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# India 2030: The Decade Ahead

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**Abstract:** *The objective of this study is to examine how the economy will look in the next decade, i.e. in 2030 and to understand the long-term repercussions and effects of Covid-19 on India as an economy. India's GDP has decelerated to its lowest in over six years and the outbreak of coronavirus has posed fresh challenges for the global economy. Even before the onset of this pandemic, the global economy was confronting turbulence on account of disruptions in trade flow and attenuated growth. The situation has now worsened by the demand, supply and liquidity shocks that covid-19 has inflicted. Covid-19 is likely to lead to a new normal. Being aware of and preparing for these dynamic shifts will help businesses and economies navigate in the post Covid-19 world. This study provides some insights on the impact on the economy post the pandemic.*

**Keywords:** *India, covid-19, slowdown, economy, future.*

## I. INTRODUCTION

India has one of the fastest growing economies of the world. It is the fifth-largest economy by nominal GDP and third-largest by purchasing power parity. India has experienced structural shift in its GDP growth, largely contributed due to new foreign direct investments and the growth in its service sector. In the coming decade, India is likely to become the Third world's largest economy after China and USA. By some, India will likely to grow from its current \$3.202 trillion GDP to be the world's third largest in 2030. India's GDP at purchasing power parity has the potential to overtake that of the United States by 2050. It is predicted to become one of the economic Super Powers in the present century.

India is an emerging economy with a growing middle class and it has captured the attention of developed economies eager to tap into a new market with hundreds of millions of potential consumers. Its prospects remain bright as middle class continues to expand and the benefits of their participation in the economy has encouraged growth in dynamic sectors of the economy and boosted entrepreneurship and consumption. India's youth constitutes two-third of the total population and is an important engine of the country's economic future. Often referred to as the 'demographic dividend', this massive young set could translate into an equally massive workforce in the coming decade. The economy slowed due to the shocks of demonetization in 2016 and introduction of GST in 2017. In 2018, India was the world's tenth-largest importer and the nineteenth-largest exporter. With 520-million-workers, the Indian labour force is the world's second-largest as of 2019.

The Indian economy has been hit hard by the ongoing coronavirus pandemic-driven global crisis. The major challenges apart from the health emergency is saving the economy from the unfolding economic uncertainty due to the dual effects of the Coronavirus pandemic and the global and national lockdown. Due to the coronavirus pandemic, various rating agencies downgraded India's GDP predictions for FY21 to negative figures, signaling a recession in India, worse than that of 1979's. The coronavirus has made a drastic impact on the Indian economy of 2020 and the recovery of all sectors from this is a long process. However, it is expected that all the sectors will recover from it within 2 to 3 years. In the long-term, this virus could be an opportunity for different sectors to come out with something better and advance which will be witnessed in the coming years.

## II. REVIEW OF LITERATURE

[Siddhartha Rastogi, 2020] explores the impact of covid-19 on the Indian economy. The things will never be same and but eventually things will go back to normal or in the author's words the 'new normal'. Liquidity is expected to remain tight as cost of borrowing in real terms will jump upwards. Banks and financial institutions will be under immense pressure as the fear of NPAs, insolvency and bankruptcies increase multifold. Many lives will be lost and millions more affected. Countries will introspect, businesses will realign. Trends will accelerate and automation will gain momentum as the spend on sophisticated IT infrastructure outpaces human resources. Gig economy will emerge and work from home will be considered normal. We'll see the emergence of specialized lenders who will aspire to make better decisions through AI and social intelligence. Paper industry is one that has the highest chances of getting wiped out as the world looks to adopt eco-friendly ways and digital will be the 'new normal'. Finally, the author concluded that the recovery of the fundamental economy will be slow and it will take around 2 years for normalcy to come back across sectors.

[Abinraj R S, 2020] has presented the impact of Corona Virus on Indian Economy and has also come up with the solutions to tackle the impact. In the initial part of the paper, the author explains the impacts and effects of coronavirus on the Indian economy. The businesses in India are largely affected especially the imports as India's all out electronic imports represent 45% of China. China is India's third biggest trade accomplice and records for almost 5% share. Areas like shipping, pharmaceutical, cars, mobiles, gadgets, materials are also being adversely affected due to the episode of coronavirus. Around 18% of India's product is being imported from China. GDP growth is set to stagnate at 4.7% according to the annual estimate of 5% by the National Statistical Office. For the coming financial year, Chief Economic Advisor Krishnamurthy Subramanian had forecasted a GDP growth of 6-6.5% and even in recent commentary on impact of coronavirus, the forecast has not changed. India is among the 15 most affected economies due to covid-19 and slowdown in production in China. The latter half of the paper gives solutions to tackle the economic problems. The solutions include providing credit to align business but due to the lag in the economy RBI is unable to rise. Hence, the government has to offer partial guarantee to make sure banks keep lending to small and medium enterprises as well as large firms. Thus, in conclusion, the key is we should not see a downturn which leads to firms closing down and businesses being shut and when finally, when everything is brought under control everything would run smoothly.

[M. Javid Masood, 2015] has described the Indian economy as one of the emerging economies of the world. But the global slowdown has far reaching impact on the Indian economy as the major driving sectors are not performing according to their full strength and potential. The government should work on major sectors such as manufacturing, trade and education so that the thrust of growth could be enhanced. Apart from these issues, there are several other reasons which are responsible for the economic slowdown. India is also the country with largest number of people living below the poverty line. The growth of an emerging economic power can only come from collective efforts and participation of the entire country regardless of geo-political and economic conditions of the region. The author is surprised with the Gujarat's growth without employment model. India must use its own Human Resources which are the greatest of all resources for any nation. The complex social issues such as discrimination against baby girl, religious intolerance and large number of women who are unable to participate in the economy are some other pressing problems. Thus, the author presents the emerging trends, issues and challenges which the Indian economy has to face in forthcoming years.

[Deepak Lal, 2006] explains about the beginning and sources of acceleration of Indian growth. The author further explains the Indian economic fortune from the historic perspective. In examining the outlook to 2030, it is useful to identify the constraints on Indian growth which were widely held responsible for the derisory Hindu rate of growth till 1980. Later with economic liberalization the perceptions of the young about the possibilities of a fruitful life in India have changed. As India has just begun its demographic transition it can be expected to have a private saving bonanza until the population stabilizes till 2040, when the UN estimates it will be 1.6billion. Private savings could rise to over by 30% by 2030 and the gross domestic savings rate could be increasing thus India will not face any savings constraints in future. Thus, it seems highly probable that India will grow at about 10%p.a which with population growing at 1.5-1% p.a would lead to a per capita income growth about 8.5-9% for the next two decades. In conclusion, the author makes future predictions according to his analysis from a historic perspective.

[Muhammad Yunus, 2020] proposes to redesign the economy from scratch instead of going back to the world the way it was before the coronavirus. The author describes this as an opportunity for us to have a clean slate and have a new beginning towards a better world. If we choose to go back to the economy the way it was, we will be counting days to when the whole planet will become unfit for human existence especially due to the impact of climate change. Now it is the time to bring a drastic change since our previous efforts were hardly bringing marginal results which were meagre to save the planet. Coronavirus has opened up audacious possibilities and we have unbelievable freedom to walk in any direction. The author describes the economy as a means that facilitates us to reach the goals set by us. We must figure out what kind of economy we want and work towards achieving it. The author suggests that we must work towards a 'reconstruction' programme and not towards a 'recovery' programme. One of the tectonic shifts in the comprehensive reconstruction plan is to focus on a new form of business called the social business. This business solely focuses for solving people's problems without any personal agenda or profits for the investors except to recoup the original investment. These social businesses can take care of destitute and the unemployed through welfare programmes, healthcare, reviving essential services and supporting all types of businesses where social businesses won't be feasible. Success of social business won't be visible if it is growing by percentage in economy but when there will be a rapid growth in the number of entrepreneurs, where the same entrepreneur will do both types of businesses. Reconstruction programmes must break the traditional division of work between citizens and the government. Finally, the author concludes by explaining us how important the reconstruction programme is because if we fail to bring a social and environmental change, we will be heading for a catastrophe that may be worse than what coronavirus has brought in.

### III. RESEARCH METHODOLOGY AND DESIGN

#### A. Research Problem

What are the long-term repercussions of Covid-19 on India and how does that affect the economy as a whole?

#### B. Research Objectives

- 1) To study the before and after effects of Covid-19 in India
- 2) To understand the sectoral slowdown in India
- 3) To stipulate the social and cultural consequences in the next 10 years
- 4) To comprehend the overall impact on the economy that affects its world standing as the 3<sup>rd</sup> largest economy by 2030

#### C. Research Design

A Descriptive Research design with longitudinal studies along with Exploratory Research is being used to get a holistic approach about the future of Indian economy in the next decade and the various factors leading and affecting it.

#### D. Data Collection

- 1) Secondary sources such as existing research papers, published reports, newspaper articles, online articles, economic magazines and reports were used to gain a deeper understanding and analyze the future of Indian Economy.
- 2) Data collection is qualitative as well as quantitative.

### IV. FINDINGS

Before analyzing how the economy will look like in 2030, it is important to understand the economy trends and major changes in the previous decades which will highly impact all the factors in the coming years. The following is a brief discussion about population, energy and water scenario and economy and its impact on the next decade.

### V. POPULATION

Human component is a major component of economic growth. The relation between population growth and economic growth does not lead to any standard conclusion but there is a high probability that history of these two relationships can predict the future relationship. Most of the studies state that a continuous increase in population has led to the slow growth rate of the nation. If compare our economy with the economy of China, the rise in their population is greater than India's but they created one of the top most economies in the world. The inefficiencies in the government, low literacy rate and low unemployment rate can be the reasons of economic slowdown. The population of India is so high that any catastrophe, foreign invasion could easily lead to a large-scale disruption. On the brighter side, the rise in GDP has outsmarted the population growth and has led to a positive progress on India. The next decade for India will be quite momentous in terms of demography. It is expected that India's demographic dividend will support higher trend growth relative to the last decade. One major reason can be more workers with higher level of education to join to the labor force particularly females in India.

India is set to cross China as the world's most populated country by 2027, according to the predictions of United Nations (UN). The population of India is projected close to 1,380 billion and is expected to become the first political entity in history to be the home to more than 1.5 billion people by 2030 and further to 1.66 billion by 2050. In India, the life expectancy at birth will be 71 years in 2025-2030, growing to 74.2 years in 2045-2050. A relatively young structure also contributes to India's population growth. The median age in India is 27 years, compared to 38 years to that of China. India's rate of urban population growth is expected to rise, partly due to migratory flow, especially youth seeking jobs. International migration does not play a significant role in India's population growth. Nevertheless, India has the largest immigrant population, with around 16 million Indians living abroad and millions planning to emigrate. The nation implements strong enforcement measures to prevent illegal entry from migrants especially from Bangladesh. Even in 2030, India will be one of the few large countries in the world with the bulk of its population living in rural areas. The enormity of India's population means that even with a relatively low urbanization rate, urban population will exceed by half a billion people, more than the entire population of the USA.

India must focus from population control to population development since over the years the graph of population will only go upwards. Emphasis on family planning programmes is very important. Ensuring availability and accessibility to diverse and modern methods of contraception and sex education to both men and women should be made compulsory. India must strengthen policies to address its enormous young and working-age population.

For India to stay competitive the quality of education, life skills, healthcare and vocational training must be addressed. By 2030, India will have the largest youth population which will help the nation to reap long term benefits. The question will be how to reap benefits i.e. the demographic dividend. India must make full use of window of opportunity before it's too late and decide what policies, strategies, and interventions to effectively unleash the full potential of the youth to maximize benefits for the nation.

## VI. ENERGY AND WATER SCENARIO

The Indian energy sector is one of the most critical components that affects the growth of the Indian economy and is also one of the largest industries in India. India has the 5<sup>th</sup> largest electricity generating capacity and amounts to 3.4% of global energy consumption. The consumption of energy is directly proportional to the increase in population and development in the standard of living.

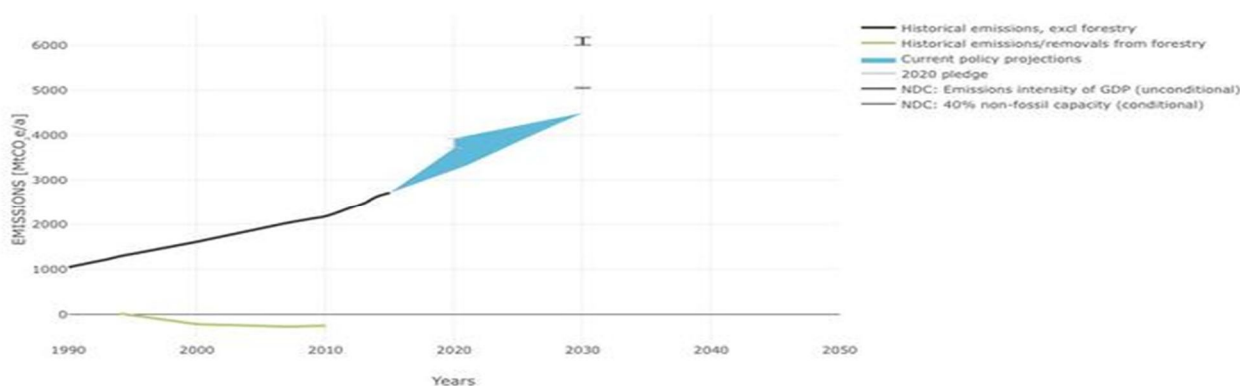
India's renewable energy ambitions are among the most aggressive in the world. Amidst coronavirus crisis, 2020 is shaping up a pivotal year in India's transition towards renewable energy. However, India's renewable energy market has slowed this year due to import duties on solar panels, land availability issues, slow development of electricity, uncertainty of power purchase agreements and artificially low ceilings on solar tenders which are dampening the market progress. In the prior decades, India accelerated its deployment of wind and solar power. Although coal power generation has fallen in 2020 as the coronavirus depresses demand, India's demand for power is still likely to bounce back after the crisis and grow sharply by the coming decade.

By 2030, Indian government wants to meet half of its power demand with clean sources. The increasing use of markets is a positive development. However, India's electric power sector is highly inefficient. Discoms and power plants have long-term contracts that lock them into transacting with each other; existing markets for day-ahead and real-time electricity trading are tiny and often not liquid. Large and efficient markets will be necessary to efficiently integrate massive quantities of renewable energy and harness conventional plants to operate flexibly and compensate for intermittent wind and solar power. High investment will be required in the infrastructure to enhance the flexibility of its power system. India's nationwide grid, which is the largest in the world, is adequate to transport existing levels of volatile renewable energy.

India is also one of the few countries on the track to meet two of its 3 key NDC commitments- 40% of non-fossil fuel installed power capacity and 33-35% emissions reductions over 2005 in 2030. Yet, the third goal of creating a carbon sink of 2.5 to 3 billion tons of carbon dioxide equivalent additional forest by 2030 requires more work and may go beyond 2030. Over the last decade the Indian government had the luxury of focusing mostly on adding solar and wind energy capacity as fast as possible. The next phase will require a deeper structural reform to create a cleaner, more flexible and more efficient power system. But given the impressive progress to date on deploying renewable energy and the willingness of the government to constantly experiment with the new policy approaches, there is reason for optimism about India's energy future.

## VII. INDIA'S EMISSION TRAJECTORY

India's emission intensity has reduced by 21% over the period 2005-2015 while total emission continues to grow. Yet, India's emission intensity is projected to be even lower by 2030.



SOURCE: [Climate Action Tracker 2019]

According to a review, India's carbon emission intensity by 2030 is likely to be in the range of 35% - 45% below 2005 emission levels. India is moving towards electrifying mobility with electric vehicles (EVs)

### VIII. WATER SCENARIO

Water is one of the five basic elements of the universe and its vital for the human existence and development. It is a factor that cuts across Human Development Indices and impacts GDP of countries making it a key to socio-economic development. In India, water has a great source of concern since it supports 18% of the world's population with just 4% of the world's fresh water resources (NWP, 2012). By 2030, India's water demand will exceed supply almost by twice, indicating severe water scarcity in the country. The average all India per capita water availability is expected to touch a low of 1,140 cubic meters, even lesser, by 2025. Despite efforts to improve access to water supply, nearly 163 million people in India lack access to clean and safe water and over 140,000 children succumb to diarrhoea every year, according to WorldAid. The cost to the Indian Economy is substantial, with approximately 73 million working days lost due to the water borne diseases each year resulting in an economic burden of an estimated USD 600 million annually. In 2019, Prime Minister Narendra Modi announced creation of a new integrated water ministry- Jal Shakti since large parts of India faced a major drought. The government also announced a series of national initiatives like Jal Shakti Abhiyan- to promote water conservation in 256 of the India's most water stressed districts, Jal Jeevan Mission- to promote piped water connections to 146 million rural households by 2024 and Atal Bhujal to improve groundwater management in seven Indian states. It is positive that the government continues to give high priority to water and is taking necessary steps to move towards a more integrated and holistic approach to water management. The central budget for 2020-21 describes access to water as one of the key aspects of an "aspirational India" along with access to better health, education and jobs. It is tragic that even after Independence, access to water still remains an "aspirational" goal for millions in India.

It is expected that as the demand for water grows, new sources of water will be identified and large infrastructure created to shift water to the demand location. This mechanism does not take care of the availability and maintenance of water resources at its natural aquifers or the sustainable consumption of water by its users. Therefore, we as citizens should understand the need of the hour and shift our focus from 'water supply system' to 'water resource management system'. This arrangement focuses on making water usage more efficient by reducing wastage, recycling water and rainwater harvesting. Presently, India only captures only 8% of the annual rainfall, among the lowest in the world. It is important to develop a strong data backed framework for managing water resources and consumption patterns. While the government and businesses may continue to make continuous efforts towards water management, efforts to transform these at a macro-economic level need a strong data backed approach.

### IX. ECONOMY

Short term and long-term Impact of Covid-19 on Indian economy

The economic impact of the 2020 coronavirus pandemic in India has been very disruptive. Along with an unprecedented human toll, covid-19 has triggered a deeper economic crisis. The global impact is worse than that during the Great Depression. India's internal buffers ensured that it was not too affected by the financial crisis of 2008, even if our GDP growth slipped from 8.5 per cent to 6.5 per cent. But this time, given the pre-existence of economic slowdown on which covid-19 crisis is acting it is quite possible that the GDP growth will be falling below 4 per cent officially. Moody's Investor Services downgraded its estimates of India's GDP growth for 2020 from 5.3per cent to 2.5per cent. Fitch Ratings revised its estimates for the growth to be only 2per cent. The situation has now been aggravated by the demand, supply and liquidity shocks that covid-19 has inflicted. On 26<sup>th</sup> May, 2020 CRISIL announced that this will perhaps be India's worst recession since Independence. The damage caused by coronavirus is not confined to only selective businesses but it has a widespread impact that may keep the economy low for a long time. Even though the magnitude of impact may vary from sector to sector, there are some sectors that have suffered the most and continue to suffer. Market experts are of the view that aviation and tourism, automobiles, financial, retail and real estate sector are the sectors that are in the front among the sectors that are smarting under severe pain.

### X. AVIATION AND TOURISM

Aviation is among the worst-affected sectors amidst the coronavirus that has taken the scale of a pandemic. According to the International Air Transport Association (IATA), airlines globally can lose in passenger revenue of about \$113 billion due to this crisis. IATA is a grouping of almost 290 airlines, including Air India, Vistara, IndiGo and SpiceJet. Airlines suffered the 'double-whammy' of steeply rising fuel costs and the decline in the value of the Indian currency. IATA expects that the pandemic can potentially impact 29,32,900 jobs in the country's aviation and its dependent industries too. The passenger traffic has declined 47 per cent. The revenue impact for airlines operating to and from the Indian market would be USD 11.221 billion i.e. approximately over Rs.85,000 crores. Airlines in Asia-Pacific region would record the largest revenue drop of USD 113 billion in 2020 compared to 2019. The losses would reverse the trend growth of 11 percent per annum the industry has logged over the past ten years, making it one of the most adversely affected sectors of the economy.

Amidst global financial crisis in the aviation industry, the Federation of Indian Chambers of Commerce and Industry (FICCI) urged the government to waive off interests and delayed charges and accruals to airport operators with loan guarantees to the airlines to make up for the gap.

As per DGCA Indian domestic passenger traffic increased by 3.74% in 2019 in compare to 2018 traffic. The Indian Aviation sector currently contributes \$72 billion in GDP, but due to the coronavirus lockdown effect the Indian Aviation industry is hit with huge revenue losses, exact figure prediction is quite difficult and almost 18-20 months may take for it to recover. The sad truth is that post-pandemic for the industry to survive, either consolidation or one or more airlines failing is a scenario that helps stabilize the overall industry. This alters the supply demand equation leaving fewer airlines competing for already depressed demand. According to the CAPA report, post lockdown, recovery is likely to be slow, demand will be suppressed due to economic dislocation, slow or even negative GDP growth, broken supply chain, low consumer confidence and concerns about lingering outbreak of coronavirus especially if the travel insurance companies refuse to provide cover for associated medical expenses or travel disruption costs.

Indian civil aviation industry is the fastest growing industry and expected to be the world's 3<sup>rd</sup> largest by 2024. Coronavirus could affect the air-traffic and there maybe a 15%-20% drop in domestic traffic for the time being. But this is a passing phase. Civil aviation sector in India will overcome the coronavirus challenge and continue to prosper. India is not only the world's third largest domestic civil aviation market but we are on the track of becoming the world's third largest civil aviation market and India would reach one billion passenger mark before 2030.

The Indian tourism, in 2018-2019, handled business of over 10.5 million foreign tourists. Tourism in India is important for the rapid growth of economy. The World Travel and Tourism Council calculated that this industry generated US \$240 billion or 9.2% of India's GDP in 2018 and supported 42.673 million jobs, 8.1% of its total employment. It is estimated that in India, branded and organized hotels annual revenue is around \$5 billion.

The economic impact on coronavirus pandemic is largely disruptive. The Indian tourism industry is projected to book a revenue loss of Rs.1.25 trillion in the year 2020. A study by CARE Ratings notes that the figure corresponds to a 40% decline in revenue over calendar 2019. On account of coronavirus, this industry is estimating a potential loss of around 38million jobs. With international and domestic travel on halt and the demand for turbine fuel has declined substantially. This industry has faced mass-scale cancellations for travel bookings and hotel accommodations and will continue to do for months to come. Hoteliers don't see a revival of this sector before October'20. The tourism sector was already facing some trouble before the rise of coronavirus due to the impact of the global economic slowdown. Economic growth decelerated in 2019-20, resulting in a weaker growth in foreign tourist arrivals and foreign exchange earnings from tourism in India.

However, as we quantify and qualify the challenges, it is important to present suggestions to help with a reboot in the months ahead. A gradual and slow recovery scenario is expected in this industry. FAITH has sought a complete deferment for 12 months of all statutory dues payable by tourism, travel and hospitality industry at the central, state and municipal government level without attracting any penal interest. The government needs to stimulate domestic tourism by giving 200% weighted reduction of expenses to Indian corporates for undertaking their meetings, conferences and exhibitions.

## XI. AUTOMOBILE

The automobile sector is an important driver of the economic growth in India and one of the successful sectors in which the country has high participation in global value chains. This sector comprises of automobile and automotive components which are the key drivers of economic growth. India was the sixth largest producer of automobiles globally with an average annual production of about 29 million vehicles in 2017-2018 of which 4 million were exported.

Automotive sector in India was already struggling before the coronavirus crisis. This sector saw a degrowth of nearly 18 per cent. FY20 and FY21 are the challenging times for the Indian automotive sector due to slow economic growth, negative consumer sentiments, BS-VI transition, changes to the axle load norms, liquidity crunch, low capacity utilization and potential bankruptcies. A prolonged truncation of consumer demand due to the lockdown is seen slightly affecting auto manufacturers revenue and cash flows.

India will be the world's fourth-largest passenger vehicle market by 2021. It took India around seven years to increase its annual production to four million vehicles from three million. However, the next milestone of five million is expected before 2030.

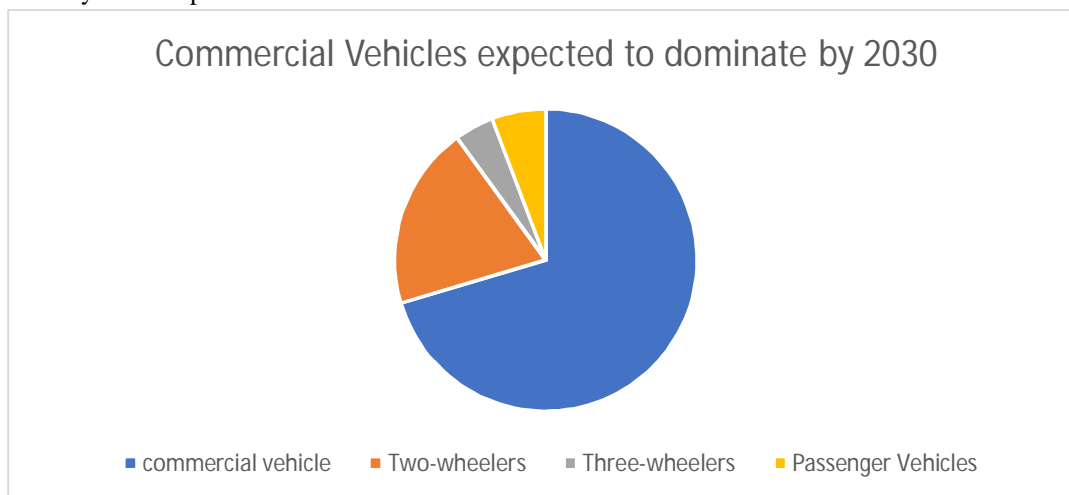
According to Meticulous Research, the current crisis will severely affect the global automotive industry resulting in a 12%-15% dip in market in 2020. The automotive supply chain in India has been impacted due to the non-availability of auto components and the impact is being felt across in all segments like the passenger vehicles, commercial vehicles, two and three wheelers and in electric vehicles. Most of the vehicle makers have either own bases for supply or have supplies based in China. These are seriously affected

by the coronavirus crisis. As the supply chain around the world is disrupted, the full impact is yet to be felt. Due to the coronavirus crisis, automobile manufacturers the world over are faced with a sudden slump in demands. This coupled with environmental factors, technological upheavals and complex regulatory frameworks are going to result in tough times for the industry.

To ensure a swift response to the outbreak and the lockdown, Indian automotive companies will need to identify where to act quickly and decisively in the short and long term. Short term priority would be to maintain efficiency and liquidity, mid-term priority should be to restore profitable and steady operations while the long-term organizations may be to review their strategy and operating model. The Indian automotive industry has already seen difficult past quarters and this pandemic could not have been more ill-timed. However, a planned response both immediate to long term will ensure a V sharp recovery of this sector. Support from Government and regulators is necessary to catalyze the revival. There is never a one pill solution for any business contingency and coronavirus teaches value of risk assessment and thereby preparing contingency plans for businesses. There would be opportunities once the time passes and companies who survive would emerge stronger than before. In the context of automobile industry, there are silver linings post coronavirus.

The world post coronavirus is very unpredictable to predict during the presence of it as the future seems to be so uncertain. However, India can still become the largest EV Market in the world by 2030. The future of automobile industry is clean and sustainable and is only a matter of time that India makes a bigger splash in the global green mobility market.

In India, adoption of EV is likely to grow with commercial vehicles rather than in passenger vehicle space. Electric vehicle adoption by 2030 is projected to be powered by two-wheelers and three-wheelers. Needless to say, the two-wheelers segment dominates the market in terms of volume owing to the growing middle class and young population. In short, yes, the adoption of EV is likely to grow with commercial vehicles rather than passenger vehicle space with commercial vehicles predicted to have a market share of 70% by 2030 as per DataLabs.



SOURCE: [Electric Vehicle Market Outlook Report, 2020. DataLabs by Inc42.]

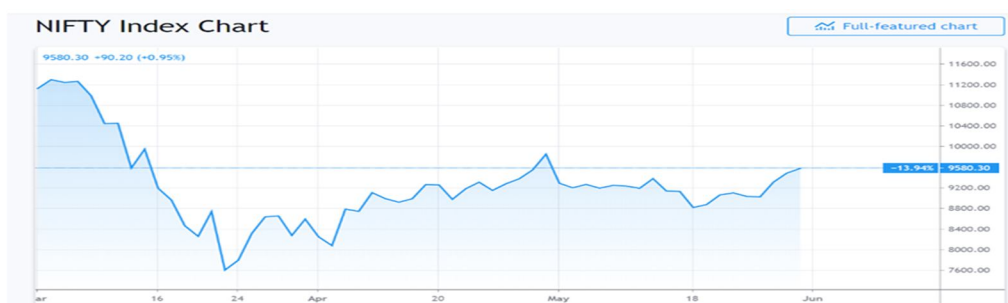
The government target of 30% electric vehicle adoption by 2030 is projected to be powered primarily by electrification of two and three-wheelers and commercial vehicles in India. Passenger cars are projected to make up just 5.8% of the market in 2030. The next couple of years are crucial for the Indian electric vehicle industry as the market is poised to grow like never before but due to coronavirus, the vehicle market is hit by supply chain problems and manufacturing disruptions. The oil prices are crashing and a lot of pressure on the global supply chain for renewable energy including power generation for electric vehicles.

## XII. BANKING & FINANCE

Stock markets are often seen as a barometer of the economy. After its launch in 1996, it took 21 years to rise from 1000 to 10000 mark which took place in 2017. The Nifty's profits in 2019, at 12 percent, was path underneath that of benchmark value records of the US, Japan, Brazil and Russia. In the period 2004-2010 India had improved its rank in terms of Gross Domestic Product from 17<sup>th</sup> to 8<sup>th</sup>. Though it climbed up to the 7<sup>th</sup> position in 2018, it had slipped to 9<sup>th</sup> in 2019. In fact, Nifty's compounded annual growth rate (CAGR) of 8.9 percent in local currency terms during the last decade was no better than the gains made by gold.

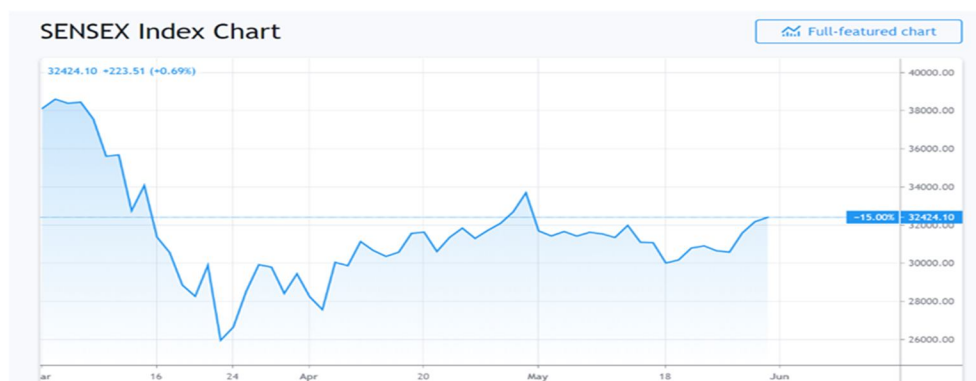
Nifty in 2020 has made its 52 weeks high of 12430.50 and looking at the bottom side, the bulls went to sleep when WHO declared the covid-19 a pandemic. The bears took the downfall rally to 7511. The BSE Sensex made 52 weeks high of 42273 and a low of 25638. There was fear selling in the bourses and domestic as well as FIIs started to pull out their funds from the markets. Recently, Nifty has seen some positive changes as few companies started to get on track again. RIL has a weightage of 11.84% in Nifty and it has recovered well from 875 in the month of March 2020 to 1579 in June. Analysts say non-essential sectors such as auto-mobile, jewellery, paints and cigarette could take relatively longer time to re-open and normalise post Covid-19 disruptions. But these sectors have only 12 percent weightage in Nifty50. Talking about the hardest hits sectors of the economy such as hotels, SMEs and textiles, tour operators and restaurants, transportation services, malls, multiplexes, real estate developers have low or zero presence in the index. The past has shown that after every downfall the markets have performed well. The investors would be expecting the same in long run.

The banking & finance industry plays a vital role in any economy by providing credit and financial infrastructure. It is already facing issues of rising NPAs. We have seen banks and venture capitalist defaulting & closing down in previous months from 'Yes Bank' and 'PMC' to 'IL&FS'. The already rising NPAs are going to be sky-rocketing as the companies are not able to pay their employees leave alone paying back the loans. The defaults coming in due to unemployment like home-loan, vehicle loans and private loans is another story. However, we have not seen these defaults coming in now thanks to moratorium given by govt. on various types of loans. But moratorium period is going to be over in near future but rehiring won't be done so quickly especially in troubled sectors like Hotel & Tourism or aviation. Thus, We are going to see a lot of NPAs in near future is no secret. Banks are going to be interested in collecting past dues and not in providing new loans. The credit cost will remain same or become higher despite reduction in interest rates by RBI (repo-rate) and reducing Cash reserve ratio(CRR). The RBI in its seventh bi-monthly monetary policy announced on March 27, reduced the repo rate by 75 basis points to 4.40 per cent. It announced to provide Rs 3.74 lakh crore liquidity to banks through reduction in cash reserve ratio, by conducting targeted long term repos operations (TLTRO) and by increasing the limit for marginal standing facility (MSF) to 3 per cent(source ET). However, this benefit won't be passed on by banks pertaining to increased risk which is completely Rational. This is going to create a credit crunch in already troubled economy.



SOURCE: [NSE NIFTY, India]

On the stock market front the NIFTY 50 fell from record high levels of 12,000pts to 7,600 pts (approx.) in the month of March however it saw a rebound in April-May and are currently trading at 9,000-10,000 levels.



SOURCE: [BSE SENSEX, India]

On the other hand, The SENSEX fell from 40,000 pts to 26,000pts (approx.) in month of March. However, it saw a rebound just like NIFTY in month of April-May and are currently trading at 30,000-35,000pts. However, this seems to be a temporary rebound and will not sustain if the economic conditions are not improved. However, PHARMA, IT and FMCG Stocks have done well and outperformed the index. The Zydus and Cipla made record high over the news of HCQ been used to treat COVID-19 patients.

In the commodity market, Oil has taken a big hit due to lack of demand and MCX futures contracts were settled for a negative Rs. 2,884 in the month of April. Whereas, MCX Gold is making new highs as gold seems to be a safe haven. In the Forex Market USD-INR has made new highs. The crypto currency like Bitcoin, Ethereum, etc. are also seeing a rise in their price as just like gold their value is derived from people's trust and it now seems to be a safe haven.

### **XIII. MEASURES TO REVIVE THE SECTOR**

Since, the banking & finance industry are lungs of an economy as an economy without credit is the one you don't want to imagine. Government can provide credit guarantees to banks as they are reluctant to give loans. However, this might not be enough as unorganized sectors & MSME's are a big portion of India's GDP. Many of them will be lacking documents required to acquire loans and collateral. Thus, Govt. needs to provide loans through its own institutions, small industries development bank, small co-operative banks, NABARD, PO Bank, small chit funds, etc. RBI and Govt. should continue to provide aid to NBFCs, Credit societies, Banks, etc. by further reduction in repo, CRR and providing credit guarantees for loans given to small enterprises and local shopkeepers as well as for consumer loans like Credit Card, EMI and consumer Finance as this will help boost consumer demand as well as help banks & Financial institutions to survive.

### **XIV. RETAIL**

Indian retail industry has been one of the most dynamic and fast paced economy generator industry in the country. Contributing to almost 10 per cent to the GDP, the retail market was estimated to grow at a CAGR of 9 to 11 per cent to US\$1.1-1.3 trillion by 2025, from US\$0.7 trillion in 2019. Lockdown implemented by government on account of coronavirus has affected the retail business in India. Most stores except the ones selling essential commodities are being shut in India. Even essential retailers are facing losses since most of them aren't allowed to sell non-essential items which would bring them higher margin. 85% of the retail costs are fixed costs which is putting severe financial pressure on the retailers. Large scale unemployment and severe liquidity challenges are majorly faced by this sector. The cash inflow of this industry has come to a standstill while the fixed operating costs remain intact as per the survey conducted by the Retailers Association of India (RAI). 70% of the retailers expect recovery to happen in more than 6 months while 20% expect it to take more than a year. 20-25% of industry players may need a capital infusion to stay afloat and about 25% jobs in the industry may get impacted. To mitigate the disruption caused by the crisis, the Indian retailers will need to devise strategies for the now, next and beyond. While the retailers need to manage their costs through operational improvement and by evaluating the store portfolio, they also need to invest in service, experience and omni-channel to serve the new consumers. They should map a strategic journey to financial resilience at the same time plan for a long-term implication on their operating model owing to the shift in the external environment. Optimizing costs to maintain enough cash and margin buffer is the key for medium- and long-term survival. Retailers must be ready in other words flexible and adaptable to alter operating models and product assortments and have cross-functional swift response teams to handle any event that may follow. Digitization will help in reimagining company operations and meeting consumer demand for rapid fulfilment as market moves to more omnichannel and delivery-based models. Recovery will also be majorly dependent on Government's support to this sector. It may take minimum 3 quarters to stabilize. Government will have to take a backseat on fiscal prudence and take bold steps to ensure that this sector as well as the economy is afloat. Coronavirus outbreak is continuously evolving and the material impact cannot be predicted with certainty. However, this pandemic is a reminder to quickly build a flexible and agile business and operational model to take care of disruptions in the future. This will mean significant focus on converting to a digital enterprise.

Now discussing about this sector in the next decade the Indian retail market is estimated to cross \$1 trillion mark by 2025 and the top five retailers could take on a bigger slice in the Industry reaching over 10 per cent market share each in the next decade according to the reporters of Economic Times. However, these predictions were made before the coronavirus crisis. In my opinion, this still holds true as coronavirus will temporarily weaken the economy but in the long run, it's going to come better than ever. As per the World Economic Forum, middle-income and high-income households in India will drive nearly USD 4 trillion of incremental consumption by 2030. Retailers will continuously innovate to address challenges posed by the changing external environment. Even in 2020, retail industry is not dead. It is evolving and will adapt and come up with dynamic business models based on value proposition and operating models to swiftly suit with the external factors.

## XV. REAL ESTATE

The impact of Coronavirus on the Indian real estate has been unprecedented to an extent that it has brought the construction activities to a halt and completely eroded the market of its potential buyer base. The interdependence of supply chain, cost overruns, migration of labourers and liquidity crisis are some looming challenges on the face of developers. Difficulties in obtaining raw materials would reduce construction activities of ongoing estate projects in the coming months even if the lockdown is lifted. Coronavirus crisis is being considered the third 'black swan' event for the realty sector in the last five years, the first two being Demonetisation in 2016 and the implementation of Real Estate Act, 2016.

India heavily imports articles used in construction activities from China. At a production capacity of 928.38 million ton in 2018, China remained the largest producer of steel and India is the second-largest producer but it lags severely in terms of capacity which stands at 106 million tons. The heavy dependence on China for steel and steel products is a cause of concern for this industry.

Residential and commercial real estate are expected to be hit in term of launches, sales and price, showed a Knight Frank India survey. The next six months from March 2019 will be one of the worst phases in terms of new supply additions across the major office markets in the country. The outlook of future rental appreciation also dipped as 50% of the stakeholders expecting rents to either remain stagnant or slide under the current uncertain economic scenario. There will be a slowdown across the sector post coronavirus. The sector is facing an acute working capital crisis which is essential to restart the business and keep it moving. According to Sanjay Dutt, MD and CEO, Tata Realty and Infrastructure, as the gradual recovery begins, things will settle over a 12-24 month time horizon and a long drawn extended U-shaped recovery for the residential segment but a faster V-shaped recovery for the office segment of the country. However, coronavirus outbreak has marred the stakeholder's sentiments.

For India to achieve its goal of achieving \$5-trillion economy, the growth of real estate is imperative. This sector is expected to grow to a market size of \$1 trillion by 2030 and by 2025 it is likely to contribute 14 per cent of the GDP. Looking at the role that real estate plays, the need of financial stimulus gains utmost importance. The relief package that the sector expects will help smoothen the functioning and cover the shortcomings brought by the Coronavirus. Every calamity is an opportunity to scale new heights. The 'New World' will come up with its own new set of demands derived from experiences gained during these troubled times. Real Estate is set to gain as it will drive the change to make the world safe and hygienic. Digitization will change the way the real estate works. It will speed up the process and also bring more transparency in dealings.

## XVI. ARTIFICIAL INTELLIGENCE BY 2030

In 2015, Klaus Schwab, the founder and executive chairman of the World Economic Forum, announced the emergence of the artificial intelligence (AI) as the commencement of the Fourth Industrial Revolution. The Fourth Industrial Revolution promises to pave the way for unprecedented automation technologies. In the 21<sup>st</sup> century, it is virtually impossible to avoid interaction with software, programs and gadgets that use artificial intelligence, internet of things (IoT) and robotics.

AI is estimated to contribute \$15.7 trillion to the global economy by 2030, and it has the potential to add \$957 billion to the Indian economy by 2035. The most heated debates around the impact of the Fourth Industrial Revolution are related to its consequences in the job market. India receives 65% of global IT off-shore work and 40% of global business processing work. About 69% of the jobs in India's formal employment sector will be automated by 2030. Economists from MIT and Boston university claim that automation leads to relocation of jobs rather than their absolute displacement. However, demand of certain jobs will decrease due to automated machines, production efficiency will increase which will increase the demand for labour to carry out other types of jobs related to it. Looking at the bigger picture, some jobs will take a hit in the short term, but the impact will even out as newer job profiles which will arise in the coming years. According to the study "Future of Jobs in India" by 2022, 9% of the workforce will be employed in jobs that don't exist yet and 37% will be working in roles that require radically new skillsets. This study sheds light on change in the workforce mix. Pay scales will soon start skyrocketing due to a dearth of the talent required to undertake such roles as more and more specialized jobs come up.

The role of AI in the broader economic perspectives of India entails participation of the government, large enterprises, MSMEs, start-ups, young entrepreneurs and society at large, and this can make AI a game changer. There are multiple economic opportunities AI could achieve in India and they are huge. Innovation in AI can help us lead to numerous solutions to address societal issues. India's linguistic diversity is a major opportunity to develop AI solutions to unify communication across various digital platforms. AI has a potential to address the challenges of demographic diversity in India. Barriers like absence of robust, interoperable systems to collect, store relevant data and under-investment will be the biggest barriers which may become challenges on the road to realize the full potential of AI.

Despite India being a late entrant in the field, India ranked 13<sup>th</sup> out of 200 countries with respect to the development of AI. According to analysts at GMF, the AI sector in India has grown by \$150 million over the past five years as of 2018, with private investments doubling from \$44 million to \$73 million from 2016 to 2017. To reach at greater heights in growth and development, the government of India has established state-of-the-art facilities dedicated to the research and application of advanced technologies in AI. Meanwhile, AI Labs are being set up by Indian telecom companies such as Bharti Airtel and Reliance Jio. According to some estimates released by NASSCOM, AI could contribute \$957 billion to India's economy by 2035. According to a PwC report, AI could contribute \$15.7 trillion to the global economy by 2030, of which \$6.6 trillion is likely to come from increased productivity and the rest \$9.1 trillion would be generated from consumption-driven economy. Sectors like healthcare, agriculture, education, smart cities and infrastructure of the Indian economy where AI will have maximum social impact. However, disruptions and opportunities are likely to accelerate India's growth and with time every challenge and barrier can be tackled. India has the opportunity to introduce national-level programmes and incentivize corporations to up-skill and re-skill the youth, enabling them to survive in the new decade. In the long term, India must invest in building its competence in core AI by broadening its research base. As the entire world is looking forward to harness the potential of AI for the growth of the industry, India has already taken steps to leverage the potential of AI in all walks of life. To foster AI-led growth, government has taken steps in all sections of society to promote Indian tech talent and skills to achieve national goals. The adoption of AI across all sectors and industries will not only drive a competitive edge and operation excellence, but will also improve efficiencies, productivity and quality of life to ensure prosperity of all. Clearly, it can transform the Indian economy as the next economic superpower in the next decade.

#### **XVII. 2020-2030: EXPLORING THE FUTURE**

The early risers among the developing countries could exploit the advantage of low labour costs and freer trade, whereas stringent and protectionist policies of India make it more challenging.

Currently the size of economy is 2.9 trillion dollars, is expected to become about \$5 trillion by 2025 and \$8.4 trillion by 2030. These amounts to an average annual real growth rate of 8%, and would make India's economy the third largest by 2026, behind China and the U.S. Also, India is expected to become the 2<sup>nd</sup> largest in terms of PPP measurement even overtaking the mighty USA, to become an economy of 46.3 trillion which indicates a growth of about 387% when taking year 2017 as the base.

India's economy will be buoyed by rapid population growth in its cities, Particularly in Urban areas which is the fastest among all world nations, majorly consisting of a working population of age 16-24 with an median age of about 31 which will be younger when compared to China with about 40 years, although it won't be a smooth ride, but looking at the opportunities i.e. the new reforms brought in by the government such as banking reforms and new indirect policies will help boost the trajectory of the Indian economy. With the give pace of growth of India there will be a rapid decrease in poverty from 15% today to about 5% below poverty line in 2030 although India would still continue to be a rural country and only 0.5% of population urbanized every year. India will remain a nation powered by a large young workforce over the foreseeable future.

Next decade shall behold an upward surge in GDP growth majority of which shall be contributed through consumption. Household Consumption will grow to \$5 trillion, from today's \$1.6 Trillion. Indian unemployment increased to 6.1% in 2018 from 3.7% in 2012 and is assumed to be at the same level. However, contribution of the work force to GDP will increase by 0.3% which will consist of more educated labour to boost productivity.

Technology is expected to boost the economy and Digitize all sectors of the economy, contribution towards GDP will account for 18-23% of the total GDP.

India, where the economic growth is already set to slow down to a record 11-year-low, a prolonged lockdown, which started from March 25, 2020 would further worsen the situation in Asia's third-largest economy. Extension of lockdown to combat the covid-19 outbreak will throw the world economy into the worst recession since the Great Depression in 1930s. However, fiscal stimulus should cushion the economic blow, as should the supply of funds be expanded and easily accessible to Industries and entrepreneur to encourage economic growth- Loose Monetary Policy.

#### **XVIII. CONCLUSION AND ANALYSIS**

After the great depression of 1930 in which the Indian economy faced the worst recession, the Indian economy is facing the global pandemic of coronavirus which has not only battered the growth of all sectors of economy, but it has also set back the goal on becoming the \$5 trillion economy by 2025. India's GDP at \$2.8 trillion in 2020 and reaching \$5 trillion by 2030 will now be a struggle if India grows at 4% per annum. As per the IMF, the GDP growth of India is around 1.9% in 2020 and to achieve the objective of \$5 Trillion economy by 2030, the expected growth rate is around 9% every year for at least the next 5 years. If it does

not turn inward and focuses more on making India globally competitive, it may reach \$5 trillion by 2030. PM Narendra Modi and finance minister Nirmala Sitharaman have reiterated that 'Atmanirbhar Bharat Abhiyan' as India's new goal for 2020. The aim is to make India self-reliant, get back the Indian economy on its feet with a Rs. 20 lakh crore economic package. This package touches almost all aspects of lives and livelihood and has a big focus on the MSME sector.

This paper gives an idea of how the major sectors of economy will be affected due to the coronavirus pandemic, its long-term repercussions and on the basis of this, an outlook of 2030 is being presented. India will experience an extremely dynamic period over the next decade and will confront with large opportunities. As far as the growth of Indian economy is concerned, it may remain below potential in the near term. However, ongoing government measures will give a major push to its potential in the future. Demonetisation and GST apart, India's bankruptcy law that came into force in 2017 will also help drive growth in the upcoming decade. There is no doubt that coronavirus pandemic will have a huge impact on the Indian economy. the recovery of the economy will be slow and will take around 2 to 3 years for normalcy to come across sectors. The 'new normal' will emerge and digital will be the new normal.

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