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Economic Survey 2020-2021 Volume 1

Preface

- When we tackle obstacles, we find hidden reserves of courage and resilience we did not know we had. We only need to find them and move on with our lives

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Saving Lives and Livelihoods Amidst a Once-in-a-Century Crisis

- The response drew on epidemiological and economic research, especially those pertaining to the Spanish Flu, which highlighted that an early, intense lockdown provided a win-win strategy to save lives, and preserve livelihoods via economic recovery in the medium to long-term. The strategy was also motivated by the Nobel-Prize winning research in Hansen & Sarget (2001) that recommends a policy focused on minimizing losses in a worst case scenario when uncertainty is very high
- Like COVID-19, the Spanish flu was highly contagious; it was also unusually lethal for young, “prime-age” adults, especially men. It came in three waves beginning in the spring of 1918. The second wave, in the fall of 1918, was the largest by far in terms of total infections and deaths. A third wave occurred in the spring of 1919. The pandemic began during World War I, and the virus is thought to have been introduced and spread throughout the United States by soldiers returning from Europe. Lockdowns implemented in 1918 resemble many of the policies used to reduce the spread of COVID-19, including school, theater, and church closures, public gathering and funeral bans, quarantine of suspected cases, and restricted business hours. Other public health interventions used were emphasis on hand-washing, sanitization practices and social / physical distancing
- An analysis of stimulus payments in US documented that only 15 percent of recipients of this transfer spent their transfer payment, while 33 percent saved it and 52 percent used it to pay down debt. Most of the spending was on essential items like food and other non-durable consumer products. This was largely due to the restrictions placed by the pandemic-induced lockdown with curtailed options for discretionary spending. The uncertainty of the duration of the pandemic with associated job loss or reduced incomes induced precautionary savings in the anticipation that these funds will be needed to make it through a long period of low income or for health urgencies. Carroll, et.al, 2020 showed that in the face of a prolonged and severe crises, government may want to consider a broad range of policies targeting aggregate demand, with direct transfers being only a part of the fiscal policy response
- Agricuture Reforms
  1. Farmers’ Produce Trade and Commerce (Promotion and Facilitation) Act, 2020
  2. Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Act, 2020
  3. Essential Commodities (Amendment) Act, 2020

- MSME Reforms
  1. New MSME definition covering almost 99 percent of all firms enabling MSMEs to grow in size and create jobs
  2. Removal of artificial separation between manufacturing and service MSMEs

- Labour Reforms
  1. Enactment of four labour codes namely, Wage Code, Industrial Relations Code, 2020, Code on Occupational Safety, Health & Working Conditions Code, 2020 & Social Security Code, 2020
  2. One labour return, one licence and one registration

- Business Process Outsourcing (BPO) Reforms
  1. Simplication of the Other Service Provider (OSP) guidelines of the Department of Telecom. Several requirements, which prevented companies from adopting 'Work from Home' and 'Work from Anywhere' policies have been removed

- Power Reforms
  1. Tarriff Power Reform: DISCOM inefficiencies not to burden consumers, Progressive reduction in cross subsidies, Time bound grant of open access etc
  2. Privatization of Distribution in Uts

- PSU Reforms
  1. PSUs in only strategic sectors
  2. Privatization of PSUs in non-strategic sectors

- Mineral Sector
  1. Commercial Mining in Coal Sector
  2. Removal of distinction between captive and merchant mines
  3. Transparent auction of mining blocks
  4. Amendment of Stamp Act, 1899 to bring uniformity in stamp duty across States
  5. Introduction of a seamless composite exploration-cum-mining-cum-production regime

- Industry Reforms
  1. Production Linked Incentive (PLI) Scheme for 10 identified sectors
  2. National GIS-enabled Land Bank system launched

- Space Reforms
  1. Level playing field provided to private companies in satellites, launches and space-based services
  2. Liberal geo-spatial data policy for providing remote-sensing data to tech-entrepreneurs

- Defence Reforms
  1. Corporatization of Ordnance Factory Board
  2. FDI limit in the Defence manufacturing under automatic route to be raised from 49 percent to 74 percent
  3. Time-bound defence procurement process

- Education Reforms
  1. PM-eVidya to enable multi-mode and equitable access to education
  2. Manodarpan initiative for psychosocial support

- Social Infrastructure Reforms
  1. Scheme for Financial Support to Public Private Partnerships (PPPs) in Infrastructure Viability Gap Funding (VGF) Scheme extended till 2024-25

- Financial Markets Reforms
  1. Direct listing of securities by Indian public companies in permissible foreign jurisdictions
  2. Provisions to reduce time line for completion of rights issues by companies
  3. Private companies which list NCDs on stock exchanges not to be regarded as listed companies

- Corporates Reforms
  1. Including the provisions of Part IXA (Producer Companies) of Companies Act, 1956 in Companies Act, 2013
  2. Decriminalization of Companies Act defaults involving minor technical and procedural defaults
  3. Power to create additional / specialized benches for NCLAT
  4. Lower penalties for all defaults for Small Companies, One-person Companies, Producer Companies & Start Ups
  5. Simplified Proforma for Incorporating Company Electronically Plus (SPICe+) introduced

- Administration Reforms
  1. National platform for recruitment: National Recruitment Agency to conduct a Common Eligibility Test
  2. Revised guidelines on Compulsory retirement to remove ineffective or corrupt officials through Fundamental Rule 56(j)/(1) and Rule 48 of CCS (Pension) Rule
  3. Faceless tax assessment and a 12-point taxpayers charter
  4. Fast track Investment Clearance through Empowered Group of Secretaries

- The historic labour reforms - discussed for three decades after the conditionality in the 1991 loan from IMF but never implemented thus far - will benefit MSMEs to increase employment, enhance labour productivity and thereby wages in MSMEs. The use of full-time equivalents provides flexibility to MSMEs to tailor their labour strength to market conditions and thereby enhance employment. The increase in the size thresholds from 10 to 20 employees to be called a factory, 20 to 50 for contract worker laws to apply, and 100 to 300 for standing orders enable economies of scale and unleash growth. The drastic reductions in compliance stem from (i) 41 central labour laws being reduced to four, (ii) the number of sections falling by 60 per cent from about 1200 to 480, (iii) the maze due to the number of minimum wages being reducing from about 2000 to 40, (iv) one registration instead of six, (v) one license instead of four, and (vi) de-criminalisation of several offences. These reforms balance the interest of both workers and employers. These codes provide social security, protection, safe and working environment and effective conciliation dispute mechanism to workers

- The reforms in the agricultural sector were more overdue than even the labour reforms as the existing laws kept the Indian farmer enslaved to the local Mandi and their rent-seeking intermediaries. While every other category of producer in India had the freedom to decide where to sell his / her produce, the Indian farmer did not. The local monopolists created by this legal infrastructure enabled the

intermediaries to prosper at the cost of the farmer, especially the poor ones without the wherewithal to store their produce. The agricultural reforms enable the farmer to sell where he gets the best deal and thereby enable competition that is sine qua non to create welfare for the small farmer. The reforms in agriculture markets will enable creation of ‘One India one market’ for agri-products, create innumerable opportunities for farmers to move up the value chain in food processing - from farm to fork, create jobs and increase incomes

- At the same time, production-linked incentive (PLI) schemes have been implemented in ten key specific sectors to make Indian manufacturers globally competitive, attract investment in the areas of core competency and cutting-edge technology; ensure efficiencies; create economies of scale; enhance exports and make India an integral part of the global supply chain. These Schemes provide incentive to enhance production and create wealth and jobs. The proposed privatization of Public Sector Enterprises in non-strategic sectors recognizes the need for efficient allocation and use of resources. All these reforms are intended to bolster the productive capacity of the economy, and create wealth and jobs especially at the bottom of the pyramid. This would, in turn, lead to inclusive growth and sustained demand generation in the economy. The policy package ensures that the regulatory environment is conducive to ease of doing business with simpler, transparent and time-bound procedures for doing business

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

- Growth leads to debt sustainability in the Indian context but not necessarily vice-versa. This is because the interest rate on debt paid by the Indian government has been less than India’s growth rate by norm, not by exception. As Blanchard (2019) explains in his 2019 Presidential Address to the American Economic Association: “If the interest rate paid by the government is less than the growth rate, then the intertemporal budget constraint facing the government no longer binds.” This phenomenon highlights that debt sustainability depends on the “interest rate growth rate differential” (IRGD) i.e. the difference between the interest rate and the growth rate in an economy
- As the IRGD is expected to be negative in the foreseeable future, a fiscal policy that provides an impetus to growth will lead to lower, not higher, debt-to-GDP ratios. In fact, simulations undertaken till 2030 highlight that given India’s growth potential, debt sustainability is unlikely to be a problem even in the worst scenarios
- While counter-cyclical fiscal policy is necessary to smooth out economic cycles, it becomes critical during an economic crisis. This is because fiscal multipliers, which capture the aggregate return derived by the economy from an additional Rupee of fiscal spending, are unequivocally greater during economic crises when compared to economic booms. In a country like India, which has a large workforce employed in the informal sector, counter-cyclical fiscal policy becomes even more paramount. In advanced economies, where the public and private sector labour markets are not too segmented, fiscal spending can increase public sector employment, reduce the supply of labour in the private sector, bid up wages, and thereby crowd out private sector employment. However, in a country

like India, where the private and public sector labour markets are largely segmented, such crowding out of private sector employment is minimal. Thus, debt-financed public expenditure is more cost-effective to employ during recessions than during economic booms

- Indian Kings used to build palaces during famines and droughts to provide employment and improve the economic fortunes of the private sector. Economic theory, in effect, makes the same recommendation: in a recessionary year, Government must spend more than during expansionary times. Such counter-cyclical fiscal policy stabilizes the business cycle by being contractionary (reduce spending / increase taxes) in good times and expansionary (increase spending / reduce taxes) in bad times. On the other hand, a pro-cyclical fiscal policy is the one wherein fiscal policy reinforces the business cycle by being expansionary during good times and contractionary during recessions
- For India, in the current scenario, when private consumption, which contributes to 54 per cent of GDP is contracting, and investment, which contributes to around 29 per cent is uncertain, the relevance of counter-cyclical fiscal policies is paramount. In fact as Krugman prescribed, a sustained, productive program of permanent stimulus directed towards public investment, in both physical and human capital, is the need of the hour
- Most studies aimed at estimating the variation in effects of fiscal policies with country's position in the business cycle, concur that the fiscal policies are considerably more effective in recessions than in expansions. Auerbach and Gorodnichenko (2012) in their seminal paper show large differences in the size of spending multipliers in recessions and expansions for the OECD countries and the US, with higher fiscal multipliers during recessionary regimes. These results are maintained after allowing for different multipliers for different components of government spending. They derive the point estimates of the maximum output multiplier is estimated to be 0.57 during expansions and 2.48 during recessions in the US
- Since during receissions liquidity constraints might bind across a wider range of households and firms, thus a larger fraction of households and firms will consume the extra income generated following an unanticipated tax cut or government spending increase, leading to greater impact on consumption (wealth effect) and hence output
- On similar lines, Canzoneri et al (2012) argue that fiscal stimulus decreases the spread (between the bank deposit rate and the bank loan rate), which fluctuates counter cyclically due to the cyclical variation in bank intermediation costs. This in turn encourages more borrowing and spending, which further expands the economy and decreases the spread again, encouraging more borrowing; and the process repeats itself. Since this financial friction (spread) increases during recession, therefore the chain effect of fiscal stimulus in boosting borrowings and output is greater during recession compared to expansionary periods
- Fiscal multipliers are likely to be higher in recessionary periods because private savings increase through the precautionary motive to save. Therefore, any potential crowding out of private investment - even if at all it manifests during

expansionary periods - is unlikely to manifest because of the increased pool of loanable funds

- As a norm in India, over the last two and a half decades, GDP growth rates have been greater than interest rates. Their historical averages for last 25 years, 8.8 per cent and 12.8 per cent respectively. As the government's investment of a Rs 100 produces Rs 112.8 while the principal and interest repayment equals Rs 108.8, Rs 4 can be added to the economy after the loan of Rs 100 is rolled over to the next period

- Across economic crises over the last century, fiscal policy has been a prominent savior to bring back economic growth. For the past three decades, the Indian economic story has been characterized by long spells of high GDP growth. Fiscal policy has been a key determinant of growth acceleration after an exogenous global shock led to a decline in growth. Consider the shock due to the Asian Financial Crisis (1997-98). During the period 1997-98 to 2002-03, growth slowed down to an average of 5.3 per cent in real terms. Despite a fall in growth levels, an expansionary fiscal policy that focused on infrastructure spending was adopted by the Government. Government expenditure increased consistently during these years, which led to general government debt reaching record levels. This fiscal push imparted the necessary impetus required for the growth to take off and average 8 per cent in real terms over the next six years from 2003-04 to 2008-09. High growth in this period brought debt down from the record high levels of 83 per cent of GDP attained in 2003-04 to around 70 per cent of GDP in 2009-10. This episode highlights that public debt - when productively streamlined - can enable the economy to reach a higher growth trajectory, and ensure debt sustainability

- The phenomenon of crowding out of private investment is based on the notion that supply of savings in the economy is fixed. Therefore, higher fiscal spending may increase the demand for loanable funds and hence exert an upward pressure on interest rates, thereby discouraging private investment. However, for emerging economies such as India, an increase in public expenditure in areas that boost private sector's propensities to save and invest, may enable private investment rather than crowding it out. In other words, in an economy that has unemployed resources, an increase in government spending increases the aggregate demand in the economy, which may induce the private sector to increase their investment in new machinery to cater to the increased demand, and hence put the unused resources to productive uses. This may have multiplier effects on aggregate demand, resulting in higher growth rates. In fact, if the public expenditure is directed to sectors where the fiscal multipliers are large - for instance for building infrastructure - such spending may significantly crowd in private investment as well

- Studies find no evidence of crowding out of private investment due to public investment for developing economies. Erden and Holcombe (2005) analyse the public and private investment in developing and developed economies, and conclude that while public investment is complementary to private investment in developing countries, the opposite holds for developed countries. Eisner (1994) argues that whether an increase in Government expenditure for goods and

services ‘crowds out’ domestic private investment, may depend upon how close the economy is to full employment

- A cross-country comparison of debt levels points out that for India, the government level as a proportion of GDP is equal to the median in the group of G-20 OECD countries and in the group of BRICS nations. India’s overall debt levels as a percent of GDP are the lowest amongst the group of G-20 OECD countries and also among the group of BRICS nations. Moreover, public debt and overall debt level for India has declined since 2003 and has been stable since 2011

- The Government’s debt portfolio is characterized by very low foreign exchange risk as the external debt is only 2.7 per cent of GDP (5.9 per cent of total Central Government liabilities). Of the total public debt, 70 per cent is held by the Centre. As the central government is entrusted with the responsibility of macro-economic management, this distribution of debt between the centre and states is desirable because of the incentive compatibility that it generates. The long maturity profile of India’s public debt (issuance of longer tenure bonds) along with a small share of floating rate debt (floating rate debt of Central Government is less than 5 per cent of public debt) tends to limit rollover risks, and insulates the debt portfolio from interest rate volatility

- The Chilean experience with fiscal rules that enable counter-cyclical fiscal policy provides important learnings. In 2000, Chilean Government adopted the structural surplus rule that targeted the overall central government’s structural balance to be a surplus of 1 per cent of GDP every year. This target was subsequently revised to 0.5 per cent of GDP in 2007, and further to a simple balanced budget in 2009 (when the debt was almost paid off). Unlike the effective budget balance, which indicates the current fiscal position, structural balance reflects the medium-term fiscal outlook. The structural balance for Chile is estimated in the budget using forward-looking estimates of potential GDP and copper prices (since copper is the key driver of revenue in Chile - the largest exporter of copper). It therefore gives an estimates for the total maximum spending level allowed in the budget for the year. If the economy grows at a rate higher than the estimated potential GDP or if there is an increase in the copper prices over the medium term, more revenues are collected. However, since the government expenditure is capped for the fiscal year, the Government runs a surplus during economic booms. Similarly, in years when the output and revenues are below potential, the government runs a deficit since the fiscal rule does not allow spending cuts. Thus, the Chilean rule allows the automatic stabilizers to operate, and the overall budget balance to adjust with the state of the economy. This would thereby imply that with economic growth, the debt-to-GDP ratio should gradually fall. The Chilean economy has benefited hugely from this budget rule, as the national savings rose from 20.6 per cent to 23.6 per cent between 2000 and 2005, leading to a sharp fall in central government debt-to-GDP ratio and improved sovereign debt ratings (Frankel, 2011). During the copper boom of 2003-08, despite high copper prices leading to higher export earnings and economic growth, counter cyclical fiscal policy led to a budget surplus of almost 8 per cent and government debt reducing to mere 4 per cent of GDP. During the subsequent phase of Global recession when the copper prices had fallen, the government adopted unprecedented

expansionary policy (using the surpluses accumulated during the copper boom) to mitigate the effects of the crisis (budget deficit crossed 4 per cent of GDP)

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

- Never in the history of sovereign credit ratings has the fifth largest economy in the world been rated as the lowest rung of the investment grade (BBB-/Baa3). Reflecting the economic size and thereby the ability to repay debt, the fifth largest economy has been predominantly rated AAA. China and India are the only exceptions to this rule - China was rated A-/A2 in 2005 and now India is rated BBB-/Baa3. Do the fundamentals that supposedly drive sovereign credit ratings rationalise this historical anamoly? In this chapter, the Survey asks this important question and answers a resounding No!
- Within its sovereign credit ratings cohort - countries rated between A+/A1 and BBB-/Baa3 for S&P / Moody's - India is a clear outlier on several parameters, i.e. a sovereign rating of the parameter. These include GDP growth rate, inflation, general government debt (as per cent of GDP), cyclically adjusted primary balance (as per cent of potential GDP), current account balance (as per cent of GDP), political stability, rule of law, control of corruption, investor protection, ease of doing business, short-term external debt (as per cent of reserves), reserve adequacy ratio and sovereign default history. The outlier status remains true not only now but also during the last two decades
- Credit ratings map the probability of default and therefore reflect the willingness and ability of borrower to meet its obligations. India's willingness to pay is unquestionably demonstrated through its zero sovereign default history. India's ability to pay can be gauged not only by the extremely low foreign currency denominated debt of the sovereign but also by the comfortable size of its foreign exchange reserves that can pay for the short term debt of the private sector as well as the entire stock of India's external debt including that of the private sector. India's non-government short-term debt as per cent of forex reserves stood at 19 per cent as of September 2020. India's forex reserves can cover an additional 2.8 standard deviation negative event i.e. an event that can be expected to manifest with a probability of less than 0.1 per cent after meeting all short-term debt. India's forex reserves stood at US$ 584.24 billions as of January 15, 2021, greater than India's total external debt (including that of the private sector) of US$ 556.2 billion as of September 2020. In corporate finance parlance, therefore, India resembles a firm that has negative debt, whose probability of default is zero by definition. Despite this compelling statistic, India is an inexplicable outlier in its ratings cohort. The Survey's findings are consistent with a large academic literature that highlights bias and subjectivity in sovereign credit ratings, especially against countries with lower ratings
- As ratings do not capture India's fundamentals, it comes as no surprise that past episodes of sovereign credit rating changes for India have not had major adverse impact on select indicators such as Sensex return, foreign exchange rate and yield on government securities. Past episodes of rating changes have no or weak correlation with macroeconomic indicators

- India's fiscal policy, therefore, must not remain beholden to a noisy / biased measure of India's fundamentals and should instead reflect Gurudev Rabindranath Thakur's sentiment of a mind without fear. Despite ratings not reflecting fundamentals, noisy, opaque and biased credit ratings damage FPI flows. It is therefore imperative that countries engage with CRAs to make the case that their methodology must be corrected to reflect economies' ability and willingness to pay their external obligations. Moreover, the pro-cyclical nature of credit ratings and its potential adverse impact on economies, especially low-rated developing economies must be expeditiously addressed. India has already raised the issue of pro-cyclicality of credit ratings in G20. In response, the Financial Stability Board (FSB) is now focusing on assessing the pro-cyclicality of credit rating downgrades
- India's sovereign credit rating downgrades during 1998-2018 are mainly confined to the 1990s on account of the post-Pokhran sanctions in 1998. India's sovereign credit ratings upgrades have mainly been witnessed in the second half of 2000s, in recognition of higher economic growth prospects and strengthened fundamentals of the Indian economy
- Further, during most of the 1990s and mid 2000s, India's sovereign credit rating was speculative grade. India's credit rating was upgraded to investment grade by Moody's in 2004, Fitch in 2006 and S&P in 2007. Notably, Indian economy grew at an average rate of over six per cent, and at approximately eight per cent in several years during this period. Hence, during most of the decade of 1990 and early 2000s, India's high rate of economic growth co-existed with a sovereign credit rating of "speculative grade"
- Jaramillo and Tejada (2011) used a panel of 35 emerging market economies for the period 1997-2010 and observed that investment grade status reduced spreads by 36 per cent over and above that implied by macroeconomic fundamentals. They found that upgrades within the investment grade reduced spreads by five-ten per cent while there was no impact of changes within the speculative grade
- Kaminsky and Schmukler (2002), through their study of 16 emerging market economies during 1990-2000, found that changes in sovereign credit ratings significantly affect bond and stock markets, with average yield spreads increasing two percentage points and average stock returns decreasing one percentage point after downgrade. They observed that rating changes had stronger effects during crises in both domestic and foreign financial markets
- All sovereign credit ratings upgrades occurred in years that witnessed lower fiscal deficit as compared to the previous year

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Inequality and Growth: Conflict or Convergence?

- Unlike in advanced economies, in India economic growth and inequality converge in terms of their effects on socio-economic indicators. Economic growth has a far greater impact on poverty alleviation than inequality. Therefore, given India's stage of development, India must continue to focus on economic growth to lift the poor

out of poverty by expanding the overall pie. Note that this policy focus does not imply that redistributive objectives are unimportant, but that redistribution is only feasible in a developing economy if the size of the economic pie grows. In sum, for a developing country such as India, where the growth potential is high and the scope for poverty reduction is also significant, the focus must continue on growing the size of the economic pie rapidly at least for the foreseeable future

- Inequality of consumption is what matters the most rather than inequality of assets or inequality of income. The permanent income hypothesis posits that individuals and households attempt to smooth their consumption over time by borrowing or saving. Thus, while the income of an individual varies from year to year, consumption is more permanent as individuals tend to smooth their consumption over time. Measures of calculating income do not take into consideration all the available resources that result into well-being. Further, savings and borrowings practices vary across the income groups as the propensity to save is typically higher among the rich than among the poor. Therefore, inequality of income does not reflect the true inequality that individuals and households as consumers encounter. In the context of inequality, the divergence in assets among the rich and the poor do not necessarily correlated strongly with the divergence in consumption

- Accelerating industrialization and urbanization in a country of over one billion people has transformed a large number of the agricultural surplus labor in the countryside into urban employment in China. Between 1978 and 2015, the number of people in nonfarm jobs as a percentage of total employment increased from 29 per cent to 70 per cent. This change also occurred in poor areas and to poor households. Official data indicates that, while the number of those that moved away for nonfarm jobs out as a percentage of the total size of the local labor populations was slightly lower in poverty-stricken areas than in the nation as a whole, the gap between the growth rates of the number of people shifting to nonfarm jobs in poor areas and in the nation as a whole was reduced to close to zero for the 1996-2019 period. Between 2002 and the end of 2012, earnings from wage and salaries as a percentage of total household income rose from 26 per cent to 43 per cent for rural households in the bottom 20 percentile, at a rate that was roughly comparable to the national average. Evidently, low-income rural households have benefitted proportionally from the changes in the country's employment pattern engendered by the dual process of industrialization and urbanization

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Healthcare takes centre stage, finally!

- As a bulk of healthcare in India is provided by the private sector, it is critical for policymakers to design policies that mitigate information asymmetry in healthcare, which creates market failures and thereby renders unregulated private healthcare sub-optimal. Therefore, information utilities that help mitigate the information asymmetry can be very useful in enhancing overall welfare

- The mitigation of information asymmetry would also help lower insurance premiums, enable the offering of better products and help increase the insurance penetration in the country

- Increasing life expectancy from 50 to 70 years could raise the economic growth rate by 1.4 percentage points per year
- Increased prioritization of healthcare in the central and state budgets is important as it crucially impacts how much protection citizens get against financial hardships due to out-of-pocket payments made for healthcare. OOP for health increase the risk of vulnerable groups slipping into poverty because of catastrophic health expenditures. At low levels of public health expenditure, i.e. were public healthcare expenditure as a per cent of GDP is less than 3 per cent, OOP expenditure as a share of total health expenditure drops precipitously when public health expenditure increases. For instance, an increase in health expenditure from the current levels in India to 3 per cent of GDP can reduce the OOP expenditure from 60 per cent currently to about 30 per cent
- In healthcare markets, Arrow (1963) explained the buyers of information (patients) rarely know the value of this information until after it is purchased and sometimes never at all. For example, when individuals avail of a healthcare service like dermatology (i.e. skin care), they may be able to readily evaluate the outcome. Therefore, for such services, low-quality providers will have to reduce their price to remain competitive. In contrast, patients who must undergo open-heart surgery may find it very difficult to evaluate its quality and have to therefore rely on the reputation of the hospital / doctor as a proxy for the quality. For some services such as preventive care and / or mental health, patients may never know for sure whether their provider did a good job
- This principal-agent relationship between the patient (as the principal) and the healthcare provider (as the agent) gets further complicated by factors that may influence this conflict of interest. For instance, altruism among doctors - a trait that is highly commended and looked for by patients - primarily serves to eliminate this conflict of interest. However, reimbursement rates pre-negotiated with insurance companies, advertising, the private incentives for testing etc. can exacerbated this conflict of interest. For instance, C-sections in pregnancies, which are more profitable for the hospital / physician, are overused. Such non-price features of healthcare can lead to obfuscation of price and / or significant price dispersions for the same good / service
- Health insurance, which becomes desirable because of the uncertainty / variability in demand, creates a second round of informational problems in healthcare markets. First, because health insurance covers (some of) the financial costs that would be caused by poor health behaviour, individuals may have less incentive to avoid them; this phenomenon is labelled ex-ante moral hazard. Pauly (1968) argued about the role of ex-post moral hazard in health insurance, which stems from the fact that the cost of an individual's excess usage of healthcare is spread over all other purchasers of insurance. This free-rider problem causes the individual to not restrain his usage of care. Given the ex-ante and ex-post moral hazard, incomplete insurance in healthcare is optimal. This prediction is consistent with the idea advocated by Holmstrom (1979) that optimal insurance contracts should be incomplete to strike a balance between reducing risk and maintaining incentives for the individual

- As Akerlof (1970) predicts, when little information is available on the quality of a product prior to purchase, and the quality of the product in uncertain, quality deteriorates to the lowest level in an unregulated market. While reputation can partially mitigate this market failure, the design of healthcare systems must account for this market failure, which can otherwise lead to loss of consumer faith and resultant under-investment in healthcare
- Given these market failures, a free market where individual consumers purchase services from providers on their own while paying at the point of service leads to severely sub-optimal outcomes including demand that can be influenced and induced by suppliers, over-seeking of hospitalization and under-seeking of primary care / public health when compared to economically optimal levels, and catastrophic out-of-pocket spending in part due to the low preference for health insurance. Therefore, most well-functioning health systems are structured as oligopolies purchasing from oligopsonys instead of individual consumers purchasing from individual providers. The structure of the market has substantial implications for long term trajectory of the health system. Countries with more fragmented health systems tend to have lower performance as reflected in higher costs, lower efficiency and poor quality. Therefore, in addition to providing healthcare services and financing healthcare, a key role for the government is to actively shape the structure of the healthcare market
- The states that have higher per capita spending have lower out-of-pocket expenditure, which also holds true at global level. Hence, there is need for higher public spending on healthcare to reduce OOP
- Credit rating agencies mitigate the information asymmetry faced by investors when investing in the debt of a firm. Specifically, credit rating agencies assess the likelihood of the firm repaying the debt that it takes from the investors, thereby the quality of the firm borrowing the money. Similarly, healthcare policymakers should consider creating agencies to assess the quality of the healthcare providers - both doctors and hospitals. The Quality and Outcomes (QOF) introduced by the National Health Service (NHS) in the United Kingdom 2004 as well as other quality assessment practices introduced by NHS provide a good example. The NHS quality assessment practices included national standards for the major chronic diseases, annual appraisal of all doctors working in the NHS, and widespread use of clinical audits to compare practices, sometimes with public release of data. These should be evaluated carefully and considered for implementation
- Credit bureaus assess the quality of individual borrowers by assigning them credit scores, thereby mitigating the information asymmetry faced by a bank or financial institution in lending to the individual borrower. In the healthcare context, insurers as well as healthcare providers suffer from similar information asymmetry about the patient. The National Digital health mission can be utilised even within the framework of data privacy. By utilising such data with the aid of artificial intelligence and machine learning algorithms, the predictive aspects can be used to mitigate information asymmetry with respect to the patients. Therefore, information utilities *a la* the credit bureaus should be evaluated and considered

Process Reforms: Enabling decision-making under uncertainty

- International comparisons show that the problems of India's administrative processes derive less from lack of compliance to processes or regulatory standards, but from over-regulation
- Real-world regulation is inevitably incomplete because of the combination of: (i) bounded rationality due to "unknown unknowns", (ii) complexity involved in framing "complete" contracts across all possible contingencies, and (iii) the difficulty for a third party to verify decisions. This makes some discretion unavoidable in decision making. The evidence shows that over-regulation, not simpler regulation, leads to opaque decision making
- The problem is that policymakers, by default, tend to favour prescriptive regulation over supervision. Unlike supervision, regulation can be easily measured. After all, regulations provide criteria or checklists, making it easier for regulators to follow and reduce their accountability later on. In contrast, it is difficult to quantify the amount and quality of supervision
- The optimal solution is to have simple regulations combined with transparent decision-making process. 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. As an illustration, the chapter shows how the new Government e Marketplace (GeM portal) has increased the transparency in pricing in government procurement. This has not only reduced the cost of procurement but has also made it easier for the honest government official to make decisions
- As an illustration of unnecessary regulation in India, take the case of voluntary closure of a company. A study by Quality Council of India (done for Economic Survey) shows that the time taken from point of decision of closure to actually the company getting struck off from the Registrar of Companies is 1570 days (i.e. 4.3 years), even if all paperwork is in place and the company is not involved in any litigation or dispute. This is the best possible case of a routine activity. Interestingly, out of the total time taken, about 1035 days are taken for clearances by Income Tax, Provident Fund, GST departments and in taking back security refunds from various departments. In contrast, voluntary liquidation takes about 12 months in Singapore, 12-24 months in Germany and 15 months in UK. In Germany, for very large and active companies, it takes 2-4 years. Given the likelihood of disputes and litigation, for the comparable large cases it may take upto a decade in India
- Incomplete regulations become inevitable when the reality of incomplete contracts is acknowledged. In theory, regulators and policymakers can choose to invest entirely in the drafting process by identifying every possible state of the world that might materialize and by specifying an appropriate solution to each state. But, in reality, they confront a vexing problem: the future is unknown and unknowable. As a result, when faced with uncertainty, it simply costs too much to foresee and then describe appropriately the contractual outcomes for all (or even most) of the conceivable states of the world. Thus, the reality of incomplete

contracts leads to inevitability of incomplete regulation. This makes some discretion unavoidable

- In a complex and uncertain world, moreover, the actual outcomes or situations do not fit in the neat boxes assumed in the regulation; hence the supervisor has to exercise some judgement. There is a widespread belief, however, that ever more detailed regulations reduce discretion. On the contrary, complex rules and regulations create more discretion because of the multiple ways in which they can be interpreted. This is made worse by the opacity of increasingly complex rules which makes it difficult for a third party to monitor how the discretion was exercised. Black (2001) argues that "discretion and rules are not in a zero-sum relationship such that the more rules there are the less discretion there is and vice-versa." In short, a complex, uncertain world makes discretion inevitable where over-regulation, not simpler regulation, leads to excessive and opaque discretion
- Kanbur & Ronconi (2016) show in their cross-country study on labor laws that the stringency of labour regulation (measured as fine for violation for minimum wage) correlates negatively with the intensity of enforcement (measured as average medium imprisonment for the same). They argue that countries with more stringent labour codes are less likely to enforce them
- The second way towards effective supervision is to incorporate transparency into the decision-making process. Transparency, apart from having intrinsic value, is appreciated because it promotes trust in public institutions and makes market efficient. The discretion in the system needs to be balanced with the transparency in decision making
- The benefits of transparency can be seen from the recent reform in public procurement. The Government in 2016 had set up a dedicated e-market known as Government e Marketplace (GeM) for different goods & services procured or sold by Government / PSUs. Anecdotal evidence suggests that prior to GeM, government procurement prices were much higher than the prices prevailing in the market and there were constant complaints about inefficiency and rent reduction in prices in comparison to the tender, rate contract and direct purchase rates that were used previously. The average prices on GeM are lower by at least 15-20 per cent than previously, and in some cases even upto 56 per cent

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Regulatory Forbearance: An Emergency Medicine, Not Staple Diet!

- Regulatory forbearance for banks involved relaxing the norms for restructuring assets, where restructured assets were no longer required to be classified as Non-Performing Assets (NPAs henceforth) and therefore did not require the levels of provisioning that NPAs attract. During the GFC, forbearance helped borrowers tide over temporary hardship caused due to the crisis and helped prevent a large contagion. However, the forbearance continued for seven years though it should have been discontinued in 2011, when GDP, exports, IIP and credit growth had all recovered significantly. Yet, the forbearance continued long after the economic recovery, resulting in unintended and detrimental consequences for banks, firms, and the economy. Given relaxed provisioning requirements, banks exploited the

forbearance window to restructure loans even for unviable entities, thereby window-dressing their books. The inflated profits were then used by banks to pay increased dividends to shareholders, including the government in the case of public sector banks. As a result, banks became severely undercapitalized. Undercapitalization distorted banks' incentives and fostered risky lending practices, including lending to zombies. As a result of the distorted incentives, banks misallocated credit, thereby damaging the quality of investment in the economy. Firms benefitting from the banks' largesse also invested in unviable projects. In a regime of injudicious credit supply and lax monitoring, a borrowing firm's management's ability to obtain credit strengthened its influence within the firm, leading to deterioration in firm governance. The quality of firms' boards declined. Subsequently, misappropriation of resources increased, and the firm performance deteriorated. By the time forbearance ended in 2015, restructuring had increased seven times while NPAs almost doubled when compared to the pre-forbearance levels. Concerned that the actual situation might be worse than reflected on the banks' books, RBI initiated an Asset Quality Review to clean up bank balance sheets. While gross NPAs increased from 4.3% in 2014-15 to 7.5% in 2015-16 and peaked in 11.2% in 2017-18, the AQR could not bring out all the hidden bad assets in the bank books and led to an under-estimation of the capital requirements. This led to a second round of lending distortions, thereby exacerbating an already grave situation

- The prolonged forbearance policies following the GFC thus engendered the recent banking criss that brought down investment rates and thereby economic growth in the country. The first lesson for policymakers is to treat emergency measures as such and not to extend them even after recovery: when an emergency medicine becomes a staple diet, it can be counterproductive. Second, while the learnings from the previous episode must be employed to avoid a recurrence, ex-post analysis of complex phenomena must be disciplined by the insights highlighted in Chapter 7 of the Survey. Specifically, to enable policymaking that involves an exercise of judgement amidst uncertainty, ex-post inquests must recognise the role of hindsight bias and not make the mistake of equating unfavourable outcomes to their bad judgement, or worse, malfide intent
- Absent forbearance, a bank must decide to restructure based on the viability of the firm / project because the cost of restructuring an unviable firm is significant. But, with forbearance, banks do not suffer any near-term cost from restructuring. Therefore, banks prefer restructuring, as this choice allows them to declare fewer NPAs and avoid the costs due to loan provisioning. Forbearance thus incentivizes banks to take risks by restructuring stressed assets even if they are unviable. Capital-constrained entities are particularly susceptible to investing in risky projects, a phenomenon called risk-shifting. Consider the case where a bank has a large outstanding against a borrower who is on the verge of default. If the borrower defaults, the bank would have to recognize the debt as NPA, incur a loss, and possibly re-capitalize on account of the depleted capital. Given the borrower's solvency concerns, lending a fresh loan, or restructuring its current loan(s) is extremely risky and may result in further losses for the bank. However, in the unlikely case that the fresh credit helps the borrower recover, banks would get back all their debt with interest and therefore face no reduction in capital. Notice that the recognition of loss impacts equity holders. They get no return on their

investments and are forced to recapitalize to maintain sufficient capital adequacy. In such a scenario, a capital-starved bank, where equity owners have little “skin in the game”, is likely to continue lending to the risky borrower. With low capital, equity owners have little to lose from the fresh lending in the likely scenario where the borrower fails. However, the unlikely case of firm revival would result in a significant upside for them. Depositors do not have any marginal upside in the case of risky investment but may incur some costs if the firm fails. Hence equity owners gain if the risks pay off and if the risks fail the cost would be borne by the depositors, bondholders, and / or the taxpayers. Forbearance further allows equity owners to restructure loans without any additional cost. Capital-constrained banks, therefore, choose to restructure even unviable projects when the opportunity arises under a forbearance regmie, thereby shifting risk away from equity holders to depositors and taxpayers

- Forbearance provides incumbent managers an opportunity to window-dress their balance sheets, show good performance during their tenure, and thereby enhance post-retirement career benefits. Consequently, bank managers resort to distortionary practices under forbearance. Second banks’ management may use forbearance as a shield to cover up outright corruption and nepotism. The events with the Punjab National Bank or recent allegations of deceit against former bank CEOs corroborate the possibility. Notice that forbearance allows banks to hide bad loans by delaying the recognition of losses. Bank managers, therefore, foresee very little downside in making unviable loans to connected parties, against the upside of making quick personal gains
- The share of restructured loans increased from 0.74% in FY08 to 6.94% in FY15. The increase in the share of restructured loans among public sector banks was much higher, from 0.82% to 8.49%. However, the private sector banks also saw their share of restructured loans increase from 0.64% to 2.87%. The reported GNPAs of banks increased modestly from 2.2% in FY08 to 4.3% in FY15. It appears that the banks used the option of restructuring loans that were on the verge of defaulting without regard to the viability of such loans. During the forbearance window, the proportion of firms in default increased by 51% after their loans got restructured. In the pre-forbearance era, there was only a marginal 6% increase in the likelihood of defaults after restructuring. Forbearance thus helped banks to hide a lot of bad loans
- The pattern of evolution of non-performing loans over time across G20 countries provides valuable insights on the costs of extended forbearance versus early resolution of banking crises. For this purpose, the year in which a country reached its peak NPA after the global financial crisis is identified. The countries that reached their peak NPA during 2009 and 2010 are called “Early Resolvers”. These countries were likely early enough to recognize the bad loan problem and take the necessary steps to address it. Their share of non-performing loans started declining after 2009-10. These include countries like the United States, which immediately recognized toxic assets and launched a recapitalization program
- In contrast, “Late Resolvers” correspond to the countries that reached their peak NPAs in 2015-19 i.e. upto a decade post the crisis. As shown in the case of India, where a prolonged policy of regulatory forbearance allowed banks to delay recognition of actual NPAs, a delay in taking actions to recognize and resolve bad

loans may have caused the NPAs to culminate many years after the crisis. Some important patterns between the “Early Resolvers” and the “Late Resolvers” present interesting insights

- The forbearance period witnessed an increase in lending to unproductive firms, popularly referred to as “zombies”. Zombies are typically identified using the interest coverage ratio, the ratio of a firm’s profit after tax to its total interest expense. Firms with an interest coverage ratio lower than one are unable to meet their interest obligations from their income and are categorized as zombies. The share of new loans to such firms increased from 5% in 2007-08 to a whopping 27% in 2014-15
- The increased lending to zombies could merely be a reflection of the poor financial performance of firms during the forbearance regime. To assess whether it is indeed the case of risky lending, a revised definitino of zombie firms is considered. Under this alternative definition, zombie firms are those whose interest coverage ratio lies in the bottom quartile. This definition ensures that the proportion of zombies remains the same across all years. Even with the revised definition, the share of new loans sanctioned to zombie firms is found to increase 20% in 2007-08 to 43% in 2014-15. This clearly indicates an increase in risky lending by banks
- There is another motive for undercapitalized banks to engage in lending to poor quality firms: to protect their already depleted capital. One way of ever-greening loans is lending a new loan to a borrower on the verge of default, near the repayment date of an existing loan, to facilitate its repayment. Such transactions go undetected as banks are not required to disclose them, unlike restructurings that warrant disclosures. To further disguise their lending to distressed borrowers, banks may direct credit to other healthy firms in the business group to which those borrowers belong. Therefore, it is important to consider a business group as a whole, instead of individual firms, for a more robust estimate of zombie lending. A business group is classified as a zombie if the interest coverage ratio of the entire group is less than one
- Dirty Dozen are the 12 large firms identified by the RBI that contributed to 25% of overall NPAs in 2016-17 i.e. INR 3.45 lakh crores. These firms are Bhushan Steel, Bhushan Power, Electrosteel Steels, JP Infra, Era Infra, Amtek Auto, ABG Shipyard, Jyoti Structures, Monnet Ispat, Lanco Infratech, Alok Industries and Essar Steel. These firms continued to receive credit during the forbearance window even when their financial condition had worsened
- Forbearance resulted in increased lending to firms with poor fundamentals and higher lending to inefficient projects. Consequently, the industrial sector’s increased credit growth from 2008-09 to 2014-15 failed to translate into a higher investment rate. India’s Gross Fixed Capital Formation as a share of GDP reduced from 34.7% in 2008 to 28.7% in 2015. Within non-financial firms, the ratio of gross fixed capital addition to additional debt decreased from 56.7% in the 2005-08 period to 44.8% in the 2012-15 period. In other words, a lesser proportion of new loans were used for capital asset creation such as buildings, plants, machinery etc. A larger part of the credit seems to have been used to keep dead loans alive by ever-greening

- Getting a loan restructured involved negotiations with the bankers who had discretion in selecting cases for restructuring. In an era of relaxed provisioning norms, firm managers formally or informally connected with bankers could persuade them to restructure loans, plausibly even unviable ones. This ability made the incumbent management's influence stronger. It became difficult for the firm's board to overthrow such managers even if they were otherwise inefficient. The increased influence of the incumbent management resulted in the weakening of the firms' governance which, in turn, had detrimental consequences in the longer run. Forbearance led to an increase in incumbent management's influence as: (i) the presence of independent directors on boards declined, (ii) the propensity of a CEO becoming the chairman increased, (iii) having a connected director on board became more likely, and (iv) the bank monitoring declined as a lower number of bank-nominated directors occupied board seats
- While firm fundamentals usually improved upon restructuring in the pre-forbearance era, they significantly declined under forbearance. Note that, these values are adjusted for industry and year and thus are not influenced by macroeconomic shocks during the forbearance regime
- Subsequent to the deterioration in their fundamentals, restructured firms in the forbearance window also witnessed a decrease in their credit ratings. The average credit rating for a firm deteriorated by 7.7% upon restructuring during the forbearance regime while the same marginally improved before forbearance. The forbearance regime also accompanied an increase in defaults by restructured firms when compared to a decrease in the same in the pre-forbearance era. The proportion of restructured firms that became defaulters increased by 51% in the forbearance period, while the pre-period increase was comparatively marginal. In terms of the amount under default, the figure more than doubled in the post-forbearance period compared to an 18% decrease in the value before forbearance. Once again, restructuring in the pre-forbearance era seems to have helped distressed and defaulting borrowers repay their debt and undo their defaulter tag. However, firms benefitting from restructuring during the forbearance window, on average, started defaulting more
- Finally, after continuing forbearance for seven years, the RBI decided to bite the bullet and withdrew regulatory forbearance starting from April 2015. The RBI also decided to conduct a detailed AQR to know the true status of banks' NPAs. However, the AQR exacerbated the problem as it neither mandated capital raising by banks nor provided a capital backstop even though it was certain that banks' capital would be adversely impacted following the AQR
- Economic theory highlights that two contrasting outcomes were possible with such an AQR. In the optimistic view, the AQR was expected to lead to a reduction in information asymmetry. The critical assumption - as hypothesized in Diamond and Rajan, 2011 - was that the resultant cleaner bank balance sheets would help banks to raise more private capital on their own, thereby improving the quality of financial intermediation. Along these lines, the RBI's view was that the program was a "deep surgery" that would lead to healthy bank balance sheets. However, a more sobering outcome could have been expected from an application of the impact of asymmetric information problems on the likelihood of capital raising. Myers and Maljuf (1984) predict that firms in distress would have no incentive to

raise equity voluntarily as managers - who know more about the firm's fundamentals than investors - fear dilution of the value of equity. Therefore, absent a policy for either mandatory capital raising or capital backstop, incumbent shareholders and managers of banks - who would invariably know more about the bank's fundamentals than the regulator or investors - have no incentive to raise equity capital. Implicity government guarantees further dis-incentivize capital raising. As a result, under-capitalized banks may again resort to risk-shifting and zombie lending, thereby severly exacerbating the problem. The adverse impact could then spill over to the real economy through good borrowers and projects being denied credit. The resultant drop in the investment rate of the economy could then lead to the slowdown of economic growth

- In reality, the AQR exercise significantly under-estimated the full extent of NPAs as well as the resultant capital infusion that was required to ensure that the bank balance sheets indeed become healthy. In terms of additional GNPAs, public sector banks added about INR 5.65 lakh crores from FY16 to the end of FY19. To put this amount in perspective, the additional NPAs translated to about 7.9% of the total tax revenue over this period
- The AQR was mostly restricted to targeting bad lending through restructuring, rather than identifying subtle ever-greening activities. Notice that loan restructuring warrants a disclosure whereas fresh lending does not. Therefore, rather than restructuring, banks could have easily lent a new loan to an existing borrower on the verge of default. To further camouflage their incentives, they could have disguised the payment in the form of fresh lending to a network of related parties of the actual firm in distress
- If the AQR had correctly identified all the hidden bad quality assets on banks' books, all the increase in NPAs and the necessary provisioning would have concluded by the stated deadline of FY17. However, the GNPAs in the Indian banking sector only increased to 11.2% by FY18. A massive surge in loan loss provisioning also occurred in FY18 - a year after AQR was supposed to make bank balance sheets healthy
- The actual capital required by public sector banks significantly exceeded the amount that the RBI seems to have estimated before the AQR. In the first year of the AQR, the total capital infused into public sector banks was INR 25,000 crores with an intended plan of infusing INR 45,000 crores in the next three years under Mission Indradhanush. However, by the end of FY19 i.e. four years after the inception of the AQR, the government had infused INR 2.5 lakh crores in the public sector banks. The addition of capital amounted to 44.24% of the added GNPAs

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

- India entered the top 50 innovating countries for the first time in 2020 since the inception of the Global Innovation Index (GII) in 2007, by improving its rank from 81 in 2015 to 48 in 2020

- The business sector in India contributes much less to gross expenditure on R&D (about 37 per cent) when compared to businesses in each of the top ten economies (68 per cent on average). This is despite the fact the tax incentives for R&D were more liberal in India when compared to those in the top ten economies. The Government does a disproportionate amount of heavy-lifting on R&D by contributing 56 per cent of the gross expenditure on R&D, which is three times the average contributed by governments in the top ten economies. Yet, India's gross expenditure on R&D at 0.65 per cent of GDP is much lower than that of the top 10 economies (1.5-3 per cent of GDP) primarily because of the disproportionately lower contribution from the business sector. Indian government sector contributes the highest share of total R&D personnel (36 per cent) and researchers (23 per cent) amongst the top ten economies (nine per cent on average). Indian business sector's contribution to the total R&D personnel (30 per cent) and researchers (34 per cent) in the country is the second lowest amongst the top ten economies (over 50 per cent on average). Indian residents contribute only 36 per cent of patents filed in India as compared to 62 per cent on average in the top ten economies. Indian firms also perform below expectation on innovation for their level of access to equity finance, which is the most crucial for innovation
- In January 2006, China initiated a 15-year "Medium to Long term Plan (MLP) for the Development of Science and Technology". MLP called for China to become an "innovation-oriented society" by the year 2020, and a world leader in science and technology (S&T) by 2050. It committed China to developing capabilities for "indigenous innovation" and to leapfrog into leading positions in new science-based industries by the end of the plan period. The MLP of China used R&D as an important instrument for development of S&T ecosystem

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

- In 2018, Government of India approved the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PM-JAY) as a historic step to provide healthcare access to the most vulnerable sections in the country. Beneficiaries included approximately 50 crore individuals across 10.74 crores poor and vulnerable families, which form the bottom 40 per cent of the Indian population. The households were included based on the deprivation and occupational criteria from the Socio-Economic Caste Census 2011 (SECC 2011) for rural and urban areas respectively. The scheme provides for healthcare of up to INR 5 lakh per family per year on a family floater basis, which means that it can be used by one or all members of the family. The scheme provides for secondary and tertiary hospitalization through a network of public and empanelled private healthcare providers. It also provides for three days of pre-hospitalization and 15 days of post-hospitalization expenses, places no cap on age and gender, or size of a family and is portable across the country. It covers 1573 procedures including 23 specialties. AB-PM-JAY also aims to set up 150,000 health and wellness centres to provide comprehensive primary health care service to the entire population