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Wealth Creation

The overarching theme of Economic survey 2019-20 is wealth creation and the policy choices that enable the same.

Wealth creation in India
1. For more than three-fourths of known economic history, India has been the dominant economic power globally which was manifested by design, and not by mere chance.
2. Wealth creation as a worthy human pursuit is recognised by traditional literatures such as Thirukural and Arthashastra.
3. Despite such a “rich” tradition of emphasizing wealth creation, India deviated from this model for several decades after independence.
4. But India returned to these roots post economic liberalisation in 1991.

Importance of wealth creation
1. The exponential rise in India’s GDP and GDP per capita post liberalisation coincides with wealth generation in the stock market.
2. The wealth created by an entrepreneur correlates strongly with benefits that accrue to the employees, suppliers of raw materials, manufacturers of capital equipment to the entrepreneur’s firm.
3. Revenues earned in foreign exchange enable macroeconomic stability by enabling the country to pay for its imports and keeping the current account deficit at manageable levels.
4. Wealth created by an entrepreneur helps the country’s common citizens, as Taxes paid represents another important benefit to society from wealth creation.
5. Tax revenues enable Government spending on creating public goods and providing welfare benefits to the citizens.

Wealth creation through the invisible hand of markets
1. Wealth creation happens in an economy when the right policy choices are pursued.
2. Wealth creation and economic development in several advanced economies has been guided by Adam Smith’s philosophy of the invisible hand.
3. In India, scepticism about the benefits accruing from a market economy still persists.
4. But our traditional economic thinking has always emphasized enabling markets and eliminating obstacles to economic activity.
5. Much of the trade in pre-modern India was carried out by large corporatized guilds similar to current multinationals and were funded by temple-banks.
6. Commerce and the pursuit of prosperity is an intrinsic part of Indian civilizational ethos.
7. The traditional economy relied on the invisible hand of the market through a stakeholder’s model with entrepreneurs, workers and consumers sharing prosperity.
8. The 1991 reforms also shows that enabling the invisible hand of markets, i.e., increasing economic openness, has a huge impact in enhancing wealth both in the aggregate and within sectors.
9. Sectors that were liberalized grew significantly faster than those that remain closed.

Instruments for wealth creation

Equal Opportunity
1. The market economy is based on the principle that optimal allocation of resources occurs when citizens are able to exercise free choice in the products or services they want.
2. Enhancing efficiency is crucial for wealth creation and a key dimension of efficiency is opportunity.
3. Equal opportunity for new entrants is important as it enables
   a. efficient resource allocation and utilization,
   b. facilitates job growth,
   c. promotes trade growth and consumer surplus through greater product variety and
   d. increases the overall boundaries of economic activity.
4. A key dimension of opportunity pertains to that between new entrants and incumbents.
5. New entrants are unlikely to possess the advantages enjoyed by influential incumbents.
6. But the ideas and innovation of new entrants help the economy directly and also indirectly by pushing the incumbents for better performance.

7. So, the vibrancy of economic opportunities is defined by the extent to which the economy enables fair competition which corresponds to a “pro-business” economy.

8. This is in contrast to the “pro-crony” economy of the influential incumbents.

9. India’s aspiration to become a $5 trillion economy depends critically on promoting pro-business policies that provide equal opportunities for new entrants.

10. Unlike in command economies where prices are determined by the government, in a market economy, price of a good is determined by the interaction of the forces of supply and demand.

**Reduce Government intervention**

1. Government intervention hurts more than it helps in the efficient functioning of markets.

2. For instance, in the pharmaceutical industry, government regulated formulation prices increase more than unregulated formulations.

3. Unshackling the economic freedom for markets augments wealth creation.

**Resource Allocation**

1. Allocation of resources is important for efficiency to ensure their optimal use as resources are limited.

2. A clear strategy for creating jobs through our export policies is needed by integrating “Assemble in India for the world” into Make in India.

3. Considering India’s demographic dividend, growth in exports will promote labour-intensive industries instead of capital-intensive industries.

4. This can create 4 crore well-paid jobs by 2025 and 8 crores by 2030.

**Trade for Job creation**

1. The ease of doing business has increased substantially in the last five years from reforms that provided greater economic freedom.

2. India is one of the 10 economies that have improved the most from 142 in 2014 to 63 in 2019.

3. Yet, the pace of reforms in enabling ease of doing business need to be enhanced.

4. India continues to trail in parameters such as Ease of Starting Business, Registering Property, Paying Taxes, and Enforcing Contracts.

5. A holistic assessment and a sustained effort to ease business regulations requires a nuts-and-bolts approach (detailed practical aspects) of feedback loops, monitoring and continuous adjustment.

**Scaleup Banking sector**

1. A large economy needs an efficient banking sector to support its growth.

2. India’s banking sector is disproportionately under-developed given the size of its economy. For instance, India has only one bank in the global top 100.

3. Despite PSBs accounting for 70 per cent of the market share in Indian banking, they are inefficient compared to their peers in every performance parameter.

4. Post-privatization, key financial indicators such as net worth, net profit and return on assets of the privatized CPSEs, have increased significantly compared to the peer firms.

**Breakdown of trust**

1. There is need for state to ensure a moral hand to support the invisible hand as markets are liable to lower ethical standards in the pursuit of profits.

2. Trust contributes positively to access of both formal and informal financing.

3. The Global Financial Crisis represented the failure of trust in a market economy.

4. In India, willful default of loans by large corporations and intentional misreport of financial audits creates negative externality which affects the financial system and economy at large.

5. This has also created large Non-Performing Assets (NPAs) in the banking system, especially for Public Sector Banks (PSBs).

**Enabling Trust**

1. Trust is a vital for the functioning of both banking and financial markets.

2. If there is high trust, economic activity can flourish despite the increased potential for opportunism.
3. The invisible hand of the market needs the supporting hand of trust.
4. Under-provisioning of public goods such as trust is often the result of lack of reward and recognition for good behavior.
5. For instance, when banks recognise corporates who pay their interest and principal in time in nonmonetary ways, this enables the intrinsic motivation to get strengthened.

**Reducing Information Asymmetry**
1. An important factor that increases the potential for opportunism in any economic exchange is information asymmetry.
2. Such opportunism can be remedied increasingly through standardising enforcement systems and public databases.
3. For instance, in the case of wilful defaults pre-2014, inability to access relevant borrower data was a key driver of information asymmetry.
4. This aspect of access of credit information for corporate borrowers has improved considerably due to the CRILC (Central Repository of Information on large Corporates).

**Enhancing quality of supervision**
1. The government needs to support the hand of trust by being a good referee of the economy.
2. Like wilful defaults, malpractices such as financial mis-reporting and market manipulation needs to be detected early because these
   a. affect investor’s faith in financial markets,
   b. diminishes portfolio investments,
   c. crowd-out important national investments,
   d. drives away investments and therefore jobs in the economy.
3. Significant enhancement in the quantity and quality of manpower among regulators (CCI, RBI, SEBI, IBBI) with significant investments in technology and analytics needs to be made.
Entrepreneurship and Wealth

1. Entrepreneurship represents a key focus area for many policy makers given its role in economic development and subsequent employment growth.
2. Entrepreneurs are seen as agents of change that accelerate innovation in the economy.
3. This chapter examines the content and drivers of entrepreneurial activity at the bottom of the administrative pyramid – over 500 districts in India.

Entrepreneurship in India
1. India has the 3rd largest entrepreneurship ecosystem in the world.
2. On a per-capita basis, India has low rates of entrepreneurship in the formal economy.
3. In general, the entrepreneurial intensity is significantly higher for the developed economies.
4. In contrast to the other countries, a large number of India’s enterprises operate in the informal economy which is not captured in these data.

Entrepreneurship and GDP
1. The entrepreneurial activity is related to economic growth and has a significant positive impact on GDDP (Gross Domestic District Product).
2. A 10% per cent increase in registration of new firms per district-year yields a 1.8 per cent increase in GDDP.
3. The results emphasize the importance of entrepreneurship as an engine of economic growth and change in India.
4. Entrepreneurial activity in emerging economies like India is largely necessity driven and typically borne from a lack of alternative employment options.
5. Productive and growth-focused entrepreneurial activity in the formal sector in the peninsular states dominate entry of new firms.
6. Entrepreneurship is dispersed across India and is not restricted just to a few metropolitan cities.

Spatial Heterogeneity in Entrepreneurial Activity
1. The impact of new firm entry is greatest in the Manufacturing and Services sectors.
2. Movement of labour from other unproductive sectors and subsistence entrepreneurship into entrepreneurship in formal manufacturing and services can help close India’s productivity gaps.
3. The manufacturing and services sectors are underdeveloped relative to economies of similar size. Greater entrepreneurial activity will help close such gaps.
4. Entrepreneurial capabilities in the Agriculture sector are not geographically localized and seem to be distributed evenly across most districts in India.
   a. States in the highest quintile of relative entrepreneurial activity in the Agriculture sector are Manipur, Meghalaya, Madhya Pradesh, Assam, Tripura and Orissa.
   b. Establishments in the North East are more likely to be private enterprises in the food business such as organic produce farms and tea plantations.
   c. A majority of the establishments in Madhya Pradesh and Orissa are farmer producer companies.
      i. These companies are designed as hybrids between cooperative societies and private limited companies.
      ii. They organize farmers into a collective to improve their bargaining strength in markets.
5. Entrepreneurial activity in the Manufacturing sector is highest in the regions of Gujarat, Meghalaya, Puducherry, Punjab and Rajasthan.
   a. Establishments in these regions are focused on textiles, chemicals, metals, plastics, and pharmaceuticals manufacturing.
   b. The nature of establishments in each of these regions attests to agglomeration economies (a localized economy with various firms and services existing in close proximity).
   c. Incumbent industrial structures for input and output markets and specialized labour in a region are strongly linked to higher entrepreneurial activity in that industry-region.
6. Spatial heterogeneity in the Manufacturing sector emphasizes the need for policy reforms that improve the ease of doing business.
   a. Gujarat, Punjab and Rajasthan were classified as states with flexible labour laws.
b. States with inflexible labour laws such as West Bengal, Assam, Jharkhand, Kerala and Bihar were classified in the lowest quintiles of entrepreneurial activity.

7. State’s policies should enable transition of labour and resources from less productive sectors and subsistence activity in the informal sector to relatively more productive establishments.

8. Entrepreneurial activity in the Services sector is highest in the regions of Delhi, Mizoram, Uttar Pradesh, Kerala, Andaman and Nicobar, and Haryana.

9. The nature of establishments in these regions is not reflective of agglomeration economies and spans diverse industries such as trading, financial services, tourism and hospitality services, retailing, and even religious leagues and missions.

10. Entrepreneurial activity in the Infrastructure sector is highest in the states of Jharkand, Arunachal Pradesh, Himachal Pradesh, Mizoram, Jammu and Kashmir and Bihar, some of which are characterized by poor levels of extant infrastructure.

11. New firms in these states are largely engaged in construction, logistics and transport, utilities generation, transmission and distribution, alternative energy distribution, and Infratech.

Entrepreneurship and employment
1. The nature of entrepreneurial activity in a district is significantly correlated with unemployment in the district, as measured by the Periodic Labour Force Survey (PLFS) data.

2. Entrepreneurial activity in the agriculture and manufacturing sectors shares a negative spatial correlation with the unemployment rate across states.

3. Entrepreneurial activity in the services and infrastructure sectors shares a positive spatial correlation with unemployment rate across states.

4. The contribution of this class of entrepreneurial activity to GDP is also insignificant.

Determinants of Entrepreneurial Activity
1. Two key sets of district-level attributes that drive the level of entrepreneurial activity in the district – social and physical infrastructure. These attributes do not constitute an exhaustive list of district-level conditions.

2. They are widely featured in prior research on entrepreneurship and economic development in India.

3. These measures of social infrastructure in a district largely relate to the general education levels in the district.

a. Higher education levels in a district enable the development of better human capital that relates to increased supply of ideas and entrepreneurs.

b. Higher education also increases the supply of talent available to entrepreneurs for managing and growing their companies.

c. Districts with better education levels is expected to have higher entrepreneurial activity.

7. The number of colleges in the district and the proportion of the literate population in a district is used to measure the education infrastructure in the district.

Physical Infrastructure
1. The measures of physical infrastructure include access to basic physical infrastructure in the district as well as physical connectivity that captures across district infrastructure in most cases.

2. The access to physical infrastructure in a district is measured using the proportion of villages in a district that is connected by tar roads.

3. This measure is expected to correlate with access to other public goods like electricity, water/ sanitation facilities, and telecom services that is fundamental to all businesses.

4. Physical connectivity is measured as the mean distance from a population centre that has at least 500,000 people.

5. Proximity to large population centers likely allows the startup to expand markets and scale operations.

6. Both these measures are expected to correlate positively with entrepreneurial activity.

7. An increase in the proportion of literate population in a district increases entrepreneurial activity as measured by the number of new firms in the district.

8. So, higher literacy levels and better education infrastructure are associated with greater entrepreneurship.

9. Superior access to markets is also associated with higher entrepreneurial activity.

10. The villages in the district are connected by tar roads, the number of new firms increases monotonically.
11. After a threshold, the number of new firms decreases. These results are symptomatic of diminishing returns from physical connectivity.

12. When the access to local markets increases beyond a point, competition levels might increase and possibly discourage entrepreneurial activity.

13. Similarly, beyond a point, increased levels of infrastructure development might also open up potential entrepreneurs to other opportunities and consequently, decrease the incentives to become entrepreneurs.

14. As the proximity to markets increases, the number of new firms increases monotonically.

15. While superior physical infrastructure will likely promote entrepreneurial activity, its ability to aid entrepreneurship might have limitations.

a. Beyond a point, increased access to local markets may create hyper-competition and discourage entrepreneurship.

16. On the contrary, no such diminishing returns are apparent with increases in literacy or improving education infrastructure.

a. Increasing literacy levels or the formation of new colleges appear to increase the number of new firms monotonically.

**Policy Implications for Fast-Tracking Entrepreneurship**

**Current status**

1. Despite being the 3rd largest ecosystem for entrepreneurship in the world, India appears to have lower rates of formal entrepreneurship on a per-capita basis when compared to other countries.

2. A significant association between the count of new firms born in a district and the GDDP of that district is found – a 10 per cent increase in registration of new firms is associated with a 1.8 per cent increase in GDDP.

3. This contribution of entrepreneurial activity to GDDP is strongest for the Manufacturing and Services sectors.

4. Significant heterogeneity in entrepreneurial activity across districts demonstrates the critical role played by social and physical infrastructure in determining such heterogeneity.

5. The eastern part of India has the lowest literacy rate of about 59.6 per cent according to the census of 2011. This is also the region in which formal entrepreneurial activity is the lowest.

**Policy Implications**

1. Measures to increase the literacy levels rapidly through the institution of more schools and colleges will spur entrepreneurship and consequently local wealth creation.

a. Governments could also explore the privatization of education to augment education capacity at all levels of education.

2. Better connectivity of villages through tar roads will likely improve access to local markets and improve entrepreneurial activity.

a. Increasing the access to local markets might create other types of opportunities which might discourage entrepreneurship.

b. Investments in infrastructure especially those undertaken to increase entrepreneurial activity should be weighed against how improved infrastructure creates other kinds of opportunities that might be consequential to a district’s GDDP.

3. Policies that foster ease of doing business and flexible labour regulation foster entrepreneurial activity, especially in the manufacturing sector.

a. As the manufacturing sector has the potential to create the maximum jobs, states must focus on enabling ease of doing business and flexible labour regulation to foster job creation.
Pro-Business versus Pro-Crony

Pro-Business, Creative Destruction and Wealth Creation
1. Pro-crony policy supports incumbent firms but does not necessarily foster competitive markets.
2. Pro-business policy fosters competitive markets creating a level playing field for businesses to compete and paves way for creative destruction.
3. Creative destruction is a “process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one.”
4. Creative destruction brings new innovations into the market that serve people better than the old technologies.
5. It brings new firms into the markets, which compete with existing firms and lower prices for consumers.
6. Prerequisite of a pro-business policy is to foster competitive, unrestricted markets.
7. When creative destruction is fostered, sectors as a whole will always outperform individual companies within the sector in creating wealth and maximizing welfare.
8. This must motivate India to pursue pro-business, rather than pro-crony, growth.

Pro-Business Policy and Creative Destruction in India
2. It enabled the forces of creative destruction, generating benefits that are reflected in Sensex.
3. Since 1991, Sensex has grown at an accelerating pace.
4. Broadly, the growth of the Sensex can be divided into three phases after 1999:
   a. Phase I (1999 to 2007)- Growth of the Sensex accelerated, with each successive 5000-point mark taking lesser and lesser time to achieve.
   b. Phase II (2007 to 2014)- The index's growth slowed down, coinciding with the global slowdown in 2008 among other unfavourable events.
   c. Phase III (After 2014)- Growth revived in response to structural reforms and improvement in global liquidity.
5. The relationship between probusiness policy and creative destruction is mirrored in the composition of the Sensex over the years.
6. After the 1991 reforms, there has been increase in the firm churn rate (old firms mainly manufacturing firms exited and new service sector firms entered the stock markets).
7. Financials and information technology, virtually non-existent in the Sensex of the early 1990s, has more than 50% of the market share of the Sensex at present.
8. The churn rate in the Sensex represents the process of creative destruction which brought new technologies, products and services to consumers, thus diversifying the economy.

Impact of Pro-Business Policy in India
1. A firm can dominate the capital markets only for short period of time compared to pre-liberalization period.
2. Sectors once considered mainstays of the Indian economy are being displaced by new sectors with new technologies and products.
3. The difference between the sizes of the largest and smallest firms are rapidly shrinking. This led to decline in monopoly power and rise in more competitive markets.
4. The competitive advantage of big firms is being rapidly challenged by new, smaller and agile firms, making way for creative destruction.
5. Consumers benefit from an increased variety of goods and services, lower prices and improvement in the quality of existing products.
Pro-Crony and Wealth Destruction in India
1. Pro-crony policies erode wealth in the economy as cronyism fosters inefficiencies by inhibiting the process of creative destruction.
2. In India proxy firms that benefitted from pro-crony policies consistently outperformed the BSE 500 index over time before 2010.
3. These firms systematically made more profits than would have been possible in a more competitive economy.
4. This started to change after the Comptroller and Auditor General’s (CAG) audit report on the 2G spectrum allocation that listed private companies that benefitted from alleged collusions.
5. After this report, many proxy firms started to underperform the market starting 2011 and the wealth of the such firms started to erode.
6. Proxy firms were unable to create value from extracting rents based on political connections.
7. The relationship between such proxy firms and rent-seeking activities occurs when institutional checks and balances are weak.

Impact of Pro-Crony Policies
1. Pro-crony, when compared to probusiness, policies can create various indirect costs to the economy.
2. Opportunities for crony rent-seeking shift the focus of firms away from growth through competition and innovation to building political relationships.
3. This undermines the economy’s capacity for wealth creation.
4. Also rents sought by cronies are paid for by genuine businesses and citizens who are not receiving any preferential treatment.
5. Such transfer of wealth increases the income inequality in the economy.

Discretionary Allocation of Natural Resources
1. Impact of discretionary allocation of natural resources and benefits of auctioned allocation can be understood with the example of coal.
2. India has the fifth largest coal reserves in the world behind USA, Russia, China, and Australia.
3. Coal is the most important indigenous source of energy for India and meets more than half of India’s energy requirements.
5. In 1993, Amendments to the Coal Mines (Nationalisation) Act 1973 allowed private companies to carry out coal mining for captive use.
6. The 2012 CAG report on coal block allocations examined the effectiveness of the processes adopted in allocation of coal blocks.
7. In 2014, the Supreme Court of India cancelled 214 of the 218 allocations made by the Government of India over a span of 15 years.

8. Before 2014, the resources were allocated based on the committee.
   a. Such discretionary allocation of natural resources by a committee provided avenues for rent seeking.
   b. Firm owners diverted their focus towards tunnelling away these rents to tax heavens rather than furthering productive, economic activities.
   c. A shift to market-based allocation of resources takes these avenues away, encourages productive economic activity and generates more wealth.

Wilful Default

1. The primary tenet of any investment is that high expected rewards come with high risk.
2. But many Indian firms reap rewards without risk by enjoying profits in good times and relying on bail out by the state or financiers in bad times.
3. A particularly form of such riskless return is the phenomenon of wilful default. The RBI defines wilful defaulter as, if –
   a. A firm that has defaulted in meeting its repayment obligations even though it has the capacity to honour these obligations.
   b. The firm uses the funds for purposes other than what is sanctioned by the lender.
   c. The firms draws the money out to related parties or removes the assets used to secure the loan.
4. While lending to wilful defaulter constitutes an erosion of wealth lending to a genuine business creates assets, which generate profit and employment.

Wilful Defaults in India

1. As of 2018, wilful defaulters owed their respective lenders nearly Rs. 1.4 lakh crores.
2. The defaulters are spread across several sectors, with manufacturing firms constituting the largest share.
3. If the money taken drawn by the wilful defaulters stayed in economy the resulting wealth created would have been equivalent in value to that needed to
   a. Double the allocation towards health, education and social protection,
   b. Double the allocation towards rural development, or
   c. Triple the allocation towards MGNREGA.
Impact of Wilful Defaulters on Economy

1. The cost of such wilful default is borne by the common man as Public sector banks get their equity from taxes paid and deposits made by the common man.
2. While most policy initiatives aim to redistribute wealth from the rich to the poor, wilful default achieves the opposite.
3. It would increase the cost of borrowing for everyone else, including genuine businesses with profitable investment opportunities.
4. High credit cost may force genuine borrowers to exit the market altogether, leaving only cronies in the market and resulting in a market failure that slows economic growth, employment and wealth creation capacity.

Conclusion

1. Pro-business policies are those that make it easy to start a business, register property, enforce contracts, obtain credit, bid for natural resources, get permits, and resolve insolvency help firms to function effectively which enable competitive markets.
2. Such policies increase competition, correct market failures, or enforce business accountability while pro-crony policies hurt markets.
3. Pro-crony policies may promote narrow business interests and may hurt social welfare.
4. Lobbying by crony businesses to limit competition, restrict imports of competing goods or reduce regulatory oversight undermine markets and reduce aggregate welfare.
5. So, reforms for pro-business policies cannot happen along with catering the needs of crony businesses.
6. Such measures may end up benefitting the preferentially treated firms at the expense of other firms, market efficiency and social welfare.
**Undermining Markets**

**Undermining Markets: When Government Intervention Hurts more Than It Helps**

**Economic Freedom**

1. India has made significant progress in enhancing economic freedom for firms and its citizens. However, it is still counted among the shackled economies in the world.

2. One of the major reasons for it is **lack of economic freedom**. In the global indices of economic freedom, India ranks in the bottom half.

3. Various indices measure economic freedom as the freedom of choice enjoyed by individuals in acquiring and using economic goods and resources.

| Index of Economic Freedom 2019 | - It is brought out by the **Heritage Foundation**.  
| **Index of Economic Freedom 2019** | - It ranked the Indian economy 129th among 186 countries, i.e., in the bottom 30 percent of countries.  
| | - India was categorized as **‘mostly unmfree’** with a score of 55.2 in 2019.  
| | - ‘Investment freedom’ component measures the ease of flow of investment capital both internally and across the country’s borders.  
| | - India scored 40 on a scale of 0-100 (repressed) against the world average of 58.5.  

| Global Economic Freedom Index | - It is brought out by the **Fraser Institute**.  
| **Global Economic Freedom Index** | - India ranks 79th among 162 countries with 108th rank in business regulation.  

4. Economic freedom enhances wealth creation by enabling efficient allocation of entrepreneurial resources and energy to productive activities to promote economic dynamism.

5. The low rank in economic freedom points to obstruction of opportunities for wealth creation by limiting economic freedom for its citizens.

6. Economic freedom affects several following aspects of wealth creation significantly.
   a) Density of registration of new business
   b) Ease of doing business indicators
   c) Number of patents applied in a country
   d) Number of patents granted in a country
   e) Scale of innovation

**Role of Government Intervention**

1. Government can intervene when markets do not function properly.

2. But excessive intervention harms economic freedom, especially when markets can do the job of enhancing citizens’ welfare perfectly well.

3. Government can affect markets through
   a) Direct participation- As a market maker or as a buyer or supplier of goods and services
   b) Indirect participation- Through regulation, taxation, subsidy or other influence.

4. Government’s direct participation affects the dynamic interaction of supply and demand in markets. It also determines the ‘equilibrium’ market prices.

5. When the price is high, there is an excessive amount of the product available for sale than people want. When the price is low, it causes the scarcity of product.

6. But serious welfare loss results in both cases. The wasted chance to create both producer and consumer welfare from such sales leads to **‘Deadweight loss’** (loss is the income that is lost forever).

7. An artificially high price transfers profits from consumers to producers and creates opportunities for rent seeking.

8. Artificially low-price leads to transfer of profits from producers to consumers and leads to low incentive to invest further. It also aggravates the scarcity of the product.

9. Government’s intervention even when there is no risk of market failure has created market failures in some instances.
a) Frequent and unpredictable imposition of blanket stock limits on commodities under Essential Commodities Act (ECA)
b) Regulation of prices of drugs through the Drug Price Control Order 2013.
c) Government policies in the food-grain markets
d) Debt waivers given by States/Centre

10. This may be partly due to the legacy of post-independence economic policies followed by the country. But markets should be allowed to work freely to enable quick wealth creation.

**A) Essential Commodities Act (ECA), 1955**

1. This act controls the production, supply and distribution of essential commodities such as vegetables, pulses, sugar etc. and trade and commerce in such commodities.

<table>
<thead>
<tr>
<th>Major commodity covered under the Act are,</th>
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<tbody>
<tr>
<td>i) Petroleum and its products, including petrol, diesel, kerosene, Naphtha, solvents etc</td>
</tr>
<tr>
<td>ii) Food stuff, including edible oil and seeds, pulses, sugarcane and its products like sugar etc.</td>
</tr>
<tr>
<td>iii) Raw Jute and jute textiles</td>
</tr>
<tr>
<td>iv) Drugs- prices of essential drugs are still controlled by the DPCO</td>
</tr>
<tr>
<td>v) Fertilisers- the Fertiliser Control Order prescribes restrictions on transfer and stock of fertilizers apart from prices</td>
</tr>
<tr>
<td>vi) Onion and Potato</td>
</tr>
<tr>
<td>vii) Seeds of food crops, fruits and vegetables, cattle fodder, Jute seeds and Cotton seeds</td>
</tr>
</tbody>
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2. Under the Act, the powers to implement the provisions of the Act are delegated to the States.

3. When the price of any of these essential commodities rises, the regulator can

a) Impose stockholding limits on the commodity
b) Restrict movement of goods
c) Mandate compulsory purchases under the system of levy.

4. Consequently, all wholesalers, distributors, and retailers dealing in the product reduces their inventories to comply with the holding limit.

**Impacts**

1. **Agricultural Markets**

a) The ECA affects the efficient development of agricultural markets by creating market distortions.
b) Agriculture is a seasonal activity so it is essential to store produce for the off-season to ensure smoothened availability of a product at stable prices throughout the year.
c) Therefore, producers face a trade-off between building an inventory in the harvest season and reducing inventory in the off-season.
d) ECA interferes with this mechanism by disincentivising investments in warehousing and storage facilities due to frequent and unpredictable imposition of stock limits.
e) Stockholding limits apply to the entire agriculture supply chain, including wholesalers, food processing industries and retail food chains.
f) The Act does not distinguish between genuine holding of stocks owing to the nature of their operations and speculatively hoarding.
g) This reduces the effectiveness of free trade and flow of commodities from surplus areas to markets with higher demand.
2. On derivative markets
   a) Traders on commodity derivative markets may not be able to deliver on the exchange platform the promised quantity, owing to stock limits.
   b) The Act distorts markets by increasing uncertainty and discouraging the entry of large private sector players into agricultural marketing.
   c) These market distortions further aggravate the price volatility in agricultural commodities.

Role of states
1. Under the ECA, states are required to enforce the provisions on stock limits and states undertake raids to do so.
2. Such raids conducted by States have had no impact on the retail and wholesale prices and volatility in these prices.
3. There is a negative relationship in the states, that are primarily consumer of essential commodities, between probability of being caught and wedge between retail and wholesale prices.
4. Raids under ECA leads to harassment of traders and adversely affects the role of trade in the marketing of the given commodity.

Way forward
1. Price Stabilization Fund (PSF) mechanism needs to be strengthened as it supplements the market forces rather than substitute them which the ECA does.

   **Price Stabilization Fund**
   - It was set up in 2014-15 to help regulate the price volatility of important agro-horticultural commodities like onion, potatoes and pulses.
   - It provides for maintaining a strategic buffer of commodities for subsequent calibrated release to moderate price volatility.
   - It discourages hoarding and unscrupulous speculation.

2. Support to Commodity futures
   a) The Act was enacted when speculative hoarding and black marketing was a threat as agricultural markets were fragmented and transport infrastructure was poorly developed.
   b) In an increasingly integrated and competitive Agricultural markets the utility of the Act is incompatible.
c) The anti-hoarding provisions of ECA discourage open reporting of stock holdings, storage capacities, trading and carry forward positions.

d) There is no aggregated data of the total private storage capacity available in the country. Such data would enable to assess the impact of any production shocks on the prices.

e) Lack of information on trades makes it harder for market participants to make accurate forecasts for the future.

f) Supporting development of commodity futures markets would help efficient discovery of market expected future prices. It can provide a better basis for private storage decisions.


g) Following steps can serve the purpose of stabilising prices of agricultural markets more efficiently than government imposed ECA.

i) Development of effective forecasting mechanisms

ii) Stable trade policies

iii) Increasing integration of agricultural markets

**B) Drug Price Control Order (DPCO)**

1. Governments resort to price controls for drugs to ensure access to essential lifesaving drugs and to avoid poor households from falling into poverty.

2. The prices of pharmaceutical drugs are regulated through National Pharmaceutical Pricing Authority (NPPA) and Drug (Prices Control) Order (DPCO).

**DPCO**

- They are issued by the Government in exercise of the powers conferred under section 3 of the Essential Commodity Act.

- It aims to ensure that the medicines listed under NELM are available at a reasonable price to the general public.

- **National Pharmaceutical Pricing Authority (NPPA)** is responsible for fixing and revising the prices of pharmaceutical products as well as the enforcement of the DPCO.

- Until 2013, DPCO specified the price ceiling using the **cost-based pricing** method in which the ceiling price was calculated as a multiple of the cost that it took producers to promote and distribute a pharmaceutical drug.

- This multiple referred to as the **Maximum Allowable Post-manufacturing Expenses (MAPE)** was set at 50 percent for formulations imported into India and at 100 per cent for indigenously manufactured formulations.

- In 2013, for the first time, India transitioned from cost-based pricing to market-based pricing.

- Under the market-based pricing method, the Government determines the ceiling prices as the maximum mark-up that a retailer can charge over the reference price.

- The order capped the maximum mark-up to 16 percent for all formulations specified in the NLEM.

3. The National List of Essential Medicines (NLEM) is a list of medicines considered essential and high priority for India’s health needs. It is prepared by Ministry of Health and Family Welfare.

4. It is based on aspects like prevalence of disease in the population, safety and efficacy of the medicine, and current affordability.

**Difference-in-differences (DID) methodology**

- It is a statistical technique used to estimate the effect of a specific intervention or treatment such as a passage of law, enactment of policy etc.

- The technique compares the changes in outcomes over time between a population that is affected by the specific intervention and a population that is not.

- It is typically used to mitigate the possibility of any extraneous factors affecting the estimated impact of an intervention.

5. DID methodology shows that the DPCO, 2013 appears to have increased the prices of drugs sold through hospitals but decreased mildly in the case of drugs sold through the retail chemists.
6. This is because the enforcement of the DPCO orders are easier in the case of retail outlets compared to hospitals.

7. Stock limits and price controls under the ECA lead to sub-optimal outcomes which are actually opposite to what the Act is mandated to achieve.

8. The Act interferes with the functioning of the markets and provides incentives which are detrimental to wealth creation.

9. ECA needs to be repealed and replaced by market friendly interventions like
   a) Price stabilization funds
   b) Direct Benefit Transfers (DBT) of support to consumers
   c) Incentives to innovations
   d) Increasing market integration
   e) Smooth flow of goods and services.

C) Government Intervention in Grain Markets

1. To achieve food security, remunerative prices are ensured to producers and the interest of consumers are safeguarded by making supplies available at affordable prices.

2. In trying to achieve it, the state performs various roles.
   a) Controls input prices of fertilizer, water and electricity
   b) Sets output prices
   c) Undertakes storage and procurement through an administrative machinery
   d) Distributes cereals across the country through the PDS.

3. Most of these roles are performed through Food Corporation of India.

Food Corporation of India (FCI)
- It was set up in 1965 under the Food Corporations Act, 1964 with the primary duty to purchase, store, move or transport, distribute and sell food-grains and other foodstuffs.
- The main objectives of FCI are,
  a) procurement of food-grains from farmers at Minimum Support Prices (MSP) announced by the Government
  b) distribution of food-grains to consumers through PDS, particularly the vulnerable sections of society at affordable prices
  c) maintenance of buffer stock of food-grains for food security and price stability.
- It is mandated to serve the interests of producers and consumers alike.

4. Subsequent to this mandate, the Government has emerged as the single largest procurer and hoarder of food-grains.

5. Government procures around 40-50% of the total markets surplus of rice and wheat emerging as the dominant buyer of these grains. In some States like Punjab and Haryana, the share reaches upto 80-90%.

6. As the single largest buyer of rice and wheat, Government is virtually a monopsonist in the domestic grain market and is a dominant player crowding out private trade.

7. This disincentivizes the private sector to undertake long-term investments in procurement, storage and processing of these commodities.

MSP mechanism

1. These procurement operations largely support the Minimum Support Price (MSP) mechanism.

   Minimum Support Price is designed to be indicative price for producers at the beginning of the sowing season and floor prices as an insurance mechanism for farmers from any fall in prices.

2. But the rise in these prices signal farmers to opt for the crops which have an assured procurement system.
3. An increase in MSP translates into farmers offering their produce for the open-ended procurement by the Government.

4. It also means market prices don’t offer remunerative options for the farmers and MSPs have become the maximum prices rather than the floor price. It is opposite of the aim it is intended for.

**High cost food-grain economy**

1. Economic cost of Food Corporation of India (FCI) involves acquiring, storing and distributing food-grains. It is about 40% more than the procurement cost.

   Procurement cost of FCI is difference between the MSP and the Central issue prices (CIP) of food-grains under Public Distribution System (PDS).

2. Following factors have contributed to building up of a high cost food-grain technology.
   a) Current mix of policies of assured procurement (at MSPs)
   b) Storage through a monopolist administrative government organisation
   c) Distribution under Targeted Public Distribution System

**Supply and demand**

1. There is a declining share of cereals in consumer expenditure while the production of rice and wheat is high.
2. This trend of decreasing demand for cereals and increasing supply of cereals shows that the production pattern is not synchronized with the demand patterns.

3. It shows the farmers are deciding croppings not from the demand patterns (reflected in the actual market prices) but from the Government policies of procurement and distribution.

4. The intervention of Government has led to a disconnect between demand and supply of grains in food-grain markets.

5. India has moved from being a food scarce country to a food surplus country with a substantial increase in production and has emerged as a net exporter of cereals.

6. The Government policies of assured procurement and distribution gave the right incentives to increase production at that time.

7. But the current food-grain economy has various economic inefficiencies.

8. So, these policies need to incentivize diversification and environmentally sustainable production.

**Way forward**

1. If food-grain markets are opened for participation of private players with Government as an equal player, competition would lead to more efficiency in the operations.

2. It can also ensure development of adequate infrastructure in storage and warehousing.

3. Reduction in subsidy

   a) Growth in public investments in agriculture is negatively correlated to increases in food subsidy.

   b) While investments are the crucial input to increase in productivity, the increasing focus on subsidies is harming the growth of agricultural sector in the long run.

   c) This imbalance between subsidies and investments needs to be urgently corrected for sustainable growth in Indian agriculture and overall inclusive growth.

4. The farmers need to be empowered through direct investment subsidies and cash transfers, which are crop neutral and do not interfere with the cropping decisions of the farmer.

**Examples of Successful Conditional Cash Transfer Schemes**

<table>
<thead>
<tr>
<th>No.</th>
<th>Scheme Name</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bolsa Familia (2003)</td>
<td>Brazil</td>
</tr>
<tr>
<td>2.</td>
<td>Oportunidades (1997)</td>
<td>Mexico</td>
</tr>
</tbody>
</table>

5. Food grains policy needs to be dynamic and allow switching from physical handling and distribution of food-grains to cash transfers/food coupons/smart cards.

6. At the macro level, the agricultural marketing, trade and distribution policies need to be aligned so that farmers receive the correct signals for diversification into remunerative and sustainable production.
D) Debt Waivers

1. Government intervention in credit markets, in the form of full or partial, conditional or unconditional, debt relief has become increasingly common at the state level in India.

![Figure 22: Loan Waiver Allocation as a per cent of State/Central Budget](image)

2. The figure shows the scale of these waivers as a proportion of state/central budgets.

Benefits

1. **Overcoming ‘Debt overhang’**
   a. Debt Overhang refers to a situation where all current income gets used up in repaying the accumulated debt. It leaves little incentives to invest either in physical or human capital.
   b. Any incremental benefit of such investment in capital is likely to go to the lenders in the form of repayment of existing obligations and not the farmer.
   c. Such borrowers are unlikely to receive new funding as the ability of the borrower to repay additional loans or grow his/her business/farm is in question.
   d. Debt overhang leads to abandonment of beneficial investment and hence reduces social welfare.
   e. So, debt waiver helps the borrowers to come out of the debt trap as it cleans their balance sheet and reduces the burden of debt servicing.

2. The loan performance of genuinely distressed borrowers improved by about 9% due to the loan waiver while the loan performance of non-distressed beneficiaries deteriorated by about 23% after the waiver.

Adverse impacts

1. Neither agricultural investment nor productivity increases after the debt waiver.
2. Debt waivers impact credit markets negatively as well. An anticipated waiver may lead to moral hazard and destroy the credit culture.
3. The waiver led to increased loan defaults on future loans and no improvement in wages, productivity, or consumption.

Legislative Reforms: overview

1. India has traversed the transition from a command and control economy to a market-driven economy with the help of many legislative reforms.
<table>
<thead>
<tr>
<th>Act</th>
<th>Market Distortion created</th>
<th>Transformation towards Market Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Issues (Control) Act, 1947</td>
<td>Government’s Control over the amount as well as pricing of shares led to ineffective valuation of capital</td>
<td>- Repealed and replaced by The Securities and Exchange Board of India (SEBI) Act, 1992. &lt;br&gt; - SEBI has steered the capital markets to ensure price discovery, governance of securities, allowing efficient mobilisation and enabling enormous wealth creation</td>
</tr>
<tr>
<td>Oil and Natural Gas Commission (ONGC) Act, 1959</td>
<td>Creation of ONGC led to Government monopoly in this sector.</td>
<td>The Act was repealed and ONGC was converted into a company.</td>
</tr>
<tr>
<td>Banking Companies (Acquisition and Transfer of Undertakings) Act of 1970 and State Bank of India Act, 1955</td>
<td>To provide for the acquisition and transfer of the undertakings of certain banking companies – created 27 nationalized banks – Private sector banks were allowed only after 1994.</td>
<td>- Merger of banks will reduce public sector banks from 27 to 12. &lt;br&gt; - Attempts to create a level playing field between private sector banks and public sector banks are in place.</td>
</tr>
<tr>
<td>Monopolies and Restrictive Trade Practices (MRTP) Act, 1969</td>
<td>MRTP Act restricted companies to grow and achieve a global scale and led to proliferation of small companies.</td>
<td>- It was repealed to give way to the Competition Act in 2002.</td>
</tr>
<tr>
<td>The Coking Coal Mines (Nationalisation) Act, 1972 and Coal Mines (Nationalization) Act, 1973</td>
<td>Government took over the management of coking and non-coking coal mines as energy sector became a crucial sector</td>
<td>- It was repealed in 2018. &lt;br&gt; - Private firms have been permitted to enter the commercial coal mining industry.</td>
</tr>
<tr>
<td>Foreign Exchange Regulation Act, 1973</td>
<td>Imposed restriction on foreign equity in companies to 40 percent and permission was needed from RBI to operate, if their shareholding was higher. This restricted access to foreign capital and technology</td>
<td>Repealed and replaced by Foreign Exchange Management Act (FEMA), 1999 to facilitate external trade and payments.</td>
</tr>
<tr>
<td>Air Corporations Act of 1953</td>
<td>- Nine airlines were nationalised to form Air India and Indian Airlines</td>
<td>Replaced by Air Corporations (Transfer of Undertaking and Repeal) Act, 1994 wherein private operators were allowed to provide air transport services.</td>
</tr>
<tr>
<td>Urban Land Ceiling and Regulation Act, 1976</td>
<td>- It led to distortion of land markets in urban areas, rise in slums, creation of artificial land scarcity and skyrocketing land prices.</td>
<td>- It was repealed in 1999.</td>
</tr>
<tr>
<td>Sick Industrial Companies Act (SICA), 1985</td>
<td>- Timely detection of sick and potentially sick companies and speedy determination of preventive measures by Board of Industrial and Financial Reconstruction (BIFR).</td>
<td>- The Act was repealed in 2004, and BIFR was dissolved in 2016 to give way to the Insolvency and Bankruptcy Code (IBC), 2016.</td>
</tr>
</tbody>
</table>
2. However, several areas of unnecessary and inefficient government intervention still remain.

<table>
<thead>
<tr>
<th>Act</th>
<th>Market Distortion created</th>
<th>Need for amendment</th>
</tr>
</thead>
</table>
| Factories Act, 1948 | - Regulates occupational safety and health in factories and docks.  
- Gives prosecutor powers to a 'chief inspector'  
- Raises cost of such entitlements and may nudge capital away from labour. | It is proposed to be subsumed by the Occupational Safety, Health and Working Conditions Code, 2019. |
| Essential Commodities Act (ECA), 1955 and Prevention of Black marketing and Maintenance of Supplies of Essential Commodities Act, 1980 | - Enables the Government to regulate the production, supply and distribution of 'essential' commodities such as drugs, oils, kerosene, coal, iron, steel and pulses.  
- It imposes stock limits which discourages large-scale private investments in agricultural markets | - These Acts owe their origin in times of shortage and inefficient linking of markets.  
- With enhanced production and integration of markets, these Acts have become an instrument of coercion and inhibit proper functioning of markets of these essential commodities. |
| Food Corporation of India (FCI), 1965 | FCI was created for purchase, storage, transport, distribution and sale of food grains and other foodstuff to safeguard the interests of farmers, maintain buffer stocks for food security | - Procurement operations of wheat, paddy and rice need to be given to states.  
- FCI should primarily focus on creating competition in every segment of food grain supply chain, from procurement to stocking to movement and finally distribution in TPDS.  
- This would reduce costs and plug leakages in the food management system. |
| Recovery of Debts due to Banks and Financial Institutions Act, 1993 | - Led to establishment of Debt Recovery Tribunals (DRTs) for "expeditious adjudication and recovery of debts due to banks and financial institutions".  
- There are huge delays due to insufficient number of presiding officers, recoveries taking two years instead of the recommended statutory six months, lack of sufficient judicial experience by recovery officers, and inconsistency of the decision-making process between tribunals. | With the IBC to fix the problem of non-performing assets, the DRTs can be phased out or integrated with the IBC. |
| The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 | - Regulates land acquisition with 80 percent of the land to be acquired through negotiations with the government stepping in only for the balance 20 percent.  
- For PPP projects, it is 70 percent | This tilts the balance in favour of land-owners who need to be made an equal partner in development of land and share the benefits and costs with the developer/acquirer. |
1. Competitive markets are effective in allocating resources in an economy.
2. The costs of Government intervention may outweigh the benefits of competitive markets only when ‘market failures’ are not severe.

‘Market Failure’ - Situations where markets may not work very well in allocating resources.

3. There are several areas where the Government needlessly intervenes and undermines markets.
4. Eliminating such instances of needless Government intervention will enable competitive markets and thereby spur investments and economic growth.
Creating Jobs and Growth by Specializing to Exports in Network Products

1. Growth in exports provides a pathway for job creation in India.
2. For instance, in just the five-year period 2001-2006, labour-intensive exports enabled China to create 70 million jobs for workers with primary education.
3. Post the 1991 reforms, India’s share in merchandise (goods) exports has grown at 13.2 per cent per annum and in world exports it has increased from 0.6 per cent in 1991 to 1.7 per cent in 2018.
4. But imports of merchandise have grown faster than exports, resulting in increasing trade deficits.
5. On the other hand, exports of services generally grew faster than imports, providing some cushion to current account deficit.
6. The US–China trade war is causing major adjustments in Global Value Chains (GVCs) and firms are now looking for alternative locations for their operations which presents India an unprecedented opportunity.

Benefits of Exports growth

1. India must focus on a group of industries, referred to as “network products”, where production processes are globally fragmented and controlled by leading Multi-National Enterprises (MNEs) within their “producer driven” global production networks.
2. Examples of network products include computers, electronic and electrical equipment, telecommunication equipment, road vehicles etc.
3. By integrating “Assemble in India for the world” into Make in India, India can raise its export market share to about 3.5 per cent by 2025 and 6 per cent by 2030.
4. In the process, India would create about 4 crore well-paid jobs by 2025 and about 8 crores by 2030.
5. It would also add about one-quarter of the increase required for making India a $5 trillion economy by 2025.

India’s export underperformance compared to China

1. Specialization versus Diversification
   a. India’s export performance in world market share is almost fully driven by the effect of specialization.
   b. India is also catching up with China in terms of diversification across products and markets.
   c. So, to become a major exporter, India should specialize more in the areas of its comparative advantage and achieve significant quantity expansion.
2. Low Level of Participation in Global Value Chains
   1. Despite being abundant in labour, the share of traditional unskilled labour intensive industries in India’s non-oil merchandise exports declined by 50% between 2000 and 2018.
   2. The fast-growing commodities in India’s export basket are capital and skill intensive.
   3. In contrast, China’s export composition shows a strong bias towards traditional labour intensive industries.
   4. Exports of capital-intensive products from China expanded after the country recorded a major export expansion of traditional unskilled labour intensive products.
   5. Export growth of capital-intensive products from China has been driven by its high level of participation in GVCs within these industries.
   6. China emerged as a major assembly hub for several capital-intensive products by making use of imported parts and components.
   7. India had not undergone a similar transition.
3. Low Market Penetration in High Income Countries
   1. India’s market penetration in high-income countries is low and has declined disproportionately during the recent decades due to
   a. Dominance of capital-intensive products in the export basket and
   b. Low level of participation in GVCs.
   2. High-income countries provide relatively a larger market for India’s unskilled labour-intensive products compared to capital-intensive products.
   3. But both Chinese capital intensive and unskilled labour-intensive products are able to penetrate equally both in high income and low- & middle-income countries.
4. This is because China is an assembly centre for the world market, irrespective of who the buyer is.

5. India can benefit significantly from greater trade with high income markets which requires a reorientation of trade specialization towards labour intensive product.

6. This can be achieved with a selective focus on
   a. traditional labour-intensive sectors such as textiles, especially man-made fibres,
   b. increased participation in GVCs.

**Gains from participation in GVCs**

1. A higher level of participation in GVCs implies that the share of foreign value added in gross exports is higher than when most inputs are sourced locally.
2. But the scale and productivity effects of selling in the world markets can lead to higher absolute levels of domestic value added and domestic job creation.
3. The scale effect creates millions of jobs and suitable for India’s labour-intensive economy.

**Figure 8: The Conceptual Framework for Gains from “Assembling in India” as part of “Make in India”**

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**Industries for specialization**

1. India has comparative advantage in labour-intensive activities and creates employment for a growing labour force.
2. There are two groups of industries that hold the greatest potential for export growth and job creation, namely
   a. Traditional unskilled labour-intensive industries such as textiles, clothing, footwear and toys.
      i. The GVCs in these industries are controlled by “buyer driven” networks of lead firms in developed countries.
      ii. Examples include the production networks of Wal-mart, Nike, Adidas etc.
   b. Final assembly in a range of products, referred to as “network products” (NP).
      i. The GVCs in these industries are controlled by leading MNEs such as Apple, Samsung, Sony etc. within “producer driven” networks.
      ii. NPs accounted for nearly 30% of world exports in 2018, with the share of Electrical Machinery being the highest at 10.4%.

**World Exports of Network Products: Trends and Patterns**

1. The world exports of NP increased steadily to US$ 5.41 Trillion in 2018 mainly driven by Assembled end products (AEP)
2. Even as India’s export of NP increased, it is still miniscule compared to that of other Asian countries.
3. Among the major Asian countries, India and Indonesia are the only ones with a trade deficit in NP.
4. The main category of NP exported by India is Road vehicles while imported is electronics and electrical machinery.
5. So, India can achieve significant export growth in electrical machinery, Office machines and automatic data processing machines and Telecommunication and sound recording equipment.
Potential gains in employment and GDP
1. The policy of focusing on NP can create significant gains both in employment creation and GDP growth.
2. By raising India’s share in world exports of NP to 3.6 per cent by 2025, it is possible to create 38.5 million additional jobs.

Free Trade Agreements
1. Free trade leads to a more efficient allocation of a country’s resources.
2. India has gained 0.7% and 2.3% increase in trade surplus per year for manufactured products and total merchandise respectively.

<table>
<thead>
<tr>
<th>Table 5: India’s Trade Agreements</th>
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<tr>
<td><strong>Agreements</strong></td>
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<tr>
<td>Sri Lanka</td>
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<td>Korea</td>
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<td>Malaysia</td>
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<td>Japan</td>
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Way forward
1. India can benefit by adopting policies aimed at strengthening its involvement in the export market for network products (NP).
2. The large-scale expansion of assembly activities by making use of imported parts & components should be short to medium term objective.
3. Giving a boost to domestic production of parts & components (upgrading within GVCs) should be the long-term objective.
4. Assembly is highly labour intensive, which can provide jobs for the masses, while domestic production of parts & components can create high skill jobs.
5. To become an attractive location for assembly activities, import tariff rates for intermediate inputs must be zero or negligible.
6. The ongoing reform measures to provide greater flexibility in the labour market should continue.
7. A pro-active FDI policy is also critical as MNEs are the leading vehicles for the country’s entry into global production networks.
8. Local firms play a role as subcontractors and suppliers of intermediate inputs to MNEs.
9. So, policy measures should focus on
   a. reducing input tariffs,
   b. implementation of key factor market reforms,
   c. providing an enabling environment for the entry of lead firms into the country and
   d. reducing the service link costs (transportation, communication, and other tasks involved in coordinating the activity).
Targeting Ease of Doing Business

1. Ease of doing business is key to entrepreneurship, innovation and wealth creation.
2. India has risen significantly in the World Bank’s Doing Business rankings in recent years, but it lags behind in – Starting a Business, Registering Property, Paying Taxes and Enforcing Contracts.
3. To achieve a 5 trillion-dollar economy by 2024-25, simplifying and maintaining a business-friendly regulatory environment is essential.
4. To ease the constraints and gaps in the regulatory processes involved in doing business, it is necessary to assess the country’s progress vis-à-vis other leading economies on various parameters.

Introduction

1. Export competitiveness depends not only on the cost of production but also on the efficiency of logistics.
2. The process flow for imports is more efficient than that for exports.
3. The processes of Indian airports should be adapted and replicated in seaports.

Doing Business rankings

1. India’s rank in World Bank’s Doing Business raised from 142 in 2014 to 63 in 2019. It has progressed on 7 out of the 10 parameters.
2. The Goods and Service Tax (GST) and the Insolvency and Bankruptcy Code (IBC) top the list of reforms that have propelled India’s rise in rankings.
3. India continues to trail in parameters such as Ease of Starting Business (rank 136), Registering Property (rank 154), Paying Taxes (rank 115), and Enforcing Contracts (rank 163).
4. The time and cost are greater than in OECD high-income economies and impede wealth creation.
5. Case studies of merchandise exports found that logistics is inordinately inefficient in Indian seaports.

Global Comparisons

1. India’s performance has been compared with its peers (China, Brazil & Indonesia) as well as the best-in-class economy in EoDB, i.e., New Zealand.
2. The comparisons demonstrate the gap that India needs to travel to achieve the best international standards.

Number of procedures and days

1. The number of procedures required to set up a business in India has reduced from 13 to 10 over the past ten years.
2. It takes an average of 18 days to set up a business in India, down from 30 days in 2009.
3. In New Zealand a seamless process of business incorporation takes place through a single window via one agency.
4. It just takes half-a-day with a single form and minimal cost to set up a business in New Zealand.
5. India has significantly reduced the time and cost of starting a business, but a lot more is needs to be done.

Property registration

1. It takes 9 procedures, at least 49 days, and 7.4-8.1 per cent of the property value to register one’s property in India.
2. The number of procedures, time and cost have increased over the last 10 years.
3. Meanwhile, New Zealand has only two procedures and a minimal cost of 0.1 per cent of the property value.

Paying taxes

1. While the number of payments per year has significantly reduced in India from 59 to 12 over the last decade, time spent on this activity has not reduced much.
2. While India takes 250-254 hours per year to pay taxes, New Zealand spends just 140 hours a year.

Enforcing contracts

1. India’s performance in this parameter has been very poor over the years.
2. India’s inability to enforce contracts and resolve disputes was cited by previous Economic Survey as the single biggest constraint to ease of doing business in India.
3. India should focus on a well-functioning legal system as it is a potential economic and social multiplier.
4. Compared to the performance of India’s peer nations, (China, Brazil, and Indonesia), on the same parameters, China fares much better than India on virtually all parameters.

**Comparison with Peers**

**Starting a Business**
1. An entrepreneur has to go through 10 procedures to set up a business in India taking 17-18 days to do so.
2. On the other hand, Indonesia and Brazil require one extra process than India to open a business.
3. While Indonesia takes four days less than India, Brazil takes almost the same time as India to do so.
4. Countries like Pakistan, Turkey and Sri Lanka (ranked 72, 77, and 85 respectively in Starting a Business parameter) have a less cumbersome process to start a business than India.

**Enforcing Contracts**
1. India’s performance in contract enforcement is poor even when compared to India’s peer nations.
2. It takes approximately 4 years to enforce a contract in India, Brazil and Indonesia spend 2.2 and 1.1 years, respectively to do so.
3. With a rank of 163 out of 190 nations in Enforcing Contracts, only a few countries like Afghanistan, Mozambique, and Zimbabwe perform worse than India.

**Way forward**
1. A holistic assessment and a sustained effort to ease business regulations and providing an environment for businesses to flourish would be a key structural reform that would enable India to grow at a sustained rate of 8-10 per cent per annum.
2. This requires a **nuts-and-bolts approach** (detailed practical aspects) of feedback loops, monitoring and continuous adjustment.

**Statutory Compliance Requirements in Manufacturing**
1. The complex architecture of the Indian governance framework including the density of legislation and statutory compliance requirements is a major challenge.
2. Manufacturing units have to conform with 6,796 compliance items, which is a tedious and time-consuming task.

**Regulatory Hurdles**
1. The services sector too faces many regulatory hurdles even for routine businesses.
2. The bars and restaurants sector are an important source of employment and growth across the world.
3. By nature this business faces a high frequency of starting new businesses and shutting old ones.
4. A survey showed that the number of licenses required to open a restaurant in India are significantly more than elsewhere.
5. In India, only the detail on the list of licenses and permissions can be obtained from a government portal or information center.
6. On the other hand, in New Zealand, all detailed guides and stepwise procedures about permissions, fees and timeline to open a restaurant are provided online.
7. They also provide ready-to-use business plan templates and comprehensive information on different businesses irrespective of the scale of business.
8. The contrast reflects a difference in approach – government control versus curation/ partnership.

**Construction Permits**
India has considerably improved the process to obtain construction permits over the last five years.

**Achieving Scale Across Business**
1. Scale of business is an issue that impacts business efficiency in India.
2. Most of the manufacturing units in India have small capacities and consequently low manufacturing efficiencies which are a disadvantage in the global supply chain.
3. Countries like Bangladesh, China, Vietnam are able to progress in the value chain by increasing their competitiveness in the international market by improving their delivery time and domestic production capacity.
4. Compared to Bangladesh, China, and Vietnam, which have more than 80 per cent of market value of exports by large enterprises, India has 80 per cent by small enterprises.

5. Also, in India it can take 7-10 days to reach a port whereas in countries like China, Bangladesh and Vietnam it takes less than a day.

6. Thus, the Indian supply chain ends up with a large number of small consignments clogging already inefficient logistics pathways.

**Trading Across Borders**

1. The Trading Across Borders indicator records the time and cost associated with the logistical process of exporting and importing goods.

2. Globally, transportation by ports is the most favored followed by railways and then roads, whereas in India it is the opposite.

3. **Italy** tops the EoDB rankings in Trading Across Borders.

4. 70 per cent of the delays (both in exports and imports) occur on account of port or border handling processes which essentially pertain to
   a. Procedural complexities (number and multiplicity of procedures required for trade),
   b. Multiple documentations and
   c. Involvement of multiple agencies for approvals and clearances.

5. The time delays and procedural inefficiencies end up pushing cost to trade.

**Way forward**

1. The government has already reduced procedural and documentation requirements considerably.

2. Increasing digitalization and seamlessly integrating multiple agencies onto a single digital platform can further reduce these procedural inefficiencies significantly and improve user experience substantially.

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**Authorised Economic Operators (AEO)**

1. Authorised Economic Operator (AEO) is a programme under the aegis of the **World Customs Organization (WCO) SAFE Framework of Standards to secure and facilitate Global Trade**.

2. The programme aims to enhance international supply chain security and facilitate movement of goods.

3. AEO encompasses various players in the international supply chain.

4. Under this programme, an entity engaged in international trade is approved by Customs as compliant with supply chain security standards and granted AEO status.

5. An entity with an AEO status is considered a ‘secure’ trader and a reliable trading partner. **AEO is a voluntary programme.**

6. It enables Indian Customs to enhance and streamline cargo security through close cooperation with the principle stakeholders of the international supply chain viz. importers, exporters, logistics providers, custodians or terminal operators, custom brokers and warehouse operators, who benefit from preferential treatment from customs authorities.

7. Benefits include expedited clearance times, fewer examinations, improved security and communication between supply chain partners, and more.

8. Anyone involved in the international supply chain that undertakes Customs related activity in India can apply for AEO status **irrespective of size of the business.**

9. These may include exporters, importers, logistic providers (e.g. carriers, airlines, freight forwarders, etc.), custodians or terminal operators, customs house agents and warehouse owners.

10. Others who may qualify include port operators, authorized couriers, stevedores.

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**Case Studies**

Case studies and industry surveys were conducted by the ‘Quality Council of India’ to understand the specific points in the supply-chain that experience inordinate delays and blockages.

**Case Study of Exporting Apparels**

1. Six processes in Nhava Sheva can take up to 14 days, of which a day or two is spent just on 'Unloading' depending on space availability at the port.
2. Three days are then used up in ‘Custom Clearance’, another three days in ‘Stuffing Containers’ and up to five days are taken up by ‘queue for entry into the ship’.

3. This is partly due to insufficient port infrastructure to handle the inflow of containers, narrow roads and poor strength bearing capacity of the roads at the port.

4. But much of the delay is due to the misalignment of processes that do not allow for "just in time" protocols.

5. The uncertainty of time needed to clear each adds to the clogging of port space.

6. The imports process takes less time than the exports process.

**Results of the case study approach**

(a) There are inordinate delays in loading and customs processes in Indian sea-ports.

(b) The processes for imports are better than those for exports.

(c) The large variance in process time means that exports are forced to account for the uncertainty by padding extra waiting time.

This means that it is not good enough to simply improve the “average” without improving reliability.

The turnaround time of ships in India has been on a continuous decline.

This shows that achieving significant efficiency gains in the case of sea-ports is possible.

**Case Study of Electronics**

1. While the processes at sea-ports remain very inefficient, But those at airports have dramatically improved.

2. With the help of right policies, India can achieve international standards, or even better them.

3. The case study suggested that

(a) Processes in Indian airports is vastly superior to those at sea ports for both imports and exports.

(b) AEO did significantly improve the process but it is reasonably smooth even for non-AEO operators importing/ exporting electronics.

(c) Indian processes can beat international standards.
Golden Jubilee of Bank Nationalisation

1. In 2019, India completed the 50th anniversary of the bank nationalization programme undertaken in 1969.
2. Public Sector Banks (PSBs) account for 70% of the market share in banking.

Size of Indian Banks

1. India’s banks are disproportionately small compared to the size of its economy.
2. Indian economy is the fifth largest in the world but the highest ranked bank—State Bank of India—is ranked 55th in the world and is the only bank to be ranked in the Global top 100.
3. Countries like Sweden and Singapore, which are respectively about 1/6th and 1/8th the economic size of India, have thrice the number of global banks as India does.

Penetration of Credit in India

1. The credit penetration to the private sector compared to per capita GDP of country is also disproportionately low in India.

Banks for Large Economies

1. A large economy needs an efficient banking sector to support its growth. Historically, the top-five economies have always been supported by their banks.
2. If banks were proportionately large in relation to the size of the Indian economy, India should have at least six banks in the global top 100.
3. Similarly, a $ 5 trillion economy will require at least eight Indian banks to be large enough to belong in the top 100 globally.

State of PSBs

1. The responsibility of supporting the Indian economy and fostering its economic development falls on PSBs as account for 70% of the market share in Indian banking.
2. But, PSBs’ collective loss in 2019, largely due to bad loans, amounted to over Rs. 66,000 crores nearly double the budgetary allocation for education.

Figure 1: Number of banks in the Global Top 100 (2019)

Figure 3: Country’s GDP per capita and penetration of credit in the country

Source: World Bank WDI Database.
3. PSBs account for 85% of reported bank frauds and gross nonperforming assets (NPAs) equal Rs. 7.4 lakh crores, more than 150% of the total infrastructure spend in 2019.
4. In 2019, every rupee of taxpayer money invested in PSBs, on average, lost 23 paise.
5. In contrast, every rupee of investor money invested in “New Private Banks” (NPBs), banks licensed after India’s 1991 liberalization, on average gained 9.6 paise.
6. The credit growth among PSBs has declined significantly since 2013 and has also been anaemic since 2016.

7. PSBs need to perform to their fullest potential and support economic growth rather than pullback lending, which has a detrimental effect on growth and welfare.

India’s Growth Prospects
1. India is at a critical inflection point in its growth trajectory due to a unique confluence of factors:
   a. A positive demographic dividend
   b. A modern digital infrastructure supported by the JAM “trinity” of near 100% financial inclusion,
   c. A biometrics-based unique identity system, and a mobile network structure, and
   d. A new GST network with uniform, electronic indirect taxation system across India.
2. Crores of individuals and businesses are entering the formal financial system.
3. This requires a thriving banking sector that supports and unleashes a multiplier effect and permanently alter India’s growth trajectory in a positive way.
4. The inefficient PSBs can severely handicap the country’s ability to exploit the unique opportunities and could result in generational setback to the economic growth.

Banking Structure: Nationalization to Today

History of Banking in India
1. Banking in India dates back to thousands of years. Several of India’s ancient texts including those in the Vedic period mention bank lending functions.
2. The modern banking system in India has its roots in the colonial era starting in the 1800s.
3. India’s public sector banks (PSBs) are legacy banks from the colonial period that were subsequently nationalized.
4. For example, India’s largest PSB, the State Bank of India (SBI), was founded as Bank of Calcutta in 1806, took the name Imperial Bank of India in 1921 and became state-owned in 1955.
5. The remaining PSBs in India were formed through two waves of nationalizations, one in 1969 and the other in 1980.
6. After the 1980 nationalization, PSBs had a 91% market share and the remaining 9% held by “old private banks” (OPBs) that were not nationalized.

Current Banking Structure
1. PSBs represent 65% to 70% of market share.
2. The decline in PSB market share from 91% from 1990s has been largely absorbed by “new private banks” (NPBs), which were licensed after a liberalization of licensing rules in 1990s.
3. PSBs, OPBs, and NPBs are currently subject to similar banking regulations on almost all aspects of their functioning including branching and priority sector lending.

4. The key difference between the PSBs and private banks is that PSBs enjoy less strategic and operating freedom because of majority government ownership.

5. The government exercises significant control over all aspects of PSB operations ranging from policies on recruitment and pay to investments and financing and bank governance including board and top management appointments.

6. The majority ownership of the government and its writ on bank functioning also results in
a. An implicit promise of the bailout of bank liabilities at the cost to taxpayer.
b. Subjecting PSB officers to scrutiny of their decisions by the Central Vigilance Commission and the comptroller Auditor General.

7. Fearing harassment due to investigations, officers of PSBs are wary of taking risks in lending or in renegotiating bad debt.

**Benefits of Nationalization**

1. The allocations of banking resources to rural areas, agriculture, and priority sectors increased.
2. Both rural bank deposit mobilization and rural credit increased significantly after the 1969 nationalization.
3. Other interventions like green revolution, multiple anti-poverty programmes along with bank nationalization also helped in such growth.
4. Policies of RBI such as lending targets for priority sectors, using a complex mix of pricing formulas also played significant role in rural credit growth.
5. RBI used both formal means and moral suasion to persuade banks to achieve the targets it set.

**Weakening of Public Sector Banks**

1. Trends over time that contrast PSBs and NPBs in a “difference-in-difference” sense reveal that the PSB weaknesses did not develop suddenly.
2. Both PSBs and NPBs have similar Return on assets (ROAs) prior to 2009 but PSB ROAs started declining in 2009 and continued through 2019.
3. ROA of NPBs increased till 2013 and declined thereafter, reflecting common trends in all banks since 2013.
4. The NPA problems of PSBs is because banks grew their loan portfolios as the Indian economy grew between 2004 and 2011.
5. But this credit growth was of suspect quality. When the economy slowed, the banking system saw a dramatic increase in NPAs.
6. It does not necessarily denote worse decision-making by banks in the last decade.


8. The banking crises are due to combination of
   a. Unsustainable macroeconomic policies,
   b. Market failures,
   c. Regulatory distortions and
   d. Government interference in the allocation of capital.

9. If the crises are not resolved effectively and swiftly, it impose enormous costs on society.

**Enhancing Efficiency of PSBs**

1. The Narasimhan Committee (1991, 1997), Rajan Committee (2007) and P J Nayak Committee (2014) have provided several suggestions to enhance the efficiency of PSBs.

2. The Survey, focuses on ideas for enhancing the efficiency of PSBs that have not been explored.

**Credit Analytics using Artificial Intelligence and Machine Learning**

1. The growth in digital transactions has been significant in India.

2. The use of direct benefit transfers has helped to bring both credit and deposits into the banking system across all geographies (rural, semi-urban, urban and metropolitan).

3. This indicates the possibilities for the Indian banking sector to grow proportionate to the scale of the Indian economy.

4. PSBs already have many important ingredients such as local market insights, vast geographic footprint, etc. to cater to this new demand.

5. But PSBs need significant investments to exploit the data-rich environment in India.

6. Analytics based on market data are capable of providing accurate predictions of corporate distress.
7. Leveraging these data requires new data, analytics, and modelling skills.
8. The adoption of new technologies- Artificial Intelligence and Machine Learning- will require complementary investments such as specialist, human capital with an orientation towards analytics.

**Benefits of credit analytics**
1. A large proportion of NPAs of Indian banks, especially PSBs, could have been prevented if data and analytics were employed in corporate lending.
2. Several leading indicator and data analytics could have highlighted about wilful defaulters as rates of default were the highest with larger loans (above INR 100 crores).

![Figure 20: Non-Performing Asset (NPA) Rate by Size of the Loan](image)

3. The information sharing among lenders on NPAs was minimal as of 2014. This information sharing was better among PSBs than NPBs.
4. About a quarter of accounts that were declared as NPAs by one bank was also declared as NPA in the bank’s account. This proportion has increased dramatically to 95% in just a few years.
5. Such incidences could be avoided with proper information sharing among banks.

**Creation of a FinTech Hub for PSBs**
1. PSBs were quick to adopt credit score by bureaus but they need to embrace FinTech, which is revolutionising the global financial landscape.
2. Investments in FinTech in India are significant. So, PSBs can benefit from the expertise that already resides in India in this area.
3. Challenges faced by PSBs such as high operating costs, disjointed process flows from manual operations and subjective decision making can be overcome by FinTech.

**Pooling of Data**
1. PSBs will be able to enhance their efficiency by fulfilling their role of delegated monitors if all the PSBs can pool their data into one entity.
2. The delegation of screening and monitoring to banks has been shown to be an efficient mechanism.
3. As the Government is the owner of all the PSBs, it can mandate the PSBs to share this data.
4. A GSTN like entity, called PSBN (PSB Network), to use technology to screen and monitor borrowers comprehensively and at length can be established.
5. PSBN would provide a significant information advantage, by utilizing other Government sources and service providers to develop AI-ML ratings models for corporates.
6. The AI-ML models can be employed for screening the corporate for a fresh loan and also for constantly monitoring the corporate borrower.

**Employee stakes in PSBs**
1. Employees are paid largely in salaries through fixed compensation contracts.
2. The flat compensation contracts and the pressures from monitoring by the vigilance agencies, make banks employees prefer safety and conservatism over risk-taking and innovation.

3. A long-term solution to this problem is enabling employees to own stakes in the PSBs

4. By enabling employees to become owners in the banks would incentivise them to embrace risk-taking and innovation.

5. A portion of the government stakes can be transferred to employees exhibiting good performance across all levels of the organization through Employee Stock Option Plans (ESOPs).

6. Part-ownership of PSBs by employees will
   a. Reduce problems as employees are incentivized to increase market value of equity, since their direct compensation depends on share values.
   b. Possibly change the mind-set from that of an employee to that of an owner.

**Need for best talent and organizational verticals based on technology**

1. Process for recruitment of bank officials is an issue as PSBs cannot recruit professional MBAs directly from the campuses.

2. Given the FinTech disruptions, PSBs need to enable cutting-edge recruitment practices that allow lateral entry of professionals and recruitment of professionally trained talent at the entry level.

3. Banks can also come up with new organizational verticals like innovation labs, accelerators, venture arms, and sandboxes for experimentation.

**Conclusion**

1. The Indian banking system is currently sub-scale compared to the size of the economy. A large economy needs an efficient banking sector to support its growth.

2. Use of FinTech (Financial Technology) across all banking functions and employee stock ownership across all levels can enhance efficiencies in PSBs.

3. These will make PSBs more efficient to support the nation towards being a $5 trillion economy.

4. A definite, timebound plan of action needs to be drawn up.

5. With the cleaning up of the banking system and the necessary legal framework such as the IBC, the banking system must focus on scaling up efficiently to support the economy.
Financial Fragility in NBFC

NBFC crisis
1. The liquidity crunch in India’s shadow banking system took shape in the wake of defaults on loan obligations by major Non-Banking Financial Companies (NBFCs).

Shadow Banking System
- It comprises a set of activities, markets, contracts and institutions that operate partially or fully outside the traditional commercial banking sector and are either lightly regulated or not regulated at all.
- A shadow banking system can be composed of a single entity that intermediates between end-suppliers and end-users of funds or it could involve multiple entities forming a chain.
- Shadow banks do not have explicit access to central bank liquidity. It is highly levered with risky and illiquid assets while its liabilities disposed to “bank runs”.
- A bank run occurs when a large number of customers of a bank or other financial institution withdraw their deposits simultaneously over concerns of the bank’s solvency.
- Three important segments of the shadow banking system in India are,
   a) Non-Banking Housing Finance Companies (HFCs)
   b) Retail Non-Banking Financial Companies (Retail-NBFCs)
   c) Liquid Debt Mutual Funds (LDMFs).

2. Two subsidiaries of Infrastructure Leasing & Financial Services (IL&FS) defaulted on their payments in 2018 and Dewan Housing Finance Limited (DHFL) defaulted in 2019.
3. Both these entities defaulted on non-convertible debentures and commercial paper obligations for amounts of approximately 1500-1700 crore.
4. So, mutual funds started selling off their investments in the NBFC sector to reduce exposure to stressed NBFCs.
5. Panic-stricken investors in debt mutual funds started pulling out their investments in these funds rapidly.
6. Net Asset Value of debt funds dropped due to the twin effects of
   a) Debt mutual funds writing off their investments in stressed NBFCs
   b) Asset sales at fire sale prices (extremely discounted prices) to meet unexpected high redemptions.
7. There was a sharp decline in the equity prices of stressed NBFCs in advance of actual defaults anticipating repayment troubles.
8. So, both debt and equity investors suffered a massive erosion in wealth due to the defaults.
9. Debt mutual funds became hesitant to finance the NBFC sector leading to liquidity crunch.
10. This impacted the overall credit growth in the Indian economy and a decline in GDP growth.

Health Score
1. It is an index is developed to estimate the financial fragility of the NBFC sector. It can predict the constraints on external financing or refinancing risk faced by NBFC firms.
2. The value of the index ranges between -100 to +100 with higher scores indicating higher financial stability of the firm/sector.
3. The Health Score employs information on the key drivers of refinancing risk such as
   a) Asset Liability Management (ALM) problems
   b) Excess reliance on short-term wholesale funding (Commercial Paper)
   c) Balance sheet strength of the NBFCs
4. The Health Score provides a diagnostic for the problems in the NBFC sector.
5. The low Health Score of the stressed NBFC from 2010-2019 period provided significant early warning signals.
6. It can serve the critical role of predicting refinancing related stress faced by the financial firms in advance.
7. It can serve as an important monitoring mechanism to prevent such problems in future.
8. Health Score can also be used by policy makers to allocate scarce capital to stressed NBFCs in an optimal way to alleviate a liquidity crisis.

ALM Problem
1. Asset Liability Management (ALM) problem highlights the over-dependence of the NBFC on short-term wholesale funding.
2. The extent of refinancing risk faced by NBFCs is fundamentally driven by their reliance on short-term wholesale funding.
3. Refinancing risk is the possibility that a borrower cannot refinance by borrowing to repay existing debt.

Conceptual framework of Rollover Risk
1. Financial institutions rely on short-term financing to fund long-term investments. This reliance on short-term funding causes an asset liability management (ALM) problem.
2. It is because asset side shocks expose financial institutions to the risk of being unable to finance their business.

**Rollover Risk**
- This risk is a risk associated with the refinancing of debt.
- It is commonly faced by countries and companies when a loan or other debt obligation like a bond is about to mature and needs to be converted, or rolled over, into new debt.
- Rollover risk reflects economic conditions, interest-rate trends, and how much liquidity there is in the credit markets.

3. A conceptual framework on the liquidity crisis in the NBFC sector:
   a) NBFCs raise capital in the short-term (1-3 months) commercial paper (CP) market at a lower cost, as compared to the long term (5-10 years) nonconvertible debenture (NCD) market.
   b) When an asset-side shock reduces expected future cashflows for an NBFC, it adversely affects the ALM problem in the NBFC and thereby risk perceptions about the NBFC.
   c) Such a shock increases the NBFC’s problems when its liability structure is over-dependent on short-term wholesale funding such as commercial paper.
   d) The Liquid Debt Mutual Fund (LDMF) sector is a primary source of short-term wholesale funds in the NBFC sector.
e) This interconnectedness causes the transmission of systemic risk from the NBFC sector to the LDMF sector.

f) Shocks in the NBFC sector may lead to pulling out money by investors at firesale prices resulting in liquidity crisis in the NBFC sector.

g) Liquidity crunch in one NBFC adversely affects risk perceptions about other NBFCs as well.

h) So, three risks work in tandem to cause Rollover Risk are,

i. First risk stems from the magnitude of the ALM problem in the NBFC.

ii. Second risk originates from the interconnectedness of the NBFC with the LDMF sector.

iii. The third risk stems from the inherent resilience of the NBFC which allows it to absorb shocks.

Differences between HFCs and Retail-NBFCs

1. The drivers of Rollover Risk differ between HFCs and Retail-NBFCs because

a. HFCs hold much longer duration assets as compared to Retail-NBFCs which hold medium-term assets.

<table>
<thead>
<tr>
<th>HFC</th>
<th>Retail NBFC</th>
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</thead>
<tbody>
<tr>
<td>- Housing loans</td>
<td>- Auto</td>
</tr>
<tr>
<td>- Developer loans</td>
<td>- Consumer durables</td>
</tr>
<tr>
<td>etc.</td>
<td>- Gold loans</td>
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b. Asset side shocks cause significant deterioration in the asset liability mismatch of the HFCs compared to asset liability mismatch of Retail-NBFCs.

c. Retail-NBFCs rely more on the short-term wholesale funding market as compared to HFCs. So, HFCs are less exposed to interconnectedness risk compared to Retail-NBFCs.

2. Key drivers of Rollover Risk for HFCs are ALM Risk and Financial and Operating Resilience while Interconnectedness Risk and Financial and Operating Resilience are the key drivers of Rollover Risk for Retail-NBFCs.

Risks from ALM Mismatch

1. This risk arises in most financial institutions due to a mismatch in the duration of assets and liabilities. Liabilities are generally of shorter duration than assets.

2. This mismatch implies that an NBFC must maintain a minimum amount of cash or cash-equivalent assets to meet its short-term obligations.
3. If cash flows from the long-term assets are inadequate to meet its immediate debt obligations, an NBFC can still repay its obligations by issuing fresh Commercial Paper (CP) to avoid defaulting.

**Commercial Paper**
- Commercial Paper (CP) is an unsecured money market instrument issued in the form of a promissory note. It was introduced in India in 1990.
- It enables highly rated corporate borrowers to diversify their sources of short-term borrowings and to provide an additional instrument to investors.
- Corporates, primary dealers (PDs) and the All-India Financial Institutions (FIs) are eligible to issue CP.

4. But such a refinancing strategy works well only when there are no asset side shocks or liability side shocks.

5. NBFCs that maintain adequate cash buffers and don’t have asset liability management problems are able to survive through the stress period. They have lower roll-over risk.

**Risks from Interconnectedness**
1. Interconnectedness Risk is a measure of the transmission of systemic risk between an NBFC and the LDMF sector that arises from two factors.
   a) If LDMF sector holds concentrated positions in the Commercial Papers of a specific stressed NBFC, it may lead to a greater redemption risk from their own investors due to perceptions.

   - **Redemption** describes the repayment of any money market fixed-income security at or before the asset's maturity date.
   - Investors can make redemptions by selling part or all of their investments such as shares, bonds, or mutual funds.

   b) LDMFs are subject to risks from their investors if their cash holdings don't account for extreme tail events. Thus, low levels of cash holdings in the LDMF sector reduces the ability to absorb redemption pressures.

   **Tail risk** is the chance of a loss occurring due to a rare event, as predicted by a probability distribution.

2. The combined impact of these two factors are referred to as the Interconnectedness Risk. It increases the likelihood of concerted redemption by investors across the entire LDMF sector.

**Financial and Operating Resilience (FOR)**
1. Liquidity crunch in debt markets often leads to credit rationing. Here firms with robust financial performance get access to credit while the less robust ones are denied credit.

2. Firms with robust financial and operating performance can withstand a prolonged period of liquidity crunch if they choose not to raise funds from debt mutual funds. It is called as FOR.

3. Measures of financial resilience of NBFCs are
   a) Commercial paper (CP) as a percentage of borrowings
   b) Capital Adequacy Ratio (CAR) and provisioning policy

3. Measures of operating resilience are
   a) Cash as a percentage of borrowings
   b) Loan quality and Operating Expense Ratio (OPEX Ratio)

**Rollover Scheme of HFCs/Retail-NBFCs**
1. Schematic for the HFC sector highlights the ALM Risk and the Financial and Operating Resilience as strong effects while the Interconnectedness Risk as a weak effect
2. In the schematic for the Retail-NBFC sector, the ALM Risk is highlighted as a weak effect but the Interconnectedness Risk and the Financial and Operating Resilience are strong effects.
Factors affecting Health Scores of HFCs
1. ALM Profile- It is measured by the difference between assets and liabilities in each cash flow bucket or part normalized by the total assets of the HFC.
2. Short-Term Volatile Capital- This is measured by CP as a percentage of borrowings of the HFC.
3. Asset Quality- This is measured by the ratio of retail loans to the overall loan portfolio of the HFC.
4. Short-term Liquidity- This is measured by the percentage of cash to the total borrowings of the HFC.
5. Provisioning Policy- This is measured by the difference between provision for bad loans made in any financial year and the gross non-performing assets (NPA) in the subsequent financial year.
6. Capital Adequacy Ratio (CAR)- This is the sum of Tier-I and Tier-II capital held by the HFC as a percentage of Risk-Weighted Assets (RWA).

Factors affecting Health scores of Retail-NBFCs
1. LDMF sector exposure to CP issued by Retail-NBFCs - This is measured by the average of the ratio of CP of the specific Retail-NBFC held by the LDMF sector and the total commercial paper holdings of the LDMF sector in the overall Retail-NBFC sector.
2. Liquidity Buffer levels in the LDMF Sector- This is measured by the average proportion of highly liquid investments such as cash, G-secs etc., that are held by the LDMFs.
3. Short-Term Volatile Capital - This is measured by CP as a percentage of borrowings of the Retail-NBFC.
4. Operating Expense Ratio (OPEX Ratio) – This is measured by the operating expenses in a financial year divided by the average of the loans outstanding in the current financial year end and previous financial year end. It is an indicator of efficiency of a Retail-NBFC.
5. Short-term Liquidity - This is measured by the percentage of cash to the total borrowings of the Retail NBFC.
6. Provisioning Policy- This is measured by the difference between provision for bad loans made in any financial year and the gross non-performing assets (NPA) in the subsequent financial year.
7. Capital Adequacy Ratio (CAR) – This is the sum of Tier-I and Tier-II capital held by the Retail-NBFC as a percentage of Risk-Weighted Assets (RWA).

Policy Implications
1. Firms in the NBFC sector are susceptible to rollover risk when they rely too much on the on the short-term wholesale funding market for financing their investments in the real sector.
2. The following policy initiatives can be employed to arrest financial fragility,
   (i) Regulators can employ the Health Score methodology to detect early warning signals of rollover risk problems in individual NBFCs. Downtrends in the Health Score can be used to trigger greater monitoring of an NBFC.
(ii) When faced with a dire liquidity crunch situation, regulators can use the Health Score as a basis for optimally directing capital infusions to deserving NBFCs to ensure efficient allocation of scarce capital.

(iii) Prudential thresholds should be set up on the extent of wholesale funding that can be permitted for firms in the shadow banking system.

(iv) Such a norm would be consistent with macroprudential regulations that are required to internalize the systemic risk concerns arising due to an individual NBFC’s financing strategy.
Privatization and Wealth Creation

1. An "in-principle" approval was accorded to reduce Government of India's paid-up share capital below 51 per cent in select Central Public Sector Enterprises (CPSEs).

2. The strategic disinvestment of Government's shareholding of 53.29 per cent in Bharat Petroleum Corporation Ltd (BPCL) was also approved.

3. There was an increase of Rs.33000 crore in the stock price of BPCL compared to HPCL after the announcement.

4. Strategic disinvestment points out that Government should discontinue its engagement in manufacturing/producing goods and services in sectors where competitive markets participates.

Evolution of Disinvestment Policy

1. The liberalization reforms of 1991 increased the demand for privatization/disinvestment of PSUs. In the initial phase, minority stake was auctioned.

2. India adopted strategic sale as a policy measure in 1999-2000 with sale up to 50 per cent or more, along with transfer of management control.

3. In 2004-05 the government decided to dilute its equity and raise resources to meet the social needs of the people.

4. Since 2014, Government has been following an active policy on disinvestment in CPSEs through the various modes
   a. Disinvestment through minority stake sale in listed CPSEs to achieve minimum public shareholding norms of 25 per cent.
   b. Listing of CPSEs to facilitate people's ownership and improve the efficiency of companies through accountability to its stake holders
   c. Strategic Disinvestment
   d. Buy-back of shares by large PSUs having huge surplus.
   e. Merger and acquisitions among PSUs in the same sector.
   f. Launch of exchange traded funds (ETFs) - an equity instrument that tracks a particular index.
   g. Monetization of select assets of CPSEs to improve their balance sheet/reduce their debts and to meet part of their capital expenditure requirements.

5. NITI Aayog has classified PSUs into “high priority” and “low priority”, based on (a) National Security (b) Sovereign functions at arm's length, and (c) Market Imperfections and Public Purpose.

6. The PSUs falling under "low priority" are covered for strategic disinvestment.

Benefits of privatization

1. It has positive effect on labour productivity and overall efficiency of PSUs in India.

2. Improves capital allocation and economic efficiency.

3. The levels and growth rates of profitability, labour productivity, and investment spending are expected to improve significantly following partial privatization.

Impact of privatization

1. The performance of privatized firms has improved significantly following privatization.

2. On an average, the net worth (is what it owes its equity shareholders) of privatized firms increased from 700 crore before privatization to 2992 crore after privatization.

3. On an average, the net profit (profit of the company after tax) of privatized firms increased from 100 crore before privatization to 555 after privatization.

4. On an average, the gross revenue of privatized firms increased from 560 crore to before privatization to 4653 crore after privatization.

5. The return on equity, assets and the net profit margin has increased after privatization.

6. The performance of the privatized CPSE and its public sector peers is quite similar till the year of privatization.

7. Post privatization, the performance of the privatized entity improves significantly compared to the change in the peers' performance.
Way forward
1. Disinvestment improves firm performance and overall productivity and unlocks their potential to create wealth.
2. Aggressive disinvestment through the route of strategic sale should be utilized to bring in higher profitability, promote efficiency, increase competitiveness and to promote professionalism in management in CPSEs.
3. The focus of the strategic disinvestment needs to be an exit from non-strategic business and directed towards optimizing economic potential of these CPSEs.
4. This would have a multiplier effect on other sectors of the economy by unlocking the capital for use especially in public infrastructure like roads, power transmission lines, sewage systems, irrigation systems, railways and urban infrastructure.
5. The Government can transfer its stake in the listed CPSEs to a separate corporate entity which would be managed by an independent board and mandated to divest the Government stake in these CPSEs.
6. This will lend professionalism and autonomy to the disinvestment programme which would improve the economic performance of the CPSEs.

**Figure 12: Proposed Structure for Corporatization of Disinvestment**
Is India’s GDP growth overrated?

1. To achieve the objective of becoming a $5 trillion economy by 2025, a strong investment climate is critical.
2. Investment assumes primacy in catalyzing the economy into a virtuous cycle (chain of factors that result in higher economic growth).
3. The growth rate of the economy is a pre-eminent driver of investment decisions.

<table>
<thead>
<tr>
<th>Change in the Base Year of the GDP Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The Base Year of the GDP Series was revised from 2004-05 to 2011-12 in line with the System of National Accounts (SNA) 2008 of the United Nations.</td>
</tr>
<tr>
<td>2. Countries follow the SNA evolved in the UN for the purpose of global standardization and comparability.</td>
</tr>
<tr>
<td>3. The SNA 2008 is the latest version of the international statistical standard for the national accounts, adopted by the United Nations Statistical Commission (UNSC) in 2009 and is an update of the earlier 1993 SNA.</td>
</tr>
<tr>
<td>4. The 2008 SNA encouraged Member States, regional and sub-regional organizations to implement its recommendations and use it for the national and international reporting of national accounts statistics based on the available data sources.</td>
</tr>
<tr>
<td>5. The Inter-Secretariat Working Group on National Accounts (ISWNGA) in India was mandated to develop the 2008 SNA through intense discussions and consultation with member countries. India also participated in the deliberations of the Advisory Expert Group.</td>
</tr>
<tr>
<td>6. India’s methodology of compilation of macro aggregates was finalized by the Advisory Committee on National Accounts Statistics (ACNAS) comprising experts from academia, National Statistical Commission, Indian Statistical Institute (ISI), Reserve Bank of India (RBI), Ministries of Finance, Corporate Affairs, Agriculture, NITI Aayog and selected State Governments.</td>
</tr>
</tbody>
</table>

Difference-in-difference (DID) model

1. It is an econometric technique that attempts to mimic an experimental research design by studying the differential effect of a quasi-experiment such as a GDP methodology change.
2. The differential effect in average GDP growth rate is studied in a country that has gone through the methodology change, such as India (treatment group), versus other countries which have not gone through the change (control group).
3. The DID methodology estimates the Indian GDP growth rate if the methodological change had not been implemented and compares this estimate to the actual growth rate to infer the incorrectness in the estimates.
4. DID models fail to show any misestimation in the Indian GDP.
5. Compared to other countries, India has very high informal sector employment and a large proportion of youth that is not in employment, education or training.
6. Agriculture contributes disproportionately to India’s employment whereas services contribute disproportionately to GDP.
7. So, pattern of GDP growth in India is far more complex than the prediction by a few indicators of economic activity. Asserting a mis-estimation based on these indicators alone is inappropriate.

Determinants of Growth Rate

1. In June 2019 report, the Economic Advisory Council to the Prime Minister highlighted the importance of agriculture- and services-based indicators in the diagnostic process.
2. Similarly, more work is needed to fully understand the determinants of India’s growth rate over time.
3. Impressive improvements in several social development indicators, such as access to nutrition and electricity, might be a reason for the higher growth rate in Indian GDP in the post-change period.
4. New firm creation in the formal sector across 504 districts has an impact on GDP growth rate.
   a. A 10 per cent increase in new firm creation increases district-level GDP growth by 1.8 per cent.
b. As the pace of new firm creation in the formal sector accelerated significantly more after 2014, the resultant impact on district-level growth and thereby country level growth must be accounted for in any analysis.

Conclusion
1. The level and growth of a country’s GDP informs several critical policy initiatives as it is a barometer of the economy’s size and health.
2. It is also a pre-eminent driver of investment. Therefore, it is important that GDP is measured as accurately as possible.
3. The cross-country, generalized difference-in-difference model demonstrated lack of any concrete evidence in favour of a misestimated Indian GDP.
4. Apart for rise in district-level GDP, analysis also shows that new firm creation in the Service sector is far greater than that in manufacturing, infrastructure or agriculture.
5. So, there is a need to invest in ramping up India’s statistical infrastructure.
6. A 28-member Standing Committee on Economic Statistics (SCES) headed by India’s former Chief Statistician need to be set up for this.
Thalinomics

1. Economics affects each one of us in our everyday lives but remains unnoticed by the common man or woman.

2. As food is a necessity, a rapid rise in the price of a Thali has the direct effect on the common man.

3. Quantifying the cost incurred by a common person in putting together one complete, homemade meal – the Indian Thali is the most effective way to communicate the trends in prices.

4. As India has very diverse cuisines, with variety of vegetables, cereals, fruits, and spices that grow across the country, Food and beverages constitute around 45.9% in the Consumer Price Index - Combined.

Construction of Thali Prices

1. Thali prices are constructed for 25 States/UTs considering the prices for cereals (rice or wheat), sabzi (vegetables plus other ingredients), dal (pulses with other ingredients) and fuel required to cook.

2. Two types of Thalis are analysed:
   a. A vegetarian comprises of a serving of cereals, sabzi and dal and
   b. A non-vegetarian one comprises of cereals, sabzi and a non-vegetarian component.

<table>
<thead>
<tr>
<th>Component of Thali</th>
<th>Other Ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sabzi</td>
<td>0.2 grams of turmeric, 0.5 grams of chilies-dry, 1 gram of salt, 0.5 grams of coriander, 10 grams of cooking oil</td>
</tr>
<tr>
<td>Dal</td>
<td>0.2 grams of turmeric, 0.2 gram of salt, 0.2 grams of chilies-dry, 1 gram of zeera/mustard seeds, 10 grams of oil</td>
</tr>
<tr>
<td>Non-Vegetarian</td>
<td>0.1 grams of turmeric, 0.2 grams of chilies-dry, 0.5 gram of salt, 0.2 grams of coriander, 0.1 gram of mixed spices, 0.5 gram ginger, 0.5 gram garlic, 15 grams of onion, 12 grams of tomato, 10 grams of cooking oil</td>
</tr>
</tbody>
</table>

The Thali prices represent the total money spent in preparing all the constituents of the respective Thalis. State-wise calculations are based on the recipe, components and weights to arrive at the state-wise prices of Thalis. Region-wise and All-India level Thalis have been constructed by taking weighted average of Thali prices in each state using the state-wise population as the weight.

Observations

1. Both across India and the four regions (North, South, East and West) the absolute prices of a vegetarian Thali have decreased since 2015-16 and then increased in 2019.

2. This was due to moderation in the prices of vegetables and dal from 2015-16 when compared to the previous trend of increasing prices.

3. If the prices of a vegetarian Thali had followed the trend obtained till 2015-16, households would have paid more than what paying today.

4. The affordability of vegetarian Thalis has also improved over the time period from 2006-07 to 2019-20 by 29% and non-vegetarian Thalis by 18%.

Thali Prices

1. In the year 2015-16 there was a shift in the dynamics of Thali prices.

2. Many reform measures were introduced to enhance the productivity of the agricultural sector along and agriculture markets for better and more transparent price discovery.

3. These reforms has resulted in a slowdown in the prices of Thalis at the All-India level.

Major Initiatives for Enhancing Productivity of Agriculture and Efficiency of Agricultural Markets

1. Pradhan Mantri Annadata Aay SanraksHan Abhiyan (PMAASHA)
   a. PM-AASHA, launched in 2018, covers three sub-scheme i.e.
      i. Price Support Scheme (PSS),
      ii. Price Deficiency Payment Scheme (PDPS) and
      iii. Pilot of Private Procurement & Stockist Scheme (PDPS).
   b. Under PSS, physical procurement of pulses, oilseeds and Copra is done by Central Nodal Agencies with proactive role of State governments.
c. PDPS covers all oilseeds for which MSP is notified. Under this, direct payment of the difference between the MSP and the selling/modal price is made to farmers selling their produce in the notified market yard through a transparent auction process.

**2. Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) - Per Drop More Crop**
PMKSY was implemented in the year 2015-16. It focuses on
a. Enhancing water use efficiency through expansion of cultivable area under assured irrigation,
b. Improve on-farm water use efficiency to reduce wastage of water,
c. Enhance the adoption of precision-irrigation and other water saving technologies,
d. Enhance recharge of aquifers and introduce sustainable water conservation practices.

**3. Pradhan Mantri Fasal Bima Yojana (PMFBY)**
a. PMFBY was introduced in 2015-16 to provide better insurance coverage for agricultural crops and thereby mitigate risk.
b. A total of 69.9 lakh farmers have benefited from PMFBY. The scheme aims to provide comprehensive insurance coverage to farmers.

**4. Soil Health Card**
a. Soil Health Card scheme was introduced in the year 2014-15 to assist State Governments to issue soil health cards to all farmers in the country.
b. Soil health card provides farmers information on the nutrient status of their soil along with recommendation on appropriate dosage of nutrients to be used for their soil conditions.

**5. e-National Agricultural Market (e-NAM)**
It is an online trading platform for agricultural commodities for transparent price discovery. So far, 585 wholesale regulated markets in 16 States and 2 UTs have connected to e-NAM.

a. The National Food Security Act enacted in 2013 entitles 67% of the population (75 per cent in rural areas and 50 per cent in urban areas) to receive highly subsidized food grains.
b. Under the Act, food grain is allocated @ 5 kg per person per month for priority households category.
c. For AAY families @ 35 kg per family per months at highly subsidized prices of Rs. 1/2/3/ per kg for Nutri-cereals, wheat and rice respectively.
d. Coverage under the Act is based on the population figures of Census, 2011. The Act is being implemented in all 36 States/UTs and covers about 81.35 crore persons.

**Regional Variations**
1. The regional variation in the price trends needs to be observed as India is diverse. States in India have therefore been divided into four regions based on geographic location:
a. Northern Region: Chandigarh, Delhi, Haryana, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Punjab and Uttar Pradesh.
b. Southern Region: Karnataka, Kerala, Puducherry, Tamil Nadu, Andhra Pradesh and Telangana.
c. Eastern Region: Assam, Bihar, Chhattisgarh, Jharkhand, Odisha, Tripura and West Bengal.
d. Western Region: Goa, Gujarat, Rajasthan and Maharashtra.
2. Similar gains are observed across regions, with the exception of Northern Region and Eastern Region in 2016-17 in the case of vegetarian Thali.
3. The highest gain in any year was in the Southern region for a vegetarian Thali in 2018-19 of around 12% of annual earnings of a worker.

**Affordability of Thalis**
1. The price of a Thali indicates the cost of consuming a healthy plate of food.
2. So the affordability of Thalis is important factor and it has increased over the years.
3. In terms of vegetarian Thali, an individual has spent around 70% of their daily wage on two Thalis for a household of five in 2006-07. Now they are able to afford same number of Thalis from around 50% of his/her daily wage in 2019-20.
4. Similarly, the affordability of non-vegetarian Thalis has also increased with the share of wages required decreasing from around 93% to around 79% in same period.
5. In 2019-20, the most affordable Thali was in Jharkhand. Nonvegetarian Thali was also most affordable in Jharkhand.

6. Comparing between 2006-07 and 2019-20, vegetarian Thali has become more affordable in all states under consideration.

7. In the case of non-vegetarian Thali, affordability has increased during this period in all states except Bihar and Maharashtra, where it has shown a marginal decline.

Price Trends of Thali Components
1. At the all-India level, prices of almost all the components have been mostly lower compared to the projected prices since 2015-16.

2. Dal prices remained elevated till 2016-17, followed by a large decline. Similar pattern is visible across the country.

3. Sabzi (vegetables) prices have remained clearly below the projected prices in all regions except in the Southern region where the variation has been greater and, in general, the Sabzi prices have been higher.

Thali Inflation
1. Thali inflation (year-on-year growth in Thali prices), remained elevated during the initial part of the period 2006-07, then reduced significantly.

2. There is an increase in the rate of inflation in vegetarian and non-vegetarian Thalis during 2019-20 which is a temporary phenomenon that should revert back as has happened in earlier years.

3. In the case of vegetarian Thali, inflation at the All-India level fell from the significantly high level, attained in 2015-16, to below zero level in the subsequent years.


5. Inflation in cereals have been declining at a steady rate throughout the period. The fall in inflation has accelerated in all other components except Sabzi.

6. Across regions and States, a similar trend is seen in inflation with overall Thali inflation showing a downward trend.

7. But, over the last year, the rate of inflation for Dal, Sabzi and nonvegetarian components have increased.

Variability of Thali Prices
1. There is no specific trend in the variability of Thali prices at the All-India level across months over the years.

2. Similarly, in cases of variability across regions and across states, over time, there are no specific trends in the variability patterns.

Conclusion
1. Food is not just an end in itself but also an essential ingredient in the growth of human capital and important for national wealth creation.

2. ‘Zero Hunger’ has been agreed upon by nations of the world as a Sustainable Development Goal (SDG).

3. This goal (SDG 2) is directly related to other SDGs such as Goal 1 (No poverty), Goal 4 (Quality Education), Goal 5 (Gender equality), Goal 12 (Responsible consumption and production), Goal 13 (Climate action) and Goal 15 (Life on Land).