

Breaking Down the Economic Survey

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Index Terms – Fiscal Developments, External Sector, Sovereign Credit Rating, Debt Sustainability, Entrepreneurship, Wealth Creation, Innovation, Services, Bare Necessities

1 INTRODUCTION

The Economic Survey of India is an annual document of the Ministry of Finance, Government of India. The Department of Economic Affairs, Ministry of Finance presents the Survey in the Parliament every year, just before the Union Budget. It is prepared under the guidance of the Chief Economic Adviser of India. This document is presented to both houses of Parliament during the budget session. The first Economic survey was presented in 1950-51 as part of the Union Budget. It is presented each year due to its significance. The survey puts out economic growth forecasts, giving out reasons why it believes the economy will expand faster or decelerate. The Economic survey has been presented in two volumes. The first volume typically outlines the challenges facing the Indian Economy, while the second volume is generally a broad-based review of the year gone by. It also gives details about the major schemes run by the government as well as key policies and their outcomes.

1.1 Importance of Economic Survey-

The survey not only puts the perspective of the country's economic condition but also analyses trends in money supply, agricultural and industrial production, infrastructure, prices, employment, exports, imports, foreign exchange reserves, as well as other economic factors, which is basically a prequel to the budget. It is used to highlight key concerns or areas of focus.

Economic Survey 2020-21 recognises the role of policymaking for economic growth and development. The survey makes the case for continued focus on economic growth as the most important objective for India at its stage of development. This survey constructs an index of 'the bare necessities' across states in India. The survey for this year has gone digital. Volume I Attempts to provide evidence based economic analyses of the challenges of policy making and tools to make it more effective. Volume II reviews recent

development in the major sectors of the economy with a focus on the challenges faced due to the pandemic this year. **Economic Survey 2019-20** made an attempt to craft a framework of policies that foster wealth creation in India. The Survey's conceptualisation of wealth creation, presents a synthesis of the old and the new, be it in the combination of ancient Indian tradition with contemporary evidence or in suggesting the use of FinTech for our Public Sector Banks. The Survey identifies several levers for furthering wealth creation: entrepreneurship at the grassroots as reflected in new firm creation in India's districts; promote "pro-business" policies that unleash the power of competitive markets to generate wealth as against "pro-crony" policies that may favour incumbent private interests. Volume I, attempts to capture ideas that encapsulate "economic freedom and wealth creation", provides evidence based economic analyses of recent economic developments to enable informed policymaking. Volume II reviews recent developments in the major sectors of the economy and is supported by relevant data.

2 FISCAL DEVELOPMENTS

Fiscal policy means use of taxation and public expenditure by government to influence economic activity. The budget is said to be balanced when tax revenues equals government expenditures, a surplus when tax revenues exceed expenditures and deficit when expenditures exceed tax revenues. Fiscal policy is an instrument of economic development. The year 2020-21 has been challenging one on the fiscal front. In order to meet the increased demand for resources, the target for gross market borrowing of the central government for the financial year 2020-21 was revised from the budget estimate of Rs.7.8 lakh crore to Rs.12 lakh crore. Therefore, India adopted a calibrated approach best suited for the evolving situation of the economy in contrast to front-loaded large stimulus packages adopted by many countries. In comparison, the year 2019-20 was challenging for the Indian Economy because of the decelerating growth rate experienced in the first half of the

year. Amongst the various reforms introduced during the year to promote growth and investment, reduction in corporate income tax rate was a major structural reform. Going forward, the plan was to relax the fiscal deficit target. Relaxing of fiscal deficit target means that the government is planning to spend more to stimulate growth. The Budget 2019-20 targeted a high growth in non-debt receipts of the Central Government, whereas when we compare with the year 2020-21, the non-debt receipts have been adversely hit by the slump in economic activity after the pandemic outbreak. During April to November 2020, the non-debt receipts have registered a growth of -17.9 percent relative to the corresponding period in 2019-20. This shortfall is attributed to a fall in all components of non-debt receipts i.e., net tax revenue, non-tax revenue and non-debt capital receipts.

2.1 Non-Debt Capital Receipts- The non-debt capital receipts include recovery of loans and disinvestment receipts.

Government had the target to mobilise 1.05 Lakh crore from disinvestment proceeds. The survey stated that it had been able to raise 0.18 lakh crore which was only 17.2 per cent of 2019-20 Budget Estimate because of the delay in disinvestment of public sector companies like BPCL, Air India and container corporation. It affected the fiscal deficit of the country as it widened to 3.8% against the predicted 3.3%. In comparison, in 2020-21, the adverse market conditions arising due to COVID-19 have also negatively impacted the Government's plans to achieve the target for disinvestment receipts. The Budget 2020-21 had envisaged to mobilize Rs.2.1 lakh crore from disinvestment proceeds during current fiscal year, of which Rs.0.18 lakh crore was realized up to November 2020. The disinvestment target of Rs. 2.1 lakh crore was apparently the highest ever-disinvestment target till date. Of this Rs.2.1 lakh crore, the Government expected to earn Rs. 90,000 crores by selling stake in public sector banks and financial institutions such as Life Insurance corporation of India (LIC) and IDBI bank and remaining Rs. 1.2 lakh crore from selling stake in public sector enterprises. The officials said that lockdown and depressed oil market was the reason they were not confident with the correct valuation for targets like Air India and BPCL. If it would have reached its target, it would have helped the Government cover a higher part of the spending needed for providing economic stimulus.

2.2 Trends in Expenditure-

Economic survey 2019-20 stated that it is imperative for any developing economy to optimally allocate the available resources without compromising on the crucial developmental and macroeconomic goals. As India's tax to GDP ratio is low, Government faced the challenge of providing sufficient funds for investment and infrastructure expansion while staying within the bounds of fiscal prudence. Therefore, improving the composition and quality of expenditure was significant. Several initiatives were undertaken by the Ministry of Defence to improve efficiency and utilization of defence expenditure, promote self-reliance, and encourage private sector participation in the defence sector, whereas the expenditure policy during the year 2020- 21 has focused on restructuring and prioritisation of expenditure to meet the unforeseen expenditure demands arising due to COVID-19.

Economic survey 2019-20 states that within revenue expenditure, more than 40% of the increase was explained by increase in interest payments and major subsidies. whereas if we compare, the monthly accounts data up to November 2020 shows that subsidies registered a negative growth of 14% during the first eight months of FY 2020-21. The decline in global petroleum prices acted as an important fiscal shock absorber during 2020-21, as it led to a decline in petroleum subsidies.

Talking about global petroleum prices, since the Oil crisis of 70s and early 80s, the price of crude oil has remained mostly, in a band of \$10-\$30 before breaking out in 2004. That time it was due to China-led oil demand growth and its impact on OPEC's surplus oil production resulted in concerns about the tighter demand-supply situation. Next, 2008 financial crisis led to unprecedented fall in oil prices by over \$100, from its all-time highs in \$140s before resuming an uptrend. Then, in 2014-15, plunge in oil prices came from unconventional sources and the missing price supported by OPEC as the oil producing nations continued to flood the market with their produce at highest rates. Lastly, came the pandemic when the futures contract for May 2020 delivery dipped to a low of -\$37 in April 2020. The onset of pandemic, led to travel curbs and a sharp drop in the economic activity causing an oversupply situation in the market.

2.3 Fiscal Situation and Response to COVID-19 Pandemic-

Spending for stimulating growth is a good step for recovery of any economy, it finances productive capital investment, but we can't ignore the problems that can come due to increase in expenditure. Firstly, higher deficits can lead to

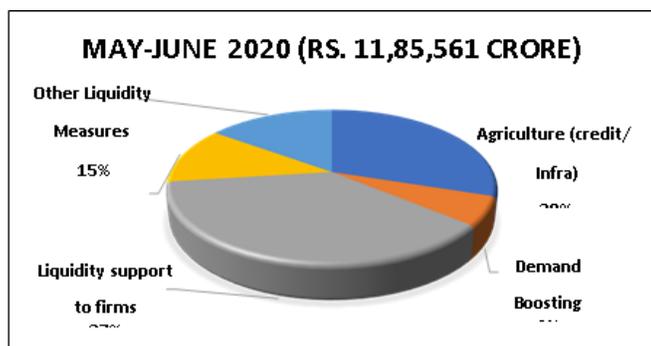
higher future taxes, which further leads to disincentives for work and entrepreneurship. Secondly, if markets lose confidence in the government, investors may not be willing to refinance the debt. This can lead to government defaulting or having to simply print money, which basically leads to inflation. Lastly, it leads to crowding out effect, where government borrowings tend to increase interest rates, which leads to reduction in private firms borrowing and investment spending, basically government borrowing takes the place of private sector borrowing.

In order to facilitate a resilient recovery of the economy from the impact of COVID-19 pandemic and the following lockdown, Government of India and RBI together announced a total stimulus worth Rs.29.87 lakh crore, which is 15% of national GDP i.e., Rs. 195.86 trillion. The fiscal stimulus by the Government of India was introduced in a phased manner. The special economic and comprehensive package announced in the initial phase of lockdown focused on measures to primarily provide a cushion to the vulnerable sections of the society and the small

businesses. This included direct food transfers to the poor and vulnerable, livelihood programmes, guarantees and liquidity enhancing measures.

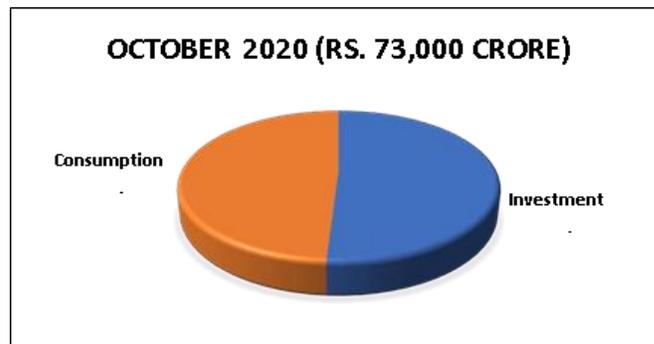


Source: Economic Survey 2020-21



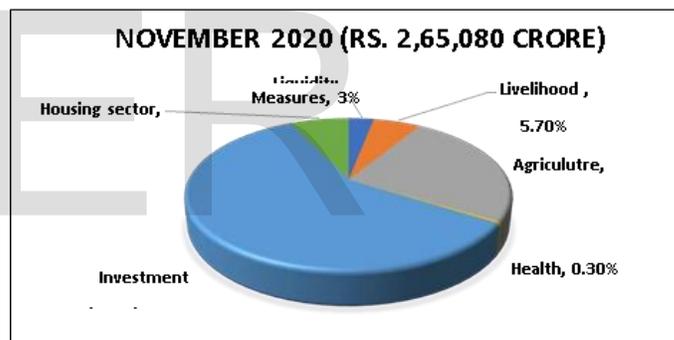
Source: Economic Survey 2020-21

Subsequently, along with the steady unwinding of the lockdown and restrictions, the demand side impetus was given to re-inflate consumption demand.



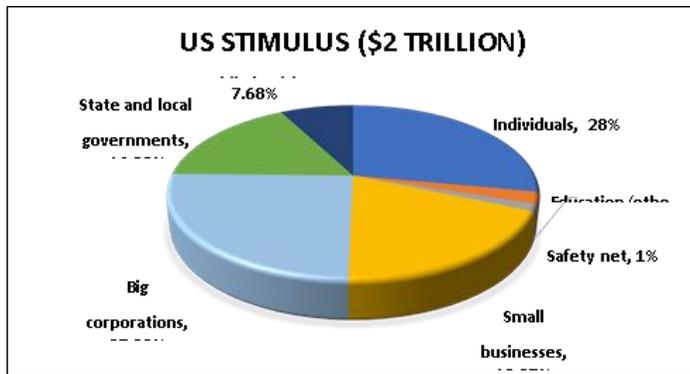
Source: Economic Survey 2020-21

When the economic recovery began after the lifting up of the lockdown, the focus of the stimulus measures shifted towards on investment boosting measures like Production Linked Incentives, enhancing capital expenditure and steps to encourage investment in infrastructure sector.



Source: Economic Survey 2020-21

Next, for comparison, we looked at U.S. stimulus package provided for dealing with the pandemic, where the Government rolled out a \$2 trillion U.S. stimulus package, the largest emergency relief bill in the American History. It was planned to help people, families, businesses, and the economy cope with the disastrous effects of the COVID-19 pandemic. This included one time cash payments of up to \$1200 to Americans who qualified. The breakdown of \$2 trillion was done as-



Source: Oberlo.in

The stimulus package aimed to provide much needed financial assistance to those with lower incomes. The money was intended to help individuals and families to keep up with their bills. It also aimed to ease strain on students with deferring of payments up to 30th September 2020 without any accrual of interest for the said time period. It also provided with a healthcare safety net and also required all private health insurance policies to cover COVID-19 testing, treatment and even preventive care. There were loans available to help the self-employed, corporations and small businesses survive. These loans were intended to help businesses to continue paying salaries and bills, to prevent business closures and layoffs.

There was a second stimulus package signed by President Donald Trump in December 2020, a \$900 billion pandemic relief bill that included enhanced unemployment benefits, money for small businesses, schools and childcare as well as for vaccine distribution. The package did not contain any direct aid to local and state governments.

2.4 State Finances-

The RBI Study on State Finances highlighted the decline in actual capital spending relative to Budget Estimates observed in the states for the last 3 years. This may have adverse implications for the pace and quality of economic development, given the high fiscal multiplier effect of capital expenditure. In fact, when the states were dealing with the pandemic with a constrained fiscal space, capital expenditure was expected to play a pivotal role in the recovery process.

During the year 2019-20, because of prevalent macro-economic scenario and lower tax collection in 2018-19, one-time special dispensation was allowed to the States by allowing additional borrowings amounting to Rs.0.59 crore for year 2019-20 beyond the State's eligibility. Also, the net

borrowing ceilings of the 28 States for the year 2020-21 had been fixed at Rs.6.41 lakh crore in line with the fiscal deficit target of 3 per cent of respective State Gross State Domestic Product (GSDP). However, for the year 2020-21, in view of the unprecedented COVID-19, additional borrowing limit of up to 2 percent of Gross State Domestic Product (GSDP) was allowed to the States, of which 1% was conditional on state level reform implementation.

2.5 General Government Finances-

In 2020-21 Budget Estimate, the General Government had budgeted for a reduction in deficit in over 2019-20. However, in the wake of the global pandemic outbreak, the General Government (Centre plus States) expected to register a fiscal slippage on account of the shortfall in revenue and higher expenditure requirements. As indicated by the enhanced borrowing provisions for both the Centre and the States for 2020- 21, the liabilities of the General Government are expected to increase. The medium-and long-term trajectory of Government debt depends on the debt sustainability calculations. A country's public debt is considered sustainable if the government is able to meet all its current and future payment obligations without exceptional financial assistance or going into default.

2.6 Outlook-

The year 2020-21 has been a difficult year from the fiscal perspective. Going forward, in order to sustain the recovery in aggregate demand, it is expected that the Government may have to continue with an expansionary fiscal stance. But then again, we can't ignore the problems that come alongside a rising fiscal deficit. The expenditure support along with the various key reforms introduced during the year are likely to impart the required momentum to medium- term growth. The calibrated approach adopted by India allows space for maintaining a fiscal impulse the coming year. The growth recovery would facilitate strong revenue collections in the medium term, and thereby enable a sustainable fiscal path.

3 EXTERNAL SECTOR-

The external sector is the portion of a country's economy that interacts with the economies of other countries. In the goods market, it involves exports and imports and in the financial market, it involves capital flows. There are different types of economies, one is an autarky, that is a closed economy where a country does not trade with other countries, and an open

economy, where there are fewer or no restrictions on trade with other countries.

India's external sector gained stability in the first half of 2019-20, as there was improvement in Balance of Payments (BoP) position. For an open emerging market economy like India, improvement in BoP position is critical. It ensures financing of essential imports like crude oil and other such inputs that drive the manufacturing sector which provides livelihood to crores of people in the country.

India's foreign reserves were comfortably placed at US\$ 461.2 billion as on 10th January, 2020. There are many benefits of having large foreign reserves, it helps a country to make sure that they have enough foreign cash and liquid assets on hand to cover near and medium-term foreign expenses and other obligations. It also helps a country like India to combat external shocks. The improvement in BoP was anchored by narrowing of current account deficit (CAD) from 2.1 per cent in 2018-19 to 1.5 per cent of GDP in H1 of 2019-20. The current account is one half of the balance of payments, the other half being the capital account. While the capital account measures cross-border investments in financial instruments, the current account measures imports and exports of goods and services, payments to foreign holders of a company's investments, payments received, transfers such as foreign aid and remittances. A positive current account balance indicates that the nation is a net lender to the rest of the world, while a negative current account balance indicates that it is a net borrower. A current account surplus increases a nation's net foreign assets by the amount of the surplus, while a current account deficit decreases it by the amount of the deficit.

The narrowing of current account deficit is because of the easing of crude prices. Export growth remained subdued with external demand, which was weakened because of slowdown in global investment, output and heightened trade tensions, notwithstanding resilient service exports. India's top five trading partners continued to be USA, China, UAE, Saudi Arabia and Hong Kong. Further improvement in BoP was contributed by easing of external financial conditions, impressive FDI, rebounding of portfolio flows and receipt of robust remittances. External debt as at end September, 2019 was at a low of 20.1 per cent of GDP.

The economic crisis has led to a sharp decline in global trade, lower commodity prices and tighter external financing conditions with varying implications for current account balances and currencies of different countries. Pharma

exports, in particular, used this opportunity to enhance their share in total India's exports and indicate India's potential to be the pharmacy of the world. Supported by resilient software service exports, India was expected to witness a current account surplus in 2020-21 after a gap of 17 years. Balance on the capital account, on the other hand, is supported by robust FDI and FPI inflows. These developments have led to accretion of foreign exchange reserves that rose to an all-time high of US\$ 586.1 billion as on January 8, 2021. High levels of headline inflation, however, posits the classical trilemma before RBI to maintain a fine balance between tightening of monetary policy to control inflation on the one hand and stimulate growth on the other hand. RBI maintains a tight monetary policy to lower down the prices (lower inflation) and loosens the monetary policy to stimulate demand in the economy, to stimulate growth, but with an impact on increase in prices (higher inflation). Achieving both, i.e., High growth and less inflation contradicts these two opposing policies.

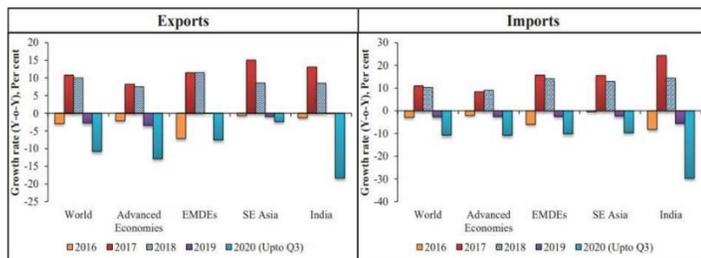
The global volume of goods trade in the first five months of 2020 was about 20 per cent lower than in 2019—a more abrupt contraction than in the first five months of the global financial crisis. The spread of the pandemic led to associated suspension of economic activities, supply-chain disruptions, travel restrictions and volatility in international commodity prices. However, India's external sector has emerged as a key cushion for resilience. The comfortable external balance position of India has been supported by surplus current account balances over three consecutive quarters, resumption of portfolio capital inflows, robust FDI inflows and sustained build-up of foreign exchange reserves.

3.1 Merchandise Trade-

Merchandise trade are transactions involving the transfer of ownership of a tangible and moveable object from a seller to a buyer and services in which a consumer benefits from actions taken by the service provider.

Over the recent years, the escalation of global trade tensions leading to slowdown in world trade has increased the fragility of India's trade deficit with the potential of worsening the BoP. The slowdown of world trade is because of number of factors, including a slowdown in investment, reduced spending on heavily traded capital goods and a sizable decline in trade in cars and car parts. Global trade growth is however projected to recover to 2.9 per cent in 2020 with recovery in global economic activity. However, there is heightened uncertainty regarding the future structure of

global value chains and the repercussions of trade tensions on technology, which may continue to weigh down the growth in world trade. With two top trading countries i.e., USA and United Arab Emirates, India has consistently run trade surplus since 2014-15. On the other hand, India has trade deficit continuously since 2014-15 with respect to other major trading partners i.e., China, Saudi Arabia, Iraq, Germany, Korea, Indonesia and Switzerland. India had trade surplus with Hong Kong and Singapore till 2017-18, before it changed to trade deficit in 2018-19. The bilateral imbalances have remained stable in most cases, whereas in the survey of 2020-21,



Source: WTO

India's exports and imports saw a sharp contraction in line with the contraction in global trade. The decline in imports outweighed that in exports – leading to smaller trade deficit of US\$9.8 billion as compared to US\$ 49.2 billion in Q1 of 2019. India registered a trade surplus in the month of June, 2020 after a gap of 18 years. With the unlocking of the economy from June onwards, a gradual revival in India's merchandise trade got underway.

3.2 Merchandise Exports-

Petroleum, Oil and Lubricants (POL) exports have a dominant share in India's export basket. It contributed negatively to export performance according to the survey of 2020-21, driven by softening of international crude oil prices. Growth in Non-POL exports dropped significantly from 2009-14 to 2014-19 whereas in 2020-21, agriculture & allied products, drugs & pharmaceutical and ores & minerals proved resilient and recorded expansion. However, key commodities such as organic and inorganic chemicals, electronic goods, textiles & allied products, engineering products, gems and jewellery pulled export growth down whereas, the pharma industry has consistently registered positive growth and highest increase in absolute terms in recent months. This led to rise in its share to 7.1 per cent in April-November, 2020 from 5.0 per cent in April-November, 2019, making it the second largest exported commodity. Iron and Steel is another commodity whose share has increased

from 3.0 per cent to 4.4 per cent in the said period. However, the pandemic-related disruptions led to sharp fall in exports of Motor Vehicles/ Cars as it no longer figures among the top 10 exported commodities in April-November, 2020.

3.3 Merchandise Imports-

In 2019-20, India has shown a positive impact on BoP position. Crude oil imports have a large presence in the import basket that correlates India's total imports with crude prices. As crude price rises so does the share of crude in total imports that increases imports to GDP ratio. Gold imports also have a significant presence in the import basket that correlates India's total imports with gold prices. Although a fall in merchandise imports to GDP ratio entails a net positive impact on the BoP position, it may be a reflection of a deceleration in GDP growth.

In 2020-21, the sharp decline in POL imports that constitute about a quarter of total merchandise imports pulled the overall import growth. While imports contracted sharply in Q1 of 2020-21, the pace of contraction eased up in Q2 and Q3 because of accelerating positive growth in gold and silver imports.

3.4 India and WTO-

World Trade Organisation (WTO) is the only international organization dealing with the global rules of trade between nations. Its main function is to ensure that trade follows as smoothly, predictably and freely as possible.

India is one of the founding members of WTO, which has played an important part in the effective formulation of major trade policies. As a result of consistent trade facilitation efforts, India has improved its ranking from 143 in 2016 to 68 in 2019 under the indicator, "Trading across Borders", which is monitored by World Bank in determining the overall ranking of around 190 countries in its Ease of Doing Business Report. The ranking of trading across borders looks specifically in logistical processes of exporting and importing. It focuses on eight dimensions of trade, focusing on time and cost for border and documentary compliance during export and import.

For the first time in 2019, to achieve cargo release time targets, India undertook a national level time release study (TRS) across multiple locations covering seaports, air cargo complex and integrated check posts.

Also, in a released UN global survey on digital and sustainable trade facilitation 2019, India not only improved its overall trade facilitation score from 69% to 80% but also outperformed other countries in the Asia-Pacific and south and South-west Asia region.

In 2020-21, in the ongoing discussion on WTO reforms, India's proposal seeks to re-affirm the importance of development and promote inclusive growth. In agriculture, India along with many other developing countries, have been demanding a permanent solution on the issue of public stockholding for food security purposes. This has become even more relevant in the wake of the ongoing pandemic, as the government had to step up disbursement of food grains under the public distribution programmes for ensuring food security of the masses.

3.5 Trade Related Logistics-

According to the economic survey of 2020-21, Some process related reforms which have contributed towards improving logistics efficiency are-

- Reduction in waiting time for inter-state border crossing due to GST,
- Introduction of paperless EXIM trade process through E-Sanchit,
- Faceless assessment by 'Turant Customs' by Central Board of Indirect Taxes and Customs (CBIC),
- Installation of scanners at major ports,
- Radio Frequency Identification (RFID) tagging of all EXIM containers for track and trace,
- Mandatory electronic toll collection system (FASTag) for reducing time loss at time toll plaza, etc.

According to World Bank's Logistics Performance Index, India ranked 44th in 2018 globally, up from 54th rank in 2014. The Logistics performing index is a benchmarking tool which focuses on trade logistics. It is created to help countries identify the challenges and opportunities they face as they relate to customs, border management, transport infrastructure, and logistics services. Comparing with the index "Trading across Borders", LPI only covers six dimensions of trade, focusing on quality, customs, infrastructure, arrangement of shipments, logistics services, tracking and tracking consignments and frequency with which shipments reach consignees.

According to economic survey 2019-20, The Government of India worked on a National Logistics Policy and a National Logistics Action Plan. Major commodities were identified and were encouraged to be transported by the cheapest mode. Movement by other modes like railways, coastal, waterways and slurry pipelines were promoted through infrastructure and policy interventions. Fast-tags were made mandatory to cut delays at toll plazas. The Ministry of Railways, had taken up the dedicated freight corridor (DFC) project. The purpose of the project is to provide a safe and efficient freight transportation system. It is expected to reduce congestion at various terminals and junctions.

3.6 Foreign Direct Investment-

A foreign direct investment (FDI) is an investment made by a firm or individual in one country into business interests located in another country. However, FDIs are distinguished from portfolio investments in which an investor merely purchases equities of foreign-based companies.

An increase in net FDI improved the BoP position. An increase in net FDI also provided more stable source of funding the CAD and provides greater stability to improvement in BoP position as compared to other capital inflows. As far as sector wise FDI is concerned, Computer software and hardware attracted the highest FDI equity inflows of US\$ 17.6 billion in April- September vis-à-vis US\$ 4.0 billion in April-September 2019. Singapore continues to be the top investing country, in terms of FDI equity inflows, while US has taken second position.

3.7 External Debt-

External debt is the portion of a country's debt that is borrowed from foreign lenders, including commercial banks, governments, or international financial institutions. These loans, including interest, must usually be paid in the currency in which the loan was made.

An increase in external debt to GDP ratio increases debt servicing and draws down on forex reserves worsening BoP position. After a significant reduction in 2014-19 relative to 2009-14, India's external debt to GDP ratio slightly increased by 0.3 per cent at the end of first half of 2020 over its level at end-March 2019, primarily on account of an increase in commercial borrowings, non-resident deposits and short-term trade credit. India's external debt remains low as compared to the average external debt to GDP ratio of all developing countries (25.6 per cent) according to World Bank's International Debt Statistics, 2020.

External debt as a ratio to GDP rose marginally to 21.6 per cent as at end-September 2020 from

20.6 per cent at end-March 2020. However, the ratio of foreign exchange reserves to total and short-term debt (original and residual) improved because of the sizable increase in reserves. Share of short-term debt (original maturity) in the total stock of external debt, which is an important metric to analyse potential debt vulnerability, has also improved.

3.8 External Commercial Borrowings-

The External commercial Borrowings or ECBs, is a financial instrument used to borrow money from the foreign source of funding to invest in commercial activities of the country. The ECBs are considered to expand the existing capacity of corporates and finance new ventures, with an objective to having a sound economic growth.

An increase in net ECBs improves the BoP position but it worsened the BoP by turning negative during 2014-19, from a healthy positive level in 2009-14. In 2018-19 however there was a surge in net ECB inflows and almost a matching amount has already flowed into the country in the first half of 2019-20. The availability of ECB avenue and an increasingly easier one at that raises a question mark that increase in fiscal deficit crowds out private investment for want of funds. In an open economy framework, a rising fiscal deficit gives rise to two problems. First, it increases the domestic cost of capital, because of which corporates have to invest their surplus in the domestic market while seeking to finance their investment through ECBs. Second, as higher fiscal deficit pushes corporates into seeking larger amounts of foreign savings, the CAD widens, bringing the country closer to the twin-deficit challenge, wherein even a small loss of investor confidence can result in capital flight and sharp depreciation of the rupee. In this situation a default on the BoP becomes highly probable.

The on-going pandemic has caused ebbing of India Inc's appetite for ECBS. The COVID-19 pandemic is expected to adversely impact export earning of external commercial borrowers.

3.9 Indian Rupee Exchange Rate-

International Monetary fund has categorized currency regimes into types, two for countries that do not issue their own currency and seven for countries that issue their own currencies. The two types which do not issue their own

currency are formal dollarization or a country which is a member of a monetary Union. Then the types, which issue their own currency starts from currency board arrangement with a fixed exchange rate, conventional fixed peg arrangement within margins of +1% or -1% versus another currency, target zone with 2%, crawling peg where the exchange rate is adjusted periodically, management of exchange rates within crawling bands with increased bands of exchange rates, managed floating exchange rate where monetary authority attempts to influence exchange rate and lastly, independently floating which is market determined and intervention is done rarely.

After depreciating to its lowest level of Rs.76.86 on April 16, 2020, the rupee subsequently appreciated owing to FPI flows to the domestic equity market and the weakening of the US\$. RBI's policy on the exchange rate of the rupee has been to allow it to be determined by market forces, with interventions only to maintain orderly market conditions by containing excessive volatility in the exchange rate, without reference to any pre-determined target level or band.

In the months following the outbreak of the pandemic, India experienced unprecedented FPI outflows of US\$ 15.92 billion in March 2020, after recording cumulative inflows of US\$ 1.42 billion in January 2020 and February 2020, with high volatility in the INR. RBI deployed several conventional and unconventional tools in order to ensure financial stability and orderly conditions in financial markets and has been largely successful in controlling the volatility in the rupee. Large stimulus by central banks in advanced economies has resulted in heightened capital flows into emerging markets such as India, causing asset price inflation as well as stronger local currencies. Judicious interventions in forex markets were, therefore, required to prevent a large one-sided appreciation in the rupee by accumulating reserves, and supplementing expansionary monetary policy.

3.10 Foreign Exchange Reserves-

Foreign exchange reserves are the foreign currencies held by a country's central bank. The reserves are maintained for the purpose of liquidity in case of an economic crisis, to make sure a country will pay its external obligations.

As at end-September 2020, India is the fifth largest foreign exchange reserves holder among all countries of the world after China, Japan, Switzerland and Russia. The rise in the foreign exchange reserves of the RBI has largely been due to the current account surplus which, in turn, is largely due to

contraction in imports rather than increase in competitiveness of exports. The current account balance, in economic terms, is synonymous with the Savings-Investment balance. A current account surplus implies a higher level of national savings relative to investment. A rise in foreign exchange reserves also represents investments in bonds/ securities of other countries – in effect investing abroad. A developing country like India, needs to spend on domestic investments to spur its growth. The surplus, therefore, gives adequate space for increased expenditure on investments in FY 2021-22. The sustainable way for a healthy external sector balance is by enhancing the earnings through exports – which also give a boost to economic growth.

3.11 Way Forward-

The COVID-19 pandemic impacted external sector differently for different countries. In India, calibrated easing of lockdown restrictions narrowed contraction in both exports and imports with imports posting faster recovery leading to progressive expansion of merchandise trade deficit over the quarters of the current year. Improving trends in India’s merchandise trade have been supplemented by equity capital inflows, robust FDI inflows and sustained build-up of foreign exchange reserves. The comfortable foreign exchange reserves give the much-needed space for enhanced domestic investments. The disruption of global manufacturing value chains due to the COVID-19 pandemic presents a tremendous opportunity for India to become one of the key nodes in the chain. Various export initiatives, as documented above – including those aimed at promoting ease of exporting – have been undertaken by the government and RBI and implementation of these initiatives would pave the way for the sustainable export performance in India going forward.

4 DOES INDIA’S SOVEREIGN CREDIT RATING REFLECT ITS FUNDAMENTALS No!

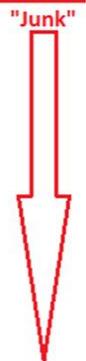
4.1 What is credit rating?

A credit rating is a measurement of a person or business’s ability to replay a financial obligation. A rating is based on the income and the past payment history. There are three main credit rating agencies in the world namely S&P,

Moody’s and Fitch. Shown below is a table showing the different credit ratings that these companies give.

Credit Rating Scales by Agency, Long-Term

Moody's	S&P	Fitch	
Aaa	AAA	AAA	Prime
Aa1	AA+	AA+	High grade
Aa2	AA	AA	
Aa3	AA-	AA-	
A1	A+	A+	Upper medium grade
A2	A	A	
A3	A-	A-	
Baa1	BBB+	BBB+	Lower medium grade
Baa2	BBB	BBB	
Baa3	BBB-	BBB-	
Ba1	BB+	BB+	Non-investment grade speculative
Ba2	BB	BB	
Ba3	BB-	BB-	
B1	B+	B+	Highly speculative
B2	B	B	
B3	B-	B-	
Caa1	CCC+	CCC	Substantial risk
Caa2	CCC		Extremely speculative
Caa3	CCC-		Default imminent with little prospect for recovery
Ca	CC	CC	In default
C	C	C	
/	D	D	
/			

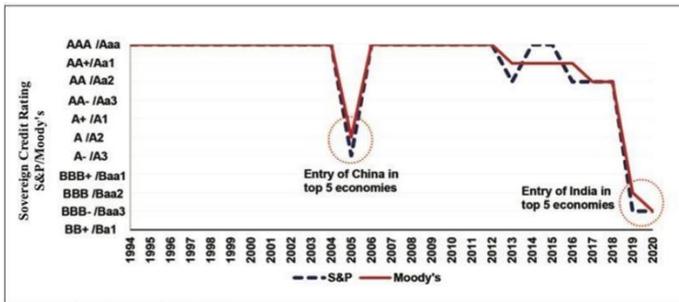


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4.2 Does India’s Sovereign Credit Rating reflect its fundamentals No!

This was the question that was raised by the committee which conducted the economic survey. India’s willingness to pay is unquestionably demonstrated through its zero sovereign default history. Despite this and India being the 5th largest economy in the world still its credit rating is ‘BBB-/Baaa3’ which is just on the verge of being called a junk or a non-investment grade bond. Never in the history of credit rating the fifth largest economy given such a poor rating. China and India are the only exceptions to this rule – China was rated A-/A2 in 2005. Reflecting the economic size and thereby the ability to repay debt, the fifth largest economy has been predominantly rated AAA.

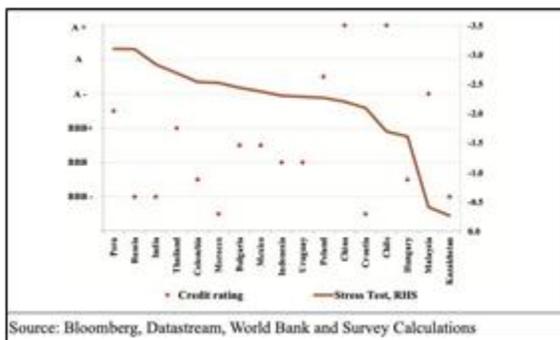
Credit rating of the 5th largest economy



Source: Bloomberg and World Bank

India's ability to pay can be gauged not only by the extremely low foreign currency- denominated debt of the sovereign but also by the comfortable size of its foreign exchange reserves that can pay for the short-term debt of the private sector as well as the entire stock of external debt, including that of the private sector. India resembles a firm that has negative debt, whose probability of default is zero by definition. But it was also stated that despite such low credit rating India has had no or little impact on indicators such as Sensex return, foreign exchange rate and government securities yield.

In stress test (a benchmark which is taken as the ratio of forex short term debt and standard deviation of forex reserve) India is rated much lower as compared to its stress test estimate of -2.8, which is third highest in its category. This implies that India's forex reserves can withstand a negative 2.8 standard deviation shock even after meeting its short-term debt obligations, including those of the private sector, validating its ability to pay debt obligations.



Source: Bloomberg, Datastream, World Bank and Survey Calculations

The Economic Survey suggested that developing economies must come together to address this bias and subjectivity inherent in sovereign credit ratings methodology. Sovereign credit ratings methodology should be made more transparent, less subjective and better attuned to reflect economies' fundamentals. the global agencies to become more transparent and less subjective in their ratings.

4.3 Analysis

Credit rating system has always been flawed as,

- Credit ratings are dynamic: -Credit ratings change over time. Rating agencies may update their default risk assessments anytime they want.
- Rating agencies are not perfect: - Ratings mistakes occur from time to time. During a past period, **subprime mortgage securities** were assigned much higher ratings than they deserved.
- Event risk is difficult to assess: - Risks that are specific to a country are difficult to predict and incorporate into credit ratings.

These factors have primally lead to flaws in the credit rating system. As these flaws are known by most of the industry and market prices act before the credit rating changes so it comes to no surprise that a change in credit rating often have little impact. Same is the case with India despite it having a low credit rating still the country economic factors are not affected by it.

But a lower credit rating does prevent FII inflows in the country as investors managing pension funds and other endowment funds often have a restriction on where to invest and credit rating is one of the restrictions.

5 DOES GROWTH LEAD TO DEBT SUSTAINABILITY? YES, BUT NOT VICE-VERSA!

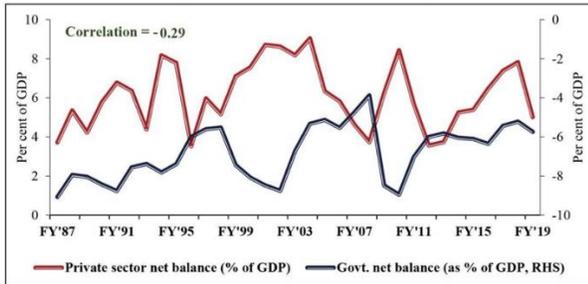
Debt sustainability depends on the 'Interest Rate Growth Rate Differential' (IRGD), i.e., the difference between the interest rate and the growth rate.

In India, interest rate on debt is less than growth rate - by norm, not by exception, as it is not an exception that the interest rate is less but rather due to high growth rate of the Indian economy.

Fiscal multipliers are disproportionately higher during economic crises than during economic booms – can ensure that the full benefit of economic reforms is reaped by limiting potential damage to productive capacity. As the IRGD is expected to be negative in the foreseeable future, a fiscal policy that provides an impetus to growth will lead to lower, not higher, debt- to-GDP ratios. In fact, simulations undertaken till 2030 highlight that given India's growth potential, debt sustainability is unlikely to be a problem even in the worst scenarios. The Survey's call for more active,

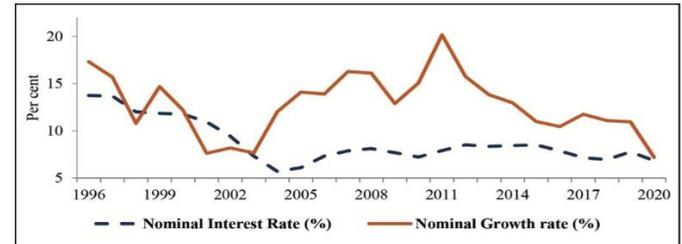
counter-cyclical fiscal policy is not a call for fiscal irresponsibility. In India the fiscal policy has not usually been counter cyclical as there are in the west. This is made further more clear by the graphs below.

Figure 1: Trends in Government and Private sector balances
Figure 1a: India (FY 1987 – FY 2019)



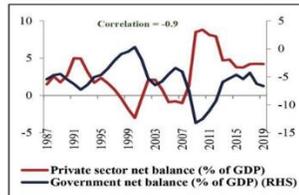
Source: RBI, MoSPI

Let's take an example, the average int. rate for past 25 years is around 8.8% and average growth rate is around 12.8%. As the government's investment of a Rs.100 produces Rs.12.8 while the principal and interest repayment equals Rs. 108.8, Rs. 4 can be added to the economy after the loan of Rs.100 is rolled over to the next period. Given below is the last 25 years growth and int rate in India.



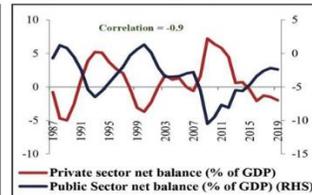
Source RBI, MoSPI

Figure 1b: United States (1987 – 2019)



Source: BEA (US)

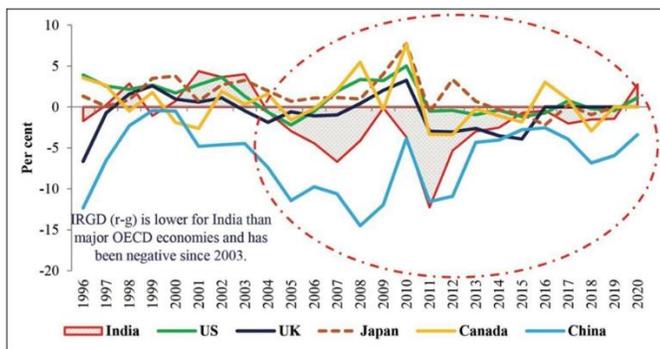
Figure 1c: United Kingdom (1987 – 2019)



Source: UK Economic Accounts (ONS) & OBR (UK)

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

Negative IRGD in India – not due to lower interest rates but much higher growth rates – prompts a debate on fiscal policy, especially during growth slowdowns and economic crises, he says.

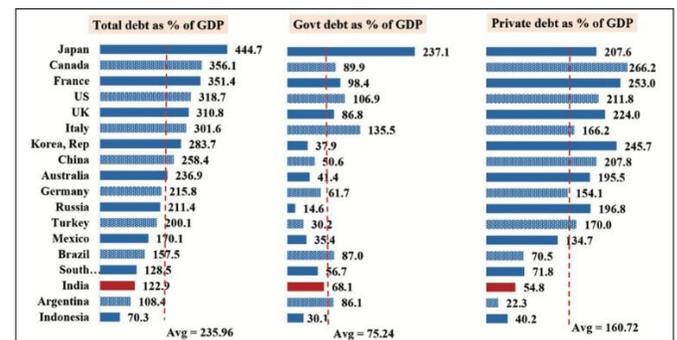


Source: IMF, RBI, World Bank

Growth causes debt to become sustainable in countries with higher growth rates; such clarity about the causal direction is not witnessed in countries with lower growth rates.

Active fiscal policy can ensure that the full benefit of reforms is reaped by limiting potential damage to productive capacity. Fiscal policy that provides an impetus to growth will lead to lower debt-to-GDP ratio. Given India's growth potential, debt sustainability is unlikely to be a problem even in the worst scenarios and even today the Indian economy is debt sustainable.

In the diagram below we can clearly see the debt structure of India compared to its GDP, including both the private sector and public sector debt.



Source: IMF Debt database

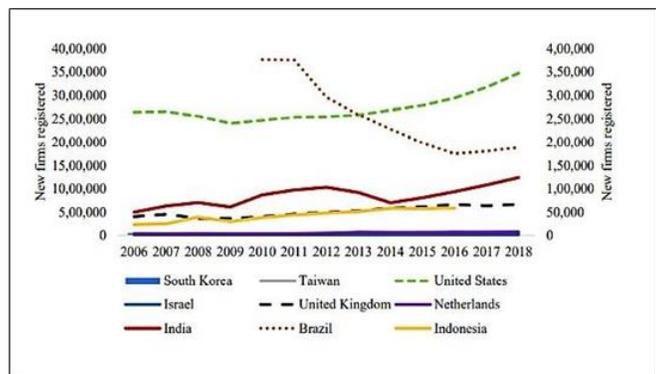
As the COVID-19 pandemic has created a significant negative shock to demand, active fiscal policy – one that recognises that fiscal multipliers are disproportionately higher during economic crises than during economic booms – can ensure that the full benefit of seminal economic reforms is reaped by limiting potential damage to productive capacity. As the IRGD is expected to be negative in the foreseeable future, a fiscal policy that provides an impetus to growth will lead to lower, not higher, debt-to-GDP ratios. In fact, simulations undertaken till 2030 highlight that given

India's growth potential, debt sustainability is unlikely to be a problem even in the worst scenarios. The survey urges gov to be more relaxed about debt as debt can be managed even in the worst case scenario, and use counter cyclical policy to push demand during an economic downturn. It also says that gov should not be fiscal irresponsible.

6 ENTREPRENEURSHIP AND WEALTH CREATION AT GRASS ROOTS-

Entrepreneurs are mushrooming all over India and are helping India significantly by contributing to economic growth in the districts in which they work. Using data from over 500 districts in India from 2006 to 2019, it has been analysed that there has been a 10% growth in new firms in a district which has increased 1.8% GDP district-wise. Such beneficial entrepreneurships at grassroots levels has grown dramatically in India since 2014. The World Bank's data on entrepreneurship shows that while the growth rate of new firms was 3.8% from 2006 to 2014, this growth rate from 2014 to 2018 has been more than three times at 12.2%, while about 70,000 new firms were created in 2014, about 1,24,000 new firms be created in 2018.

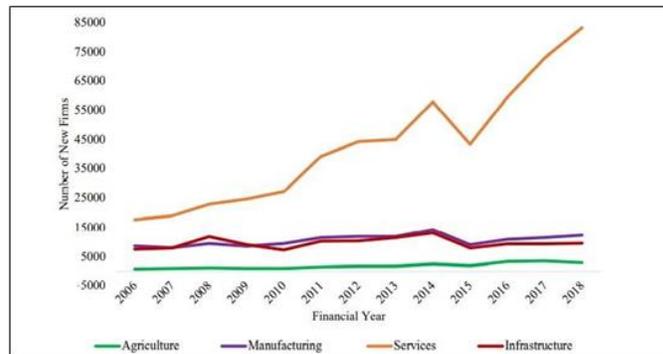
Birth of new firms is very heterogeneous across Indian districts and across sectors. Moreover, it is dispersed across India and is not restricted to just a few cities. For instance, the eastern part of India has the lowest literacy rate of about 59.6 per cent according to the census of 2011. This is also the region in which new firm formation is the lowest. In fact, the impact of literacy on entrepreneurship is most pronounced when it is above 70 per cent. So, for these issues, government should try and implement more such policies to promote entrepreneurship in these such areas where access to literacy and education is low. This will help the country to bloom even more by educating its youth as much as they can. This will also help lead to decrease in unemployment and thus will contribute to an increase in GDP.



Comparison of new firms across countries.

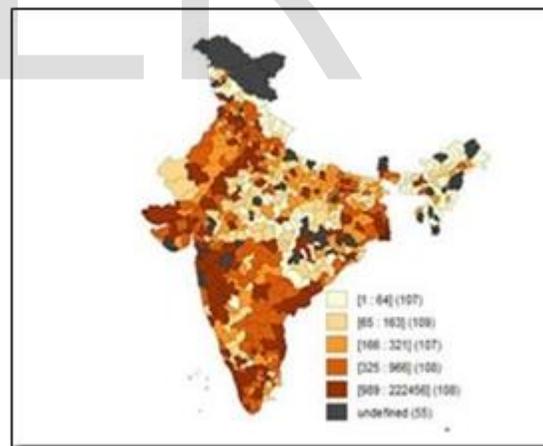
Source: World Bank's EODB Entrepreneurship Data, Business Formation Statistics of the U.S. Census Bureau and Survey Calculations

This above figure proves how India is in its blooming stage, and if carried out well, entrepreneurship can play a huge role in increasing India's GDP. As compared to the US, India is still far away to achieve such a high figure, hence the Government should try and promote Start-ups even further.



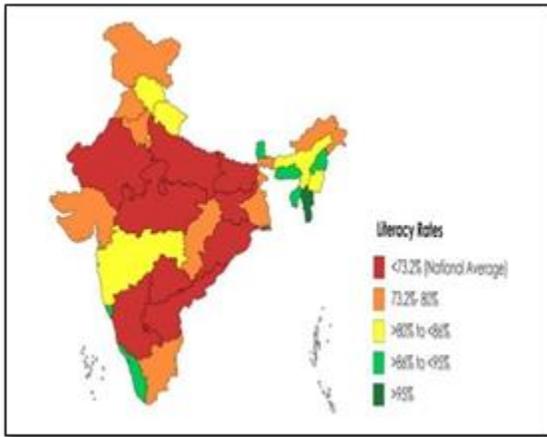
Growth in new firms over time in India

Source: MCA-21 and Survey Calculations



Distribution of New Firms across Districts

Source: MCA-21 and Survey Calculations (2017-18), NSSO @ Observer Research Foundation's India Data Labs.



State Wise Adult Literacy Rate

Source: Periodic Labour Force

The above chart (3) shows the distribution of how many new firms are located in which particular areas, and interpreting from the chart, it can be easily assumed that the Eastern part of the country needs more implementations of policies for uplifting entrepreneurship amongst the youth. To support this, it can be clearly seen in chart (4), that the lowest literacy rates are prevalent in many north eastern parts of the countries, where proper education system is not prevalent. There is a research paper, namely 'Problems and Future Prospects of Higher Education in North East India' by Pallab Jyoti Boruah who talks about various issues faced in North eastern States in terms of education.

Even though in Chart (4) shows along with north eastern states like, Assam, Arunachal Pradesh amongst others seem to have a similar literacy rate as compared to Andhra Pradesh, Karnataka and Delhi, it has been noticed (source: Business Insider India) that Karnataka is one of the leading top performers in start-ups after Kerala and Maharashtra and here the problem can be verified by seeing how few initiatives are taken to uplift the north eastern states towards the path of entrepreneurship.

Higher education levels in a district enable the development of better human capital that relates to an increased supply of ideas and entrepreneurs. Number of colleges and universities also determine the level of higher education and the significant factor in inducing entrepreneurship. Proximity to large population centres likely allows the start-up to gain market access and scale up operations. It also implies better access to inputs and a talented workforce.

As a result, India is now the third largest start-up ecosystem in the world. Literacy levels should be increased by establishing more schools and colleges and making sure the youth, especially in remote areas, are attending them regularly. As the manufacturing sector has the potential to create maximum jobs, states must focus on enabling ease of doing business and flexible labour regulation to foster job creation. This will also help in uplifting of budding entrepreneurs to start their businesses in an uplifting atmosphere. This topic shows that literacy, education, physical infrastructure, flexible labour laws and ease of doing business are all critical in further enhancing entrepreneurship in India and thereby creating jobs for a youth.

7 TARGETING EASE OF DOING BUSINESS IN INDIA-

Ease of doing business is key to entrepreneurship, innovation and wealth creation. India has risen significantly in the World Bank's Doing Business rankings in recent years, but there are categories where it lags behind – Starting a Business, Registering Property, Paying Taxes and Enforcing Contracts. For example, registering property in Delhi and Mumbai takes 49 and 68 days respectively, while it takes 9 days in China and 3.5 days in New Zealand.

As India jumps towards a five trillion-dollar economy by 2024-25, simplifying and maintaining a business-friendly regulatory environment is essential. 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.

India has made substantial gains in the World Bank's Doing Business rankings from 142 in 2014 to 63 in 2019. It has progressed on seven out of the 10 parameters. 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.

Parameters	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Ease of starting a business	169	165	166	173	179	158	155	155	156	137	136
Dealing with construction permits	175	177	181	182	182	184	183	185	181	52	27
Getting electricity	-	-	98	105	111	137	70	26	29	24	22
Registering your property	93	94	97	94	92	121	138	138	154	166	154
Getting credit for your business	30	32	40	23	28	36	42	44	29	22	25
Protecting minority investors	41	44	46	49	34	7	8	13	4	7	13
Paying taxes	169	164	147	152	158	156	157	172	119	121	115
Trading across borders	94	100	109	127	132	126	133	143	146	80	68
Enforcing contracts	182	182	182	184	186	186	178	172	164	163	163
Resolving insolvency	138	134	128	116	121	137	136	136	103	108	52
Overall Rank	133	134	132	132	134	142	130	130	100	77	63

Capturing India’s decade-long journey in the Doing Business Rankings

Source: Doing Business database, World Bank.

important source of employment and growth everywhere in the world. It is also a business that, by its nature, faces a high frequency of starting new businesses and shutting old ones.

According to the National Restaurants Association of India (NRAI), a total of 36 approvals are required to open a restaurant in Bengaluru, Delhi requires 26, and Mumbai 22. Moreover, Delhi and Kolkata also require a ‘Police Eating House License’. The number of documents needed to obtain this license from Delhi Police is 45 – far more than the number of documents required for a license to procure new arms and major fireworks, 19 and 12 respectively.

Moreover, in India, only the list of licenses and permissions can be obtained from a government portal or information centre. On the other hand, in New Zealand, the website of Auckland Council (operated by a private third-party agency) has all detailed guides and stepwise procedures about permissions, fees and timeline to open a restaurant. The website is also equipped with ready-to-use business plan templates and comprehensive information on different businesses irrespective of the scale of business. The contrast reflects a difference in approach – government control versus curation/ partnership.

7.2 Construction Permits

Hong Kong, which tops the World Bank rankings for ease of obtaining construction permits, it can be seen that Hong Kong takes just over two months to obtain a construction permit, while Delhi takes almost four months. Moreover, it takes 35 days to get water and sewer connection in Delhi – after a significant improvement since 2014.

Global Comparisons

Parameter	India	Peers	New Zealand (Rank 1 in EODB)
No. of procedures and days to start a business	10 procedures and 18 days	China takes 4 procedures and 9 days. Other countries like Indonesia, Brazil, Pakistan and Sri Lanka also have a less cumbersome process to start a business than India	1 procedure and half a day
Registering Property	9 procedures, at least 49 days, and 7.4-8.1 % of the property value to register	In China – 4 procedures, 9 days, and 4.6 % of the property value to register one’s property	2 procedures and a minimal cost of 0.1% of the property value.
Paying Taxes	250-254 hours per year to pay taxes	China- 138 hours per year	140 hours per year.
Enforcing Contracts	1,445 days to resolve an average dispute i.e. approx. 4 years	China – 496 days, Brazil – 801 days, Indonesia- 403 days	216 days

7.1 Regulatory Hurdles in Opening A Restaurant-

The services sector too faces many regulatory hurdles even for routine businesses. The bars and restaurants sector are an



Cost of Construction Permits in India

Source: World Bank Doing Business database.

7.3 Achieving Scale Across Business

Most of the manufacturing units in India have small capacities and consequently low manufacturing efficiencies which are a disadvantage in the global supply chain. 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.

Compared to Bangladesh, China, and Vietnam, which have more than 80% of the market value of exports by large enterprises, India has 80% by small enterprises.

7.4 Trading Across Borders

The Trading Across Borders indicator records the time and cost associated with the logistical process of exporting and importing goods. Globally, transportation by ports is the most favoured followed by railways and then roads, whereas in India it is the opposite.

It must be noted that almost 70% of the delays (both in exports and imports) occur on account of port or border handling processes which essentially pertain to procedural complexities pushing up the cost to trade.

The survey suggested that while the government has already reduced procedural and documentation requirements considerably through schemes like Authorized Economic Operators, increasing digitalization and seamlessly integrating multiple agencies onto a single digital platform can further reduce these procedural inefficiencies significantly and improve user experience substantially.

INDIA (RANK 68)		Hours		Hours	ITALY (RANK 1)	
		Delhi	Mumbai			
EXPORT				0	EXPORT	
1: Border Compliance		54	50		1: Border Compliance	
2: Documentary Compliance		6	18	1	2: Documentary Compliance	
IMPORT				0	IMPORT	
1: Border Compliance		70	60		1: Border Compliance	
2: Documentary Compliance		18	22	1	2: Documentary Compliance	
INDIA (RANK 68)		Cost (US\$)		Cost (US\$)	ITALY (RANK 1)	
		Delhi	Mumbai			
EXPORT				0	EXPORT	
1: Border Compliance		195	231		1: Border Compliance	
2: Documentary Compliance		65	50	0	2: Documentary Compliance	
IMPORT				0	IMPORT	
1: Border Compliance		260	273		1: Border Compliance	
2: Documentary Compliance		100	100	0	2: Documentary Compliance	

Trading across Borders- India vs Italy

Source: World Bank Doing Business Report, 2020.

Note: India numbers are for Delhi/Mumbai respectively, as these are the two centres covered by World Bank for India.

According to the survey, the following points can safely be stated-

- There exist inordinate delays in loading and customs processes in Indian sea-ports.
- The processes for imports, ironically, are better than those for exports.
- The large variance in process time means that exporters have to pad up the time spent waiting which adds to the clogging of port space.
- In contrast, the processes in Indian airports are vastly superior to those at seaports for both imports and exports
- AEO did significantly improve the process but it is reasonably smooth even for non- AEO operators importing/exporting electronics
- Indian processes can beat international standards.
- The processes of Indian airports should be adapted and replicated in sea-ports

It was seen that Department for Promotion of Industry and Internal Trade (DPIIT) identified enforcing contracts, resolving insolvency, starting a business, registering property, paying taxes and trading across borders as six areas that need improvement. DPIIT is also following reform activities in Kolkata and Bengaluru as these two cities are included by the World Bank this year besides Delhi and Mumbai for preparing the ease of doing business report, with a view to provide a holistic picture of business environment in India.

India has jumped 14 places to rank 63rd out of 190 countries in the World Bank's Doing Business 2020 report on account of significant improvement in resolving insolvency and obtaining construction permits. The current ranking is topped by New Zealand. India's ranking was behind Asian peers Singapore (2nd ranked), Hong Kong (3rd), Korea (5th), Malaysia (12th) and China (31st). The US was placed 6th on the list.

It can be concluded that the streamlining of the logistics process at sea-ports requires close coordination between the logistics division of the Ministry of Commerce and Industry, the Central Board of Indirect Taxes and Customs, Ministry of Shipping and the different port authorities. The simplification of the Ease of Doing Business landscape of individual sectors such as tourism or manufacturing, however, requires a more targeted approach that maps out the regulatory and process bottlenecks for each segment. Once the process map has been done, the correction can be done at the appropriate level of government –central, state or municipal.

8 INNOVATION: TRENDING UP BUT NEEDS THRUST, ESPECIALLY FROM THE PRIVATE SECTOR

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

India ranks first in Central and South Asia, and third amongst lower-middle-income group economies.

Private sector In India contributes comparatively much less as compared to 10 largest economies of world as it stand as 37% as compared to 68% being the average. India's gross expenditure on R&D at 0.65% of GDP is much lower

than that of the top 10 economies primarily because of the disproportionately lower contribution from the business sector.

Also, the government sector contributes the highest share of total R&D personnel (36%) and researchers (23%) amongst the top ten economies (9% on average).

Indian resident's share in total patents filed 36% which is also much lessor than average of 62%.

8.1 Why Innovation Matters?

- Solow model links the output per worker with savings, population growth and technological progress

The new growth theory endogenizes technological progress and suggests several determinants of the same.

1. Human Capital

2. Search for new ideas by profit-oriented researchers.

3. Infrastructure

4. Improving quality of existing products

Studies have also established a relationship between entrepreneurship innovation and economic growth.

- An increase of 10 percent in R&D investment has been associated with productivity gains ranging from 1.1 percent to 1.4 percent.

- As per Global Innovation Index data, there is a positive correlation between past innovation performance and current GDP per capita.

8.2 How Does India Perform on Innovation?

- India ranks 48th amongst 131 countries in terms of its innovation performance as measured using the Global Innovation Index.

- India entered the top 50 innovating countries for the first time since the inception of the index in 2007.

8.3 Patterns IN INDIA'S INNOVATION PERFORMANCE

India has rising through ranks of Global Innovation index from 81 in 2015 to 48 in 2020

India needs a vision, plan to reach up to it full capacity. For Example, China was able to turn itself to a major innovation hub by constantly working on medium term and long-term goals.

Research and development consumption in India

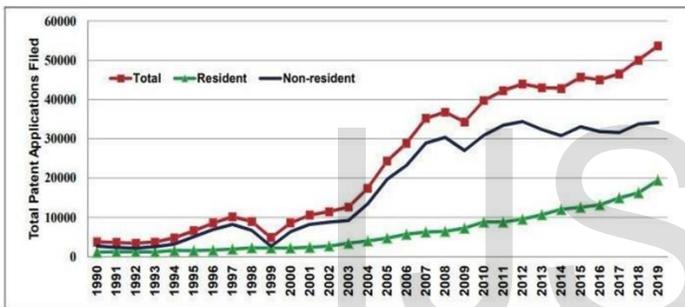
- Government in India contributes 56% of R&D which is well under 20% in 10 major developed economies in world. Even after that, India's overall contribution to R&D is lower than 10 major economies in world majorly on account of lower private sector contribution.

India's presentation on patents and trademarks

Overall number of patents filled in India has been on rise steeply since 1999, majorly on account of patents filed by non-residents.

While patent applications filed by residents have increased steadily since 1999, they have risen at a much lower rate than patent applications by non-residents.

Trend in Patent Applications Filed in India



Source: WIPO

8.4 Is Indian innovation affected by access to finance?

- Industries that are more reliant on outside account, and are all the more cutting edge concentrated, display disproportionately higher advancement in nations with all around created value markets.

Reasons:

1. Equity financing makes no risk of distress and hence gives freedom for innovation
2. Equity markets can facilitate this evaluation through information embedded in stock market prices.
3. Equity financing is suited for projects and companies that rely on innovation and have intrinsic value.

- It also observed that developed credit markets appear to discourage innovation in industries that are more dependent on external finance and are higher tech-intensive.

8.5 Reasons:

1. Innovative firms may have limited collateral to deploy for debt financing by way of tangible assets, restricting their use of debt.
2. Banks tend to avoid risky projects and give credit to un risky conventional businesses.

8.6 Is India Effectively Translating Innovation Inputs Into Innovation Outputs?

- It may be seen that that India can effectively use investments in innovation to produce a higher level of innovation output. This enables India to receive Higher Capital inflow from developed countries having low yield on money invested. Moreover with increase in investments it may lead to more favourable situation due to scale.

- The improvements in institutions and business sophistication could lead to higher creative output performance.

8.7 Policy Implications

- India to become the third-largest economy in GDP current US\$ in the near future. This requires boosting gross expenditure on R&D from 0.7 percent of GDP currently, to at least the average level in other top 10 economies of over 2%.

- India's private sector needs to look towards innovation as a means of investment compounder rather than reply on jugaad innovation.

- Literacy, education, physical infrastructure, and policies enabling ease of doing business, as drivers of new firm creation and entrepreneurship, remain relevant in innovation in India.

8.8 Conclusion

To become an innovation hub, India needs stimulus, focus on R&D, experimentation

Despite Various tax incentive for innovation and R&D expenses have been provided by government but still business and private sector contribution to R&D patents lag behind by huge margin showing com non inclination towards innovation which creates a multiplier effect in long run.

- India's innovation ranking is much lower than expected for its level of access to equity capital. This points towards the need for India's business sector to significantly ramp up R&D investments.

- Indian residents offer in patents in the nation remains at 36%. This falls behind the normal of 62% in other biggest economies. Occupant share in patent applications should ascend for India to turn into an imaginative country.

- India should zero in on improving its presentation on establishments and business refinement development inputs. These are required to bring about higher improvement in advancement yield.

9 FINANCIAL FRAGILITY IN THE NBFC SECTOR

All the problems of liquidity crunch started with series of frauds which happened as defaults on loan obligations by major Non-Banking Financial Companies (NBFCs). 2 sub subsidiaries of (ILFS) Infrastructure Leasing & Financial Services and Dewan Housing Finance Limited (DHFL) defaulted on their payments in the 2018 and 2019 respectively.

9.1 Relation between Credit growth, NBFC, and liquidity

At the point when banks and NBFC loan cash, it is considered as Credit development. This credit enhances liquidity in the market. As it is easily available at times, rate of interest offered is low. This causes MSME and others to scale up their venture.

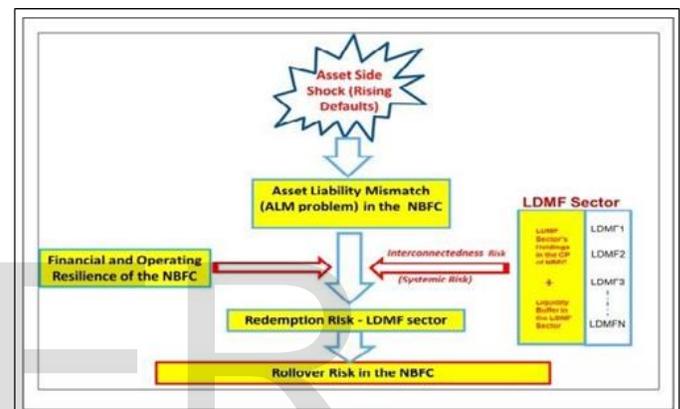
In the event that there is liquidity, income in the economy, individuals get jobs and places. They acquire, and subsequently there is an expansion sought after for administrations and items like another home loans, a vehicle loans and enhanced expenses. A huge piece of acquiring from work/work is additionally put to reserve funds, which alongside venture part is again put to profitable use in the economy. Thus, creating a virtuous cycle of investment - Jobs-earning- savings-demands-investments.

Since the greater part of the banks are reeling under Basel standards and rising NPA, the lower range of the economy was financed by NBFC. Due to these reasons credit creation suffers due to non-availability of credit. Since no cheap credit is available, there occurs a problem of; liquidity, costing and

economy suffers. That is the relationship which exists between credit development, NBFCs, and liquidity.

9.2 Risks from Asset-Liability Mismatch

This risk arises in most financial institutions due to a mismatch in the duration of assets and liabilities. Generally, liabilities are of much shorter duration than assets which tend to be of longer duration. NBFC keep rolling over their liabilities time to time but at times mismatch occurs due to less supply leading to panic in economy.



9.3 Risks form Interconnectedness:

Liability structure of NBFC is risky as some of the, are over dependent on short term funds

This risk arises when the liability structure of NBFCs is over-dependent on short term wholesale funds. Source of Low cost Whole Short-term funding is liquid Debt mutual fund sector. This interconnectedness is a channel for the transmission of fundamental danger from the NBFC area to the LDMF area and the other way around. Redemption Pressure is described as repayment pressure of any security at or before the asset's maturity date.

Financial and Operating Resilience (indicating balance sheet strength and associated risk of NBFCs)

Commercial paper represent Financial resilience of NBFCs as a percentage of Borrowing, provisioning policy and Capital Adequacy Ratio

9.4 GOVERNMENT INITIATIVES TO TACKLE THE CRISIS

Health Score index launched

The Economic Survey 2020 unveiled an early-warning system, 'Health Score' It is developed for NBFC and housing finance company (HFCs) sectors. It can help detect early-warning signals of impending liquidity problems facing the companies in the sectors.

This index will range from -100 to +100. A higher score will indicate higher financial stability of the firm/sector (lower Rollover Risk). It will give information on the key drivers of refinancing risks such as Asset Liability Management (ALM) problems, excess reliance on short-term whole-sale funding (Commercial Paper), and balance sheet strength of the NBFCs. Management (ALM) problems, excess reliance on short-term wholesale funding (Commercial Paper) and balance sheet strength of the NBFC.

9.5 Initiatives from RBI:

Liquidity management framework

RBI has introduced '**liquidity management framework**' for NBFCs. This aims to strengthen their asset-liability management following the liquidity crisis faced by these firms in the past year.

Under this framework, NBFCs are mandated to maintain liquidity coverage ratios (LCR). LCR refers to the proportion of highly liquid assets held by companies to ensure their ongoing ability to meet short-term obligations.

Increased threshold on bank's exposure to NBFCs:

RBI has decided to increase the cap on a bank's exposure to a single NBFC to 20% of its tier- I capital from 15% now.

Priority sector tag:

Banks' lending to NBFCs, **for on-lending** to farm, small and medium enterprises and housing sector got a Priority sector allocation.

Long-term repo operation:

Central Banks were offered funds at Long-term repo rates at cheaper rates so that they should lend to mid and small size NBFC to create liquidity in economy.

9.6 Initiatives from Government:

Partial Credit Guarantee Scheme: Under this, Public Sector banks (PSBs) are allowed to purchase, invest in highly rated

pool of debt from financially sound NBFC and Housing Finance companies.

This guarantee support aims to help address NBFCs/HFCs resolve their temporary liquidity or cash flow mismatch issues.

10 SERVICES

The services sector holds a lot of significance in the Indian economy and accounts for around 55% of the total size and growth, as per survey 2019-2020. It majorly includes activities such as Trade, hotels, transport, tourism, communication & Financial, real estate & professional services. Looking at the Services sector in economic Budget for 2020-2021, there was a contraction of almost 16% in the services sector owing to Covid-19 as major factor responsible. Air passenger traffic, rail freight traffic, port traffic, foreign tourist arrivals, and foreign exchange earnings all contracted sharply following the first lockdown which was announced in March, 2020. The year 2020-21 witnessed many significant structural reforms especially in space & telecom sector.

10.1 Current Scenario

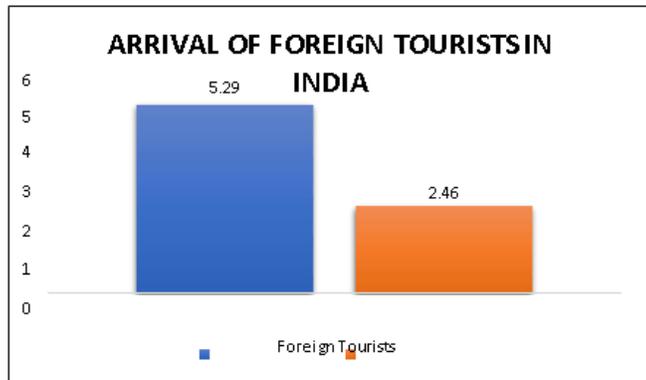
As the economy gradually entered the unlock phase, most of these indicators showed signs of recovery. Air travel which had significantly reduced has also started increasing gradually on a monthly basis. Services purchasing managers' index, rail freight traffic, and port traffic have bottomed out and are rising steadily now, showing a V-shaped recovery. Services sector's significance in the Indian economy has been steady with sector now accounting for 54%. FDI inflows into the services sector increased by 34 per cent despite the global pandemic and disturbances. The space sector was opened up, telecom related regulations were removed from the IT-BPO sector, and consumer protection regulations were introduced for e-commerce.

10.2 Comparison & Analysis

1. Tourism sector

Tourism sector is a major engine of economic growth that contributes significantly in terms of GDP, foreign exchange earnings and employment. However, the COVID-19 pandemic had a weakening impact on travel & tourism in India as tourism declined sharply in 2020. Only 2.46 million foreign tourists arrived in India during January-June 2020 as

compared to 5.29 million during January-June last year. Consequently, foreign exchange earnings from tourism declined almost half in January- June 2020 as compared to January-June 2019.



The growth in tourism sector decelerated in 2019-20 with weaker growth in foreign tourist arrivals and consequently in foreign exchange earnings from tourism. In India, the tourism sector witnessed a strong performance from 2015 to 2017, with high growth in foreign tourist arrivals. However, foreign tourist arrivals growth decreased since then to 5.2 per cent in 2018 and 2.7 per cent in January-October 2019. The table below Foreign and International Tourist Arrivals and Tourism Receipts in India and the World.

TABLE: Foreign and International Tourist Arrivals and Tourism Receipts in India and the World.

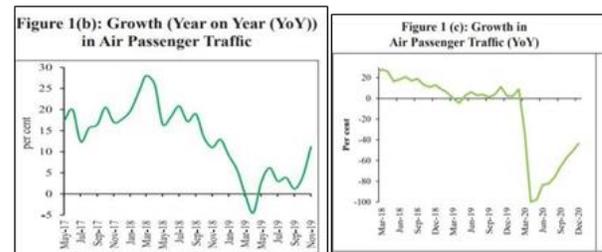
Parameter	2015	2016	2017	2018	2019
Foreign Tourist Arrivals (FTA) to India (million)	8.03	8.80	10.04	10.56	10.93
International Tourist Arrivals (ITAs) in India (million)*	13.76	15.03	16.81	17.42	17.91
International Tourist Arrivals (ITAs) around the World (million)	1,195	1,241	1,333	1,408	1,460
India's Share in World's ITAs (per cent)	1.15	1.21	1.26	1.24	1.23
India's Rank in World's ITAs	24 th	26 th	26 th	2 nd	23 rd
ITAs in Asia & the Pacific (million)	284.1	306.6	324.1	347.7	360.1
India's Share in Asia Pacific's ITAs (per cent)	4.84	4.90	5.19	5.01	4.97
India's Rank in Asia Pacific's ITAs	7 th	8 th	7 th	7 th	7 th

SOURCE: Ministry of Tourism

2. Air Passenger Traffic

According to Economic Survey 2020-2021, Indian airlines were grounded for about two months between March and May, as the government then implemented travel restrictions to curb the spread of the pandemic. In April 2020, air traffic fell sharply. Domestic travel started operating by the end of May but in a phased and discipline manner. Domestic air passenger traffic has been showing a gradual

recovery since August on a monthly basis, although travel remains Services 307 muted as compared to last year.



SOURCE: Directorate General of Civil Aviation, RBI

Growth in air passenger traffic has begun to show some signs of recovery after having witnessed a slowdown since mid-2018-19. The domestic air traffic, however, stands 50.93 percent lower in November 2020 as compared to November 2019, wherein 1.3 crore passengers had flown.

3. IT-BPO & Telecom Sector

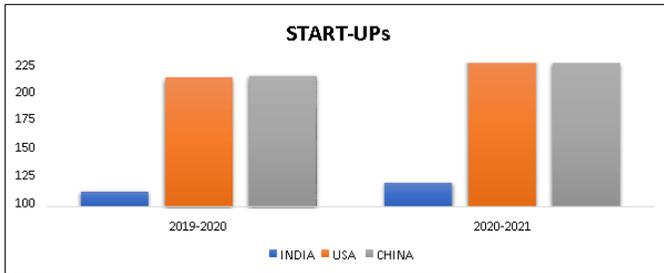
The year 2020-21 witnessed many significant structural reforms. Telecom related regulations were removed from the IT-BPO sector. With an aim to improve the Ease of Doing Business of the IT Industry particularly Business Process Outsourcing (BPO) and IT Enabled Services, the Government, in November 2020, simplified the Other Service Provider (OSP) guidelines of the Department of Telecom. The new guidelines tremendously reduce the compliance burden of the BPO industry and enables to 'Work from Home' (WFH). In addition, other requirements such as deposit of bank guarantees, requirement for static IPs, frequent reporting obligations, publication of network diagram, penal provisions etc. have also been removed. These changes will enable IT-BPM companies to 'Work from Home' and 'Work from Anywhere'.

4. Start-ups

According to Economic Survey 2019-2020, A number of policy initiatives were undertaken to drive innovation and technology adoption in the IT-BPM sector, including Start-up India, National Software Product Policy, and removal of issues related to Angel Tax. The Indian start-up ecosystem progressed and was the third largest in the world with 24 unicorns, though the gap with the largest (China: 206) and second largest (USA: 203) markets remains significant. Cities such as Bangalore, Delhi NCR and Mumbai account for around 55 per cent of the total start-ups in India.

According to Economic Survey 2020-2021, The Indian start-up ecosystem has been progressing well, despite the Covid-

19 pandemic. Faced with challenges at the onset of the pandemic, the ecosystem defied the odds and had a record number of 12 start-ups that reached unicorn status. The country is home to 38 unicorns at present. The US and China have 243 and 227 unicorns, respectively.

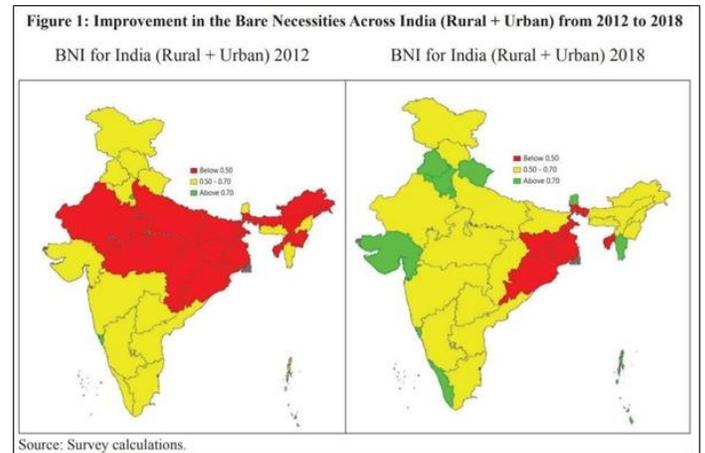


SOURCE: NASSCOM Study, NASSCOM Tech Start Up report 2021

11 BARE NECESSITIES

This chapter in the economic survey talks about Access to “the bare necessities” such as housing, water, sanitation, electricity and clean cooking fuel. A family’s ability to access bare necessities have therefore been regarded as an important barometer of economic development in academic and policymaking circles. The Sustainable Development Goals (SDGs) focus on providing “the bare necessities” to all. Therefore, Bare Necessities Index was established to check the progress of the state’s access to the necessities. It has been created for all states in 2012 and 2018 using the data by NSO. The specifications about the index are that it classifies areas on three levels of access which is high, medium and low to all bare necessities. The BNI summarises 26 indicators on five dimensions viz., water, sanitation, housing, micro-environment, and other facilities. The BNI has been created for all states for 2012 and 2018 using data from two NSO rounds.

Compared to 2012, access to “the bare necessities” has improved across all States in the country in 2018. This is because the States where the level of access to “the bare necessities” was low in 2012 have gained relatively more between 2012 and 2018. Access to “the bare necessities” has improved disproportionately more for the poorest households when compared to the richest households across rural and urban areas. (as shown in the figure below)



Access to bare necessities is the highest in the States such as Kerala, Punjab, Haryana and Gujarat while it is the lowest in Odisha, Jharkhand, West Bengal and Tripura. Interstate disparities in the access to “the bare necessities” have declined in 2018 when compared to 2012 across rural and urban areas.

In order to improve access to “the bare necessities,” successive governments have made constant efforts. The network of schemes designed to deliver these necessities include inter- alia the Swachh Bharat Mission (SBM), National Rural Drinking Water Programme (NRDWP), Pradhan Mantri Awaas Yojana (PMAY) and Ujjwala Yojana.

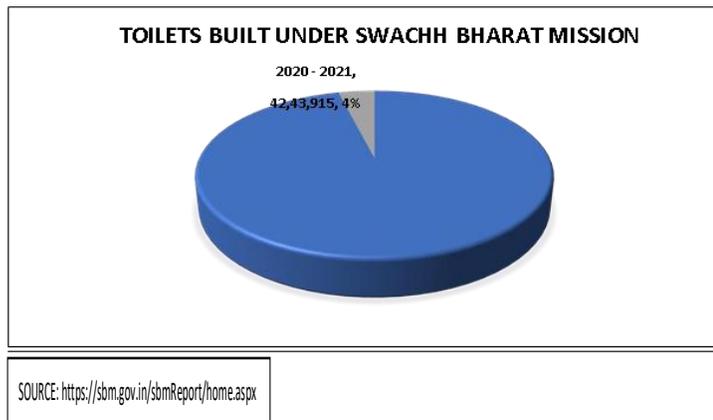
11.1 Swachh Bharat Mission

Swachh Bharat Mission was launched by Prime Minister Narendra Modi, on 2 October, 2014 on the occasion of the launch of the ambitious pan India cleanliness mission Swachh Bharat Abhiyan stressed on the construction of more toilets across the country.

Looking at the progress of SBM, across rural India, sanitation coverage stands at 93 per cent, with over 8.4 crore toilets constructed. In 5 years of the mission, the number of people defecating in the open has come down to 53 to 25 crores, as per a survey conducted by the Ministry of Drinking Water and Sanitation earlier this year. Prioritised from day one, increasing rural sanitation coverage has been the key goal of Swachh Bharat Abhiyan. States such as Maharashtra, Gujarat and Tamil Nadu which today boast of 100 per cent rural sanitation coverage had less than 50 per cent coverage till 2014.

Objective of SBM-Rural was to attain Open Defecation Free (ODF) India by providing access to toilet facilities to all rural households in the country. Objective of SBM-Urban is to

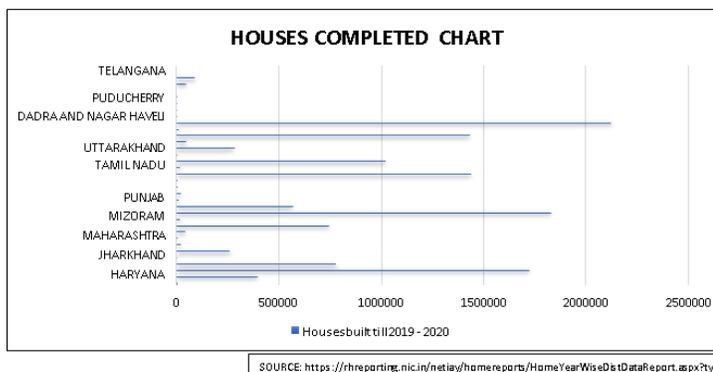
achieve 100 per cent Open Defecation Free (ODF) status and 100 per cent scientific processing of the Municipal Solid Waste (MSW) being generated in the country.



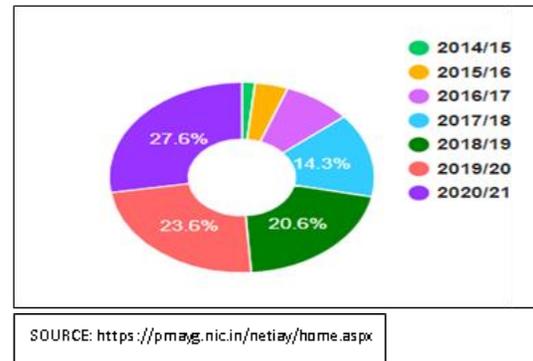
The number of toilets built to fulfil the objective were 1076.49 lakhs since the launch of SBM i.e., 2nd October 2014 out of which 42,43,915 were built in 2020-2021. (as shown in graph)

11.2 Pradhan Mantri Awaas Yojana (PMAY)

PMAY intends to provide housing for all in urban and rural areas by 2022. The target number of houses for construction under PMAY (Gramin) is 2.95 crore in two phases i.e. 1.00 crore in Phase I (2016-17 to 2018-19) and 1.95 crore in Phase II (2019-20 to 2021-22). Under PMAY (Urban), as on 18th January, 2021, 109.2 lakh houses have been sanctioned out of which 70.4 lakh houses have been grounded for construction since inception of the scheme in June, 2015.



According to PRADHAN MANTRI AWAAS YOJANA-GRAMIN, the pie chart below represents the updated information as on 15 March 2021. This shows the data of all the years since PMAY was launched. It is evident that the numbers have been progressing since 2014 showing desired results.



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