macroeconomic landscape in terms of GDP growth, CPI inflation trends, public finances positions, external vulnerability indicators, political stability, rule of law, control of corruption, ease of doing business and sovereign default history with its peer group. These are all the parameters that are used by rating agencies in justifying the outlook and ratings band that is assigned to various countries. **On almost all parameters, the Indian economy was found to be on a much more sounder footing than its peer ratings group of countries rated in the A+/A1 for Standard & Poor ratings agency and BBB-/Baa3 for Moody's rating agency—this is the case both in the past and present. A conclusion was made that the Indian economy is an 'outlier' on several of the parameters as compared to its peer group.** Specific emphasis was made on the fact that India has a low foreign currency denominated debt as well as having more than adequate foreign exchange buffer to meeting external funding requirements. The Indian economy was also found to be able to withstand a substantial external funding shock in case such a scenario is to materialize.

In examining the impact that sovereign ratings downgrades have on market variables. It was found that: (a) no clear pattern emerges in the near, medium and longer term for the BSE Sensex returns and the USD/INR pair, (b) there can be an adverse near-term effect on the government securities market but that dissipates over the medium to longer term and (c) there tends to be a more pronounced negative effect on FPI flows in response to ratings downgrades. Sovereign rating upgrades have a pronounced positive effect on the BSE Sensex returns and FPI flows but an ambiguous effect on the USD/INR pair and government bond markets.

The study in the chapter finds that there was an 'under-assessment' of fundamentals in India's historic sovereign ratings assessment assigned by rating agencies. **Hence, fiscal policy decision making should not be greatly influenced by considerations of the sovereign ratings but instead focus on considerations of growth and development.**

Inequality and Growth: Conflict or Convergence?

The survey examines the correlation of inequality and per-capita income, a proxy for the impact of economic growth, with a range of various socio-economic indicators (education, life expectancy, infant mortality and crime), the findings reveal that both economic growth and inequality have positive relationships with socio-economic indicators. Thus, unlike in advanced economies where inequality correlates negatively with the index of health and social outcomes while income per capita correlates positively, in India economic growth and inequality converge in terms of their effects on socio-economic indicators. Furthermore, the analysis reveals that economic growth has a far greater impact on poverty alleviation than inequality. The results remain robust in a state-wise analysis as well. Given India's stage of development, its higher potential rate of economic growth and the higher scope for poverty reduction, it must continue to focus more on economic growth to alleviate poverty by expanding the overall surplus.

Healthcare takes centre stage, finally!

COVID-19 pandemic has asserted the significance of a sound healthcare sector and its strong linkages to the key sectors, highlighting the transformation of a health crisis into an economic and social crisis. The chapter highlights that an "equitable, affordable and accountable" health care system directly affects domestic economic growth via labour productivity, economic cost of illness and increases risk of vulnerable groups slipping into poverty. The key issues and learnings highlighted by the pandemic are:

- **Healthcare sector needs careful system designs** – Countries with more fragmented health systems tend to have lower performance as reflected in higher costs, lower efficiency, and poor quality. Any active system design of healthcare must be mindful of its inherent characteristics- 1) uncertainty / variability of demand; 2) information asymmetry and 3) hyperbolic tendencies which leads to sub optimal healthcare market structure.
- **Healthcare policy "relative importance placed on communicable vs non-communicable diseases"** - The key decision for a healthcare policy is to choose between the two since it can become a victim of "saliency bias", which involves over-weighting recent phenomena. The statistics highlight that ~ 71% of global deaths and ~65 % of deaths in India are caused by non-communicable diseases (NCDs) and even the infrastructure created by greater healthcare spending in the advanced economies could not deal with the disease burden created by the pandemic. As the next health crisis could possibly be drastically different from COVID-19, the focus must be on building the healthcare system generally rather than a specific focus on communicable diseases.
- **Current state of Indian Healthcare -**despite improvements in healthcare access and quality, the current state of India's health care is lagging behind many Low and Lower Middle Income (LMIC) countries. The key issues we face are 1) the hospitalization rates in India are amongst the lowest in the world which reflect lower access and utilization of healthcare in India 2) high out-of-pocket health expenditures 3) low budget allocations for healthcare 4) low human resources for health.
- **Information Asymmetry in India's Private health and Insurance Market-** The private sector dominates the total healthcare provision in India (with ~74% of outpatient care and 65% of hospitalization care provided in urban India). Given the market failures stemming from significant asymmetric information, an unregulated private healthcare system is clearly sub-optimal compared to a system where policies mitigate the problem of asymmetric information
- **Telemedicine-** Impressive growth has been seen in the adoption of telemedicine in India since the outbreak of the COVID-19 pandemic. Thus, the success of telemedicine critically hinges on having decent level of health infrastructure and internet connectivity nationwide. Specifically, investing in internet access, can lead to greater uptake of telemedicine, which in turn can greatly help reduce geographic disparities in healthcare access and utilization.

Key learnings: 1) the health infrastructure and policies should be agile enough to effectively respond to such situations in future ;2) need to harness the telemedicine to the fullest by especially investing in internet connectivity and health infrastructure; 3) the emphasis on National Health mission (NHM) in conjunction with Ayushman Bharat considering (considering its role in mitigating inequity as the access of the poorest to pre-natal and post-natal care as well as institutional deliveries has increased significantly); 4) an increase in public spend from 1 % to 2.5-3 % of GDP – expected to decrease the Out-Of-Pocket expenditures from 65% to 30% of overall healthcare spend; 5) policies designed to mitigate information asymmetry in healthcare services.

Process Reforms: Enabling decision-making under uncertainty

The chapter discusses the problems of India's administrative processes and claims that the same is derived from "over-regulation" and "effectiveness of regulations" caused by undue delays rather than lack of regulatory standards and its compliance. The issues and solution are:

The inevitability of incomplete regulations:

- While making the regulations, the focus is on having "complete regulations" that account for every possible outcome while the "inevitability" of incomplete contracts and regulations is overlooked in a world of uncertainty.
- Unlike in theory where different possible situations and outcomes can be worked upon, the real world is uncertain and hence the contracts are inherently incomplete given 1) rationality owing to uncertainty in future 2) complexity in framing contracts anticipating the future outcomes for all possible contingencies for all parties 3) the inability of a third party to verify all outcomes "ex-post" as well as "ex-ante" decisions unambiguously.

'Regulation' and 'Supervision'

- Although here is a need to create simple regulation and complement the same by providing flexibility and discretion to the supervisor, there is a difference between the two since as regulation can be easily measured while supervision cannot be measured easily, regulators and decision-makers would prefer to substitute supervision with more and more regulation.
- Also, the regulations provide criteria or checklists, making it easier for regulators to follow and reduce their accountability later on. On the other hand, it is difficult to quantify the amount and quality of supervision.
- This creates a perverse incentive to keep adding more top-down regulations regardless of their effectiveness.

Solving for discretion:

- The optimal solution is to have simple regulations combined with transparent decision-making process. Since there is no substitute for active supervision and discretion, to ensure the same, there can be following ways 1) Strengthen ex-ante accountability, 2) Bring transparency in the decision-making process, 3) Build resilient ex-post resolution mechanism
- Having provided the Government decision maker with discretion, it is important then to balance it with three things- improved transparency stronger systems of ex-ante accountability (such as bank boards) and ex-post resolution mechanisms.

Regulatory Forbearance: An Emergency Medicine, Not Staple Diet!

- India adopted regulatory forbearance, which involved relaxing the norms for restructuring assets so that they are no longer required to be classified as NPA and therefore did not require the levels of provisioning, as emergency measures to address the economic challenges posed by COVID-19 pandemic and prevent further deepening of the crisis.
- This emergency measure- forbearance helps borrowers tide over the crisis, but it has detrimental effect if forbearance continues for a long period.
- The 2008 Global Financial Crisis (GFC) provide important lessons for the current times, During GFC, forbearance continued for seven years even after economy had recovered significantly as GDP growth, IIP, exports were showing signs of normalcy in 2011.

- This emergency medicine, when continued for longer, perpetuated the problem further. Banks exploited the forbearance window resulting in restructuring of loans even for "unviable entities, window dressing of books", undercapitalization of banks, lending to zombie firms, ever greening of loans and weakening of corporate governance.
- By the time forbearance ended in 2015, restructuring had increased seven times while NPAs almost doubled when compared to the pre-forbearance levels.
- Adding to wounds, RBI initiated an Asset Quality Review (AQR) to clean up bank balance sheets in anticipation that banks with cleaner balance sheet would not require severe recapitalization. However, AQR could not bring all bad hidden assets and lead to under-estimation of the capital requirements. This triggered the already grave situation.

The bottom line is that prolonged forbearance policies could exacerbate the current banking crisis bringing down the investment and economic growth. Thus 'an emergency medicine should not become a staple diet, it can be counterproductive'.

Innovation: Trending Up but needs, thrust, especially from the Private Sector

This chapter talks about India's innovation performance gauged by the Global Innovation Index (GII) which indicates India ranks 48th out of 131 countries in 2020 (vs. 81 in 2015). The improvement was led by knowledge and technology output (as reflected by information and communication, technology exports as a percentage of total trade where India ranks first globally) and market sophistication (as measured by domestic scale (rank 3), ease of protecting minority investors (rank 13), market capitalization as per cent of GDP (rank 19) and ease of getting credit (rank 23)). To achieve the aim of becoming the third largest economy (in terms of GDP current USD), India must invest significantly into the drivers of the innovation as India's ability to effectively transfer investments in innovation inputs to innovation outputs gives an edge over other countries.

Drivers of innovation: The study articulates that R&D investment is one of the main drivers of country's innovative performance. In India, government's share is 56% of gross domestic expenditure on R&D (GRED) which is less than 20% of the top ten countries (by nominal GDP in USD). Moreover, lack of expected contributions from India's private sector (currently at 37% of GRED) drags the overall innovation output of the country down.

Additionally, deployment of resources in terms of R&D personnel and researchers and providing necessary environment for residents to apply for more number of patents also have been considered as the drivers for innovation output. The study also reflects upon the availability of equity finance which also strengthens the innovation growth as seen in developed market economies. Given generous tax regime, the onus is now on the private sector of India to contribute and lead the innovation going forward as seen in the other large economies.

In order to set itself on the path to become the third largest economy, India needs to boost the innovation output which can be achieved through – (a) increasing gross expenditure on R&D from 0.7% of GDP to 2% of GDP, (b) India's business sector to increase the contribution in R&D from current 37% of GRED to 68% of GRED along with increased deployment of R&D personnel and researchers, and (c) India to focus on improving the performance of institutions and business sophistications innovation inputs since these translate to higher innovation outputs.

JAY Ho: Ayushman Bharat's Jan Arogya Yojana (JAY) and Health Outcomes

Pradhan Mantri Jan Arogya Yojana (PM-JAY) – the ambitious program launched by Government of India in 2018 aims to provide healthcare access to the most vulnerable sections providing secondary and tertiary hospitalization through a network of public and empaneled private healthcare providers.

Status and Progress So Far: As per the latest annual report of PM-JAY, the scheme is being implemented in 32 states and UTs, 24,215 hospitals have been empaneled, 13.48 crore E-cards have been issued, treatments worth INR 7,490 crore have been provided which include 1.55 crores hospital admission.

PM-JAY and Health Outcome

- PM-JAY achieved tremendous success having a strong positive effects of PM-JAY on healthcare outcomes despite the short time since introduction of the programme.
- The scheme is used significantly for high frequency and low cost care such as dialysis. General medicine account for more than half the claims followed by general surgery, obstetrics and gynaecology.
- Health outcome of states that adopted PM-JAY improved as compared to states that did not adopt. Estimates suggests that states that adopted PM-JAY experienced greater penetration of health insurance, experienced a reduction in infant and child mortality rates, greater access and utilization of family planning services and awareness about HIV/AIDS.
- Health insurance increased by 54 per cent for the states that implemented PM-JAY while falling by 10 per cent in states that did not. IMR fell by 20% in states who adopted PM-JAY vs 12% who did not.
- Effects are apparent directly due to enhanced insurance coverage, while other effects stem from spillover effect of the scheme.

The Bare Necessities

This chapter evaluates the performance of providing access to 'the bare necessities' by constructing a Bare Necessities Index (BNI) for states from 2012 to 2018 across five major categories like water, sanitization, housing, micro-environment and other facilities. The index shows access to 'the bare necessities' has improved across all states in 2018 compared to 2012, with Kerala, Punjab, Haryana and Gujarat performing better while Odisha, Jharkhand, West Bengal and Tripura performing relatively worse. The study also finds that improved access to 'the bare necessities' leads to improved health and education indicators.

Improving equity in access to Bare Necessities: The study showed that access to bare necessities improved disproportionately more for the poorer households compared to the richer households for both rural as well as urban areas, even though the rich has access to other alternatives compared to the poor. This suggests that public good provisioning affect the quality of life of the vulnerable sections of the society.

Even after achieving substantial growth in delivering bare necessities to the population, there still exists disparities across states, income groups and rural-urban areas. Government interventions thorough Jal Jeevan Mission, Pradhan Mantri Awaas Yojana, Swachh Barat Mission, Sahaj Bijli Har Ghar Yojana, Pradhan Mantri Ujjwala Yojana etc. need to be addressed for specific target audiences in the country to achieve the sustainable development goals of reducing poverty, improving access to drinking water, sanitation and housing by 2030.

Source: Economic Survey, 2020-2021

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