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VOL-1

GIST OF ECONOMIC SURVEY 2020-21

For Civil Seivices Exam

GS SCORE
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TESTIMONIALS

"Being in job of IRS, time management was extremely challenging. I express my immense gratefulness towards GS Score and Manoj Jha Sir for providing me best possible support in my success journey

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Rank 3

"I am highly obliged towards GS SCORE for its best evaluation and assessment mechanism which helped me to crack UPSC in first attempt.

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"Answer writing is always considered as a vital part for success in UPSC. GS Score helped me in building a strong and solid foundation for development of answer writing skills. Thank You!

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"Cracking UPSC was my childhood dream and I am highly thankful towards GS Score for guiding me in this journey. And special thanks to Manoj Jha Sir

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"I am very much Thankful to GS Score for building my capacity of Answer Writing Skills. Value addition, mentoring and personal evaluation by Piyush Choubey Sir did help a lot.

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"Managing sincere attempt while being in service of IPS was very tedious job. But GS Score helped me a lot in my smart preparation. I will always be thankful to Manoj Jha Sir for his mentoring.

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"History Optional was not an easy nut to crack. I express my sincere gratitude towards GS SCORE and Piyush Yadav Sir who helped me to to sail through the rough water of UPSC.

Ashutosh Kulkarni
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"Being from family of Civil Servants, UPSC was a childhood dream for me. I express my humble gratitude towards Manoj Jha Sir for building my confidence in Ethics Paper.

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"UPSC style mock papers coupled with evaluation by faculty members of GS SCORE themselves enhanced my confidence to write answers as per the demand. I am

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"I would always find lack of substance to fill my pages in Ethics and Essay. Manoj Jha Sir squarely took care of this. Thank you Sir!

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"Cracking UPSC in first attempt is considered as achievement within achievements. Thank You GS SCORE for the right guidance at right time.

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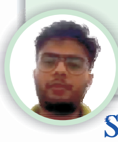
"I am extremely grateful to GS SCORE for the guidance in improving my MCQs solving temperament which helped me to crack UPSC in my first attempt.



Shikhar Choudhary
Rank 97

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CHAPTER: 1

Saving Lives And Livelihoods Amidst A Once-In-A-Century Crisis

Key-Terms

Great Depression

- Great Depression is a worldwide economic downturn that began in 1929 and lasted until about 1939.
- It was the longest and most severe depression ever experienced by the industrialized Western world, sparking fundamental changes in economic institutions, macroeconomic policy, and economic theory.

Non Pharmaceutical Interventions (NPIs)

- NPIs include both actions that individuals and households can take (e.g. frequent hand washing, covering coughs and sneezes, and keeping a distance from sick people) and social distancing policies that communities can enact (e.g. closing schools, working from home, restricting public gatherings) that are specifically geared to limiting the spread of a disease that is transmitted from person to person.
- Not only will they be available and accessible at the local level, but they are likely to be very effective in limiting the spread of the disease, and reducing the number of deaths.

Spanish Flu

- The Spanish flu, also known as the 1918 flu pandemic, was an unusually deadly influenza pandemic caused by the **H1N1 influenza A virus**.
- Spanish flu pandemic resulted in a higher-than-expected mortality rate for **young adults**.
- The 1918 Spanish flu was the first of two pandemics caused by H1N1 influenza A virus; the second was the 2009 **swine flu pandemic.**

Saving a life that is in jeopardy is the origin of dharma

– Mahabharata

Introduction

- The world has endured a year of the unexpected onslaught by the novel COVID-19 virus - SARS-CoV-2 - first identified in Wuhan city of China in December 2019.
- The virus has posed an unprecedented challenge for policy making, globally and nationally.
- It engendered a once-in-a-century global crisis in 2020 – a unique recession where 90 per cent of countries are expected to experience a contraction in GDP per capita.

- Faced with unprecedented uncertainty at the onset of the pandemic, India focused on saving lives and livelihoods by its willingness to take short-term pain for long-term gain.
- India's response was based on the saying of Mahabharata "Saving a life that is in jeopardy is the origin of dharma."
- India's strategy was guided by the following:
  - The 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 & Sargent (2001) that recommends a policy focused on minimising losses in a worst case scenario when uncertainty is very high.

What was India's strategy?

- To implement its strategy, India imposed the most stringent lockdown at the very onset of the pandemic.
- This enabled flattening of the pandemic curve and, thereby, provided the necessary time to ramp up the health and testing infrastructure.

Constraints unique to India

- There were certain constraints which were unique to India:
  - First, as the pace of spread of a pandemic depends upon network effects, a huge population inherently enables a higher pace of sprread.
  - second, as the pandemic spreads via human contact, high population density, especially at the bottom of the pyramid, innately aids the spread of the pandemic at its onset.
  - Third, although the average age is low, India's vulnerable elderly population, in absolute numbers, exceeds significantly that of other countries.
  - Finally, an overburdened health infrastructure exposed the country to a humongous supply-demand mismatch that could have severely exacerbated fatalities

- Faced with enormousuncertainty, India adopted a strategy of Bayesian updating to continually calibrate its response while gradually unlocking and easing economic activity.
- India has transformed the short-term trade-off between lives and livelihoods into a win-win in the medium to long-term that saves both lives and livelihoods.
- 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.
- The analysis clearly shows that early and more stringent lockdowns have been effective in controlling the spread of the pandemic – both across countries and across States in India.
- By constructing a stringency index at the State level Survey show that the under-or-over performance in cases and deaths (compared to the expected) correlates strongly with the stringency of the lockdown.
- Similarly, the V- shaped economic recovery also strongly correlates with the stringency of the lockdown.
- Thus, Survey infers that the lockdown had a causal impact on saving lives and the economic recovery.
- India thus benefited from successfully pushing the peak of the pandemic curve to September, 2020 through the lockdown.
- After this peak, India has been unique in experiencing declining daily cases despite increasing mobility.

- On the economic policy front, India recognized that, unlike previous crises, the Covid pandemic affects both demand and supply.
- Furthermore, given disruptions in the labour markets that can affect disposable income and firms suffering financial distress, the loss of productive capacity due to hysteresis could not be ruled out.
- Therefore, a slew of structural reforms were announced; together, these would helped to expand supply significantly in the medium to long term.
- On the demand side, at the onset of the pandemic, India's policies focused purely on necessities.

Covid-19: Once In A Century 'Crisis'

- Due the rigorous spread of infection, by the end of February 2020, the infection had spread to over 54 countries, infected more than 85,403 individuals across the world and resulted in around 3,000 deaths.
- The exponential rise in the number of cases being witnessed daily compelled the World Health Organization (WHO) to title this outbreak a pandemic onMarch 11, 2020 – within a period of three months of its emergence.
- The only strategy that seemed viable for containment of the pandemic was active surveillance, early detection, isolation and case management, contact tracing and prevention of onward spread by practicing social distancing and safety precautions.
- Various non-pharmaceutical interventions (NPIs) – such as lockdowns, closure of schools and non-essential business, travel restrictions – were, therefore, adopted by countries across the globe.

What are the economic impacts of the pandemic?

- The pandemic and associated lockdown measures led to a de facto shutdown of a significantportion of the global economy, thereby triggering a global recession this year.
- The crisis World is facing today is unique in a number of ways.
  - Firstly, the health crisis-induced global recession is in contrast with previous global recessions which were driven by confluences of a wide range of factors, including financial crises (the Great Depression in 1930-32; 1982; 1991; 2009), sharp movements in oil prices (1975; 1982), and wars (1914; 1917-21; 1945-46).
  - Secondly, this recession is highly synchronized as the fraction of economies experiencing annual declines in national per capita is highest since 1870—more than 90 per cent, even higher than the proportion of about 85 per cent of countries in recession at the height of the Great Depression of 1930-32.
  - Thirdly, the present crisis is unique as it originated in a pandemic that required social distancing and limiting of physical interactions. Thus, inherent to the crisis there was the tradeoff – at least in the short run – between health and human lives, on the one hand, and the economy and livelihoods, on the other hand
- The pandemic is, therefore, once in a 150-year event with an unprecedented impact with all regions in the world projected to experience negative growth in 2020. It is aptly called the 'Great Lockdown'.

Research-Driven Policy Response Amidst Unprecedented Uncertainty

Two fundamental strategies to combat an epidemic are possible:

- **mitigation,** which focuses on slowing the epidemic spread by reducing R0, and
- **Suppression,** which aims to reverse epidemic growth by reducing R0 below 1.

Learnings from Spanish Flu

- The research focused on the Spanish Flu, guided India's policy response. In sum, the learnings were as follows:

- The pandemic curve needs to be 'flattened' to spread the pandemic over time and enable more people to receive proper health treatment, thereby lowering the fatality rate ultimately.
- Given the network structures that affect the transmission of the pandemic, higher population can lead to faster spread of the pandemic.
- Denser areas are more vulnerable to faster spread of the virus and this effect is especially strong at the onset of the pandemic.
- Early lockdowns delay the time taken to reach the peak, reduces the magnitude of the peak, and thereby decreases the total mortality burden by providing valuable time to ramp up the health and testing infrastructure.
- Implementing lockdowns earlier in the pandemic and using them more intensely – while costly in the short-run – led to a much sharper economic recovery and reduced mortality as well.
- When faced with enormous uncertainty, policies must be designed with the objective of minimizing large losses by selecting the policy that would be optimal under the worst-case scenario.

Far-Sighted Policy Response For Economic Recovery

- Indian policymakers, backed by evidence, recognized that the lockdown would adversely impact economic activity and disrupt livelihoods.
- The fiscal policy response of the Government of India to the pandemic was, accordingly, strategized with a step-by-step approach.
- During the first two quarters of FY:2020-21, the Government ensured that funds for essential activities were available despite a sharp contraction in revenue receipts.
- The initial approach was to provide a cushion for the poor and section of society and to the business sector (especially the MSMEs) to tide over the distress caused by disruption of economic activity.
- The PradhanMantriGaribKalyanYojana (PMGKY) for ensuring food security through public distribution system, direct benefit transfers to widows, pensioners and women, additional funds for MGNREGS, and debt moratoria and liquidity support for businesses.
- With the easing of movement and health-related restrictions in the third quarter, the the government transited in a calibrated fashion to support investment and consumption demand through Atmanirbhar 2.0 and 3.0.

Structural Reforms adopted by India

- The Indian policymakers also recognized that the 'supply' shock induced by the lockdown would disrupt the productive capacity of the economy. India initiated a slew of multi-sectoral supply-side structural reforms to lend flexibility and resilience to supply chains as a part of the Atmanirbhar Bharat Mission.
- India is the only country to have undertaken structural reforms on the supply-side at the initial stages of the pandemic. This far-sighted policy response will generate productivity gains in the medium to long term.
- Major structural reforms launched by the Government – in agriculture markets, labour laws and definition of MSMEs – provide unparalleled opportunity to grow and prosper now and thereby contribute to job creation in the primary and secondary sectors.
- 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 reforms in the agricultural sector were more overdue than even the labour reforms.
  - 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.

Major Structural Reforms Undertaken as a Part of Atmanirbhar Bharat Package

Sector	Structural Reform Undertaken
Deregulation and Liberalization of Sectors	
Agriculture	Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020 Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Act, 2020 Essential Commodities (Amendment) Act, 2020
MSMEs	New MSME definition covering almost 99 per cent of all firms enabling MSMEs to grow in size and create jobs Removal of artificial separation between manufacturing and service MSMEs
Labour	Enactment of four labour codes namely, Wage Code, Industrial Relations Code, 2020, Code on Occupational Safety, I Iealth & Working Conditions Code, 2020 & Social Security Code, 2020 'One labour return, one licence and one registration'
Business Process Outsourcing (BPO)	Simplification of the Other Service Provider (OSP) guidelines of the Department of Telecom. Several requirements, which prevented companies from adopting 'Work from I lome' and 'Work from Anywhere' policies have been removed
Power	Tariff Policy Reform: DISCOM inefficiencies not to burden consumers, Progressive reduction in cross subsidies. Time bound grant of open access, etc. Privatization of Distribution in UTs
PSUs	PSUs in only strategic sectors Privatization of PSUs in non-strategic sectors
Mineral Sector	Commercial Mining in Coal Sector Removal of distinction between captive and merchant mines Transparent auction of mining blocks Amendment to Stamp Act, 1899 to bring uniformity in stamp duty across States Introduction of a seamless composite exploration-cum-mining-cum-production regime
Strengthening Productive Capacity	
Industry	Production Linked Incentive (PLI) Scheme for 10 identified sectors National GIS-enabled Land Bank system launched

Space	Level playing field provided to private companies in satellites, launches and space-based services Liberal geo-spatial data policy for providing remote-sensing data to tech-entrepreneurs
Defence	Corporatization of Ordnance Factory Board FDI limit in the Defence manufacturing under automatic route to be raised from 49 per cent to 74 per cent. Time-bound defence procurement process
Ease of Doing Business	
Financial Markets	Direct listing of securities by Indian public companies in permissible foreign jurisdictions Provisions to reduce time line for completion of rights issues by companies Private companies which list NCDs on stock exchanges not to be regarded as listed companies
Corporates	Including the provisions of Part IXA (Producer Companies) of Companies Act, 1956 in Companies Act, 2013 Decriminalization of Companies Act defaults involving minor technical and procedural defaults Power to create additional/ specialized benches for NCLAT Lower penalties for all defaults for Small Companies, One-person Companies, Producer Companies & Start Ups Simplified Proforma for Incorporating Company Electronically Plus (SPICe +) introduced
Administration	National platform for recruitment: National Recruitment Agency to conduct a Common Eligibility Test Revised guidelines on Compulsory retirement to remove ineffective or corrupt officials through Fundamental Rule 56(j)/(1) and Rule 48 of CCS (Pension) Rule Faceless tax assessment and a 12-point taxpayers charter Fast track Investment Clearance through Empowered Group of Secretaries

Conclusion

Despite the hard-hitting economic shock created by the global pandemic, India is witnessing a V-shaped recovery with a stable macroeconomic situation aided by a stable currency, comfortable current account, burgeoning forex reserves, and encouraging signs in the manufacturing sector output. India is reaping the “lockdown dividend” from the brave, preventive measures adopted at the onset of the pandemic, which were based on the humane principle advocated eloquently in the Mahabharata that “Saving a life that is in jeopardy is the origin of dharma.”

Practice Question

- Due to the pandemic crisis, countries across the globe are at an economic halt. What measures India can take to not only revive its economy but also act as an example for its neighbouring countries.

CHAPTER: 2

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

Key-Terms

Fiscal multipliers

- The fiscal multiplier measures the effect that increases in fiscal spending will have on a nation's economic output, or gross domestic product (GDP).

Counter-cyclical fiscal policy

- Counter-cyclical fiscal measures are policy measures which counteract the effects of the economic cycle.
  - For example, counter-cyclical fiscal policy actions when the economy is slowing would include increasing government spending or cutting taxes to help stimulate economic recovery.

Procyclical fiscal policy:

- A 'procyclical fiscal policy' can be summarised simply as governments choosing to increase government spending and reduce taxes during an economic expansion, but reduce spending and increase taxes during a recession.

Interest rate-growth differential:

- In general, an interest rate differential (IRD) weighs the contrast in interest rates between two similar interest-bearing assets.
- Traders in the foreign exchange market use IRDs when pricing forward exchange rates. Based on the interest rate parity, a trader can create an expectation of the future exchange rate between two currencies and set the premium, or discount, on the current market exchange rate futures contracts.
- Interest rate differentials simply measure the difference in interest rates of two different instruments.
- IRD is most often used in fixed income, forex, and lending markets.
- IRD plays a key role in calculating a carry trade.

Debt sustainability model

- The debt sustainability model, or debt sustainability analysis, is a form of structured examination on a developing country based on the Debt Sustainability Framework.
- It is utilized by the World Bank and the International Monetary Fund (IMF) and measures the lending and borrowing decisions surrounding low-income and developing countries.
- The model is essential for measuring a developing country's financing needs with its capacity to repay borrowed funds.

Debt-to-GDP ratios:

- The debt-to-GDP ratio is the metric comparing a country's public debt to its gross domestic product (GDP).
- By comparing what a country owes with what it produces, the debt-to-GDP ratio reliably indicates that particular country's ability to pay back its debts.
- Often expressed as a percentage, this ratio can also be interpreted as the number of years needed to pay back debt, if GDP is dedicated entirely to debt repayment.

Low wage-growth trap:

- The "Low Wage Trap" provides information on the financial consequences for an employed person when increasing his/her work effort and thus his/her wages.

Crowding out:

- The crowding out effect is an economic theory arguing that rising public sector spending drives down or even eliminates private sector spending.
- The crowding out effect suggests rising public sector spending drives down private sector spending.
- There are three main reasons for the crowding out effect to take place: economics, social welfare, and infrastructure.

Introduction:

- As the COVID-19 pandemic has created a significant negative shock to demand, active fiscal policy – one that recognises that fiscal multipliers are disproportionately higher during economic crises than during economic booms – can ensure that the full benefit of seminal economic reforms is reaped by limiting potential damage to productive capacity.
- This Chapter establishes clearly that 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.
- The chapter studies the evidence across several countries to show that growth causes debt to become sustainable in countries with higher growth rates.

Which fiscal policy should the Indian government adopt: pro-cyclical or counter-cyclical?

Fiscal policy (FP) stance	Recession (↓GDP)	Expansion (↓GDP)	Outcome
Pro-cyclical	Contractionary FP ↓ Govt. Expenditure or /and ↑ Taxes	Expansionary FP ↑ Govt. Expenditure or /and ↓ Taxes	Deepens recessions and amplifies expansions, thereby increasing fluctuations in the business cycle.
Counter-cyclical	Expansionary FP ↑ Govt. Expenditure or /and ↓ Taxes	Contractionary FP ↓ Govt. Expenditure or /and ↑ Taxes	Softens the recession and moderates the expansions, thereby decreasing fluctuations in the business cycle.

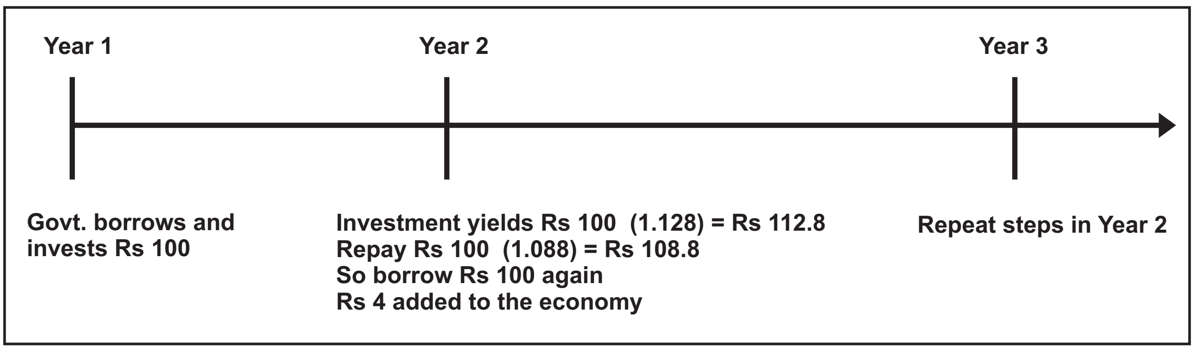
- **A procyclical fiscal policy** is the one which goes in line with the current mood of the economy. For example, during the time of an economic boom the government makes high expenditure and also does not increase taxes – this further amplifies the boom. While during an economic slump the government reduces expenditure, increases taxes to improve its revenue thereby putting higher pressure on the economy and amplifying the slump.
- **A countercyclical fiscal policy** on the other hand goes in opposite direction to the current mood of the economy. It has a stabilizing effect whereby any boom does not explode and any recession does not grow deeper. For example, during a recession the government increases its expenditure to generate demand in the economy and reduces taxes to increase the disposable income with the people, thereby stabilizing the state of the economy in the medium term.

Counter-cyclical fiscal policy

- Keeping in mind the stabilizing nature of the countercyclical fiscal policy, the Economic Survey prescribes that India should put a greater focus over it. In a country like India which has a large workforce employed in the informal sector, counter-cyclical fiscal policy becomes even more paramount.
- Moreover, counter-cyclical fiscal policy becomes critical during an economic crises. This is the result of the fact that fiscal multipliers which capture the aggregate return derived by the economy from an additional Rupee of fiscal spending are significantly greater during economic crises when compared to economic boom.
- For example: In the ancient times, during difficult times like famines and droughts, the Indian Kings used to build palaces in order to provide employment to the suffering masses and improve the economic fortunes of the private sector. This clearly shows the importance of counter-cyclical economic policy.
- The Economic Survey states that, 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.

Significance of interest rate growth differential (IRGD):

- As per principles of economics, a government is generally in an economically sound position if the interest rate paid by the government is less than the economic growth rate experienced by the country. This implies that there will be debt sustainability (debt under control) when nominal growth rate exceeds the nominal interest rate for the foreseeable future.
  - For example: Let us take the nominal interest rate and nominal growth rate as 8.8 per cent and 12.8 per cent respectively. As the government's investment of a ₹100 produces ₹112.8 (as per growth rate) while the principal and interest repayment equals ₹108.8(as per interest rate), there is a difference of ₹4. These₹4 can be added to the economy after the loan of ₹100 is rolled over to the next period.



- Debt sustainability denotes that the overall debt on the government is not running out of control and is the debt is being managed with caution. This debt sustainability is primarily dependent on the 'interest rate-growth differential (IRGD)' which is the difference between interest rate and the growth rate (also called r-g differential, where 'r' denotes interest rate and 'g' denotes growth rate).

The role of the differential can be seen as follows:

CASE	IRGD or (r-g)	DEBT
Interest Rate>Growth Rate	Positive	Unsustainable
Interest Rate<Growth Rate	Negative	Sustainable

- A positive IRGD denotes that the debt keeps on increasing and the growth rate is not able to keep pace with it, eventually leading to a grave economic situation. While a negative IRGD denotes that growth rate is higher than the interest rate that the government is paying and is therefore signifying stability in debt.
- Thus, the ease with which a government can reduce its debt-to-GDP ratio depends primarily on the IRGD or (r-g). More negative the IRGD, the easier (and quicker) it is for the Government to ensure debt sustainability. Conversely, if the IRGD is positive, the harder (and slower) it is for the Government to ensure debt sustainability. A negative IRGD thus creates an enabling environment for debt sustainability

Impact of Consistently Negative IRGD on India's Economic Health:

- The Economic Survey points out the relationship between 'growth' and 'debt' in India. It is very important to understand the 'CAUSALITY' between the two variables.
- Due to the presence of negative IRGD backed by high growth rate, India's debt has been sustainable. Thus, High Growth has led to Debt Sustainability/lowering of debt-to-GDP ratio.
- However, economic data show that the vice versa is not true in India – i.e. High Debt Levels do not lead to economic slowdown/reduction in growth.
- CASE STUDY: During the Asian Financial Crises (1997), there was huge economic instability due to collapse of currency exchange rates in most of East and Southeast Asia. It had it ripple effects on Indian economy as well. 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

The IRGD parameter and debt sustainability in India:

The Economic Survey states that as a norm in India, over the last two and a half decades, GDP growth rates have been greater than interest rates.

- During the last 25 years, Nominal Growth Rate had been greater than the Nominal Interest Rate (except a short period during the Asian Financial Crises-1997).
- This has led to a negative IRGD for most of the years during the last two and a half decades, which has consequently led to a decline in debt levels in India.
- Moreover, in India there has been a higher variability in growth rates relative to interest rates over the past 25 years. This implies that changes in IRGD are mostly attributable to changes in growth rates rather than the changes in interest rates.
- Thus, it is a higher growth that provides the key to sustainability of debt for India.

IRGD and debt sustainability for other economies:

- Similar to the Indian experience, economic date from IMF and World Bank show a strong correlation between IRGD and incremental debt-to-GDP ratio for other countries like Japan, Canada, China, Malaysia etc. The years that correspond to negative IRGD are accompanied by a steeper decline in debt levels across these countries.
- Cross-country evidence also shows higher variability is observed in mean growth rates across countries as compared to variability in average interest rates.

- Thus, when taken together, both the within-country and across-country variation clearly imply that the variability in IRGD depends primarily on variation in g.
- Thus it is important to examine the dynamics of debt sustainability for high growth economies separately from that for low growth ones.

India's position in comparison to other countries:

- On analysing the averages of real interest rate, real growth rates and IRGD for the period 1990-2018 across selected emerging and advanced economies, it can be seen that India – as one of the high growth economies – is amongst the countries having negative average IRGD, along with other countries such as China, Russia and Singapore.
- Also, the graph given below shows that since 2003, India's IRGD has been negative and the lowest for the major OECD countries.

Does crowding out really happens in India?

- Economic research shows that for emerging economies like 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.
- There has been no evidence of crowding out in India over the last three decades post liberalization.
- Thus, an expansionary fiscal policy in India neither leads to neglect of the private sector nor does it lead to decline in the economic growth.

Structure Of India's Debt:

A cross-country comparison of debt levels points out the following points for India:

- The 'government debt 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 per cent of GDP' are the lowest amongst the group of G-20 OECD countries and also among the group of BRICS nations.
- Public debt and overall debt level for India has declined since 2003 and has been stable since 2011.
- Share of External Debt: The government's debt portfolio which is external in nature (i.e. borrowed from outside the country) is only 2.7 per cent of GDP (5.9 per cent of total Central Government liabilities). This denotes very low foreign exchange risk.
- Distribution of Debt Between the Centre and the States: Of the total public debt, 70 per cent is held by the Centre and only 30 percent by the states. This distribution of debt between the Centre and the states is desirable since the central government is entrusted with the responsibility of macro-economic management.
- Maturity profile of India's Public Debt: India majorly issues longer tenure bonds for raising funding which ensures that there is no immediate pressure of returning the principal and paying the interest. This provides breathing space to projects and helps in generating revenue.
- Nature of Rate of Debt: The share of floating rate debt is very low in the overall public debt. Floating debt rate of Central government is less than 5 per cent of public debt). This tends to limit rollover risks and insulates the debt portfolio from volatility in interest rate.
- Fig: Showing distribution of public debt between the Centre-States and Share of External Liability and Internal Liability in the public debt

Scenario analysis: Is India's current debt sustainable?

The Economic Survey concludes that India's debt will remain sustainable due to the following factors:

- Since 'crowding out' of the private investment is not a phenomenon present in India, an increase in the general government debt-to-GDP correlates with lower (not higher) nominal interest rates.

- In the last three decades, a strong negative correlation between debt-to-GDP ratio and nominal interest rates in India is observed.
- The 5-year forward interest rates for all maturities (1 year, 5 years, 10 years, 20 years and 30 years) have been trending down sharply over the last decade.
- The IRGD is very likely to be negative for India in a 5-year horizon, thus leading to debt sustainability as previously discussed.

Policy implications for India:

- To ensure that the economy remains in good health to avail the full benefit of these significant reforms, the "economic bridge" to the medium and long-term has to be created.
- Only an active fiscal policy – one that recognises that the risks from doing too little are much more than the risks from doing too much – can ensure that this "economic bridge" is well laid out.

  During economic crises, a well-designed expansionary fiscal policy stance can contribute to better economic outcomes in two ways.

- First, it can boost potential growth with multi-year public investment packages that raise productivity.
- Second, there is a risk of the Indian economy falling into a 'low wage-growth trap', as has happened in Japan during the last two decades. Implementing the NIP via front-ended fiscal spending could generate higher-paying jobs and boost productivity.

Conclusion:

The Economic Survey prescribes an expansionary counter-cyclical fiscal policy to usher growth and lower the debt-to-GDP ratio. It points out that it is not prudent to be too scared of debt.

The Survey's effort is thus to provide the intellectual anchor for the government to be more relaxed about debt during a time of economic crisis such as the one we are witnessing. Once growth picks up in a sustainable manner, it will be the time for fiscal consolidation.

Practice Question

- "Governments may have a natural proclivity to spend leading to higher fiscal deficit, unsustainable debts and lower economic growth in the long term". Critically analyse the statement while explaining the necessity of counter-cyclical fiscal policies during an economic slump.
- What are Fiscal multipliers and why are they disproportionately higher during economic crises than during economic booms? Elucidate the statement by giving suitable examples.
- Explain the phenomenon of 'crowding out of private investment' as a result of increased public expenditure. Give a comparison with regard to the presence of this phenomenon between advanced and emerging economies of the world.
- Give a detailed outlook of the 'public debt profile' of India and comment whether public debt in India is sustainable or not. Justify your answer with suitable data and figures.
- Comment on the 'causality' between growth rate and debt sustainability by presenting a cross-country comparison for the same with special focus on India.
- Explain debt sustainability. Does growth lead to debt sustainability?

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CHAPTER: 3

Does India's Sovereign Credit Rating Reflect Its Fundamentals? No!

Key-Terms

- **Sovereign credit rating:** A sovereign credit rating is an independent assessment of the creditworthiness of a country or sovereign entity.
- **Sovereign debt (government debt or public debt):** It is **debt issued by the national government in a foreign currency** in order to finance the issuing country's growth and development. Sovereign debt can either be:
  - **internal debt**- debt owed to lenders who are within the country, or
  - **external debt**- debt owed to lenders in foreign areas

  The **stability** of the issuing government can be provided by the country's **sovereign credit ratings** which help investors weigh risks when assessing sovereign debt investments.
- **Stress test estimate:** Stress testing helps **gauge investment risk and the adequacy of assets**, as well as to help evaluate internal processes and controls.

$$\text{Stress Test estimate} = (-)\ \frac{\text{Forex Reserves Net of Short Term Debt}}{\text{Standard Deviation of Forex Reserves}}$$

- Countries with more comfortable forex reserves can withstand larger negative standard deviation shocks. Hence **larger negative value of stress test estimate suggests better forex reserve position**
- **Changes in ratings**: it can be classified as upgrade or downgrade. The **downgrade credit ratings reflect increasing risks** that economic growth of a country will remain materially lower than in the past. It can lead to **massive foreign fund outflows.**
- **Pro-cyclical nature of credit ratings:** The behaviour of CRAs has been **pro-cyclical**, that is often seen to aggravate crises and fuel bubbles.They are too **lenient when the times are good,** and **too harsh when economic conditions worsen,** making booms and busts that much more dramatic.

Introduction

- Sovereign credit ratings map the probability of default and therefore reflect the willingness and ability of borrower to meet its debt obligations.
- When favourable, these can facilitate countries access to global capital markets and foreign investment.
- The three key CRAs that seek to measure Sovereign credit ratings are – S&P, Moody's and Fitch.

- Sovereign credit ratings broadly rate countries as either investment grade or speculative grade, with the latter projected to have a higher likelihood of default on borrowings.

The Bias Against Emerging Giants in Sovereign Credit Ratings

- Economic Survey 2020-21 argues that 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.

India's Sovereign Credit Ratings

- This anomaly in sovereign credit ratings has continued for India. India's sovereign credit rating downgrades during 1998-2018are 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, inrecognition of higher economic growth prospects and strengthened fundamentals of the Indian economy.
- Indian economy grew at an average rateof over six per cent and at approximately eight per cent in several years during this period. Still, India's high rate of economic growth co-existed with a sovereign credit rating of "speculative grade".

Does India's Sovereign Credit Rating 'Actually' Reflect its Fundamentals?

- India's sovereign credit ratings do not reflect its fundamentals.
- Within its sovereign credit ratings cohort – countries rated between A+/A1 and BBB-/Baa3 for S&P/ Moody's – India is a clear negative outlier on several parameters.
- Figure 5 shows a positive correlation between sovereign credit ratings and GDP growth rate across India's cohort.
- A negative correlation is observed between sovereign credit ratings and Consumer Price Index (CPI) inflation (Figure 6) across India's sovereign credit ratings cohort.
- In both the cases, India can clearly be seen as a negative outlier i.e. it is currently rated much below expectation for its level of GDP growth and CPI inflation.

Does India's Sovereign Credit Rating Reflect its Willingness and Ability to Pay?

- **India's willingness to pay is unquestionably demonstrated through its zero sovereign default history.**
- Within India's sovereign credit ratings cohort, India is rated much below expectation for its number of sovereign defaultssince 1990 (which is zero for India), making it a negative outlier.
- **India's sovereign external debt as per centof GDP stood at a mere four per cent as of September 2020**.
- India's sovereign foreign denominated debt is met through India's forex reserves.
- India's non-governmentshort term-debt as per cent of forex reserves stood at 19 per cent as of September2020.
- As shown by stress test estimate, **India's forex reserves can cover an additional 2.8 standard deviation negative event.**

Effect of Sovereign Credit Rating Changes on Select Indicators

- Economic Survey 2020-21 has examined the effect of changes in India's sovereign credit ratings during 1998-2018 on selectindicators – **stock market return, foreign exchange rate, yield on government securities and foreignportfolio investment flows.**
- **As ratings do not captureIndia's fundamentals, it comes as no surprise that past episodes of sovereign credit rating changesfor India have not had major adverse impact on select indicators** such as Sensex return, foreignexchange rate and yield on government securities.

Macroeconomic Indicators as Determinants of Sovereign Credit Rating Changes

- **There is no or weak correlation between episodes of sovereign credit ratings changes and select fiscal and macro-economic indicators of India**.
- It may be seen that **during years of India's sovereign credit rating changes, the average performanceof macroeconomic indicators was better than or similar to the previous year**.

Policy Implications

- The Survey questioned whether India's sovereign credit ratings reflect its fundamentals.
- It found evidence of a systemic under-assessment of India's fundamentals as reflected in its low ratings over a period of at least two decades.
- **While sovereign credit ratings do not reflect the Indian economy's fundamentals, noisy, opaque and biased credit ratings canaffect equity anddebt FPI flows of developing countries, causing damage and worsening crisis.**
- **Sovereign credit ratings methodology**must be amended to reflect economies' ability and willingness to pay their debt obligations by**becoming more transparent and less subjective**.
- **The pro-cyclical nature of credit ratings and its potential adverse impact on economies, especially low-rated developing economies must be expeditiously addressed**.

Practice Question

- What are Sovereign Credit Ratings? Does India's Sovereign Credit Rating reflect its fundamentals?
- What are the major determinants of Sovereign Credit Ratings (SCRs)? How do changes in SCRs impact a country's economy and its financial institutions?

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CHAPTER: 4

Inequality and Growth: Confilict or Convergence

Key-Terms

Gini coefficient:

- It was developed by Italian statistician CorradoGini in 1912.
- It is a measure of the distribution of income across a population.
- It is used as a gauge of economic inequality, measuring income distribution or, less commonly, wealth distribution among a population.
- The coefficient ranges from 0 (or 0%) to 1 (or 100%), with 0 representing perfect equality and 1 representing perfect inequality.

Multidimensional Poverty

- The Multidimensional Poverty Index (MPI) identifies multiple deprivations at the household and individual level in health, education and standard of living.
- It uses micro data from household surveys, and—unlike the Inequality-adjusted Human Development Index—all the indicators needed to construct the measure must come from the same survey.
- Each person in a given household is classified as poor or non-poor depending on the weighted number of deprivations his or her household, and thus, he or she experiences.
- It uses ten indicators viz; education attainment, year of education; nutrition and mortality; andelectricity, drinking water, sanitation, cooking gas, housing, and assets.

Poverty is the parent of revolution and crime.

—Aristotle

Introduction

- The Economic Survey 2019-20 argued that ethical wealth creation – by combining theinvisible hand of markets with the hand of trust – provides the way forward for India todevelop economically.
- Some commentary, especially in advanced economies post the Global Financial Crisis, argues that inequality is no accident but an essential feature of capitalism. Such commentaries, thus, highlight a potential conflict between economic growth and inequality.
- The significant reduction in poverty that high economic growth has delivered in India and China presents the most striking challenge to this notion of conflict between economic growth and inequality.

- Choices in economic policy always present inherent trade-offs. Resolving these trade-offs in a manner that suits the specific economic context of the day is, therefore, critical to lay out clear policy objectives.
- Advanced economies may choose to focus on alleviating inequality given their stage of development.
- They may resolve the trade-off between growth and inequality by leaning towards alleviating inequality.
- However, despite facing the same trade-off, the policy objective of focusing on inequality may not apply in the Indian context given the differences in the stage of development, India's higher potential rate of economic growth and the higher absolute levels of poverty.
- This chapter of Economic Survey examines if the inequality and growth conflict or converge in the Indian context It examines the correlation of inequality and per-capita income, which reflects the impact of economic growth, with a range of socio-economic indicators.

  Growth, Inequality, and Socio-Economic Outcomes: India Versus The Advanced Economies

- In the advanced economies higher inequality leads to adverse socio-economic outcomes but income percapita, a measure of economic growth, has little impact.
- In case of India, across a range of socio-economic outcomes a stark contrast between India and the advanced economies in the correlation of socio-economic outcomes with inequality and income per capita have been observed.
- Across the Indian states, it is seen that both inequality and income per capita correlate similarly with socio-economic outcomes. inequality across Indian states is measured as the Gini coefficient of consumption
- Index of health outcomes correlates positively with both inequality and income per capita across the Indian states.
- However, across the advanced economies, inequality correlates negatively with the index of health and social outcomes while income per capita correlates positively.
- Same result using the index of education, life expectancy, infant mortality and crime respectively.
- Neither inequality nor income per capita among Indian states correlate strongly with drug usage; however, inequality correlates strongly with drug usage in the advanced economies.
- On mental health, the effects of inequality and income per capita remain similar across the Indian states and the advanced economies.

Are the patterns similar across different types and measures of inequality and different time periods?

- There is a relationship between the two types of inequality in Indian states i.e.,
  - the inequality in the ownership of asset measured by the Gini coefficients based of assets
  - the inequality of consumption measured by the consumption based Gini.
- It was shown that states with greater consumption inequality are the ones facing greater asset inequality as well.
- Inequality of consumption is what matters the most rather than inequality of assets or inequality of income. .
- Further, savings and borrowing 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.

Poverty And Inequality Tradeoff In China

- **China has made exceptional strides in reducing its extreme poverty rates since 1970s.** As per data from China National Bureau of Statistics, **the head count ratio of poverty has reduced by 94 per cent from 1980 to 2015 in rural China.**

- By the official poverty line, which is about 21 per cent higher than the line that is set at USD 1.9 per day (2011 PPP), since 1980, the country has made remarkable progress in reducing poverty.
- In contrast **Gini coefficient of income distribution among rural residents in China rose from 0.241 in 1980 to 0.39 in 2011 or by 62 per cent according to the official estimation**.
- **World Bank research also argues that benefits of China's sustained economic growth have really trickled down.**
- 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.
- Good system of equal land ownership reforms, social development programs in rural areas since 2000 (including universal compulsory education up to grade 9, rural medical cooperative system, social pension system for rural residents, and a minimum living allowance scheme) and targeted poverty reduction programs, is in place nationally since 1986. **China is now on road to end extreme poverty by 2030.**

Is Perfect Equality Optimal?

- Since inequality and income per capita do not diverge in their relationship with socio-economic outcomes in India, now it is worth asking: is perfect equality optimal?
- Perfect equalisation of outcomes ex-post, i.e., after the efforts have been exerted to obtain those outcomes, can reduce individuals' incentives for work, innovation and wealth creation.
- **In most cases, inequality of opportunity is much more objectionable than inequality of outcomes,** as individuals' opportunities are influenced by endowments that are related to parents and other adults, peers, and a variety of chance occurrences throughout their lifetimes.
- For a developing country such as India, where the growth potential is high and the scope for poverty reduction is also significant, **a policy that lifts the poor out of poverty by expanding the overall pie is preferable as redistribution is only feasible if the size of the economic pie grows rapidly**

'Inequality' Or 'Poverty'?

- **Inequality needs to be distinguished from poverty.** Inequality refers to the degree of dispersion in the distribution of assets, income or consumption. Poverty refers to the assets, income or consumption of those at the bottom of the distribution.
- **Poverty could be conceptualized in relative terms or in absolute terms**. People feel themselves to be poor, and think others to be poor if they have substantially less than what is commonplace among others in their society.
- Poverty, in this view, is relative deprivation. If the poverty is conceptualized in relative terms, there is no need to distinguish it from inequality. **A relative measure of poverty is indeed a measure of inequality.**

Relative Impact Of Economic Growth And Inequality On Poverty In India

- The data for four years (1993, 1999, 2004 and 2011) suggests an overall strong negative relationship, implying that the states with greater income or high per capita NSDP (Net state domestic product) experienced low rates of poverty and vice versa.
- However, such **strong relationship is absent between inequality and poverty**. There does not exist any correlation between inequality and poverty among the Indian states leading to an ambiguous conclusion.
- States that witnessed large reduction in poverty, using the official estimates based on consumption, experienced proportional reductions in multi-dimensional poverty as well.
- **Improvement in poverty also alleviates poverty measured along multiple dimensions and vice versa.**

Correlation between economic growth and multi-dimensional poverty

- World Bank (2000) found that India could achieve sustained decline in poverty during 1970s-1990s only when the GDP growth picked up from 3.5 per cent in the initial years. Also, rise in the growth of mean consumption was responsible for approximately 87 per cent of the cumulative decline in poverty, while redistribution contributed to only 13 per cent.
- More recently in 2019 analysing six decades of data from 1957 to 2012 for India, find that the growth reduced poverty, and their association has acquired more strength after the 1991 reforms.
- It was also found that **pattern of growth has changed significantly after 1991.Poverty is concentrating more and more in urban areas, as now one-in-three poor is living in urban areas**, which was about one-in-eight in the early 1950s.
- **In the post-liberalisation period urban growth and non-agricultural growth has emerged as a major driver of national poverty reduction including rural poverty.**

Conclusion

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.

Practice Question

- Economic growth has a far greater impact on poverty alleviation than inequality. Discuss
- Economic growth and inequality converge in terms of their effects on socio-economic indicators in India. Comment

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CHAPTER: 5

Healthcare takes Centre stage, Finally!

Key-Terms

The Quality and Outcomes Framework (QOF)

- QOF is a system designed to remunerate general practices for providing good quality care to their patients, and to help fund work to further improve the quality of health care delivered.
- It is a system for the performance management and payment of general practitioners (GPs) in the National Health Service (NHS) in England, Wales, Scotland and Northern Ireland.
- It is a fundamental part of the General Medical Services (GMS) Contract, introduced in 2004.

Oligopoly

- An oligopoly is a market form wherein a market or industry is dominated by a small group of large sellers.
- Oligopolies can result from various forms of collusion that reduce market competition which then leads to higher prices for consumers and lower wages for the employees of oligopolies.

Salience bias

- Salience bias refers to the fact that individuals are more likely to focus on items that are more prominent and ignore those that are less so.

> "It is health that is real wealth and not pieces of gold and silver."
>
> —Mohandas K. Gandhi

Introduction:

- The recent COVID-19 pandemic has emphasized the importance of the healthcare sector and its inter-linkages with other key sector of the economy.
- The ongoing pandemic has showcased how a healthcare crisis can get transformed into an economic and social crisis.
- Given its potential to provide healthcare access in remote areas, telemedicine needs to be harnessed to the fullest by especially investing in internet connectivity and health infrastructure.
- As a bulk of the 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.

- 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.

Covid-19 and India's health care policy

- Following the Covid-19 pandemic, a key portfolio decision that healthcare policy must make is about the relative importance placed on communicable versus non-communicable diseases.
- As pandemics represent rare events, healthcare policy can become a victim of "saliency bias", which involves over-weighting recent phenomena.
- 71 per cent of global deaths and about 65 per cent of deaths in India are caused by non-communicable diseases.
- Further, preventing communicable diseases requires focus on better sanitation and drinking water, which the Swachh Bharat and the Har Ghar Jal Abhiyan campaigns are focusing on.

What are the issues with Indian Healthcare system?

- Despite improvements in healthcare access and quality (healthcare access and quality scored at 41.2 in 2016, up from 24.7 in 1990), India continues to underperform in comparison to other Low and Lower Middle Income (LMIC) countries.
- On quality and access of healthcare, India was ranked 145th out of 180 countries (Global Burden of Disease Study 2016).
- Only few sub-Saharan countries, some pacific islands, Nepal and Pakistan were ranked below India.

Poor health outcomes

- As seen in figure despite improvements in MMR and IMR, India still needs to improve significantly on these metrics.
- Countries such as China, Bangladesh, Bhutan, Cambodia, etc. have improved much more on these metrics than India.

Low access and utilisation

- At 3-4 per cent, the hospitalisation rates in India are among the lowest in the world; the average for middle income countries is 8-9 per cent and 13-17 per cent for OECD countries (OECD Statistics).
- The low hospitalisation rates reflect lower access and utilisation of healthcare in India.

Inequality in health care

- Though decreasing in recent years, inequity persists in availability of healthcare.
- In recent times, the percentage of the poorest utilising prenatal care through public facilities has increased from 19.9 per cent to 24.7 per cent from 2004 to 2018, and there is a similar increase in the percentage of the poor accessing institutional delivery as well as post-natal care.

Low budget allocations for healthcare

- As health is a state subject in India, spending on healthcare by states matters the most when examining government healthcare spending. According to National Health Accounts, 2017, 66 per cent of spending on healthcare is done by the states.
- India ranks 179th out of 189 countries in prioritization accorded to health in its government budgets (consolidated union & state government).

Low public health expenditure as compared to other countries

- An increase in public 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.
- 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 outof- pocket payments made for healthcare.
- OOP for health increase the risk of vulnerable groups slipping into poverty because of catastrophic health expenditures.

The state expenditure on healthcare highly variable across states

- The state expenditure on healthcare is highly variable across states and is not fully explained by the income level of the state.
- While healthcare spending per capita increases with the GSDP per capita, healthcare spending as a per cent of GSDP decreases with the GSDP per capita. Thus, the richer states are spending a lower proportion of their GSDP on healthcare.
- The states that have higher per capita spending have lower out-of-pocket expenditure, which also holds true at global level.

Low human resources for health

- World Health Organization (WHO) identified an aggregate density of health workers to be 44.5 per 10,000 population and an adequate skill-mix of health workers to achieve composite SDG tracer indicators index by 2030.
- The WHO also specified a lower range of 23 health workers per 10,000 population to achieve 80 per cent of births attended by skilled health professionals.
- Although aggregate human resources for health density in India is close to the lower threshold of 23, the distribution of health workforce across states is lop-sided.

Unregulated private enterprise in an industry marked by high level of market failure

- While the share of public institutions has increased both in hospital and outpatient cares, the private sector dominates in total healthcare provision in India.
- Around 74 per cent of outpatient care and 65 per cent of hospitalisation care is provided through the private sector in urban India.

What are the inherent characteristics of healthcare system?

Healthcare systems do not self-organise using the force of free markets because of three key inherent and unchanging characteristics:

- Uncertainty/variability of demand;
- Information asymmetry; and
- Hyperbolic tendencies.

Hence, any active system design of healthcare must be mindful of these inherent characteristics.

Need for system design in healthcare

- 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.

International Experience in Regulating Healthcare

Australia

- National Safety and Quality Health Service (NSQHS) Standards developed by the Australian Commission on Safety and Quality in Health Care (ACSQHC) are part of the Australian Health Services Safety and Quality Accreditation Scheme endorsed by the Australian health ministers in 2010.

England

- Following the 2012 Health and Social Care Act, the NHS in England has undergone considerable change, with reform implementation continuing. In addition to regulators professional statutory bodies also have an important role in England.
- Currently, they use a mix of enforcement and punishment to ensure compliance.

Finland

- The Finnish Constitution sets out the requirement that government must provide adequate care for all, providing the legal foundation for national regulation such as the 1992 Act on the Status and Rights of Patients.

Netherlands

- The Dutch government has defined quality of care in terms of effectiveness (clinical effectiveness; patient safety), patient centeredness and cost-efficiency, which form the basis of the regulatory system and national regulation.

USA

- The 2010 Affordable Care Act required the Department of Health and Human Services (DHHS) to develop a National Strategy for the Improvement of Heath Care (National Quality strategy). The Nursing Home Reform act (OBRA'87) deals with nursing home regulation.
- The National Quality Strategy is a developing strategy guided by DHHS as an attempt to set national aims and priorities in healthcare quality improvement. The strategy has three aims: better care, healthy people and communities, and affordable care.
- The **OBRA'87** deals with nursing home regulation; it defines regulatory standards for nursing homes at the federal level, supplemented by individual state laws.

Telemedicine

- Impressive growth has been seen in the adoption of telemedicine in India since the outbreak of the COVID-19 pandemic. This coincided with the imposition of lockdown in India and the issuance of the Telemedicine Practice Guidelines 2020 by the Ministry of Health and Family Welfare (MoHFW) on March 25, 2020.
- **eSanjeevani OPD (a patient-to-doctor tele-consultation system)** has recorded almost a million consultations since its launch in April 2020.
- 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.

Way Forward:

Long-term healthcare priorities

- Countries with much higher healthcare investments and concomitant health infrastructure have struggled to contain the pandemic. The next health crisis may not possibly involve a communicable disease. Therefore, India's healthcare policy must continue focusing on its long-term healthcare priorities.
- Simultaneously, to enable India to respond to pandemics, the health infrastructure must be agile. For instance, every hospital may be equipped so that at least one ward in the hospital can be quickly modified to respond to a national health emergency while caring for the normal diseases in usual times.

Role of technology-enabled platforms

- The ongoing COVID-19 pandemic has helped showcase the role of technology-enabled platforms as an alternate distribution channel for remote delivery of healthcare services.
- These technology-enabled platforms offer a promising new avenue to address India's last-mile healthcare access and delivery challenges. These technology platforms coupled with digitization and the promise of artificial intelligence at-scale, have led to a drastic uptake in the utilisation of telemedicine for primary care and mental health.
- Given India's unique last mile challenges, such technology-enabled solutions need to be harnessed to the fullest. As we show, telemedicine depends crucially on internet connectivity and health infrastructure.
- Therefore, both Central and the State governments need to invest in telemedicine on a mission mode to complement the government's digital health mission and thereby enable greater access to the masses.

Role of the National Health mission

- The National Health mission has played a critical role in mitigating inequity in healthcare access. The percentage of the poorest utilising prenatal care through public facilities has increased from 19.9 per cent to 24.7 per cent from 2004 to 2018.
- Similarly, the percentage of the poorest accessing institutional delivery increased from 18.6 per cent to 23.1 per cent and from 24.7 per cent to 25.4 per cent for post-natal care.
- The poorest utilising inpatient care and outpatient care has increased from 12.7 per cent to 18.5 per cent and from 15.6 per cent to 18.3 per cent. Therefore in conjunction with Ayushman Bharat, the emphasis on NHM should continue.

Health Insurance

- With limited visibility into patients' medical records and no standardised treatment protocols, insurance companies have a risk of adverse selection at the time of policy issuance and a risk of moral hazard at the time of claims.
- To safeguard against this risks, insurance companies resort to high premiums and restriction of services covered in the insurance policy.
- Addressing this information asymmetry can help lower premiums, enable the offering of better products and help increase the insurance penetration in the country.

Practice Question

- Following the Covid-19 pandemic, a key portfolio decision that healthcare policy must make is about the relative importance placed on communicable versus non-communicable diseases. Elaborate.
- As pandemics represent rare events, healthcare policy can become a victim of "saliency bias". Comment.
- Better health infrastructure is no guarantee that a country would be able to deal better with devastating pandemics like Covid-19. In this context, discuss the need of building the healthcare system generally rather than a specific focus on communicable diseases.
- Health status of any country crucially depends on the available health infrastructure in general and human resources for health. Discuss the statement in context of India with suitable example.

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CHAPTER: 6

Process Reforms: Enabling Decision-making under uncertainty

Key-Terms

- **Liquidation** - It is the process of bringing a business to an end and distributing its assets to claimants. It is an event that usually occurs when a company is insolvent, meaning it cannot pay its obligations when they are due.

Introduction

In this chapter, the issue of over-regulation is illustrated through a study of time and procedures taken for a company to undergo voluntary liquidation in India. Using the framework of incomplete contracts, the chapter argues that the problem of over-regulation and opacity in Indian administrative processes flows from the emphasis on having complete regulations that account for every possible outcome. This is due to the inadequate appreciation of the difference between 'Regulation' and 'Supervision', on the one hand, and the inevitability of incomplete regulations, on the other hand. Real-world regulation is inevitably incomplete because of the combination of:

- bounded rationality due to "unknown unknowns",
- complexity involved in framing "complete" contracts across all possible contingencies, and
- 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 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.

The Problem of Regulatory Effectiveness

It is often believed that India's regulatory problems are due to the lack of regulatory standards and poor compliance to process. International comparisons, however, show that India ranks better than its peers on having regulatory standards in place and compliance to process.

- The **'World Rule of Law Index' published by the World Justice Project** provides cross country comparison on various aspects of regulatory enforcement.
- In 2020, **India's rank is 45 out of 128 countries** in the category of 'Due process is respected in administrative proceedings' (proxy for following due process).

- India stands at 89th rank in 'Administrative Proceedings are conducted without unreasonable delay' (proxy for timeliness) and 107th in 'Administrative Proceedings are applied and enforced without improper influence' (proxy for rent seeking).
  - This shows that India is relatively good at complying with processes, but lag in regulatory effectiveness.
- India's performance has improved significantly in following due process in administrative proceedings, with its rank improving from 72 in 2015 (out of 102 countries) to 45 in 2020 (out of 128 countries).

India's rank in various categories of regulatory enforcement		
	2015	2020
Regulatory Enforcement overall rank	69	74
Government regulations are effectively enforced	87	104
Government regulations are applied and enforced without improper influence	74	107
Administrative proceedings are conducted without unreasonable delay	75	89
Due process is respected in administrative proceedings	72	45
Number of Countries	102	128

- The index shows that United Kingdom, United States, Singapore and Canada are placed much better than India in case of both, following due process and regulatory effectiveness.
- India is placed better than other BRICS countries (barring South Africa) in terms of respecting due process, but, worse than them in the effectiveness of those standards.
- The World Bank's Ease of Doing Business (EoDB) report (2020) shows that despite making huge strides in the overall EoDB rank.

The Inevitability Of Incomplete Regulations

The problem of over-regulation stems from not recognizing the inevitability of incomplete contracts and regulations in a world of uncertainty. Real world contracts are inherently incomplete because of three key reasons that reinforce one another's influence.

- **First**, as Herbert Simon has highlighted in his the Nobel-prize winning work, humans are bounded rational because the future comprises of "unknown unknowns." Note that radical uncertainty of "unknown unknowns" is fundamentally different from the notion of risk as defined by Frank Knight.
- **Second**, as another Noble-prize winning work on incomplete contracts by Oliver Hart highlights, complexity in framing contracts arises from the difficulties involved in anticipating and specifying all obligations for all parties in full across all possible contingencies. In fact, with radical uncertainty, it is impossible to know the possible characteristics of all the future states of the world. Therefore, writing complete contracts that will efficiently fit every future situation is inherently impossible in the real world.
- **Finally,** because of these two features, a third party may be able to observe outcomes ex-post but cannot verify ex-ante decisions unambiguously

  Incomplete regulations become inevitable when the reality of incomplete contracts is acknowledged. Thus, the reality of incomplete contracts leads to inevitability of incomplete regulation. This makes some discretion unavoidable.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 waysin 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. In short, a complex, uncertain world makes discretion inevitable where over-regulation, not simpler regulation, leads to excessive and opaque discretion.

Problem Of Regulatory Default

From the discussion in the previous sections, it is clear that there is a need to create simple regulation and complement the same by providing flexibility and discretion to the supervisor.

Problems are listed below:

- More regulation is added over time regardless of its effectiveness.
- Discretion is not provided or exercised even when there is a case to do so.
- Discretion is questioned with the benefit of hindsight
- Government departments follow default precedent

Solving For Discretion

There is no substitute for active supervision and discretion. Specifically, ex-ante regulation cannot substitute for ex-post supervision; in fact, more ex-ante regulation only serves to dilute the quality of ex-post supervision by fostering opaque discretion.

- **Strengthen ex-ante accountability -** The property rights literature based on incomplete contracts argues for the strengthening of governance in institutions by vesting more power in boards and then holding them accountable ex-ante. Instead of relying too much on ex-post audits, which anyway suffer from hindsight bias, ex-ante accountability needs to be entrusted with the boards of institutions.
- **Bring transparency in the decision-making process -** 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.
- **Build resilient ex-post resolution mechanism -** When outcomes are uncertain, it is important to have a resilient ex-post resolution mechanism. Despite having all regulations in place and best efforts to deal with effective supervision ex-ante, devising a robust ex-post resolution mechanism is imperative. Thus, adding ex-ante complexity to contracts and regulations, or risk analysis cannot resolve this issue.

Direction Of Administrative Process Reforms

The above approach has several implications that are already informing recent reforms.

- The need for process simplicity extends to the institutional architecture as well. The ultimate source of supervision is public scrutiny and public leadership. Since it is not possible for the public to scrutinize everything, the focus should be on a strong but limited state, rather than weak and all pervasive state. This is in line with government's idea of 'Minimum Government and Maximum Governance'.
- Finally, there is a case for enacting Transparency of Rules Act to end any asymmetry of information regarding rules and regulations faced by a citizen.The reform solves for the problem that rules frequently change and often the citizen has to follow a long paper trail of circulars and notifications to know the current requirements.Further, all laws, rules and regulations will have to be presented as an updated, unified whole at all times. This will bring transparency and simplify the understanding of regulations.

Conclusion

Discretion, however, needs to be balanced with transparency, systems of ex-ante accountability and ex-post resolution mechanisms. The experience with GeM portal for public procurement illustrates how transparency not only reduces purchase prices but also provides the honest decision maker with a clean process. However, the above intellectual framework has already informed reforms ranging from labour codes to removal of onerous regulations on the BPO sector. The same approach is also reflected in the rationalisation of autonomous bodies.

Practice Question

- It is not possible to have complete regulations in a world. The evidence, however, shows that India over-regulates the economy. Critically examine
- Discuss in detail the problem of over-regulation and opacity in Indian administrative processes in context of Indian Economy.
- What can be the optimal solution to resolve the issue of over- regulation in the administrative processes?

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CHAPTER: 7

Regulatory Forbearance: An Emergency Medicine, Not Staple Diet

IMPORTANT TERMS

- **Asset Quality Review:** Special inspection, conducted in 2015-16, by RBI of selected banks' balance sheets in random to check the genuine nature of bank assets.
- **Interest Coverage Ratio:** It measures how many times a company can cover its current interest payment with its available earnings. The interest coverage ratio is used to determine how easily a company can pay its interest expenses on outstanding debt.
- **Capital Adequacy Ratio:** It is also known as Capital-to-Risk-weighted-Asset Ratio (CRAR). It is the ratio of a bank's capital in relation to its risk weighted assets and current liabilities. It is used to protect depositors and promote the stability and efficiency of financial systems around the world.

Introduction

- **Regulatory forbearance** for banks involves relaxing the norms for restructuring assets, where restructured assets are no longer required to be classified as Non-Performing Assets (NPAs henceforth) and therefore do not require the levels of provisioning that NPAs attract.
- In this chapter, survey talks about the adverse impacts of continuing Regulatory forbearance long after the economic recovery, viz.
- Bank restructuring loans even for unviable entities, inflated profits thus increased dividend to shareholders leading to severe undercapitalization also incentivizing risky lending practices including lending to zombies.
- Misallocation of credit not only damages the quality of investment in the economy but also leads to deterioration in corporate governance.

What Is The Policy Of Regulatory Forbearance?

- In 2008, anticipating the global financial crisis, RBI introduced the policy of regulatory forbearance.
- It relaxed the norms for restructuring stressed assets - downgrading the asset to non-performing status was no longer mandatory and required no additional provisioning.

Without Forbearance	With Forbearance
1. If the project is viable, the bank would restructure the asset and downgrade it to a Non-Performing Asset (NPA) and provision for the same.	1. If the project is viable, the bank would restructure the asset. As restructured assets do not require the smae level of provisioning as NPAs, inadequate provisions are made.
2. It the project is unviable, teh bank would not restructure the loan and declare the asset as non-performing. Crucially, banks do not gain by restructuring unviable projects in this case.	2. Capital-starved banks now have an incentive to restructure even unviable projects to reduce procisioning and avoid the consequent hit on capital.

- Forbearance thus incentivizes banks to take risks by restructuring stressed assets even if they are unviable.

Risk-shifting: It is shifting of risk away from equity holders to depositors and taxpayers. Capital-constrained entities are particularly susceptible to investing in risky projects. As Forbearance allows equity owners to restructure loans without any additional cost, they choose to restructure even unviable projects when the opportunity arises under a forbearance regime. Hence equity owners gain if the risks pay off and if the risks fail the cost would be borne by the depositors/taxpayers, thus shifting the risk away from equity holders to depositors and taxpayers.

The Originial Sin: The Seven Year Forbearance!

- As per regulations prevalent before August 2008, non-industrial non-SME accounts classified as 'standard assets' were to be re-classified as 'sub-standard assets' upon restructuring.
- The new relaxed norms entitled borrowers to retain the same asset classification upon restructuring, subject to a few conditions.
- Since accounts would no longer be classified as sub-standard on restructuring, banks were no longer required to make the general provision on total outstanding for substandard assets.
- The relaxed norms were extended to already restructured loans as well. Note, before 2008, only loans with no prior history of restructuring were considered for restructuring.

The survey argues that forbearance should have ended by 2011-12 as most of the important economic indices were showing signs of recovery.

P.J. Nayak Committee (2014) highlighted in its report submitted in May 2014 the **twin concerns** stemming from the forbearance regime: **ever-greening of loans** by classifying NPAs as restructured assets and the resultant **undercapitalization of banks**. After the discontinuation of forbearance policy in 2015, RBI in its Asset Quality Review came to know exact amount of bad loans present in the banking system thus increasing NPAs significantly from 2014-15 to 2015-16.

Extended Forbearance Or Early Resolution: International Evidence

- International experience shows us that **Early Resolvers** like Brazil, Canada, Germany, USA etc. had a lower **average peak NPAs** (global average 3.22%, 2009-10) after the GFC as compared to **Late Resolvers** like India, China, Italy, Turkey etc. (global average 9.83%, 2015-19).

Adverse Impact Of Forbearance On Bank Performance And Lending

- **Undercapitalization of Banks**: Forbearance lets undercapitalized banks operate without raising capital.
- **Lending to zombie firms:** Reduction in the capital distorts the incentives of the bank owners and incumbent management, making banks more risk seeking (risky lending and shady lending practices).
- **Ever-greening of loans:** Banks also 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.
- **Weakening of Corporate Governance:** The increased influence of the incumbent management resulted in the weakening of the firms' governance.
- **Deterioration in the Quality of the Board:** Promoters are the controlling shareholders in most Indian firms, the non-promoter directors are specifically required to uphold the interests of minority shareholders.

- **Inefficient allocation of capital by borrowers that benefited from forbearance:** Aided by poor governance, beneficiary firms under the forbearance regime also seem to have misallocated capital in unviable projects.
- Mis-appropriation of resources by borrowers that benefited from forbearance:
  - Strong management influence and declining governance may lead to increase in private benefits being redirected to the firms' management at the cost of minority shareholders.
  - The internal governance of the firms weakened, misappropriation of resources increased, and their fundamentals deteriorated.
- Deterioration in performance of borrowers benefiting from forbearance
- Increased defaults by borrowers benefitting from forbearance:
  - The proportion of restructured firms that became defaulters increased by 51% in the forbearance period, while the pre-period increase was comparatively marginal (by 6%).
  - On a macroeconomic front, under the forbearance window, a higher share of restructured firms within an industry was also associated with a decrease in the entry of new firms in the industry.

Bank Clean-Up Without Adequate Capitalization

Bank Clean-up refers to detailed **Asset Quality Review** (AQR) by RBI to know the true status of Banks' NPAs to reduce information asymmetry in the Banking Sector.

- The crucial difference vis-à-vis bank clean-ups in the rest of the world:
  - Unlike rest of the world, In India, AQR was conducted in a period of relative economic stability and RBI assumed that markets would supply the required capital to banks once their books are cleaner.
  - AQR was done under the presumption that the extent of additional loan provisioning required due to the clean-up would not generate needs for a severe recapitalization of the banks.
- **The inadequate clean-up of bank balance sheets:** AQR exercise significantly under-estimated the full extent of NPAs and required capital infusion. Hence, the RBI audit missed some severe cases of ever-greening by these banks.
- **Under-estimation of required bank capital:** 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 crore in the next three years under **Mission Indradhanush**. However, by the end of FY2019, the government had infused INR 2.5 lakh crores in the public sector banks.

MISSION INDRADHANUSH: It is a seven-pronged plan launched by Government of India to resolve issues faced by Public Sector banks. It aims to revamp their functioning to enable them to compete with Private Sector banks. The 7 elements are:

- **Appointment**: Separation of posts of Chairman and Managing Director to bring more professionalism.
- B**ank Board Bureau**: will replace the appointments board of PSBs.
- **Capitalization**: by infusing equity capital.
- **De-stressing**: Strengthening Asset Reconstruction Companies and Establishment Repository of Information on Large Credits (CRILC) by RBI to collect store and disseminate credit data to banks.
- **Empowerment**: Greater autonomy for banks and more flexibility for hiring manpower.
- **Framework for accountability**: through key performance indicators for PSBs
- **Governance reforms:** "GyanSangam" conference of PSBs and Financial institutions attended by all major stake-holders.

- **Adverse impact on lending:** As the banks were unable to raise adequate fresh capital after the clean-up, their lending reduced.

- **Decline in Firm's Capital Investment:** Firms more exposed to the AQR- affected banks could not entirely replace their credit supply from other financial institutions. Thus, these firms became financially constrained and reduced their capital expenditures, leading to ongoing projects being stalled.

  In sum, the clean-up of bank balance sheets undertaken under the AQR exacerbated the problems created by the prolonged period of forbearance.

Implications For The Current Forbearance Regime

- Policymakers should lay out thresholds of economic recovery at which such measures will be withdrawn. These thresholds should be communicated to the banks in advance so that they can prepare for the same. Prolonged forbearance is likely to sow the seeds of a much deeper crisis
- A clean-up of bank balance sheets is necessary when the forbearance is discontinued
- The asset quality review must account for all the creative ways in which banks can evergreen their loans
- Clean-up exercise should be accompanied by mandatory recapitalization based on a thorough evaluation of the capital requirements post an asset quality review.
- To avoid ever-greening and zombie lending following the current round of forbearance banks should have fully empowered, capable boards. Sound governance is a key metric to ensure that banks do not engage in distortionary lending post capital infusion. The regulator may consider penalties on bank auditors if ever-greening is discovered.

  Legal infrastructure for the recovery of loans needs to be strengthened. Judicial infrastructure for the implementation of **The Insolvency and Bankruptcy Code** (IBC) – comprised of Debt recovery tribunals, National Company Law Tribunals, and the appellate tribunals must be strengthened substantially.

Practice Question

- Regulatory Forbearance: An Emergency Medicine, Not Staple Diet! Comment.
- Which one do you think is better for Indian banking sector, identifying non-performing asset early on and resolving them or late resolution by restructuring the asset? Explain with suitable examples.
- Lax norms in Indian Banking sector are responsible for culture of default. Comment.
- Reforming governance in Indian banking sectors will not only reduce the levels of NPAs but will also improve the quality of investments in the economy. Do you agree?

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CHAPTER: 8

Industry and Infrastructure

Introduction

- The financial year 2020-21 (FY21) began amidst a global pandemic, the management of which led to countries adopting unprecedented measures that brought the economy to a grinding halt.
- The rebuilding of the Indian economy is hinged on various reform measures aimed at addressing concerns of businesses and support to livelihoods.
- India implemented policies aimed at reducing transaction costs, supporting Micro Small and Medium Enterprises (MSMEs), enhancing competition, fostering employment creation and securing sustenance through the Atmanirbhar Bharat Abhiyan.
- The performance of the industrial sector is critical given its deep backward and forward linkages with the other sectors of the economy.
- A strong industrial sector is a sine quo non for an Atmanirbhar Bharat.
- Any initiative aimed at securing a rapid recovery needs to keep industry concerns at the core of its intervention.
- A bouquet of measures equivalent to Rs 29.87 lakh crores or 15 per cent of India's GDP were introduced as a measure of relief and support to the economy.
- These were subsequently backed by initiatives to further strengthen the economy.

> - As per the latest estimates on Gross Value Added (GVA), the industrial sector is expected to record a growth of **-9.6 per cent** with an overall contribution in GVA of **25.8 per cent** in 2020-21 (FY21).
> - The contribution of the industrial sector has been constantly declining since 2011-12.
> - The fall in share is across the board except in case of 'Electricity, gas, water supply & other utility services' whose share in GVA has increased from 2.3 per cent in FY12 to 2.7 per cent in FY21.

Assessing the trends/performance in industrial sector

Index of Eight-Core Industries and Index of Industrial Production (IIP)

- The eight-core industries that support infrastructure, such as coal, crude oil, natural gas, refinery products, fertilizers, steel, cement, and electricity have **a total weight of nearly 40 percent** in the IIP.
- The eight-core index recorded its **all-time low growth of (-) 37.9** due to covid-19 led nation-wide lockdown (April-2020).
  - The eight-core industries registered (-) 2.6 per cent growth in November-2020 as compared to 0.7 per cent in November-2019 and (-) 0.9 per cent in October-2020.

- The cumulative growth of core industries during April-November 2020 was (-) 11.4 per cent as compared to 0.3 per cent during April-November 2019.

- The overall IIP broadly follows the eight-core index.
- The IIP attained a growth of (-) 1.9 per cent in November-2020 as compared to 2.1 per cent in November-2019.
- The cumulative growth of IIP for the period April-November 2020 was (-) 15.5 per cent as compared to 0.3 per cent from April-November 2019.

Analysis of IIP by weight of items

To provide another perspective on the revival of growth, the IIP was further analysed by the weight of items that have recorded growth.

- The weight of the items that recorded growth was 46.05 per cent in November-2020, which was significantly higher than 5.87 per cent in the month of April-2020.
- In the past (from Apr-12 to Feb-20), the number of items that recorded a monthly growth in the pre-COVID-19 regime had an average weight of 61.6 per cent.
- The weight of the items recording positive growth in November-2019 and November-2018 were **56**.22 per cent and 52.40 per cent, respectively.

Gross Capital Formation in the Industrial Sector

- The rate of growth of **Gross Capital Formation (GCF)** in industry registered a sharp rise from 1.2 per cent in FY18 to 17.5 per cent in FY19, showing a substantive improvement in GCF in the sector.
- Mining & Quarrying, Manufacturing, 'Electricity, Gas, Water Supply & Other Utility Services' and Construction had registered a growth rate of 14.9 per cent, 15.9 per cent, 15.3 per cent, and 24.4 per cent respectively in FY19.
- However, the share of GCF of the industrial sector had declined from 38.2 per cent in FY12 to 30.2 per cent of GDP in FY18 before an uptick (31.9 per cent) was recorded in FY19.

Credit to the Industrial Sector

- Gross bank credit to the industrial sector, on a YoY basis, recorded (-) 1.7 growth in October-2020 as compared to 3.4 per cent growth in October-2019.
- Some of the industries recorded a nominal credit growth including the construction sectors.
- The laggards in the group are 'All Engineering', 'Cement & Cement Products', and 'Basic Metal & Metal Products'which recorded a YoY negative growth in October-2020.

Performance of Central Public Sector Enterprises (CPSEs)

CPSEs

- CPSEs are operating in 4 sectors –Agriculture, Mining & Exploration, Manufacturing, and Services.
- As of January 15, 2021, based on provisional information with Department of Public Enterprises, there are 366 CPSEs as of March 2020.
- Of these, 256 are in operation, but only 171 CPSEs booked profit during FY20.

Profits made by CPSEs

- The total profit of profit-making CPSEs was ` 1.38 lakh crores in FY20, whereas the consolidated loss of loss-making enterprises was ` 44,816 crores.
- The overall net profit of the CPSEs declined by 34.6 per cent to reach ` 93,295 crore in FY20 from ` 1.43 lakh crore in FY19.

- The public sector enterprise policy enunciated by the Government in November 2020, spells a complete change in paradigm as compared to its policy of import substitution and self sufficiency which became the basis of the Mahalanobis Plan in 1956.
- However, the inherent inefficiencies leading to low productivity in the PSEs, high-cost structure and strained public finances led the GoI to privatize the PSUs after 1991.
- Thus, began the journey of privatisation/ disinvestment in the country.

Government measures to reduce its presence in commercial activities

- Under the aegis of the **Atmanirbhar Bharat Mission**, the government has proposed to rationalise the participation of the CPSEs in commercial activities.
- It has been argued that the existence of the CPSEs should only be in the 'strategic sectors'.
  - Accordingly, the number of PSEs in the strategic sector will ideally be limited to four– others would either be merged or privatized or brought under holding companies.
  - Further, the CPSEs in the non-strategic sectors would be privatized as per guidelines issued. This initiative is expected to bring healthy competition in sectors and will also assist the Government to focus extensively on 'strategic sectors.'
- **Department of Public Enterprises** has separately initiated revamping of **Performance Monitoring system** of the CPSEs to make it more objective and forward-looking based on sectoral indices/ benchmarks.

Corporate Sector Performance

- Demand conditions in the manufacturing sector moved to the path of recovery with a softer contraction of **4.3 per cent (YoY)** in nominal sales for Q2:2020-21 after a contraction of 41.1 per cent in the previous quarter due to pandemic led country-wide lockdown.
- The recovery was led by iron and steel, food products, cement, automobile, and pharmaceutical companies.
- The net profit for the manufacturing sector contracted by 7.8 per cent in Q2:2020-21

Ease of Doing Business

- As per the Doing Business Report (DBR), 2020, the rank of India in the Ease of Doing Business (EoDB) Index for 2019 has moved upwards to the 63rd position amongst 190 countries from a rank of 77 in 2018.
- India has improved its position in 7 out of 10 indicators, inching up to the international best practices.
- The DBR, 2020 acknowledges India as one of the top 10 improvers, the third time in a row, with an improvement of 67 ranks in three years. It is also the highest jump by any large country since 2011.
- As per the DBR 2020 report:
  - **Lead subcomponents** of EoDB were 'getting electricity', 'trading across borders' and others
  - **Main laggards** were 'enforcing contracts', 'registering property', 'revoking insolvency', and 'pay taxes'.

Start-up India

- To facilitate the growth of startups, GoI had announced the "**Startup India, Stand-up India"** initiative. The action plan is based on the three pillars
  - Simplification and Handholding
  - Funding Support and Incentives

- Industry-Academia Partnership and Incubation

- As on December 23, 2020, GoI has recognized a total of 41061 startups and 4,70,000 jobs have been reported by more than 39,000 startups.
- The Government has taken several initiatives to promote the startups:
    - **Startups Intellectual Property Protection (SIPP) scheme** enables a start-up to seek assistance from any empanelled facilitator to file and prosecute their application.
    - **The Fund of Funds for Startups (FFS)** with a total corpus of Rs. 10,000 crores was established with contribution spread over the 14th and 15th Finance Commission cycle based on the progress of implementation.
    - **Startup Yatra**: An initiative that include travelling to Tier 2 and Tier 3 cities of India to search for entrepreneurial talent by conducting day long boot camps.

Foreign Direct Investment (FDI)

- FDI is a one of the major sources of investment and investment financing that drives the economic growth in the country.
- The FDI equity flows have been on the upswing since FY13.
- During FY20, total FDI equity inflows were US$49.98 billion as compared to US$44.37 billion during FY19.
- The similar number for FY21 (up to September-2020) was US$30.0 billion.
- The bulk of FDI equity flow is in the non-manufacturing sector leading to a reduction in the share of manufacturing in the FDI flows.
- Within the manufacturing sector, industries like automobile, telecommunication, metallurgical, non-conventional energy, chemical (other than fertilizers), food processing, and petroleum & natural gas get the bulk of FDI equity flows.
- These industries together accounted for about 67 per cent of FDI equity flows into the manufacturing sector in FY20.

Sector Wise Issues and Initiatives

Steel

- **Current Status**
    - India is the second-largest producer of crude steel only after China.
    - India is also the second largest consumer of steel.
- However, its per capita total finished steel consumption was around 74.7 kg during FY20 as against the global average of 229 kg.
- Further, the capacity utilization in crude steel plants continues to be low.
- **Government initiatives**
    - The National Steel Policy, 2017 (NSP-17) aims at achieving a crude steel capacity of 300 million tonnes (MT) and a finished steel capacity of 230 MT with a per capita consumption of 158 kg by 2030-31.
    - Recently, the GoI has taken various initiatives under the **Atmanirbhar Abhiyan** to enhance the domestic production of steel such as
    - inclusion of '**Speciality Steel'** under the **Production Linked Incentive (PLI) scheme**
    - protecting the industry from unfair trade through appropriate remedial measures

Coal

- **Current status**
    - Coal accounts for 55 per cent of the country's energy needs.

- India is also an importer of coal, importing 248.54 MT of coal in FY20, a growth of 5.7 per cent over FY19.
- In the FY20, the production of raw coal in India was 729.1 million tonnes (MnT) with a minuscule growth of 0.05 per cent over the previous year.
- In FY21 (April-October), all India coal production was 337.52 MnT, thus declining by 3.3 per cent YoY. The contraction in production is attributable to COVID-19.

➤ **Government initiatives**

- **Creating carbon sink:** About 54500 ha land has been brought under green cover by planting 132 million trees - estimated carbon sink of 2.7 lakh tonnes of CO2 equivalent/year.
- **Two Coal Bed Methane (CBM) Projects** with considerable potential for carbon footprint reduction are in the pipeline
- Several amendments were brought into the **Coal Mines (Special Provisions) Act, 2015** through the **Mineral Laws (Amendment) Act, 2020** enacted on 13.03.2020.

Micro, Small & Medium Enterprises (MSME) s

➤ **Current status**

- **Total MSMEs:** more than 6 crores
- **Employment generation:** more than 11 crores people
- **GDP:** 30 per cent to the GDP.

➤ **Corrective and supportive measures**

- Several corrective and supportive measures have been taken to bring the sector on track. The first among those is the revision of the investment criteria in the MSME definition.
- other interventions have also been taken like the
  - **Champions Portal**
  - **Udyam registration portal**

Textile and Apparels

➤ **Current Status**

- **GDP:** 2 per cent in the overall GDP
- **Total manufacturing GVA:** 11 per cent
- **Total direct and indirect employment**: 10.5 crore people. The sector is the second-largest employment generator in the country, next only to agriculture.

➤ India is the sixth-largest exporter of textile and apparel products after China, Germany, Bangladesh, Vietnam, and Italy.

Government measures

➤ **Amended Technology Upgradation Fund Scheme (ATUFS):** to modernize and upgrade the technology of the Indian textile industry.

➤ **Scheme for Integrated textiles park (SITP)**: to provide world class infrastructure facilities

➤ **Samarth:** focuses on capacity building in the textile sector

Infrastructure

➤ **Government measures**

➤ **National Infrastructure Pipeline (NIP)** for the FY 2020-2025 to facilitated world class infrastructure projects to be implemented.

➤ The GoI set up the **Public Private Partnership Appraisal Committee (PPPAC) responsible** for the appraisal of PPP projects in the Central sector.

- In FY21, the GoI approved the continuation of the revamped **Infrastructure Viability Gap Funding (VGF)** scheme till 2024-25.

Road Sector

- **Current status**
  - **GVA (FY19):** 4.6 per cent of which the share of road transport contributed roughly 67 per cent (Figure 25).
  - With 63.86 lakh kms of rural-urban roads and national-state highways, India is next only to the United States of America that has a road network of 66.45 lakh km.
  - With the proactive policy initiatives in the sector, the road network has continuously been expanding in the country.
  - During the decade ending in FY19, the national highways recorded a CAGR of 7.25 per cent followed by rural roads (6.25 per cent) and urban roads (4.27 per cent).
  - The pace at which roads have been constructed has grown significantly from 12 kms per day in 2014-15 to 30 kms per day in FY19 before it moderated in FY20.
  - The decline in the construction of road per day in FY21 is mostly on account of the COVID-19 shock.

Civil Aviation

- India's domestic traffic has more than doubled from around 61 million in FY14 to around 137 million in FY20, a growth of over 14 per cent per annum.
- From the third largest domestic aviation market, it is expected to become the third largest overall (including domestic and international traffic) by the year FY25.

Port and Shipping

- **Current status**
  - In India, around 95 per cent (68 per cent) of total volume (value) of international trade is transported by sea.
  - India is endowed with a rich coastline of ~7500 km and has a strategic location on key international maritime trade routes.
- **Government Schemes**
  - Sagarmala Programme: to promote port-led development in the country and reduce logistics costs for trade.
  - The Sagarmala program has identified 500+ projects under four pillars— 211 port modernization projects, 200 port connectivity projects, 32 port-led industrialization projects, and 62 coastal community development projects which can unlock the opportunities for portled development and are expected to mobilize more than 3.59 lakh crores of infrastructure investment.
  - GoI has also been striving to improve operational efficiencies of major ports through mechanization, digitization, and process simplification.

Railways

- **Current Status**
  - Indian Railways (IR) with over 67,580 route kms, is the third-largest network in the world under single management.
  - During the FY20, IR carried 1.2 billion tonnes of freight and 8.1 billion passengers – making it the world's largest passenger carrier and fourth-largest freight carrier.
  - **Revenue earning freight loading** (excluding loading by Konkan Railway) by IR in FY20 was 12,084 lakh tonnes, registering a decrease of 1.1 per cent over FY19.
  - **The passenger traffic** was 80,857 lakhs in FY20 registering a growth of (-) 4.2 per cent over FY19.

Government Schemes

- **Privatization:** The GoI has allowed the private players to operate in the Railways sector through the PPP mode under the "New India New Railway" initiative.
- **Kisan Rail Services:** The Union Budget 2020-21 made an announcement to run the Kisan Rail services to provide better market opportunity by transporting perishables and agri-product, including milk, meat, and fish.
- **National Rail Plan (NRP):** To develop capacity- both infrastructure and rolling stock- ahead of demand, the Ministry of Railways has developed a **National Rail Plan (NRP).**

Campaigns/programmes

- The IR launched a special cleanliness campaign under Swachh bharat Abhiyan on 2nd October 2014. Under the cleanliness campaign, the IR has installed the bio-toiletsin all passenger coaches.

Telecom Sector

- The telecom sector plays an important role in implementation of JAM-trinity (Jandhan Aadhar Mobile) based social sector schemes and other pro-development initiative of the GoI.
- The **wireless telephony** constitutes 98.3 per cent of all subscriptions whereas the share of landline telephones now stands at only 1.7 per cent.
- The **overall teledensity** in India stands at 86.6 per cent at the end of November-2020, whereas **teledensity in rural and urban areas** are 59.1 per cent and 139.0 per cent respectively.
- The number of internet subscribers (both broadband and narrowband put together) stood at 776.45 million at the end of September-2020 as compared to 636.73 million in March-2019.

Government Schemes

- **BharatNet** for achieving the goal of Digital India programme.
- Under the project, network infrastructure is being established for Broadband Highways, accessible on a non-discriminatory basis to provide affordable broadband services to citizens and institutions in rural areas, in partnership with States and the private sector.
- **Broadband connectivity:** The GoI has laid considerable emphasis on broadband for all as a part of its Digital India Campaign.
- As on 15.01.2021 about 4.87 lakh kms of optical fiber cable has been laid to cover 1.63 lakh Gram Panchayats (GPs) and nearly 1.51 lakh GPs have become service ready.

Petroleum and Natural Gas

- India is the third-largest energy consumer in the world after USA and China. With a share of 5.8 per cent of the world's primary energy consumption, the Indian energy consumption basket is primarily dominated by Coal and Crude Oil. India's indigenous crude oil production declined to 32.17 Million Metric Tonnes (MMT) in FY20 as against 34.20 MMT in FY19. Of the total crude oil & condensate production, 64.1 per cent was from ONGC, 9.7 per cent from OIL, and 26.2 per cent from the Production Share Contract (PSC) regime. During FY21 (Apr-Dec), oil production registered a decline of 5.7 per cent as compared to the corresponding period in FY20 (Figure 39). The decline in production is mainly on account of the spread of COVID-19. Therefore, production is expected to return to normalcy given the economic recovery. 8.63 Natural Gas production during FY20 was 31.18 Billion Cubic Meters (BCM) as against 32.87 BCM in FY19 (Figure 40). Of the total production of natural gas, 76.1 per cent was from ONGC, 8.6 per cent from OIL, and 15.3 per cent from the PSC regime. During April-December 2020, gas production was 21.13 BCM which was 11.3 per cent lower than the production during the same period in FY20.
- Power 8.65 Electricity is essential for powering economic activity and is also required in leisure time. The power sector has witnessed substantial transformation from both the demand (universal electrification) and supply-side (the advent of green energy). Commendable progress has been made in the generation and transmission of electricity in India. The total installed capacity has increased from 3,56,100 MW in March-2019 to 3,70,106 MW in March 2020. Further, the generation capacity

increased to 3,73,436 MW in October-2020 and comprised of 2,31,321 MW 300 Economic Survey 2020-21 Volume 2 of thermal, 45,699 MW of hydro, 6,780 MW of nuclear, and 89,636 MW of renewables and others. The capacity addition in the power sector was mainly driven by the Government in the year FY20 (Figure 41). 8.66 The decline in energy deficit may be partially attributed to enhanced energy efficiency and improved energy intensity in India. Energy intensity is defined as the quantity of energy required to produce a unit of output. Therefore, lower the energy intensity better it is. The energy intensity of India (at 2011-12 prices) decreased from 65.6 toes per crore rupees in FY12 to 55.43 toe per crore rupees in FY19 (Figure 42). At the same time, the per capita consumption increased from 0.47 toe in FY12 to 0.58 toe in FY19. 8.67 In 2014, GoI approved the Integrated Power Development Scheme (IPDS) to facilitate state utilities to ensure quality and reliable 24x7 power supply in the urban areas with a total outlay of ` 32,612 crores. So far, projects worth ` 30,991 crores have been sanctioned to the States and the distribution strengthening has been completed in 442 of the 546 circles till the end of September-2020. Further, the country has already accomplished two major landmarks in rural electrification arena: (i) 100 per cent village electrification under Deen Dayal Upadhyaya Gram Joyti Yojana, and (ii) universal household electrification under 'Pradhan Mantri Sahaj Bijli Har Ghar Yojana' (Saubhaagya)

- Mining Sector 8.69 Minerals are valuable natural resources that are finite and play a key role in the overall economic development. The mining sector is one of the core sectors of the economy. India produces as many as 95 minerals which include 4 hydrocarbon energy minerals (coal, lignite, petroleum & natural gas), 5 atomic minerals (ilmenite, rutile, zircon, uranium, and monazite), 10 metallic, 21 non-metallic, and 55 minor minerals. The Gross Value Added (GVA) of the Industry and Infrastructure 301 mining and quarrying sector in FY20 was ` 3,93,102 crores (at current price), accounting for about 2.1 per cent of the overall GVA during FY20. The production value of the major minerals increased by 2.3 per cent in FY20 as compared to 22.4 per cent growth in FY19. The mining sector has undergone significant reforms in recent years, that has resulted in better exploration and utilization of natural resources (Box 9).
- Housing and Urban Infrastructure 8.70 India is witnessing rapid urbanisation.According to Census 2011, India's urban population was 37.7 crores, which is projected to grow to about 60 crores by 2030. Urbanization in India has become an important and irreversible process, and it is an important determinant of national economic growth and poverty reduction. Though the cities are engines of growth, a rapid pace of urbanization poses significant challenges to basic infrastructure services such as water supply, sanitation, solid waste and wastewater management. 8.71 The GoI has been implementing the Deendayal Antyodaya Yojana - National Urban Livelihoods Mission in all the statutory townsto addressthe social & occupational vulnerabilities of the urban poor. Under the mission, urban poor are imparted skill training for self and wage employment and assisted in setting up self-employment ventures by providing credit atsubsidized rates of interest. The Mission also provides for shelters for urban homeless and infrastructure for street vendors. As on 31st October 2020, ` 3,378 crores have been released to States/UTs and 9.9 lakh beneficiaries have been skill-trained and certified to enhance their employability. Of this, 5.3 lakh skill-trained have been given self and wage-based employment. 8.72 PM Street Vendor's Atmanirbhar Nidhi (PM SVANidhi) was launched as part of the Atmanirbhar Bharat Abhiyan for providing micro-credit facility to the street vendors to restart their businesses post COVID-19 lockdowns. This scheme targets to benefit over 50 lakhs street vendors who had been vending on or before March 24, 2020, in urban areas including those from surrounding peri-urban/ rural areas. Under the Scheme, the vendors can avail a working capital loan of up to ` 10,000, which is repayable in monthly instalments in the tenure of one year. On timely/ early repayment of the loan, an interest subsidy @ 7 per cent per annum will be credited to the bank accounts of beneficiaries through Direct Benefit Transfer on quarterly basis. The Scheme was launched on June 01, 2020 and started its operations from July 2, 2020. As on November 9, 2020, of the 26.48 lakh loan applications received, over 13.70 lakh were sanctioned and over 6.70 lakh were disbursed. Work is on to prepare a socio-economic profile of the street vendors and their families and assess their potential eligibility for various central welfare schemes, to further facilitate the linkages to these schemes. 8.73 Pradhan Mantri Awas Yojan-Urban (PMAY-U) has been rapidly moving towards achieving the vision for providing a pucca house to every household by 2022. It has so far approved more than 109 lakh houses of which over 70 lakh houses have been grounded for construction. More than 41 lakh houses have been completed and delivered. The GoI has made additional outlay of ` 18,000 crore for the year FY21 through budgetary allocation and extra budgetary resources for the scheme under Atmanirbhar Bharat 3.0. Further, a sub scheme Affordable Rental Housing Complexes (ARHCs) under PMAY-U has been initiated to address the needs of the migrant workers for decent rental housing at

affordable rate near their work places. 8.74 To provide impetus to innovative technology for housing construction, the Hon'ble Prime Minister laid foundation stones of Light House Projects (LHPs) on 1st January, 2021. The six LHPs for construction of 6,368 houses involving project cost of ` 790.57 crores are being implemented at six places – Lucknow, Indore, Rajkot, Chennai, Ranchi and Agartala using innovative technologies identified through Global Housing Technology Challenge– India. These LHPs will act as live laborator

- WAY FORWARD 8.75 The COVID-19 led economic crisis adversely affected the global and domestic economy. The economic activities across the sectors were suddenly suspended that forced billions of people to restrict their movement. The crisis management strategy had to encompass all the stakeholders, especially the weaker and the vulnerable sections. The nature and scale of the unprecedented shock triggered several interventions from the Government –short term as well as those aimed at ushering in structural reforms through the Atmanirbhar Bharat package. A rapid recovery of the industrial sector following a sudden fall in the high frequency growth indicators could only be witnessed because of timely, meaningful, and appropriate policy measures. 8.76 The year after the crisis (FY22) will require sustained and calibrated measures to facilitate the process of economic recovery and to enable the economy to get back to its long-term growth trajectory. The revival of the industrial and infrastructure sector will be key to overall economic growth and macroeconomic stability. 8.77 The FY21 can be summarized in the lines of Saint Francis of Assisi "Start by doing what's necessary, then do what's possible, and suddenly you are doing the impossible" because as Albert Einstein said, "In the midst of every crisis, lies great opportunity

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CHAPTER: 9

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

Key-Terms

- **Socio-Economic Caste Census-** SECC-2011 is a study of socio economic status of rural and urban households and allows ranking of households based on predefined parameters
- **Mortality rate: Mortality rate** or **death rate** is a measure of the number of deaths in a particular population, scaled to the size of that population, per unit of time.
- **Postnatal care:** *Postnatal care* (PNC) is the care given to the mother and her newborn baby.

Introduction

- As healthcare represents a critical public good, India has committed to achieve universal health coverage (UHC).
- However, until 2018, UHC remained an elusive dream.
- 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.

What are the salient features of the Yojana?

It is a historic step to provide healthcare access to the most vulnerable sections in the country.

- Beneficiaries include 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.
- It 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.

Analysis

PM-JAY: Status and progress so far

As per the latest annual report of PM-JAY released by the National Health Authority (NHA, 2019), the status of implementation is as follows:

- 32 states and UTs implement the scheme
- 13.48 crore E-cards have been issued
- Treatments worth INR 7,490 crore have been provided (1.55 crores hospital admission)
- 24,215 hospitals empaneled
- 1.5 crore users have registered on the scheme's website

Positive outcome of PM-JAY

- **Low cost care**: It is used significantly for high frequency and low cost care consisting with the general utilisation of healthcare services.
- **General medicine**: It has been the overwhelmingly major clinical specialty used since 2018 with its share continuously growing. It is followed by general surgery, obstetrics and gynaecology
- **Higher dialysis service:** The claims for dialysis did not diminish due to Covid-19 or because of the lockdown in March-April 2020 even while we observe a steep fall in claims under the overall general medicine category during the lockdown.
- **V-shaped recovery of care-seeking:** General care-seeking exhibited a V-shaped recovery after falling during the lockdown and has reached the pre-Covid-19 levels in December 2020.
- **Difference-in-difference analysis**: The analysis in the attempts to estimate the impact of PM-JAY on health outcomes by undertaking a difference-in-difference analysis.

Distribution of the expenditure

- Higher Low expenses: The distribution is a long-tailed one that peaks in the range of INR 10,000-15,000. The highest number of pre-authorization claims received were for procedures that cost in this range.
- Lower high expenses:The distribution is heavily right tailed indicating relatively fewer claims for more expensive procedures.
- Focus on primary healthcare services:The high number of claims for low cost procedures could be indicative of people utilizing PM-JAY as a delivery channel for primary healthcare services.
- Highest received services:General medicine has been the overwhelmingly major clinical specialty used since 2018 with its share continuously growing. It is followed by general surgery and obstetrics and gynecology. Dialysis itself comprises a large chunk (30 per cent) of the 'general medicine' category claims under PM-JAY.

PM-JAY AND COVID-19

- V-shaped behavior of health service recovery
  - The V-shaped behaviour is likely to be due to both demand and supply side effects.
- Supply side constraints
  - Health care workers might have cut back on services out of initial fear of infection or it is possible that pre-authorization processes were skipped.
  - Many private hospitals were not providing services for fear of infection and government hospitals were reserved for COVID-19 patients.
- Demand side constraints
  - On the demand side, patients avoided hospitals due to fear of contracting the virus.
  - The access to medical services could have been impeded by lack of transport or finances during the lockdown.
  - Both the demand and supply side factors seem to have since recovered completely during the unlock phase.

Pm-Jay And Health Outcomes: Difference-In-Difference

- To compare any significant impact on the health outcomes, the health indicatorsby **National Family Health Survey-4 (NFHS 2015-16)** and the **National Family Health survey 5 (NFHS 2019-20)** were measured to undertake this analysis.
- To mitigate the impact of various confounding factors, including but not limited to secular improvements in health indicators across the country, the analysis was done by estimating a difference-in-difference.
- The same analysis for all states that did not implement PMJAY vis-à-vis all states that implemented PM-JAY.

Comparing West Bengal (did not join) versus its neighbours (Bihar, Sikkim, Assam- joined)

- **Sex ratio improvements:** While both West Bengal and the neighbouring three states improved on this front, the rise was higher for the neighbours than for West Bengal. From NHFS 4 to NFHS 5, West Bengal's sex ratio at birth improved by 1.35 per cent while the corresponding improvement for the three neighbours was 6.28 per cent.
- **Enrollment in the level of schooling:** Women with 10 or more years of schooling increased in all four states with the increase in West Bengal being higher at 24 per cent than that in Bihar, Assam and Sikkim at 20 per cent.
- **Health insurance coverage:** The proportion of population that had health insurance increased from NHFS 4 to NFHS 5 in Bihar, Assam and Sikkim by 89 per cent, while in West Bengal, it was -12 per cent.
- **Infant and child mortality:**While infant and child mortality declined for all states, the decline has been sharper for states that implemented PM-JAY.
- **Family planning:** The quality of family planning services has improved in all four states; the impact has been felt more in states that implemented PM-JAY.
- **Maternal and Child health:** No major improvements and differences in the four states.
- **Registered pregnancies:** Increase in registered pregnancies was marginally higher in Bihar, Assam and Sikkim at 3 per cent when compared to West Bengal at 1 per cent.
- **Postnatal care:** The three neighbouring states with PM-JAY witnessed slightly higher utilisation of maternal and child care services.
- **Institutional births:** Percentage of institutional births increased in all four states.
- **Child vaccination and Vitamin supplements:** The improvement happened in all four states, the magnitude was greater in Bihar, Sikkim and Assam.
- **Childhood disease:**The data for the treatment of childhood diseases for children under the age of 5 years suggest improvement in all four states irrespective of the adoption of PM-JAY.
- **Awareness about HIV/AIDS**: Proportion of women who have comprehensive knowledge of HIV/AIDS increased significantly in the three states which adopted PM-JAY (Bihar, Sikkim, Assam), the proportion declined by 1 per cent in West Bengal, which did not adopt PMJAY.

Comparing all States that adopted PM-JAY versus those that did not

- **Health insurance Cover**: Health insurance or financing scheme increased by 54 per cent from NFHS 4 to NFHS 5 in the states that adopted PM-JAY, it decreased by 10 per cent in the states that did not adopt PM-JAY.
- **Level of schooling:** The average proportion of both women and men with 10 or more years of schooling improved similarly across the two groups of states.
- **Infant and Child Mortality rate**: Neonatal mortality rate (NNMR) declined by 22 per cent in the states that adopted PM-JAY in comparison to a 16 per cent decline in states that did not adopt PM-JAY.
- **Family Planning**: The proportion of people currently using any method of family planning rose by 15 per cent in the PM-JAY adopted states and only by 7 per cent (less than half) in the other states.

- **Maternal and Child health:** While the proportion of mothers who had at least four antenatal care visits remained constant between the NFHS surveys in the states which adopted PM-JAY, the proportion declined by 3 per cent among the non-PM-JAY states.
- **Institutional births**: Institutional births in public facility and home births are much higher in the states which did not adopt the PM-JAY.
- **Vaccination of the child and vitamin-A supplementation**: It improved remarkably in the states which adopted the PM-JAY as compared to the states which did not adopt the PM-JAY.
- **Childhood diseases:** The proportion of children with diarrhea in the two weeks preceding the survey who received oral rehydration salts (ORS) increased by 9 per cent between the surveys in the PM-JAY states as compared to a 5 per cent increase in the non-PM-JAY states.
- **Awareness about HIV/AIDS**: PM-JAY has not only been successful in improving health outcomes across states, but has also accounted for the increase in the spread of knowledge and awareness regarding important health concerns like HIV/AIDS.

Concluding Observations

The difference-in-difference computations that control for confounding factors, shows that states adopting PM-JAY are able to improve their health outcomes.

Relative to states that did not implement PM-JAY, states that adopted it experienced greater penetration of health insurance, experienced a reduction in infant and child mortality rates, realized improved access and utilization of family planning services, and greater awareness about HIV/AIDS.

While some of these effects stemmed directly from enhanced care enabled by insurance coverage, others represent spillover effects due to the same. Even though only a short time has elapsed since its introduction, the effects that are identified by the Survey underscore the potential of the program to significantly alter the health landscape in the country, especially for the vulnerable sections.

Question for Mains

- Critically analyze the effectiveness of PM-JAY to cater a large population of the country?
- Discuss, how the PM-JAY tries to bring the more inclusiveness in terms of health?

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CHAPTER: 10

Bare Necessities Index

Key-Terms

- **Bare necessities:** It refers to "basic needs" approach to economic development which focuses on the minimum specified quantities of basic necessities such as food, clothing, shelter, water and sanitation that are necessary to prevent ill health, and undernourishment.
- **ODF+ and ODF++** are aimed towards proper maintenance of toilet facilities and safe collection, conveyance, treatment/disposal of all faecal sludge and sewage.
  - ODF+ focuses on toilets with water, maintenance and hygiene
  - ODF++ focuses on toilets with sludge and septage management.
- **Regional disparities:** Regional imbalances or disparities mean wide differences in per capita income, literacy. rates, health and education services, levels of industrialization, etc. between different regions. Regions may be either States or regions within a State.

Look for the bare necessities, The simple bare necessities, Forget about your worries and your strife, I mean the bare necessities!

—The Jungle Book

Introduction

- The Finance Ministry in its Economic Survey for 2020-21 has introduced a new metric to gauge progress on the quality of bare necessities available such as drinking water, sanitation, shelter, electricity and LPG called the Bare Necessities Index (BNI).
- Since the 1950s, the idea of "minimum needs", can be viewed as a process of providing the "bare necessities of life" to citizens has been around in India.
- A family's ability to access bare necessities – such as housing, water, sanitation, electricity and clean cooking fuel – have therefore been regarded as an important barometer of economic development in academic and policymaking circles.
- The BNI has been developed as a means of assessing economic development using the "basic needs" approach.

What is the Bare Necessities Index?

- The BNI measures access to "the bare necessities" for households in rural areas, urban areas and at the all India level.
- Source Data: The data is sourced from two National Statistical Office (NSO) Rounds on drinking water, sanitation, hygiene, and housing condition in India: 69th (2012) and 76th (2018).

- Created for: All States/UTs by employing the data at State level.
- Five dimensions:
  - Water
  - Sanitation
  - Housing
  - Micro-Environment
  - Other facilities (Kitchen type: Ventilation of the dwelling unit, Access of the household to bathroom, public/community use with payment, electricity etc.)

Assessing the findings of the Index

Overall

- **Highest access:** Highest in Kerala, Punjab, Haryana, Gujarat, Uttrakhand, Delhi, Goa, Mizoram and Sikkim, while lowest in Odisha, Jharkhand, West Bengal and Tripura.
- **Improving states:** Haryana, Punjab, Uttarakhand, Gujarat, Kerala, Rajasthan, Uttar Pradesh, Bihar, Madhya Pradesh, Chhattisgarh, and North East states except for Tripura, Nagaland and Meghalaya.

Rural India

- **Highest access:** Highest in Punjab, Kerala, Sikkim, Goa and Delhi, while the lowest in Uttar Pradesh, Madhya Pradesh, Bihar, Jharkhand, West Bengal, Odisha, Assam, Manipur and Tripura.
- **Improvement:** J&K, Punjab, Rajasthan, Gujarat, Maharashtra, Karnataka, Chhattisgarh, Tamil Nadu, Andhra Pradesh, Kerala, Goa, Meghalaya and Arunachal Pradesh.

Urban India

- In urban India, no State is showing the lowest level of BNI in 2018, and the States showing improvement over 2012 include Uttarakhand, J&K, Punjab, Rajasthan, Madhya Pradesh, Maharashtra, Karnataka, Kerala, Tamil Nadu, Arunachal Pradesh and Manipur

The Five Dimensions (Sub-Index)

Drinking Water Accessibility Index

- Improvement: The access to drinking water to households in most of the States has improved in 2018 compared to 2012, in rural as well as in urban areas, (except for Andhra Pradesh in Rural and Andhra Pradesh and Himachal Pradesh in urban areas).
- Top and bottom: States such as Sikkim, Punjab, Haryana and Gujarat are at the top while Odisha, Jharkhand and Andhra Pradesh are at the bottom on the drinking water accessibility index.

Indicators

- the principal source of drinking water
- distance from source of water
- nature of access
- method of taking out water

- Regional disparities: Regional disparities have increased in 2018 when compared to 2012 despite such disparities declining in urban areas.
- Equity in access: Across all groups, equity in access to drinking water increased in 2018 when compared to 2012.

Sanitation Index

- **Improvement:** The sanitation access has improved for all States in rural areas and for most of the States in urban areas in 2018 compared to 2012.

- **Regional disparities:** Regional disparities in access to sanitation have declined as the states having low access to sanitation in 2012 have gained more. However, inter-State differences in access to sanitation are still large, especially in rural areas.

Indicators

- access to latrine for exclusive use
- the type of latrine viz.,
  - piped sewer system
  - septic tank
  - twin leach pit
  - single pit

Housing Index

- **Improvement:** The access to housing has improved in all States, except urban areas in few States.
- Inter-State disparities: The inter-State disparities have also declined as the States having low level in 2012 have gained more. However, the gaps in the levels across states have been large, especially in rural areas.
- **Equity in access:** The improvement in access to housing has also been disproportionately greater for the lowest income group when compared to the highest income group, thereby enhancing equity in access to housing in 2018 vis-à-vis 2012.

Indicators

- Structure of house (Pucca or Katcha)
- Quality of house
- Condition of structure (Good or not)

Micro-Environment Index

- The index measures the percentage of households who are living in a dwelling unit with access to drainage (indicated in terms of access to drainage and quality of drainage in terms of other than Katcha drainage), without problems of flies/mosquitoes (indicated by other than severe), and efforts made by local bodies/State government to tackle problem of flies/mosquitoes.
- Improvement: Micro-environment has improved in 2018 for all States, except for Assam in rural and Odisha and Assam in urban areas, as compared to 2012.
- Regional disparities: Regional disparities have declined sharply in urban areas in 2018 vis-à-vis 2012, though it was increased in the rural areas. The micro-environment is much better in urban areas when compared to the rural areas, and the rural-urban gaps are large.
- Equity in access: The access to microenvironment in 2018 has improved especially to the lowest income quintile in rural as well as in urban areas.

Other facilities index

- The index captures the availability of kitchen, kitchen with a water tap, good ventilation in house, access to bathroom, attached bathroom, electricity use, the types of wiring used instead of temporary electric wiring, and type of fuel used for cooking (LPG or others).
- Improvement: Access to Other-facilities for a household has improved for all States in 2018 compared to 2012 for rural as well as in urban areas except for Himachal Pradesh in urban.
- Inter-states disparities: The inter-states disparities in terms of these facilities have also declined, especially in the urban areas.
- Equity in access: The equity in access to other facilities has improved in rural and urban areas.The gaps are still high across the State in rural, between rural and urban in States, between income groups, and between rural and urban in income groups.

Other major outcomes

- Health Outcomes

  Research highlights the health benefits that can accrue from greater access to the bare necessities:

- Swachh Bharat Mission led to a decrease in diarrhea and malaria cases in children below five years,
- Access to improved sanitation also reduces the risk of contracting diarrhoea.
- Access to the piped water and sanitation is critical in reducing the child mortality substantially.

- The distance and time spent on fetching water from the source is found to affect under-five child health and increase the risk of illness.
- Access to clean cooking fuel improves child health.
- Having a separate kitchen improves the indoor environment, thereby yielding health benefits to the household, especially women and children.
- Access to housing, better housing conditions and amenities are closely connected with health outcomes.

Education Outcomes

Research studies support that the access to bare necessities through its possible linkages can positively impact educational indicators as well.

- Water hauling, a daily activity, consumes substantial time and effort of a household. It is found that water hauling activity is negatively associated with the girls' school attendance.
- Access to latrine in schools substantially increases enrolment of pubescent-age girls.
- Further, the electrification's links with education, which could be through lighting and use of other equipment, are visible in day-to-day life.
- In fact, there is a strong correlation between electricity consumption per capita and higher scores on the education index across countries.

Government measures to improve access to the bare necessities

- In order to improve access to "the bare necessities," governments have made constant efforts.
- The network of schemes designed to deliver these necessities include inter-alia
  - the Swachh Bharat Mission (SBM)
  - Rural Drinking Water Programme (NRDWP)
  - Pradhan Mantri Awaas Yojana (PMAY), Saubhagya
  - Ujjwala Yojana
- These Schemes were equipped with new features such as **use of technology, real time monitoring, geo-tagging of assets, social audit, embedded digital flow of information, and direct benefit transfers wherever possible.**

Swachh Bharat Mission-Rural and Urban

Objectives

- **SBM-Rural:** To attain Open Defecation Free (ODF) India by 2nd October, 2019 by providing access to toilet facilities to all rural households in the country.
- **SBM-Urban:** To achieve 100 per cent Open Defecation Free (ODF) status and 100 per cent scientific processing of the Municipal Solid Waste (MSW) being generated in the country

Indicators

- More than 10 crore toilets built across rural India.
- 4,327 Urban Local Bodies (ULBs) have been declared ODF so far.
- The Mission is now focusing on holistic sanitation through its ODF+and ODF++ protocols with a total of 1,319 cities certified ODF+ and 489 cities certified ODF++ as on date.

Pradhan Mantri Awaas Yojana (PMAY)

Objectives

To provide housing for all in urban and rural areas by 2022

Indicators

- As of 18th January, 2021 109.2 lakh houses have been sanctioned out of which 70.4 lakh houses have been grounded for construction of which 41.3 lakh have been built to the beneficiaries under PMAY(U) since inception of the scheme in June, 2015.
- The target number of houses for construction under PMAY (Gramin) is 2.95 crore in two phases i.e.
  - 1.00 crore in Phase I (2016-17 to 2018-19)
  - 1.95 crore in Phase II (2019-20 to 2021-22)

Sahaj Bijli Har Ghar Yojana – Saubhagya

Objectives

To achieve universal household electrification by providing electricity connections to all willing un-electrified households in rural areas and all willing poor households in urban areas in the country, by March, 2019.

Indicators

- All States have declared electrification of all households on Saubhagya portal, exept 18,734 households in Left Wing Extremists (LWE) affected areas of Chhattisgarh as on 31.03.2019.
- Electricity connections to 262.84 lakh households have released from 11.10.2017 to 31.03.2019
- Subsequently, seven States reported that 19.09 lakh un-electrified households identified before 31.03.2019, which were earlier un-willing but have expressed willingness to get electricity connection.
- States have been asked to electrify these households under Saubhagya.
- These households are being electrified by the concerned States and as on 20.12.2019, electricity connections to 7.42 lakh Households have been released.

Pradhan Mantri Ujjwala Yojana (PMUY)

Objectives

To provide clean cooking fuel to poor households with a target to provide 8 crore deposit free LPG connection

Targets and achievements

- A target to provide 8 crore new LPG connections has been achieved in September, 2019, in advance of the target date of 32st March, 2020

Conclusion

Using the composite index of bare necessities, the above analysis summarizes the progress made in providing access to bare necessities for ensuring a healthy living.

However, while improvements in access to bare necessities are evident, the disparities in access to bare necessities continue to exist between rural-urban, among income groups and also across States. Government schemes, may design appropriate strategy to address these gaps to enable India achieve the SDG goals. There should be effective targeting of the needier population be they in urban or rural areas or across states.

Practice Question

- Access to bare necessities is a sine qua non to live a decent life. Examine.
- How a family's ability to access bare necessities can be regarded as an important barometer of economic development in academic and policymaking circles?
- Discuss the recent government initiatives to improve access and deliver the bare necessities to the people.
- The micro-environment is much better in urban areas when compared to the rural areas. Analyse the reasons behind the large rural-urban gaps.

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GS SCORE
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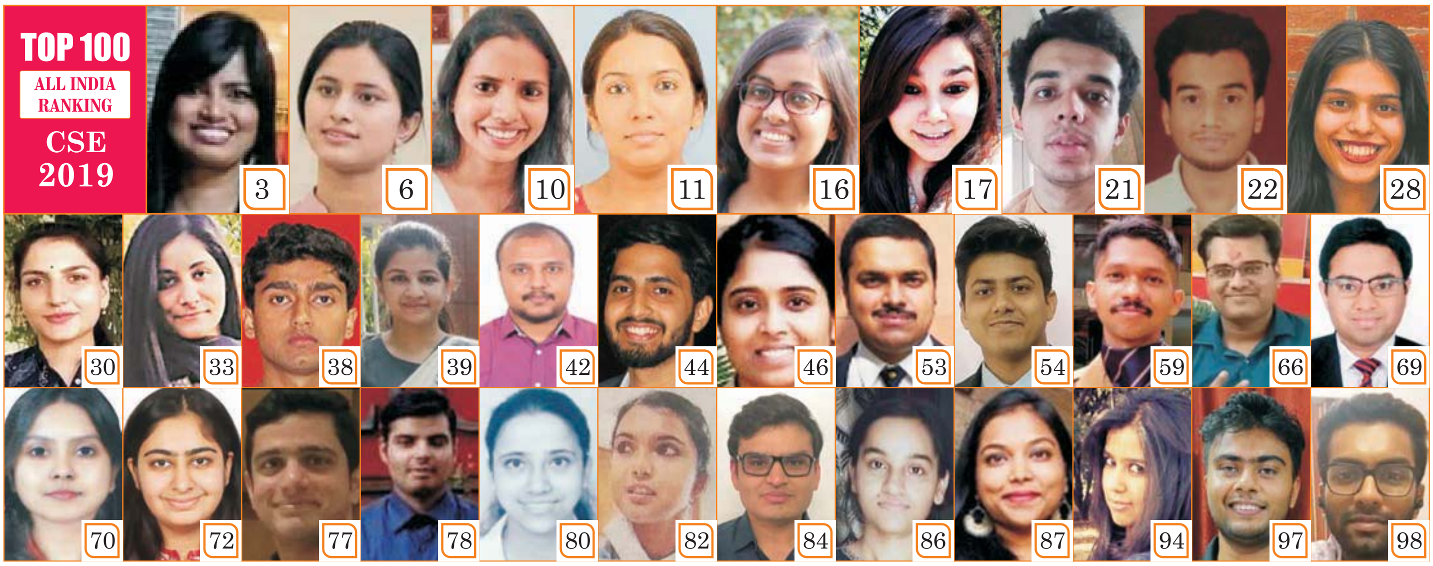
CSE RESULTS

TOP 100
ALL INDIA RANKING
CSE 2019



SUCCESS IS A PRACTICE WE DO!

TOP 100
ALL INDIA RANKING
CSE 2018

TOP 100
ALL INDIA RANKING
CSE 2017

TOP 100
ALL INDIA RANKING
CSE 2016

TOP 100
ALL INDIA RANKING
CSE 2015