

CAN INDIA AVOID THE MIDDLE INCOME TRAP?

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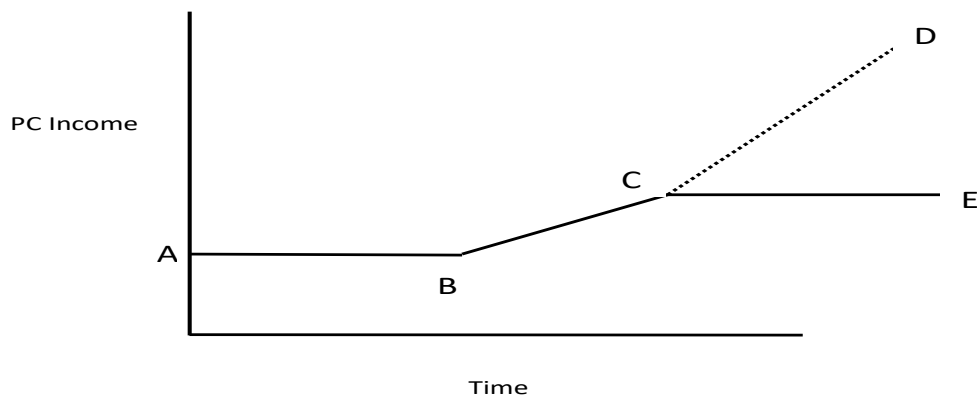
Chapter 1

Introduction

Of late the idea of middle income trap has gained impetus. A lot of research has been done on the developmental experience of various countries to investigate the reasons behind the middle income trap. In fact, the Economic Survey 2017-18 released by the Ministry of Finance has examined the risk of India facing a Late Convergence Stall (Middle Income Trap).

Middle income trap (MIT) is a situation where middle income economies, after initially showing impressive growth are unable to graduate to higher income levels due to operation of various adverse factors arising out of the higher levels of growth achieved initially. As per World Bank's classification¹, countries with per capita income of less than US \$ 995 are termed as low income countries. Countries with per capita income level between US \$ 996 to US \$ 3895 are termed as lower middle income and between US \$ 3896 and US \$ 12055 are termed as higher middle income economies and countries having per capita income levels of higher than US \$ 12056 are classified as high income countries. With the per capita GDP of US \$ 2134, India is already classified as middle income country by the World Bank.

Figure 1.1 - Middle Income Trap



Source: ADBI Working Paper No 421 (2013)

¹ <https://blogs.worldbank.org/opendata/new-country-classifications-income-level-2018-2019-> accessed on 24th October 2018.

Figure 1.1 above can be used to understand the concept of MIT. The X axis represents time and Y axis shows the level of per capita income (PCY) of an economy. Assume that an economy is initially at level A of PCY and is largely an agrarian economy, which is stagnating at low growth. However, at point B, there is some reallocation of resources from low productive sectors to higher productive sectors and as a result the PCY shows an improvement from point B (low income economy) to point C (middle income economy). Now the most difficult task is to sustain this growth and move from point C to D and become a high income economy. However, due to various reasons, the economy is not able to maintain the high rates of growth and reaches point E instead of point D and is caught in the middle income trap.

Statement of Problem

India has come a long way from the low rates of growth from independence to late 1980s to the impressive growth rates achieved after the opening up of the economy after the economic reforms of 1991. According to the World Bank's report titled global economic prospects (June 2018), the Indian Economy is termed as the fastest growing major economy of the world with the projected growth rate of 7.3 percent for FY2019. Currently, India is world's sixth largest economy by nominal GDP and third largest in terms of Purchasing Power Parity (PPP). As per the World Economic Outlook database (April 2018) of International Monetary Fund, the nominal GDP of India in 2018 is estimated at US \$ 2.848 trillion and at US \$ 10.385 trillion in terms of PPP. According to this database, in 2018 the per capita GDP of the country is estimated to be US \$ 2134 in nominal terms and US \$ 7783 in PPP terms. It is estimated that long term growth prospects of the economy are bright and therefore, nominal GDP of the country is likely to be in the range of US \$ 10 trillion by 2030.

However, India continues to be riddled with sub-par performance on many of the social indicators. The country still has large number of people living in extreme poverty and is riddled with largest number of people who are hungry as per the global hunger index. The country also fares badly on most of other social indicators like Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR), literacy rate, mean years of schooling, gender parity etc.

However, out of more than 100 countries which had per capita GNI in the range of middle income countries in 1960s, only 13 were able to graduate to become high income economies in 2008 and the rest of them (like Cyprus, Portugal, Argentina, Brazil, Mexico,

Peru and South Africa to name a few) continue to languish in the middle income trap². The relevant question for India, therefore, is that can we continue the growth momentum and sustain high levels of growth for the coming twenty years? Can the policy makers bridge the gap between the potential and actual growth? Can India avoid the middle income trap and graduate to become a high income economy?

Objectives of the study:

It will be interesting to examine whether India can achieve the status of high income economy in the next 20-25 years or will it get caught in the middle income trap? What are the drivers of the long term growth and what are the constraints which can hinder progress of the country in attaining the levels of per capita income of more than US \$ 12236? What are the strengths, weaknesses, opportunities and threats facing the Indian economy? What can we learn from the experience of other countries which have fallen into the middle income trap and also from that of those which successfully avoided this trap? What are the causes of the middle income trap and what are the early warning signs of this trap? The main aim of the paper would be to prescribe Do's and Don'ts if we want to avoid the Middle income trap. The paper will try to identify the factors and strategies relevant to India for avoiding the trap. Broad objectives of the study would be:

1. To identify the factors and strategies relevant to India to avoid MIT including policy recommendations.
2. To study the causes of MIT- including early warning signs, if any.
3. To examine/document the development experience of Asian countries viz. Singapore, South Korea, Malaysia, Indonesia and Thailand w.r.t. MIT.
4. To study the role of economic as well as social factors - in sustaining the long term growth with special reference to India- to help it avoid /escape the trap.
5. To examine the impact of factors like per capita expenditure on health / education, changes in the rankings on the ease of doing business index and global competitive index etc. on growth of per capita income.

² The Economist,, "The middle-income trap" 2012
(<http://www.economist.com/blogs/graphicdetail/2012/03/focus-3>)

Research Hypothesis:

A lot has been written and said about the impact of economic factors on the long term growth of a country. However, evidence is now emerging that social factors play an equally important role in sustaining the long term growth momentum. Accordingly, it will be important to gauge the role of social factors in the quest to examine whether India can avoid the MIT or not. Therefore, the study will try to see the relationship between improvement in social sector indicators especially relating to health & education and increase in per capita income in Indian context. The null hypothesis and alternative hypothesis are as below:

H₀ : Improvement in social sector indicators cannot help India in escaping MIT.

H₁ : Improvement in social sector indicators can help India in escaping MIT.

Research Design:

As the intention is to describe the main features of MIT and current state of the Indian economy, future challenges and vulnerabilities, role of economic and non-economic factors in preparing a strategy for avoiding the MIT, study the developmental experience of Asian countries; a descriptive and exploratory research design will be employed. In order to ascertain the determinants of India's long term growth / Per Capita Income and also to establish correlation between developmental indicators and social sector indicators and growth a causal research design will be used. Overall, all three types of research designs- exploratory, descriptive and causal, would be employed.

Research Questions:

The pertinent research questions that this study will try to investigate and answer are as under:-

1. What is MIT and what are its features?
2. What are the drivers of the long term growth and determinants of long term growth of Per Capita Income in India?
3. What are the constraints /roadblocks leading to growth slowdown resulting in convergence stall?
4. What are the strengths, weaknesses, opportunities and threats presently facing the Indian economy?

Research Methods and data sources:

The study primarily focuses on the sustainability of the long-term growth of the Indian economy and determinants of long term growth of per capita income. Therefore, both quantitative as well as qualitative methods will be used in the study. The study will analyse secondary data for the last 50 years (from the year 1970 onwards) on various economic and social indicators of various countries including India from the following data sources:

1. World economic outlook database- IMF
2. World development indicators- World Bank
3. Various reports of UN and its organisations like UN Human Development Report, World Economic situation and prospects, World Investment Report etc.
4. Database and various reports of WEF
5. Database on Indian Economy-RBI
6. NAS data-CSO/MOSPI
7. Census of India/ RGI data
8. Relevant data available on the website of various Departments / Ministries

Chapter 2: What is Middle Income Trap (MIT)?

It is a well-documented fact in the economic history that only a few countries that have achieved middle-income status continue to maintain impressive growth rates and converge to the level of high-income countries. As the policy, institutional, and structural environment evolves, prior strategies and competencies no longer remain effective at generating an equivalent rate of growth. When it is no longer possible to increase the factors of production especially Capital and labour, the marginal productivity of capital decreases and wages start rising thereby impinging adversely upon the international competitiveness. Therefore, the structure of the economy becomes more complex and it becomes increasingly difficult to sustain high levels of economic growth. This process shackles such countries in the middle income i.e. they are unable to graduate to high income levels. Countries in the MIT are no longer able to effectively compete with low-wage competitors in poor countries and still lacking the innovative capabilities to rival high-income economies.

In general, the “middle-income trap”, are middle-income economies that have been stuck at the middle income levels for a long period of time and are unable to transition to high-income within a reasonable time and the prospects of their doing so in future are also very bleak. As Ejaz Ghani from the World Bank says, it is a “development stage that characterizes countries that are squeezed between low-wage producers and highly skilled and fast-moving innovators.” The World Bank explains that “after exceeding the poverty trap of \$1,000 Per Capita GDP, many countries head rapidly to the middle income ‘take off stage’ of \$3,000 per capita GDP, but as they reach the middle-income range, they experience long-term economic stagnation.

The world economy today can be divided into four groups: group 1 comprises low-income countries which are still encountering the poverty trap. Group 2 is the countries

which reached middle-income level many years ago (more than 50 years for many cases) but have experienced low or no growth since then. Many Latin American countries belong to this group. Group 3 consists of the countries which have recently reached or are approaching the middle income level. Several Association of Southeast Asian Nations (ASEAN) economies and the People's Republic of China (PRC) and India are included in this group. Group 4 is composed of high income countries such as members of the Organisation for Economic Co-operation and Development (OECD) and several others. The countries in group 2 can be referred to as old middle-income countries; those in group 3 can be called new middle-income countries. The phenomenon that group 2 countries stagnate after reaching the middle-income level may be described as the “middle-income trap”.

Ideally, the main function of the economic growth for a country is to ensure that it should be perpetually on a high growth path in order to ensure that once the first transition is made from low income to middle income level, the second transition from middle income to high income level is within a reasonable period of time. However, it is often observed that often the second transition never happens in most of the cases. This is evident from the fact that many developing countries have transited from a low-income to a middle-income economies, however, only a few of them have been able to complete the second transition from middle income to high income levels. It appears that when a country is caught in the middle income trap, its growth simply stagnates or even decreases, ensuring the country's economy will remain in the middle-income level for a very long time and has little hope of seeing it reach high-income in the close future.

A middle-income trap is recognised as the risk of long-term economic stagnation, which a middle income country suffers from as a consequence of their economic and social structures that are unique to MICs. It is generally agreed that a delay or failure to change the economic structure from an input-driven growth model into a productivity-driven growth

model is a factor in triggering the risk of a middle-income trap. The first comprehensive discussion about the problem of a middle-income trap appeared in Gill et al (2007). Gill et al regard some Latin American countries as having fallen into the trap, reasoning that they realised fast growth to become MICs by extracting and exporting their natural resources, but fell into a long-term stagnation thereafter.

Productivity slowdown has been a sound characterization of middle income traps. Over time in a country's development process, there emerges diminishing marginal returns to cheap labour and technology imitation; this could be offset if government act early to move from an imitation based economy to innovation based production cycle. The East Asian experience has illustrated that such policies are central to fostering technological learning, attracting talented individuals into research and development activities, and encouraging the build-up of national and international knowledge networks. Recently, the broader debate over China's innovative prowess and potential development path has intensified. Some observers regard Chinese firms' ability to stay close to the world technology frontier and to improve upon and adapt existing innovation as key to the country's continued growth (Breznitz and Murphree 2011) where the globalization of services is increasingly an important components of China's growth (Roach, Stephen 2013). Only one (South Korea) of the seven countries which were middle-income by 1975 managed to reach high-income status by 2005. Brazil and South Africa, which had double the per-capita income of South Korea in 1975, have remained at the same level since then. It faced periods of negative growth, which cancelled all earlier progress.

Evidence of the middle-income trap can also be found in the dynamics of occupations and wages across countries. The integration of the world's labour markets creates big gains for rich and poor countries alike. For example, blueprints of products flow from California to China, while manufacturing goods flow in the opposite direction (Kharas et al, 2010). The

middle-income countries benefit less from globalization (Eeckhout and Jovanovic, 2007). They are not technologically-savvy enough to compete with rich countries and are not cheap enough to compete with China, Vietnam and other dynamic low-income countries. Thanks to communications and transportation technologies, managers, engineers and designers — larger in number in rich countries — have access to a pool of cheap labour in poor countries. This makes them more productive as they can produce more with the same resources. The higher wages that accrue to high-skilled individuals represent the gains to rich countries of an integrated global labour market.

Poor countries also gain. They produce better and more, thanks to the technology, design and managerial skills brought in from rich countries. The wages of their unskilled rise and this represents their gains from globalization. However, middle-income countries (lower middle-income to upper middle-income) gain almost nothing from globalization as they are likely to experience “the smallest change in factor-price ratio” or no significant change in the ratio of skilled to unskilled wages. Escaping the middle income country trap is an uphill battle. The move from being a middle-income country (MIC) to being a high income country (HIC) requires a break from the past in some significant structural shift. Apart from policies that no longer work to elevate them to a high-income economy, many “trapped MICs” tend to make two common mistakes: either they cling on too long to past successful policies or they exit prematurely from the industries that could have served as the basis for their specialization process. Moreover, most MICs fail to anticipate the transition and the new demands that come with it. The second common mistake is a premature shift away from assembly manufacturing before ensuring an adequate supply of high-quality and competitive human capital to support the transition to higher value-added sectors.

BOX 2.1

Table below depicts the per capita incomes of certain selected economies over the last 50 years.

Table 2.1 Growth rate of GDP Per Capita of Selected Countries

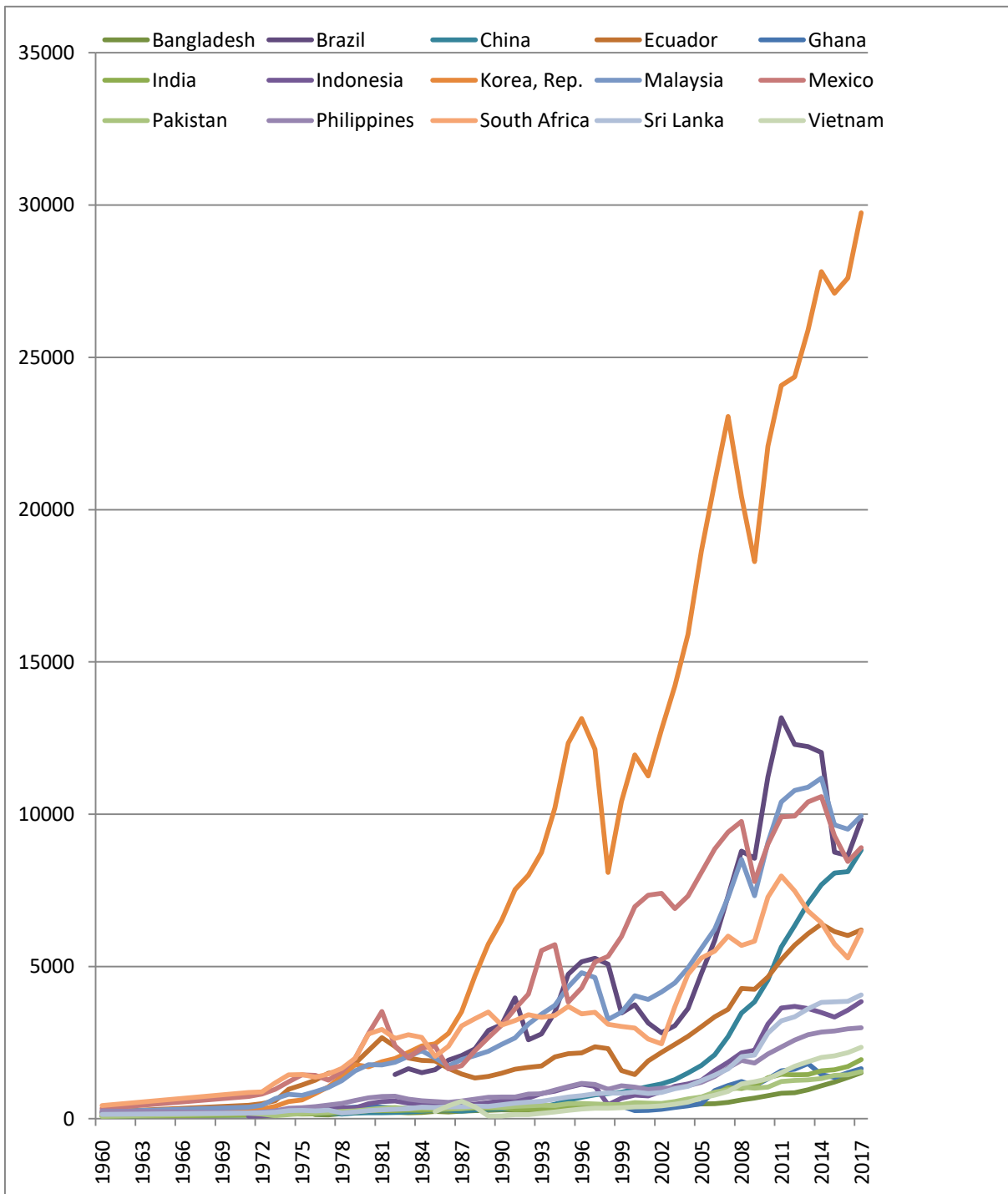
Country	1961-70 Average	1971-80 Average	1981-90 Average	1991-00 Average	2001-10 Average	2011-17 Average
Argentina	2.45	1.15	-2.21	2.87	2.58	0.21
Australia	3.06	1.37	1.86	2.14	1.61	1.06
Austria	4.16	3.52	2.08	2.18	1.12	0.68
Belgium	4.29	3.20	1.91	1.96	1.02	0.54
Bangladesh	0.99	-1.22	1.30	2.46	4.06	5.38
Brazil	3.28	5.94	-0.34	0.97	2.51	-0.40
Canada	3.39	2.59	1.43	1.83	0.86	1.13
China	2.71	4.37	7.77	9.28	9.93	7.02
Ecuador	1.09	4.08	0.11	-0.08	2.41	1.78
Spain	6.32	2.59	2.58	2.36	0.84	0.79
France	4.44	3.00	1.92	1.69	0.56	0.67
United Kingdom	2.65	2.04	2.77	2.19	0.92	1.28
Ghana	0.43	-1.75	-0.77	1.64	3.09	4.31
Greece	7.08	3.74	0.15	1.86	1.54	-2.13
Hong Kong SAR, China	6.27	6.45	5.53	2.42	3.58	2.21
Indonesia	1.19	4.78	3.35	2.49	3.81	4.12
India	1.89	0.74	3.25	3.60	5.87	5.56
Ireland	-	3.26	3.36	6.16	1.33	6.52
Italy	4.98	3.34	2.36	1.62	-0.07	-0.38
Japan	8.13	3.33	3.95	1.04	0.57	1.25
Kenya	1.30	4.27	0.37	-1.08	1.54	2.75
Korea, Rep.	6.80	7.47	8.65	6.06	3.89	2.44
Sri Lanka	2.20	2.51	2.73	4.38	4.44	4.63
Mexico	3.55	3.69	-0.16	1.69	0.06	1.41
Myanmar	0.89	2.25	-0.56	5.87	11.04	6.05
Malaysia	3.54	5.68	3.23	4.57	2.65	3.49
Pakistan	4.52	1.67	2.92	1.37	2.08	2.34
Philippines	1.73	3.00	-0.89	0.55	2.87	4.47
Sudan	-1.15	0.56	-0.33	2.78	3.97	4.20
Singapore	6.87	7.44	5.28	4.24	3.52	2.47
Sweden	3.86	1.64	1.90	1.80	1.59	1.29
Thailand	5.01	4.24	6.00	3.42	3.94	2.74
United States	2.90	2.14	2.39	2.19	0.73	1.35
World	3.34	1.96	1.34	1.31	1.54	1.60

Source: World Bank

The average growth rates of per capita GDP achieved by major countries can be perused in the table above. It may be seen that the average growth for all countries has slowed from 3.34 % during the 1960s to 1.6% during the current decade. However, the performance of two countries i.e., China and South Korea is commendable. If India wants to avoid falling into the middle income trap, it has to replicate what China did during the last three decades.

BOX 2.2

Figure 2.1 Graphical representation of Per Capita GDP (Current US \$)



Only a few countries have been able to cross the threshold of US \$ 10,000 Per Capita GDP.

Causes of MIT:

While the causes of the MIT are multifaceted, there does appear to be one consistent cause among many of them. As developing countries hit their early growth spurt and wages rise, manufacturers often find themselves unable to compete in export markets with lower-cost producers elsewhere. Yet, they still find themselves behind the advanced economies in their ability to produce higher-value products. The biggest challenge, then, is moving from resource-driven growth that depends on cheap labour and capital to growth based on high productivity. Recent history is littered with examples of seemingly extraordinary rates of economic growth that were not what they seemed. During the first two decades after World War II, for example, it was a widely held belief that the Soviet Union was outpacing the United States in economic growth. Some economists at the time had even come to admire the communist model of central planning. Unfortunately for the Soviets, the relatively rapid growth in output could be fully explained by the rapid growth in their factor inputs, a rapid expansion in their labour force, significant increases in educational levels, and above all, massive investments in physical capital. Economic growth that is based exclusively on factor accumulations, rather than on growth in output per unit of input or productivity, is inevitably subject to diminishing returns. It was simply not possible for the Soviet economy to sustain the high rates of growth in labour force participation, education levels, and its physical capital stock that had prevailed in the early post war years. The result was a slowdown in productivity growth. Without the sustenance of productivity growth, Soviet economic growth eventually faltered. Productivity growth is the most important gauge of an economy's long-run health. Nothing is more critical in determining living standards over the long run than improvements in the efficiency with which an economy combines its inputs of capital and labour.

The illusion of sustainable growth was not only limited to the command economies. The unusually rapid and protracted growth in the then newly industrialized economies (NIEs) of East Asia (Hong Kong, Singapore, South Korea, and Taiwan) from the 1960s until the 1980s led to the widespread belief that productivity growth in these economies, especially in their manufacturing sectors, had been extraordinarily high. But research showed that the NIEs' economic growth was mainly due to factor accumulation and the sectoral reallocation of resources. All four economies had experienced sizable increases in their labour force participation, leading to natural increases in output per capita, or average living standards. In particular, however, they had been rapidly accumulating capital, leading to more capital per worker, and in turn, higher labour productivity. Unlike the command economies of the communist era, however, factor accumulation in the four NIEs contributed substantially to growth because these economies on the whole allowed the increasing amounts of labour and capital to move from the less productive sectors to the more productive ones. It is this factor accumulation, combined with eventual gains in productivity, which allowed them to escape the MIT.

For a country starting with a per capita annual income \$500, if the average annual growth rate of per capita income is 7% (the income doubles in 10 years), incomes will double four times (40 years) to reach the upper middle income level (about \$8,000). If the growth rate is 5% (the income doubles in 14–15 years), it takes nearly 60 years to reach the upper-middle income level.

Thus, the transition from a poor to a middle-income country requires sustained periods of growth. However, from an upper-middle income level, the country needs only 15 years to reach the high-income level if the average annual growth rate is 5%. However, doubling from middle to high income looks easier than it is and it has proven for many countries to be a difficult passage. Initial progress is a long process that transforms the

country from an agricultural to an industrial economy, with increasing shares of the manufacturing and services sectors in total output and employment. In this process, the economy experiences many aspects of structural change, including factor markets, technological levels, and comparative advantage. When the economy reaches the middle-income stage, those changes become major challenges which the country must overcome for successful transition to the high-income level.

As an economy attains the middle income stage, in the factor markets, real wages rise along with the shift of the economy from labour surplus to labour shortage. From this point, labour must be more productive to match the rise in wages. Also from this point, the quality of labour must be upgraded to enable the transformation of the industrial structure from being less skill intensive to being high skill-intensive. Effort by the government is thus required to place more emphasis on a higher level and higher quality of education to supply a qualified labour force for the transition to the high-income level.

The earlier stage of development can also be characterized as being input-driven (intensive use of labour and capital). In this stage, such a growth pattern can be justified since labour is abundant. Capital is relatively scarce but the need for it in initial investment in infrastructure and in industrial production has increasingly expanded, while technology remains underdeveloped. However, for sustained growth toward the high income level, the country must be increasingly endowed with highly technological and managerial resources, and capital must be efficiently utilized. In other words, the growth of the economy should be increasingly attributed to total factor productivity (TFP).

Sustained growth requires the successful shift of the comparative advantage from a mature industry (industry 1) to a new industry that is more skill-intensive (industry 2), and prepares conditions to move to a newer industry (industry 3). The process continues to industries 4, 5, and so on, which are increasingly innovative and high skill-intensive. If the

country fails to continue that process, industry 2 loses its comparative advantage earlier than anticipated due to rapid changes in international markets, and the country is not able to generate a newer industry (industry 3). Thus, the middle-income trap appears when a middle-income country fails to sustain growth through the generation of new comparative advantage over time.

What are the conditions for the dynamic transformation of comparative advantage to avoid such a middle-income trap? Two areas seem important. One is the timely shift of focus of policy and public sector investment in infrastructure and human capital so as to develop new technology- and knowledge-intensive industries. The second area is high-quality institutions that generate and maintain a dynamic private sector which is innovative and sensitive to changes in international markets. Let us elaborate on these two areas. On the shift of policy, promotion of higher education, applied research, and development of high-quality infrastructure should be emphasized to move the economy toward the high-income level, which is characterized by high skill and knowledge intensity.

The second area for dynamic transformation of comparative advantage is on the building of high-quality institutions. In the earlier stages of development, sophisticated institutions are not necessary and the capacity for building such institutions is also not available. Given the factor endowment (agricultural resources, labor abundance), the direction of development has been quite clear so that policy formation has been simple. Government intervention, including establishment of state-owned enterprises, has been necessary and justifiable. Such “crude” institutions are not inappropriate at the input-driven growth stage. For sustained growth toward high-income levels, however, the country needs a different set of institutions which are sophisticated and of high quality. The contents of "high-quality institutions," a term coined by Rodrik (2007), include good governance; corporate governance; wide participation of various stakeholders in the policy decision process;

effective cooperation among academics, businesses, and government in the formation of strategy for strengthening international competitiveness; efficient and transparent relationship between government and businesses; and increasing investment in research and development (R&D). For building high quality institutions, the country needs qualified bureaucrats, efficient government, and a strong private sector (Rodrik 2007). High-quality institutions are also necessary for (i) improvement of human capital over time, which enables the upgrade of industrial structure toward skill intensiveness; and (ii) strengthening over time of the international competitiveness of the private sector. So far, we have discussed the turning points related to the possible trap dividing the middle income and high-income levels. These turning points can be synthesized into three factors: (i) Effort of the middle-income country to strengthen R&D activities and quality of human resources. This factor is essential for facilitating the transition from a labour-surplus to a labour shortage economy, the transition from input-driven growth to TFP-based growth, and for upgrading the industrial and export structure to high-skill and technology-intensive products. (ii) Effort of the middle-income country to build high-quality institutions. This factor is essential for creating a new business environment to stimulate a dynamic private sector which is innovation-oriented. (iii) The results of those two factors can be expected to reflect on the dynamic changes in the structure of comparative advantage.

On the basis of the above, factors responsible for triggering MIT and factors responsible for not letting a country to get out of the MIT are as below:

Factors behind triggering MIT

1. Inability of the countries to keep adding / increasing the factor inputs leading to increase in wage rates.
2. Inability to do further reallocation of resources.

3. Overdependence on exports of manufactured products with little value addition.
4. Increasing inequalities both regional and income inequalities.
5. Over devaluation of the currency.
6. Increasing dependency ratios

Factors keeping a country in MIT:

1. Inability to further improve productivity
2. Lack of innovation
3. Lack of investment in research and development
4. Lack of quality of higher education and vocational training
5. Inability of the State owned entities to work efficiently without subsidies and support from the Government
6. Poor governance and corruption
7. Policy of excessive protection to low productive industries and agriculture
8. Lack of good quality and adequate infrastructure.
9. Political uncertainty and unrest.
10. Low levels of tax to GDP ratios.

Although the challenges highlighted by the ‘middle income trap’ may emphasize the need to modify existing growth strategies, it is important to note that the basic policy objective will remain unchanged: strong productivity growth of the overall economy. Productivity (understood as either traditional labour productivity or the residual total factor productivity concept) provides a useful indicator of economic efficiency and is universally recognized as the fundamental determinant of improvements in real wages and rising standards of living over time.

BOX 2.3

Case Study –The South Korea Miracle.

Among East Asian countries, South Korea represents an exceptional case of a swift transition to an advanced economy. The South Korean economy went from a per capita income level around \$2,000 in 1960 to a GDP per capita of \$28,000 in PPP by 2008, solidly placing it in the group of developed countries. South Korea's quick transition is typically divided into three stages. The first began in 1962, with the introduction of five-year plans intended as guidelines to better coordinate public-private efforts to improve the performance of the economy. This resulted in accelerated development through 1997, with an annual growth rate of 7 percent. The first phase was characterized by high levels of savings and investment and by a determined industrial policy that implied a continuous technological "upgrade" to align exports with South Korea's evolving comparative advantages in successive phases of its development. The second stage covered the 1997–1998 financial crisis, which slowed the economy and increased unemployment. In spite of rather solid economic fundamentals such as balanced fiscal and current accounts, a low public debt in 1996, and high domestic saving and investment (34 percent of GDP and 38 percent of GDP in 1996, respectively), imbalances had accumulated in the domestic private financial markets. Some of the symptoms were a high ratio of short-term private external debt to international reserves (207 percent in the second quarter of 1997); overinvestment in manufacturing sectors that had displayed an excess capacity even before the crisis took hold and a non-regulated process of financial liberalization that induced over indebtedness on the part of the private sector (nonperforming loans increased from 3.9 percent of total outstanding loans in December 1996 to 6.1 percent in June 1997). The South Korean financial crisis involved a solvency crisis for many banks and businesses and morphed into a generalized economic crisis. The outcome was negative growth in 1998, with a sharp increase in unemployment (from 2.4 percent in 1997 to 6.8 percent in 1998) and a higher rate of poverty (from 11.4 percent in 1997 to 23.2 percent in 1998).

The third phase in the development of the South Korean economy was characterized by rapid recovery from the crisis. GDP growth in 1999 was 10.7 percent (the highest it had been since 1988 and the highest in East Asia). Exports went up by close to 9 percent in 1999 and 18.2 percent in 2000. Unemployment dropped from 6.8 percent in 1998 to 4.5 percent by the end of 1999. The share of poor households fell from 23.2 percent in 1998 to 18.0 percent in 1999. Subsequently, the South Korean economy was able to sustain an annual growth rate of 5 percent from 1998 to 2008. The reasons for South Korea's swift recovery are centered on aggressively countercyclical monetary and fiscal policies; significant growth in the export sector; and high inflows of foreign direct investment. In addition, the country implemented economic reforms that included measures to restructure the business sector, banking, the public sector, and the labour market. However, after a decade of rapid growth, the South Korean economy was not immune to the current global recession. In November 2008, exports were down 19.5 percent annually, and they continued to drop until mid-2009. The economy grew by just 2.3 percent in 2008. But it recovered in 2010 to a growth rate of 6.2 percent, similar to the one achieved before the crisis. This swift recovery in the South Korean economy has been led by rapid growth in exports due to the depreciation of the South Korean won; strong demand in China; and an effective and aggressive monetary and fiscal policy response.

Selected Economic Indicators of South Korea:

Period	GDP Per Capita (PPP US Dollar)	GDP Growth (%)	Fiscal Balance (% of GDP)	Public Debt (% of GDP)	Current Account (% of GDP)	Inflation	Exports (% of GDP)
1962-97	1962: 1,704 1997: 18,239	8%	-1%	13.4%	-1.4%	14.10%	24.4%
1998	16,867	-6.9%	0.9%	14.3%	11.3%	5.8%	44.3%
1999-2008	1999: 18,336 2008: 26,875	5.3%	2.3%	22.9%	1.8%	2.4%	39.5%
2010	28,390	6.1%	1.4%	32.1%	2.6%	2.2%	54.8%

BOX 2.4

Case Study – Malaysian Experience.

Since its formation in 1963, Malaysia's economic performance has been one of Asia's best. Real gross domestic product (GDP) grew by an average of 6.5% per year from 1957 to 2005. Performance peaked in the early 1980s through the mid-1990s, as the economy experienced sustained rapid growth averaging almost 8% annually. High levels of foreign and domestic private investment played a significant role as the economy diversified and modernised. Once heavily dependent on primary products such as rubber and tin, Malaysia today is an upper middle-income country with a multi-sector economy based on services and manufacturing. Malaysia is one of the world's largest exporters of semiconductor components and devices, electrical goods, solar panels, and information and communication technology (ICT) products.

In the 1970s, Malaysia began to imitate the four Asian Tiger economies (South Korea, Taiwan, the then British Crown Colony of Hong Kong, and Singapore) and committed itself to a transition from being reliant on mining and agriculture to an economy that depends more on manufacturing. In the 1970s, the predominantly mining and agricultural based Malaysian economy began a transition towards a more multi-sector economy. Since the 1980s the industrial sector has led Malaysia's growth. High levels of investment played a significant role in this. With Japanese investment, heavy industries flourished and in a matter of years, Malaysian exports became the country's primary growth engine. Malaysia consistently achieved more than 7% GDP growth along with low inflation in the 1980s and the 1990s.

Current GDP per capita grew 31% in the Sixties and 358% in the Seventies, but this proved unsustainable and growth scaled back sharply to 36% in the Eighties. It rose again to 59% in the Nineties led primarily by export-oriented industries. This increase in GDP was brought about due to a shift from the traditional agricultural and resource based economy to one based on manufactured goods. From 1988 to 1996, Malaysia's economy expanded at 8 per cent, the second fastest after China, resulting in manufactured goods such as microchips and semiconductors making up 80 per cent of exports. Per capita income doubled from 1990 to 1996. Infrastructure

projects were greatly increased in this time. Other countries looked to Malaysia at the time as an example for economic reform.

The GDP per capita which stood at US \$ 1770 in the year 1980 has gone up to US \$ 10,700 in 2018. Presently, the economy of Malaysia is the 3rd largest in Southeast Asia and is the 38th largest economy in the world. Malaysian labour productivity is significantly higher than neighbouring Thailand, Indonesia, Philippines or Vietnam due to a high density of knowledge-based industries and adoption of cutting edge technology for manufacturing and digital economy. According to the Global Competitiveness Report 2017, the Malaysian economy is the 23rd most competitive country in the world in the period of 2017–18.

BOX 2.5

Case Study – The Singapore Wonder

The miracle of Singapore is a unique phenomenon in modern history. In 1959, Singapore got independence from Britain and in 1963 it joined Malaysia in a federation composed of north Borneo, Sarawak and other states. The union with Malaysia was short lived because of conflict between the ethnic Chinese majority of Singapore and the Malay dominated population of Malaysia. On August 9, 1965, Singapore emerged as an independent state when it was expelled from the Federation of Malaysia, and within a span of three decades it transformed from an impoverished and weak state to a rich and successful one. When Lee Kuan Yew became the Prime Minister of Singapore five decades ago, the country's per capita income was \$400. When he stepped down in 1990 it had risen to \$ 22,000 and is estimated to be \$ 61766 in 2018. How did this happen? After all, Lee Kuan Yew himself once called an independent Singapore “a political, economic and geographic absurdity.”

With only six hundred square kilometres Singapore's prosperity is first of all due to good economic policy, which includes the promotion of foreign investment and the creation of free economic zones, the state's assistance to small and medium-sized businesses. In 30 years, Singapore, changed from poor country into one of the world's most developed countries in the world. Economists from many countries consider Singapore to be an ideal place for doing business. This country has a wonderful financial infrastructure, a stable political and legal system. It is no coincidence that more than three and a half thousand branches of world leading companies and more than 120 international companies are here.

The miracle of Singapore was made possible because of four main reasons. First, the dynamic leadership of Lee Kuan Yew who with his vision, perseverance, hard work and honesty transformed Singapore from a third to a first world country within one generation. Second, the rule of law and good governance provided a source of attraction to foreign investors to do business in Singapore. Third, the practice of strong work ethics and professionalism which helped ensure a good quality of life for the people. Fourth, there was a massive focus on human development, education, tolerance and multiculturalism. This was simply because, lacking natural resources, Singapore tapped into its human resources.

BOX 2.6

Case Study – The Thailand Experience

Over the last four decades, Thailand has made remarkable progress in social and economic development. Thailand has been one of the widely cited development success stories, with sustained strong growth and impressive poverty reduction, particularly in the 1980s. In the 1960s and 1970s, Thailand was among the fastest growing and most successful developing countries in the world. Rapid growth in production, accompanied by progress in alleviating poverty, was impressive, especially in the 1970s. By the early 1980s, however, Thailand's economic performance had slowed, partly as a result of the worldwide recession. Although its annual growth rate remained higher than the average for middle-income countries, earlier expectations had not been met.

The Thai economy began taking off in 1970s and kept growing and growing. The GNP quadrupled between 1970 and 1990 and growth averaged 7 percent and per capita incomes tripled between 1965 and 1995 (figures equalled in Malaysia and Indonesia). By contrast, the per-capita incomes increased six fold between 1965 and 1995 in the Four Tigers—South Korea, Taiwan, Hong Kong and Singapore.

In the late 1980s, Thailand was on its way to joining the tigers like Taiwan and South Korea. Thailand had the world's fastest-growing economy for about a decade in the late 1980s and early 1990s. The growth rate was 8 percent between 1985 and 1995, peaking at 13.6 percent in 1988. The Thai economy was fuelled by cheap labour and light industry such as computer manufacturing and assembly. There was no shortage of construction jobs. Thailand became a leading exporter of rice and Southeast Asia's largest producer of cars (from Japanese-owned plants).

From 1986 to 1989, the amount of foreign money flowing into Thailand increased 400 percent. Afterwards, the pace of investment picked up as major foreign investors discovered Southeast Asia. In 1993, Thailand set up the Bangkok International Banking facility to make it easier to invest money. About \$50 billion in loans poured into Thailand between 1993 and 1996 and private sector borrowing jumped from 39 percent of GDP to 123 percent. Growth between 1991 and 1995 was 8.5 percent. At the end of 1996, foreign reserves exceeded \$32 billion, unemployment was at 2 percent and inflation was 4.9 percent. Thailand was being hailed as the next Asian tiger.

However, A relatively few number of people reaped the rewards of economic prosperity. Growth was concentrated mainly around Bangkok while the countryside was largely neglected. The environmental costs of rapid economic expansion have been high. Many peasants have actually been made worse by environmental damages caused by unbridled growth. The Thai education system has failed to produce a skilled workforce that could compete with workers from countries like Taiwan and South Korea. The government failed to invest in educational infrastructure to prepare its workers for the high tech world. As of 1997, only 17 percent of Thais had graduated from high school and Thailand had 260 engineers per 1 million compared to 2,500 per million South Korea. The result for Thailand was high labour costs and low productivity.

After average growth slowed to 3.5% over 2005-2015, with a dip to 2.3 % in 2014-2016, Thailand is now on the path to recovery. Economic growth reached 4.8% in the first quarter of 2018 - the highest pace since 2013. Going forward, the sustained pace and quality of reforms, as well as sound implementation, will be crucial for translating the reform effort into the desired economic outcomes. Reversing the relative erosion of competitiveness, improving effectiveness of the public sector, and improving education and skills will be particularly important to take Thailand out from middle to high income status.

Chapter 3

Literature Review:

Being a phenomenon so important and widespread, a number of studies have been conducted around the world describing the Middle Income Trap (MIT) and explaining the reasons why countries are stuck in this trap. A number of studies have been conducted on the issue of middle income trap and how countries are stuck in the middle. What kind of impact it has on human development. How different governments have acted upon certain key policies and strategies to accelerate the growth of the economy so that countries can escape the middle income trap and reach the high income status. Some of the studies conducted have highlighted the impact of economic growth on socio-economic factors such as health, education, employment, sanitation, which otherwise become huge challenges for the country to escape this middle income trap. There have been a number of recent studies examining the reasons for stalling of growth in BRICS and south-east Asian countries. Besides, there are some important studies/papers published by International Monetary Fund (IMF), World Bank and Asian Development Bank (ADB) delving exclusively into the issues related with MIT. However, specific to India and MIT, very scanty literature is available. Summary of some of the relevant studies which have been reviewed are as below:

1. The economic survey 2017-18, in an exclusive chapter devoted to the subject titled “Existence of Late Convergence Stall in Economic Development and can India avoid it?” has given detailed insights into the MIT vis-à-vis India and has identified hyper-globalisation repudiation leading to reduced exports, Structural transformation (failure to transfer resources from low productivity to high productivity areas, premature de-industrialisation, problems associated with upgrading the human capital to cater to the needs and demands of higher technology and Climate change induced agricultural

stress as the main threats which can result in growth slowdown in India. The chapter concludes with observation that right now India is not in the grip of MIT but there is a need to take timely action to ward off the associated risks. However, merely the fact that India is the fastest growing major economy in the world cannot ensure that it will avoid the trap unless it is ensured that growth is inclusive and the benefits of growth percolate down to the lowest strata of society. The challenge posed by increasing inequalities of income and wealth has not been adequately examined in the economic survey 2017-18.

2. Hartwell (2018) has done a critical appraisal of the MIT in the BRICS countries and concluded that the trap is not something new and the fundamental factors still matter a lot. He argues about the importance of macroeconomic stability and quality of institutions, both economic and political, in ensuring long term and sustenance of high growth in BRICS countries. However, the paper examines only the past growth trends of various countries including the BRICS countries from 1960 to 2016 and does not indicate the solutions for the possibilities of future growth slowdowns. The author basically uses the graphical method to show the existence of trap and gives intuitive details about the reasons for the same. The paper identifies the commonalities amongst the BRICS countries for growth slowdowns and specifies on the importance of macro-economic fundamentals and robustness of economic and political institutions and antidotes to growth slowdown.
3. In a paper dealing with escaping the middle income trap in Indonesia-an analysis of risks, remedies and national characteristics, Basri and Arya Putra (2015) argues for critical role of human capital and total capital stock in avoiding growth slowdown. While comparing the growth experience of Indonesia with that of South Korea during 1966 to 2014, they also observe that currency depreciation and role of government in tackling market failures are also important factors in avoiding the MIT. This also

highlights the extreme vulnerability of Indonesia to external shocks and the long time it requires for recovery. Finally the authors conclude that the probability of Indonesia becoming a high income economy is very low-just 3 percent only.

4. Wilson (2014) examines how to beat the MIT in four south-east Asian countries viz., Indonesia, Philippines, Thailand and Vietnam and identifies factors such as lack of infrastructure, lack of domestic investment, political turmoil, credit bubbles and high inflation important in avoiding the trap. The paper concludes that growth in Philippines is likely to slowdown in case the levels of domestic investments are not elevated in future. In case of Thailand, the growth has suffered due to political instability and possible credit bubbles. The risks to high growth in Vietnam have been identified as banking problems, high inflation and corruption. Finally, in case of Indonesia, lack of infrastructure has been identified as the biggest stumbling block for future high growth. The paper concludes that while Thailand is already trapped, Vietnam is already an MIT candidate, Philippines as shaky but improving and Indonesia as reasonably solid to avoid the trap. Most of the factors identified above are very relevant for India too. However, the author fails to highlight the important role played by social factors and external sector in achieving the goal of sustainable long term growth.
5. In another important study by Aiyar et al. (2013), the authors did an in-depth analysis of growth slowdown and MIT and identified the determinants of growth slowdown in a systematic manner. The authors differentiate between episodes of growth slowdown in various countries as temporary shocks due to specific factors which are reversible and substantial & prolonged periods of slowdown indicative of the trap. The authors prepared a trap map or growth slowdown risk map for the middle income countries using data on various parameters and concluded that institutions, demography, communication, road, output composition, macro-economic factors and trade as

important determinants of long term growth. However, relying only on economic factors by ignoring the role of social and political factors may not be appropriate.

6. Recognising the important link between rising inequalities of income & wealth in Asian countries and growth slowdown, Egawa (2013) examined this relation using the Kuznets hypothesis and confirmed the inverse relationship between higher income inequalities and growth slowdown. The author examines Asian countries like China, Malaysia, Indonesia, Vietnam, Philippines and India on parameters like growth rate of per capita GDP from 1991 to 2010 (dependent Variable) and income levels represented through S5/S1 level and gini coefficient, urbanisations, primary and secondary school enrolment rates, R&D captured through export share of high tech manufacturing in the total exports and concluded that income inequality will become a problem for upper middle income countries and will reduce growth rates if left untreated. Author also conducted a sensitivity analysis of three upper middle income Asian countries viz., China, Malaysia and Thailand and found out that with respect to MIT the situation is worse than average in China and Malaysia, The author recommended that these two countries should urgently improve access to secondary education and implement measures to implement income redistribution. However, the author failed to empirically test the validity of this relationship on countries which avoided the trap despite having rising inequalities of income.
7. Tho (2013) traced various stages of development of ASEAN countries in the context of MIT with special reference to four countries viz., Indonesia, Malaysia, Philippines & Thailand and emphasised on strengthening of Research and Development (R&D) capabilities, improving quality of human capital and nourishing a dynamic private sector. However, the study identifies only country specific problems and offers specific solutions without delving into the limited capacities of the countries to actually implement the suggested solutions.

8. In another study titled “How to Avoid middle income trap? Evidence from Malaysia”, Flaaen et al. (2013) examines the strategies relevant for Malaysia for avoiding the MIT and concluded that modernizing the services sector may provide a way out of the MIT and serve as a source of growth for future. In Malaysia, due to rapid industrialisation, the relative share of service sector has lagged that of secondary sector. But, in India, the service sector is the dominant sector and is already working as an engine of growth with 55 percent contribution to the GDP. Therefore, solutions provided in the study may not be relevant for India.
9. A study on “Tracking the MIT: What is it, who is in it and why?” by Felipe (2012) defines the thresholds for the trap and also analyses the number of years a country takes in transition. However the study is too broad and does not identify the specific factors leading to countries stumbling into the trap and also does not provide strategies to avoid the trap.
10. In a paper “When Fast Growing Economies Slow Down” by Barry Eichengreen, Donghyun Park and Kwanho Shin (2011), they used specific statistical figures and found that, by the time countries get to the general range of US\$17000 per capita in a year, the growth rate is, on an average, falling from 5.6% to 2.1%. They also found that is especially likely for societies getting older and for countries, which have earlier generated growth from artificially real low exchange rates.
11. Another study by Foxley and SoSSdorf (2011) traces the growth path of Finland and South Korea and highlights the importance of early investments in Education and induced higher Investment in R&D and draws important lessons for Middle income countries. The study provides case study of 5 countries (Finland, South Korea, Ireland, Spain and Portugal) that were able to avoid the MIT and graduated to high income economies and draws lessons from their experiences and examines the relevance of these lessons for middle income countries in their efforts to avoid the

MIT. The study concluded that merely good macro-economic management during the periods of crisis' is not enough and stressed on the importance of eliminating excessive rigidities in the labour and exchange markets for staying competitive without compromising growth. The study also stressed on the imperative of investing in human resources and capacity to innovate in order to sustain high growth rates over the long run.

12. Pierre-Richard Agénor, Otaviano Canuto, and Michael Jelenic (2012) in a seminal work has observed, since the 1950s, rapid growth has allowed a significant number of countries to reach middle-income status; yet, very few have made the additional leap needed to become high-income economies. Rather, many developing countries have become caught in what has been called a middle-income trap, characterized by a sharp deceleration in growth and in the pace of productivity increases. It further opines that middle-income traps are stable low growth economic equilibriums where talent is misallocated and innovation stagnates. Policies that can counteract middle-income traps are a number of public policies that governments can pursue, such as improving access to advanced infrastructure, enhancing the protection of property rights, and reforming labour markets to reduce rigidities—all implemented within a context where technological learning and research and development (R&D) are central to enhancing innovation. Such policies not only explain why some economies—particularly in East Asia—were able to avoid the middle-income trap, but are also instructive for other developing countries seeking to move up the ladder and reach high income.
13. In another important study by Barry Eichengreen, Donghyun Park, and Kwanho Shin (2011) where they explained rapidly growing economies slow down significantly, in the sense that the growth rate downshifts by at least 2 percentage points, when their per capita incomes reach around US\$ 17,000 in year-2005 constant international

prices. In some circles, the assumption is pervasive that China will continue to grow rapidly. Equivalently, it is assumed that China will be able to avoid the middle-income trap and jump to upper-middle-income-country status. But it is worth recalling that only a small group of countries successfully completed this transition in the second half of the 20th century, whereas a much larger group, in Latin America for example, are still struggling to escape the middle-income trap. Given China's huge size and daunting array of structural challenges, completing this transition will be rather difficult.

14. Dani Rodrik (1999) argues that domestic social conflicts are a key to understanding why growth rates lack persistence and why so many countries have experienced a growth collapse since the mid-1970s. It emphasizes, in particular, the manner in which social conflicts interact with external shock on the one hand, and the domestic institutions of conflict-management on the other. Econometric evidence provides support for this hypothesis. Countries that experienced the sharpest drops in growth after 1975 were those with divided societies (as measured by indicators of inequality, ethnic fragmentation, and the like) and with weak institutions of conflict management (proxied by indicators of the quality of governmental institutions, rule of law, democratic rights, and social safety nets).
15. In another important study entitled —Schumpeterian Analysis of Economic Catch-up: Knowledge, Path-Creation, and the Middle Income Trap, Lee (2013) argues despite economic development, aid, and policy changes in line with the prescription of Washington Consensus some countries are unable to catch up with the advanced countries' development. Poverty remains the main hindrance and is widening year after year. Reason why good policy prescription like opening up and integration with the world economy is somewhat failing is due to poor institutional conditions such as lack of corporate governance, insecure property rights and absence of rule of law. Lee

further highlights the significance of second generation reforms which are somewhat redefined as augmented Washington Consensus and replacing the old Washington Consensus. They include anti-corruption law, social safety nets, financial codes and standards, independent central bank functioning, inflation targeting etc.

16. A study on Tracking the Middle-income Trap: What Is It, Who Is in It, and Why? by Jesus Felipe, Arnelyn Abdon and Utsav Kumar (2012) states that the median number of years that countries spent in the lower-middle-income and in the upper-middle-income groups are 28 and 14 years, respectively, before graduating to the next income group. It also stated that a country that becomes lower-middle-income has to attain an average growth rate of per capita income of at least 4.7 percent per annum to avoid falling into the lower-middle-income trap and emphasized upon encouraging exports of commodities with comparative advantage to move up to next income category. However, the paper didn't focus on any other criteria avoid the middle income trap, and reduce the duration of staying at same income category, once average growth rate of per capita income of 4.7 % is attained.
17. A study on equity and health sector reforms by Margaret whitehead, and Timothy Evans (2001) emphasized on problems related to development of health sector in low and middle income nations. It specifies the introduction of user fee in public services and growth of out of pocket expenses for services posing a major threat of poverty trap. But, these elements can impact the growth of per capita income at macro level, causing a problem for the nation to move to higher income category.
18. A study on confronting the middle income trap by Eva Paus (2012), talks of a capability approach that suggests growth can be attained only when it is undergirded by the development of technological capability that results in broad-based upgrading. It further underscores the need for exports of commodities of comparative advantage,

but has moved a step forward to encourage exports of skill based commodities which is possible on developing capabilities approach.

The above analyses of the existing literature indicate the existence of a large body of literature to understand the concept of MIT. Yet, it is not easy to ascertain why certain countries faced growth slowdown thereby getting trapped while at the same time certain other countries were able to graduate from middle income to high income. Some of the studies indicate that countries that escaped middle income trap and made it into the upper-middle income group had a more diversified, export basket at the time they were about to jump than those in the lower-middle-income trap today, like South Korea and Japan. Korea was able to gain comparative advantage in its balance of trade significantly and was well connected to Malaysia and the Philippines which are major importers of electronics from South Korea. It is therefore, a very challenging task to be specific and precise while analysing the pin point the reasons for differences in the development experience of different countries. While certain factors like good macro-economic policies, steady improvement in the quality of human resources leading to increasing total factor productivity, buoyant export performance etc. may have been successful in certain countries, in others, they may not work that efficiently.

Not many studies have been carried out especially in relation to India to explain why India will remain in the middle income trap for some time or how it can attain higher economic status to escape this trap. The issues that are deeply concerned to this challenge are not straight jacketed or simple rather they are extremely complex and intricate in nature. Analysing this body of literature, it is apparent that it's not just unleashing favourable or complementary economic reforms or designing policies or opening up to the outside world, and reforming country's trade policies or external sector or financial sector reforms that allow the country to move to a higher economic status and thus escape this middle income trap.

Rather it has several factors such as level of education, healthcare facilities, GNI per capita, infrastructure and social policies that could play a pivotal role in determining a country's social and economic status and thus allow an economy to reach the next level of development or escape from the middle income trap. Challenges therefore are many and varied, and could be farfetched.

Chapter 4

SWOT Analysis of Indian Economy

In its seventh decade of independence, India stands on the cusp of major change: a transformation that could lead to unprecedented economic growth paired with radical improvements in the nation's Human Development Index (HDI). Over the past two decades, India's gross domestic product (GDP) has risen by more than US\$1tr, in the process bringing millions of citizens into a new cohort called the emerging middle class. In order to become a truly welfare State, India will have to increase its GDP by 9% per year to become a US\$10tr economy over the coming two decades. A 9% GDP growth rate with a per capita income rising from US\$1,500 to just under US\$7,000 per year will boost quality of life for more than 1.25bn citizens. This would be the largest national development effort any democracy has ever attempted. Reaching this goal will call for a concerted effort—from businesses, entrepreneurs, investors, and government leaders. It will also require new solutions.

Today, India is the world's third largest economy measured in purchasing power parity (PPP) terms and sixth largest economy in nominal terms. Also, India already is and in all likelihood will be the fastest growing large economy in the world in the coming two decades. By 2025, one-fifth of the world's working age population will be Indian. By 2030 there will be over 850 million internet users in India. By 2035 India's five largest cities will have economies of comparable size to middle income countries today.

The drivers of Indian growth are deeply structural which suggests they are also sustainable. They include the urbanisation of the world's largest rural population, the gradual movement of the informal economy, currently comprising 90 per cent of India's workers, into the formal economy, a young demographic with a mean age of 27, considerable investment in infrastructure, and the beginnings of an ambitious program to upskill 400 million Indians. These structural drivers will likely keep India on a relatively strong growth path.

India's growth path will be driven by how effectively it harnesses and rewards the efforts of its greatest natural asset – its people. India has the second largest population in the world with more than 1.3 billion people. India's population will overtake China's to become the world's largest. By 2035, the United Nations projects that India's population will have reached almost 1.6 billion people, on its way to a peak of almost 1.7 billion by the early 2060s. India's population has benefited from this strong economic performance. India's steps towards liberalisation and openness in the 1980s, which accelerated in the 1990s, saw India's GDP growth rise from an average annual rate of less than 3 per cent in the 1970s to over 7 per cent in recent years. Since 1970, India's real GDP per capita has increased fivefold. As a result, millions of people have been lifted out of poverty. Key development indicators such as infant mortality and life expectancy have steadily improved. However, with one of the largest and youngest populations in the world, India needs to create millions of good-quality jobs in the near future to ensure decent living conditions for the vast majority of its citizens. Will India be able to achieve shared prosperity without a growing manufacturing sector? Agriculture accounts today for only 16% of total value added (down from 44% in 1965), but still employs about half of the Indian population. Productivity in this sector did not increase significantly in the past decades, limiting improvements in living standards in rural areas.

In short term, with improved investment, scenario coupled with government continual through and reforms, the economy is expected to do better. But in long run, the performance depends on how well the reform are initiated, the investment and growth in Infrastructure, the continued availability of natural resources avail of low-cost , high skill workforce and global market scenario. Keeping in view the strengths and weaknesses inherent in the Indian Economy, our future development strategy should be well grounded in reality. Therefore, it is important to do a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis to gauge the real picture of the economy.

SWOT is an acronym for the internal strength and weaknesses and opportunities and threats facing an entity or business. SWOT analysis is a systematic identification of these factors and the strategy that reflects the best match between them. The logic behind this technique is that an effective strategy maximizes business strength and opportunities on the one hand and minimizes its weaknesses on the other hand. The details of the words strength, weaknesses opportunities and threats, are as follows:

STRENGTH: Strength is a comparative advantage or edge over our competitors. The skill, available resources, goodwill, market leadership and buyer/seller relationships are the examples of strengths of an organization.

WEAKNESS: A weakness is a limitation or deficiency in resources, skills and capabilities that impede effective information. Facilities, financial resources, management capabilities, marketing skills and brand image could be the causes of weakness

OPPORTUNITIES: An opportunity is a major favourable situation. Opportunity could represent improved buyer or supplier relationships, identification of a previously overlooked market segment, technological changes, changes in regulatory framework and changes in competitive circumstances, etc.

THREATS: Unfavourable situation is a major threat to the organization. Major elements which could represent threats to the organization may be entrance of a new competitor, slow market growth, increased bargaining power of key buyers or suppliers, technological changes and changing regulations, etc. Understanding the key opportunities and threats facing a firm helps managers in identifying realistic options from which they can make an appropriate strategy.

SWOT Analysis

Strengths

- India has been a well acknowledged democracy at all levels with reasonably developed institutions and large public participation. It has potential to grow at 8 to 10% in medium to long term. Presently, India is the fastest growing large economy and is said to be a bright spot in the gloomy global environment.
- Demographics of India are favourable. India still has a positive birth rate meaning that the size of the workforce will continue to grow for the foreseeable future. (unlike China) A rising workforce helps to increase saving and investment. It also enables increased productivity. India's labour force is expected to touch 160-170 million by 2020, based on rate of population growth, increased labour force participation, and higher education enrolment, among other factors, according to a study by ASSOCHAM and Thought Arbitrage Research Institute. Moreover, availability of skilled as well unskilled labour at competitive rates is the biggest strength which can be used to increase the share of manufacturing in the GDP.
- There is much scope for increases in efficiency. The infrastructure of India is so bad in places that even moderate improvements could lead to significant improvements in the productive capacity of the economy.
- India is well placed to benefit from globalisation and outsourcing. A legacy of the British Empire is that India has one of the largest English speaking populations in the world. For labour-intensive industries like call centres, India is an obvious target for outsourcing. Moreover, India is already an IT giant and is often referred to as the software of the world.
- India has a relatively high level of literacy for average GDP per capita levels. The right to elementary education (from 2002 act) has helped literacy rise from 52.2% in 1991 to 74.04% in 2011

- India has an important segment of its workforce working overseas (e.g. Middle-East). Annually around 3.5% of India's GDP worth of foreign remittances is received in India. This helps in bridging a part of the huge trade deficit. India is expected to retain its position as the world's leading recipient of remittances in 2018, with total remittances touching US\$ 80 billion, according to World Bank's Migration and Development Brief.
- Tourism is a growth market for India, attracting foreign currency and creating employment. The tourism sector is forecast to grow by annual rate of 7.5% by 2025.
- India has retained its position as the third largest start-up base in the world with over 4,750 technology start-ups, with about 1,400 new start-ups being founded in 2016, according to a report by NASSCOM.
- India's gross domestic product (GDP) is expected to reach US\$ 5 trillion by 2025 and achieve upper-middle income status on the back of digitisation, globalisation, favourable demographics, and reforms.
- Presence of vast industrial infrastructure and big industries in both public and private sector is a big advantage and can be used as a platform for collaboration to leapfrog into the high end sophisticated manufacturing.
- Unlike the Asian tigers, India does not rely excessively on exports for its growth as the main engine of growth of India continues to be the domestic consumption. Therefore, India's economy is not very much prone to developments in the external environment.
- India continues to attract huge levels of Foreign Direct Investment (FDI) and is likely to attract more FDI in the coming decade. With the Foreign Exchange Reserves close to US \$ 400 Billion and relative low levels of external Debt, the external sector is in a good condition.

- Recent reforms like GST and IBC are likely to further improve the competitiveness of the economy and augur well for the future growth of the economy. These reforms have also helped India in improving its ranking in the World Bank's Ease of Doing Business from 100 in 2018 to 77 in 2019.
- India is probably the only country in the world with a very extensive network and infrastructure created by JAM trinity (Jaan Dhan, Aadhar and Mobile Number Trinity) to reach the targeted groups.
- Robust levels of Savings and Investment rates with a reasonable level of capital output ratio means that the country is likely to reap the benefit of high growth in future also.

Weaknesses

- With one of the largest and youngest populations in the world, India needs to create millions of good-quality jobs in the near future to ensure decent living conditions for the vast majority of its citizens. Recently, growth has been impressive but questions have been raised about the number of quality jobs created. Unemployed youth can be a disaster for the nation not only on economic front but also on social front. Empty mind is devil's workshop- it will be very difficult to channelise the energy of unemployed youth away from anarchy, social disorder and chaos.
- Agriculture accounts today for only 16% of total value added (down from 44% in 1965), but still employs about half of the Indian population. Productivity in this sector did not increase significantly in the past decades, limiting improvements in living standards in rural areas. Further, excessive dependence of our agriculture on monsoon rains is a problem which seems to have no near term solutions.
- Educational enrolment rates are relatively low across all levels barely above the median for its peer group on pre-primary and primary, and below the median for

secondary, vocational and tertiary levels. And quality also varies greatly, leading to notable differences in educational performance among students from different socioeconomic backgrounds.

- The gender gaps in labour force participation and wages are both high indicating that India's women are not benefiting equally from economic opportunities.
- Out-dated labour laws continue to hold back the country. Labour laws continue to be the single biggest hurdle for foreign and domestic companies to start / expand.
- Over dependence on subsidies of various kinds continue to plague the economy. The subsidy culture is deep rooted and it is very difficult to undo it.
- Inadequate and poor quality of infrastructure also poses a big challenge and often results in delays and cost overruns.
- Weak regulatory system is unable to prevent companies from indulging in unfair trade practices.
- India imports around 70 % of the total oil consumed in the country. This over-dependence on imported oil is one of the biggest problems. Further, any increase in the price of oil in the international prices of oil often lead to higher domestic inflation and a considerable strain on our current account deficit leading to pressure on Rupee vis-a-vis US Dollar.
- Corruption is an issue that adversely affects India's economy of central, state and local government agencies. Not only has it held the economy back from reaching new heights, but rampant corruption has stunted the country's development. A study conducted by Transparency International in 2005 recorded that more than 62% of Indians had at some point or another paid a bribe to a public official to get a job done. In a study conducted in 2008, Transparency International reported that about 50% of Indians had first-hand experience of paying bribes or using contacts to get services performed by public offices. Although, Transparency International's 2018 Corruption

Perception Index ranks the country 78th place out of 180 countries reflecting steady decline in perception of corruption among people.

- India has witnessed impressive growth since opening up its economy in 1991. Yet, this period also witnessed a rise in inequality, which has been mainly driven by income gaps between India's states, and a growing urban-rural divide. India continues to have the largest number of poor in the world (approximately 300 million are in extreme poverty), and nearly half of the poor are concentrated in five states. Rising inequalities of income and consumption is indicative of the fact that the growth is not inclusive. Major beneficiary of the growth is the group that is already well to do and actual benefits of growth for the poor people are much less than the potential.
- Low level of technology is a persistent problem in India. Although, new technologies are being developed every day. However, they are expensive and require people with a considerable amount of skill to apply them in production. Any new technology requires capital and trained and skilled personnel. Therefore, the deficiency of human capital and the absence of skilled labour are major hurdles in spreading technology in the economy.
- Low level of expenditure on Research and Development (R&D) is another problem which is holding back the Indian economy.

Opportunities

- Prime Minister Narendra Modi launched the Make in India initiative on September 25, 2014, with the primary goal of making India a global manufacturing hub, by encouraging both multinational as well as domestic companies to manufacture their products within the country. With wages going up in China, low end manufacturing is increasingly being shifted to other countries which still have cost advantage in respect of labour. If India can come up with right kind of policies by providing right kinds of

incentives to encourage investments in manufacturing industries under the Make in India Programme, we can very well increase the share of manufacturing in our GDP. This can also help us to increase our share in the world trade which presently is very low. This will also mean job creation at a large scale.

- The recent spate of successful missions, especially the Chandrayaan and the Mangalyaan missions, has catapulted the Indian Space Research Organisation (ISRO) into the multi-billion dollar space launch industry. Armed with two weapons of accuracy and cost effectiveness, ISRO can be a big player in future especially in the launch of small satellites. This will also add to the soft power of the country.
- The Indian pharmaceuticals market is the 3rd largest in terms of volume and 13th largest in terms of value. India is the largest provider of generic drugs globally with the Indian generics accounting for 20 per cent of global exports in terms of volume. India enjoys an important position in the global pharmaceuticals sector. The country also has a large pool of scientists and engineers who have the potential to steer the industry ahead to an even higher level. Presently over 80 per cent of the antiretroviral drugs used globally to combat Acquired Immuno Deficiency Syndrome (AIDS) are supplied by Indian pharmaceutical firms.
- India has a huge domestic market which is growing rapidly. If India continues on its current high-growth path, over the next two decades the Indian market will undergo a major transformation. Income levels will almost triple, and India will climb from its position as the twelfth-largest consumer market today to become the world's fifth-largest consumer market by 2025. Further, as per a report of the World Economic Forum (WEF), India is poised to become the third-largest consumer market behind only the US and China; and consumer spending in India is expected to grow from USD 1.5 trillion at present to nearly USD 6 trillion by 2030.

- Recently, India has overtaken Germany to become the fourth largest automobile market in the world, latest global data show. Automobile sales, including passenger and commercial vehicles, in Asia's third largest economy grew 9.5%, the fastest among major global markets, last year to more than 4 million units, outpacing Germany's 3.8-million vehicle sales. As per a McKinsey report, India is expected to emerge as the world's third-largest passenger-vehicle market by 2021.¹ It took India around seven years to increase annual production to four million vehicles from three million. However, the next milestone—five million—is expected in less than five years. This augurs well for the future economic growth.
- Although India is known for its rural population in the world with about 73 percent of its population living in rural villages, it is urbanising rapidly and it is expected that by the year 2030, about 50 percent of Indian population will be urban. This presents huge opportunities because a lot of tier 2 and tier 3 towns will need massive expansion and other facilities.
- India is one of the fastest-growing spots for startup activity, behind China and the U.K., as per a report by the Centre of American Entrepreneurship, 'Rise of the Global Startup City'. While Mumbai, Delhi and Bengaluru are known startup ecosystems of the country, the report also recognises Pune, Hyderabad, Ahmedabad, and Kolkata as growing hubs. Start-ups are at the core of India's transition journey towards becoming a leading innovation hub in the world. With the young and dynamic pool of entrepreneurs and skilled workforce, India is likely to become a focal point to generate innovative ideas in the near future.
- Tourism in India is important for the country's economy and is growing rapidly. The World Travel and Tourism Council calculated that tourism generated ₹15.24 lakh crore (US\$210 billion) or 9.4% of India's GDP in 2017 and supported 41.622 million jobs, 8% of its total employment. The sector is predicted to grow at an annual rate of

6.9% to ₹32.05 lakh crore (US\$450 billion) by 2028 (9.9% of GDP). Over 10 million foreign tourists arrived in India in 2017 compared to 8.89 million in 2016, representing a growth of 15.6%. Growth of Tourism can be a source of sustained economic growth in future.

- In recent times, the tourism sector of the country is witnessing the progression of a new trajectory, i.e., Medical Tourism. The Indian Medical Tourism Industry is facing a phenomenal growth percentage of 18% CAGR every year. Currently constituting of nearly 18% of the global medical tourism market, India is expected to reach 20% of the share with a worth of about USD 9 billion by 2020. According to the Medical Tourism Market Report 2015, India was found as ‘one of the lowest cost and highest quality of all medical tourism destinations’. India has diligently recognized the opportunity and is showcasing its strength and potential in global market through public-private partnership, thereby paving its way to become a hub for medical tourism.
- India is now the seventh largest aviation market with 187 million passengers (to, from and within India) in FY18 and is expected to become the third largest by 2022. There is huge growth potential in the civil aviation industry of India which has shown a consistent double digit growth during the last decade. If the current trend in the Indian aviation market continues for the next two decades, air passenger traffic will grow six fold to around 1.1 billion, comprising about 821 million domestic and 303 million international passengers, according to a report by Ministry of Civil Aviation.
- Research suggests that women now contribute only 17 percent of India’s GDP and make up just 24 percent of the workforce, compared with 40 percent globally. In the coming decade, they will represent one of the largest potential economic forces in the country. If it matched the progress toward gender parity of the region’s fastest-improving country, It is estimate that it could add \$700 billion to its GDP in 2025.

Movement toward closing the gender gap in education and in financial and digital inclusion has begun, but there is scope for further progress.

Threats

- While India's share in world trade is relatively small, it isn't entirely immune from global economic recession / slowdown. A global economic slowdown could result in drying up of the Foreign Direct Investment (FDI) into the country and slow export growth can also hurt the economy. While domestic consumption continues to be robust and is likely to grow in future, the other two engines of growth viz. Investment and Exports can be severely hit due to global economic slowdown which can drag the future growth down.
- Growing trend of de-globalization or anti-globalization poses a very serious challenge for India. There is considerable tension between United States of America and China over trade issues pushing a de-globalisation wave all over the globe. This process is likely to result in reduction in world trade and investment which will have an adverse impact on our growth.
- Rising oil prices is a big hurdle in the path of sustained economic growth. Every \$10 increase in the oil price pushes up the inflation rate by 30 to 40 basis points and hurts economic growth of the world's fastest growing oil user by about 15 basis points, according to Nomura Holdings Inc. Add a weaker currency to this equation, and the problem gets compounded. Every rupee change in the exchange rate against the U.S. dollar impacts our crude oil import bill by about 109 billion rupees (\$1.5 billion) on an annualized basis, according to the Petroleum Planning and Analysis Cell of the Ministry of Petroleum and Natural Gas.
- Presently, Indian Banking industry is seriously affected by Non-Performing Assets (NPAs). There is a lot of stress on the banking sector due to huge NPAs and this in

turn is affecting the ability of our public sector banks to provide the required level of credit to the needy industrialists. More than Rs. 7 lakh crore worth loans are classified as Non-Performing Loans in India. This is a huge amount and roughly translates to near 10% of all loans given. This could prove to be a huge dampener for the future economic growth of the country.

- Terrorism, rising extremism and social disharmony pose a big challenge for the Indian Economy. It is a well-known fact that that terrorist attacks significantly weaken economic activity and adversely impact investment and economic growth. Therefore, it is important that the problem of radicalisation (especially in J&K) and terrorism is tackled at war footing and every effort is made to ensure social harmony in the country.

Swot analysis of the Indian Economy shows the inherent strengths of our economy which is sufficient to provide a strong platform for growth in the next decade. However, just like any other economy, we too have our own set of weaknesses / problems. But these problems are not insurmountable and can be tackled with the right kind of policies. There is a plethora of opportunities which, if exploited rightly, can help us in sustaining the high growth trajectory in future.

Chapter 5

India's Economic Growth Story

Table 5.1 below indicates the growth performance of the Indian economy since 1961.

Table 5.1 Growth performance of Indian Economy

Growth Rate of GDP (%)					
1961	3.72	1981	6.01	2001	4.82
1962	2.93	1982	3.48	2002	3.80
1963	5.99	1983	7.29	2003	7.86
1964	7.45	1984	3.82	2004	7.92
1965	-2.64	1985	5.25	2005	9.28
1966	-0.06	1986	4.78	2006	9.26
1967	7.83	1987	3.97	2007	9.80
1968	3.39	1988	9.63	2008	3.89
1969	6.54	1989	5.95	2009	8.48
1970	5.16	1990	5.53	2010	10.26
1971	1.64	1991	1.06	2011	6.64
1972	-0.55	1992	5.48	2012	5.46
1973	3.30	1993	4.75	2013	6.39
1974	1.19	1994	6.66	2014	7.41
1975	9.15	1995	7.57	2015	8.15
1976	1.66	1996	7.55	2016	7.11
1977	7.25	1997	4.05	2017	6.68
1978	5.71	1998	6.18		
1979	-5.24	1999	8.85		
1980	6.74	2000	3.84		

Source: World Bank

For the first thirty years after independence, economic growth averaged a modest 3.6 percent, with per capita growth of a meagre 1.4 percent per year. Those were the heydays of state-led, import-substituting industrialization, especially after the 1957 foreign exchange crisis and the heavy industrialization bias of the Second Five Year Plan (1956-61). While the strategy achieved some success in raising the level of resource mobilization and investment in the economy, it turned out to be hugely costly in terms of economic efficiency. The inefficiencies stemmed not just from the adoption of a statist, inward looking policy stance

(at a time when world trade was expanding rapidly) but also from the extremely detailed, dysfunctional and corruption-breeding controls that were imposed on industry and trade

Growth accelerated significantly in the 1980s to 5.6 percent, entailing a more than doubling of per capita growth to 3.4 percent a year. This acceleration was due to a number of factors, including: the early efforts at industrial and trade liberalization and tax reform during the 1980s, a step-up in public investment, better agricultural performance and an increasingly expansionist (almost profligate!) fiscal policy. Fiscal controls weakened and deficits mounted and spilled over to the external sector, requiring growing recourse to external borrowing on commercial terms. Against a background of a low export/GDP ratio, rising trade and current account deficits and a deteriorating external debt profile, the 1990 Gulf War and consequent oil price spike tipped India's balance of payments into crisis in 1990/91. Growth accelerated significantly in the 1980s to 5.6 percent, entailing a more than doubling of per capita growth to 3.4 percent a year. This acceleration was due to a number of factors, including: the early efforts at industrial and trade liberalization and tax reform during the 1980s, a step-up in public investment, better agricultural performance and an increasingly expansionist (almost profligate!) fiscal policy. Fiscal controls weakened and deficits mounted and spilled over to the external sector, requiring growing recourse to external borrowing on commercial terms. Against a background of a low export/GDP ratio, rising trade and current account deficits and a deteriorating external debt profile, the 1990 Gulf War and consequent oil price spike tipped India's balance of payments into crisis in 1990/91.

The new government of June 1991, with Shri Manmohan Singh as finance minister, undertook emergency measures to restore external and domestic confidence in the economy and its management.³ The rupee was devalued, the fiscal deficit was cut and special balance of payments financing mobilized from the IMF and the World Bank. Even more importantly, the government seized the opportunity offered by the crisis to launch an array of long

overdue and wide-ranging economic reforms. They encompassed external sector liberalization, deregulation of industry, reforms of taxation and the financial sector and a more commercial approach to the public sector.

The economy responded swiftly and positively to these reforms. After virtual stagnation in 1991/92, GDP growth surged in the next five years to clock a record 5-year average of 6.7 percent. It is noteworthy that in this high growth Eighth Plan period all major sectors (agriculture, industry, services) grew noticeably faster than in the pre-crisis decade. The acceleration in the growth of agricultural value added is particularly interesting in the light of oft-repeated criticism that the economic reforms of the early nineties neglected the agricultural sector.

The momentum of growth slowed noticeably in the Ninth Plan period, 1997-2002, to an average of 5.5 percent, compared to the 6.7 percent achieved in the previous five years. Among the factors which contributed to this deceleration were: the significant worsening of the fiscal deficits (mainly due to large public pay increases following the Fifth Pay Commission) and the associated decline in public savings, the slackening of economic reforms after 1995 as coalition governance became the norm, a significant slowdown in agricultural growth for a variety of reasons, a marked downswing in the industrial cycle and an increasingly unsupportive international economic environment.

Indeed, India's economic growth in 1997-2002 might have been even weaker but for the unexpected and somewhat inexplicable strength of services sector growth, which clocked an average of 8.2 percent, despite industrial growth of only 4.4 percent. The services sector accounted for almost 70 percent of all growth in this period.

BOX 5.1

Economic Reforms after 1991 crisis

Fiscal

- Reduction of the fiscal deficit.
- Launching of reform of major tax reforms.

External Sector

- Devaluation and transition to a Market-determined Exchange Rate.
- Phased reduction of import licensing (quantitative restrictions).
- Phased reduction of peak custom duties.
- Policies to encourage direct and portfolio foreign investment.
- Monitoring and controls over external borrowing, especially short term.
- Build-up of foreign exchange reserves.
- Amendment of FERA to reduce restrictions on firms.

Industry

- Virtual abolition of industrial licensing.
- Abolition of separate permission needed by “MRTP houses”.
- Sharp reduction of industries “reserved” for the public sector.
- Freer access to foreign technology.

Agriculture

- More remunerative procurement prices for cereals.
- Reduction in protection to the manufacturing sector.

Financial Sector

- Phasing in of Basle prudential norms.
- Reduction of reserve requirements for banks (CRR and SLR).
- Gradual freeing up of interest rates.
- Legislative empowerment of SEBI.
- Establishment of the National Stock Exchange.
- Abolition of government control over capital issues.

Public Sector

- Disinvestment programme begun.
- Greater autonomy / accountability for public enterprises.

In the five years up to 2007-08, India's economic growth averaged close to 9 per cent a year. The downdraft from the global crisis certainly slowed India's momentum in 2008-09 but much less than the overwhelming majority of international and domestic analysts had feared back in the post-Lehman autumn of 2008. The acceleration of India's growth from around 6 per cent in the early years of the decade to 9 per cent by 2005-06 can be attributed to several factors. An important one must surely be the remarkable rise in the rate of aggregate investment from around 25 per cent of GDP in the early years to 35 per cent by the middle of the decade. This unprecedented increase in the investment rate can, in turn, be attributed to a number of interlinked causes, including a sharp increase in private corporate savings (depreciation plus retained profits) from below 4 per cent of GDP in the early years to above 8 per cent in the later years; remarkable progress in fiscal consolidation which improved governmental savings by 4-5 per cent of GDP by 2007-08; and relatively low nominal and real interest rates. The last feature was undoubtedly buttressed by the buoyant (pre-global financial crisis) international capital markets and the concomitant surge in foreign capital inflows into India during 2004-08.

The Great Recession and its aftermath have hurt some of these growth-friendly conditions. First, because of expansionary fiscal actions undertaken to counter recessionary forces (and increase government pay and expand entitlement programmes), India's combined fiscal deficit (Centre and states) remained above 10 per cent of GDP in 2009-10, double the pre-crisis level of 5 per cent in 2007-08.

Growth started creating a shortage of skilled labour, raised the skill premium and unleashed a widespread demand for education as a tool of social mobility. The government was unable to bring about a fundamental change in the public education system and solve the perennial problem of low quality. As a result, the growth decelerated and by the end of 2012, India started struggling to maintain the high growth momentum. By 2013, the country was

staring at the problem of twin deficit, i.e. a heightened level of current account deficit coupled with an elevated fiscal deficit. Moreover, problems on the external front started spilling over onto the exchange rate and currency markets making Indian Rupee a lot weaker and vulnerable vis a vis US dollar.

However, the resilience of the Indian economy was in full glow and the turnaround was much faster and smoother. All the headline macro indicators were within the safe zone by 2015 and the growth rebounded. However, there was a huge shock in the form of demonetisation of higher denomination currency notes in 2016 which again shaved off some growth, albeit temporarily. Thereafter, in 2017 the GST was introduced which again proved to a temporary roadblock for growth. However, by the third quarter of 2018, the impact of GST on growth waned off and India is likely to have a growth of 7 % in 2018-19. Presently, our external payments situation remains comfortable, the foreign exchange reserves are robust, fiscal consolidation is on track and the inflation is also within the targeted level. The investment climate is promising, the manufacturing sector is growing on the back of entrepreneurial resurgence, and our comparative advantage in the knowledge economy is fuelling the boom in the services sector.

Analysis of nearly five decades of data finds that India's long-term growth process is steady, stable, diversified and resilient. India's long-term economic growth has steadily accelerated over a fifty-year period, without any prolonged reversals. The acceleration of growth is evident not just for aggregate GDP, but even more strongly for per capita GDP. The average pace of per capita growth was 5.5 percent a year in the last decade. Interestingly, when compared with some of the world's largest emerging economies, this steady acceleration of growth stands out as being unique to India. Moreover, India's rate of growth has become more stable. This is partly due to the stabilization of growth within each sector – agriculture, industry and services – and partly to the transition of the economy toward the

services sector, where growth is more stable. Over the long run, India's growth has been driven by an increasing share of investment and exports, with a large contribution from consumption. Growth has also been characterized by productivity gains – both in labor productivity as well as in total factor productivity. Finally, growth has been broadly resilient to shocks, both domestic and external. The resilience of India's growth can be attributed to the country's large and spatially diversified economy, as well as to its diversified production structure that is not dependent on a few products, commodities, or natural resources. It can also be attributed to India's diversified trade basket and broad range of trading partners, wherein a slowdown in any one part of the world will not result in a large impact on India.

Chapter 6

Impact of Social Sector indicators on Economic Growth in India

It is difficult to come across a formal definition of the term “social sector”. Generally, it is used to refer to sectors like education, health and nutrition, etc. that are concerned with the provisioning of ‘merit goods’ which are socially valuable but which may not always bring immediate or direct economic returns. It is important to examine and understand the impact of improvement in social sector indicators like education and health outcomes on overall per capita income of the economy. The social sector can play a vital role in influencing the rate of economic growth as well. As the social sector develops, quality of life improves, leading to better quality human capital that leads to higher total factor productivity. Within India, the experience of Kerala also demonstrates the importance of social sector attainments in influencing human development as well as economic growth. Thus, the achievement in economic front is closely dependent on and related to that in social sector.

Spending on social sector is critical since it tends to benefit the poor relatively more than the rich and because, it arguably enhances the human capital of the economy, which can produce direct growth effects and indirect spill over benefits for the rest of the economy. In the case of India- as with many other developing economies- the Government’s expenditure on social sector assumes importance on three accounts. The first being magnitude of deprivation in the country being too large to be left to the market forces alone to tackle. Secondly, the proportion of poor households utilizing Government services is higher as compared to the richer households and thirdly, to ensure clearly articulated outcomes in social sectors such as the Sustainable Development Goals (SDGs).

A composite index of life expectancy, education, and per capita income indicators is known as the Human Development Index (HDI). The Human Development Index (HDI) is a

summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions.

A country scores a higher HDI when the lifespan is higher, the education level is higher, and the GNI (PPP) per capita is higher. It is a tool developed by the United Nations to measure and rank countries' levels of social and economic development. Four principal areas of examination are used to rank countries: mean years of schooling, expected years of schooling, life expectancy at birth and gross national income per capita. This index makes it possible to follow changes in development levels over time and to compare the development levels of different countries.

The HDI was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone. The HDI simplifies and captures only part of what human development entails. It does not reflect on inequalities, poverty, human security, empowerment, etc. HDI values of India from the year 2000 are captured in the table below.

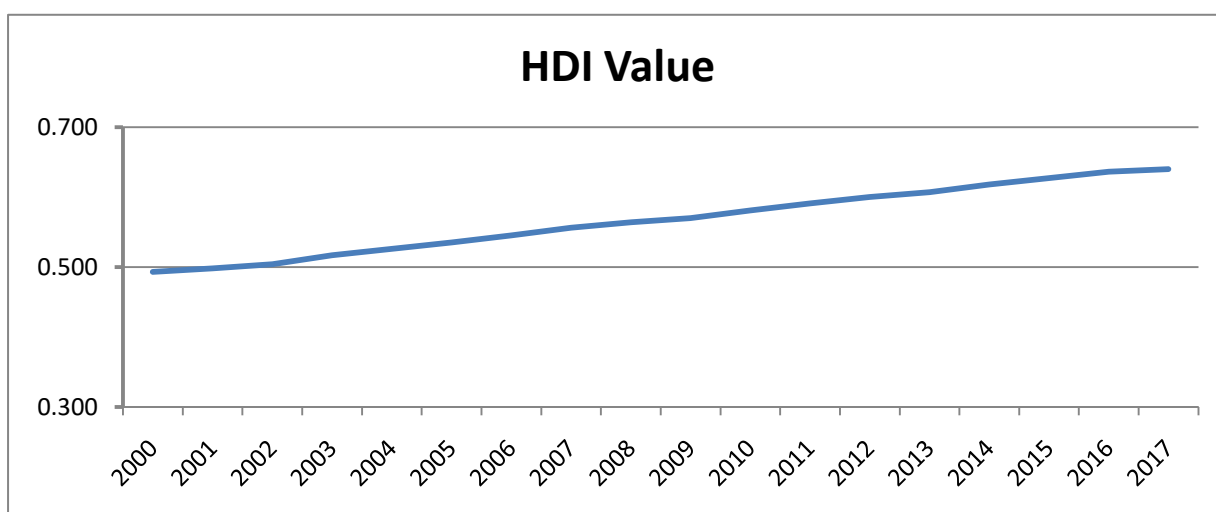
Table 6.1 Per Capita GDP & HDI Values (INDIA)

Year	Per Capita GDP (Current US \$)	HDI Value
2000	439	0.493
2001	447	0.498
2002	466	0.504
2003	541	0.517
2004	621	0.526
2005	707	0.535
2006	792	0.545
2007	1018	0.556
2008	991	0.564
2009	1090	0.570
2010	1346	0.581
2011	1462	0.591
2012	1447	0.600
2013	1452	0.607
2014	1576	0.618
2015	1606	0.627
2016	1717	0.636
2017	1940	0.640

Source: World Bank and UNHDR

The journey of India on Human Development can be seen graphically as below:

Figure 6.1 HDI Values of India



To understand the impact of education and health on overall GNI per capita of the economy, a regression analysis is performed considering GNI per capita as dependent variable on 2 independent variables, namely, per capita expenditure on health and Gross enrolment at the primary level. These elements have been selected for a variety of reasons. The best way to measure growth of an economy is by looking at the incomes of people whether it is increasing. To achieve rising incomes for people, two things need to happen: increase in productivity and, new income generated from this increased productivity to be returned to workers (in the form of higher wages). Evidence suggests that states that increase the level of education and improved health conditions of their workforce see greater productivity. A strong dedication on educational system can help a nation improve on slim competitive edge, which it retains in the world markets. The level of cognitive skills of the students and the young population of a nation has a large effect on its subsequent economic growth rate. Micro economists have found extensive evidence that an individual's health is an important determinant of his or her economic performance. Various measures of poor health, including malnutrition, anaemia, and exposure to disease during childhood, have all been shown to have a negative effect on a person's mental growth and also on wages or productivity. The factors like health and education become paramount to help raise quality human capital which can better human development index and productivity, thus leading to improvement in overall GDP and economic growth, and finally allowing the nation to avoid middle-income trap.

Table below shows the GDP per capita, health expenditure per capita and number of educational institutions for the period 2000 to 2015.

Table 6.2 Per Capita GDP, Per Capita Health Expenditure and Gross Enrolment

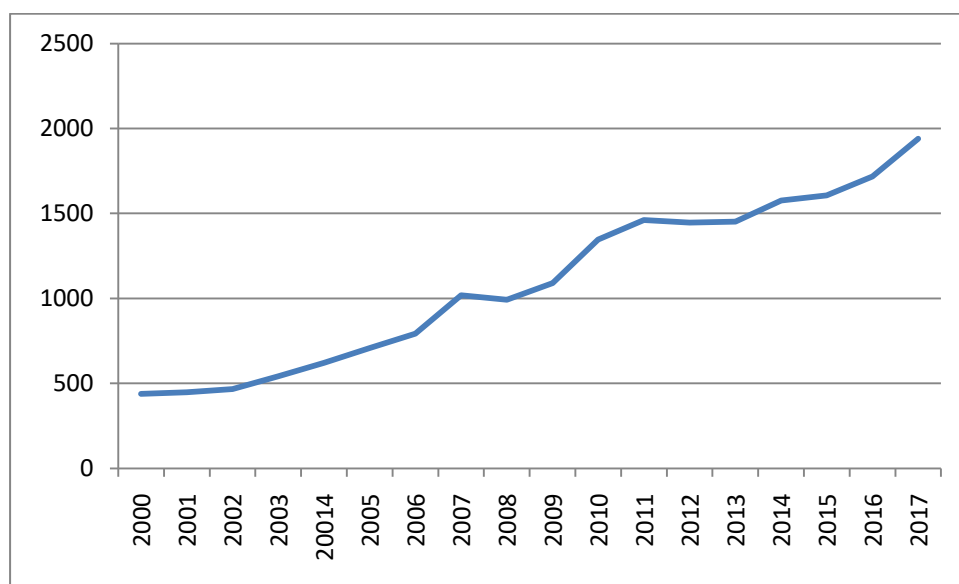
Year	Per Capita GDP (Current US \$)	Health Exp. per capita (current US \$)	Number of Educational Institutions
2000	439	18.56	10150
2001	447	19.86	10403
2002	466	20.30	13150
2003	541	22.07	14078
2004	621	25.14	15437
2005	707	27.75	17205
2006	792	29.65	17332
2007	1018	35.96	20183
2008	991	37.99	23505
2009	1090	38.41	28322
2010	1346	45.25	33595
2011	1462	48.72	33595
2012	1447	49.05	35494
2013	1452	56.22	36494
2014	1576	57.15	37383
2015	1606	63.32	38346

Source: World bank

The above table shows that we have come a long way from having a paltry Per capita GDP of US \$ 439 in the year 2000 to over 1600 US \$ in 2015. As per the latest data, the per capita GDP of the country is estimated to be 1940 US \$ in 2017. This means an almost 4.5 fold increase in the per capita GDP is a span of last 17 years meaning thereby that that have been able double our per capita income every 6-7 years. Going by this trend, we need another 15-20 years period to break into the higher income group of countries. Therefore, in order to avoid the middle income trap, we need to continue and preserve the growth momentum for the next two decades. It can also be seen from the above table that there has been a considerable improvement in social indicators like per capita health expenditure as well as enrolment ratios at various levels.

The graphical representation of Per Capita income (US \$) below shows that there has been a continuously increasing trend in the Per Capita GDP since the year 2000 except for the year 2012 when there was a slight decrease mainly due to the combined impact of slow growth as well as massive depreciation of the Indian Rupee vis-à-vis US Dollar. The slope of the curve indicates that the rate of growth was very high during the period 2003 to 2007 and also after 2015.

Figure 6.2 Per Capita GDP (US \$)



The graphical representation of the independent variables below indicates that there has been a considerable improvement in per capita health expenditure as well as number of educational institutions in the country. Therefore, as expected, as the ability of the country has increased to spend more on health and education, which has in turn contributed to the ability of the country to achieve higher levels of per capita income.

Figure 6.3 Health Expenditure per capita in India

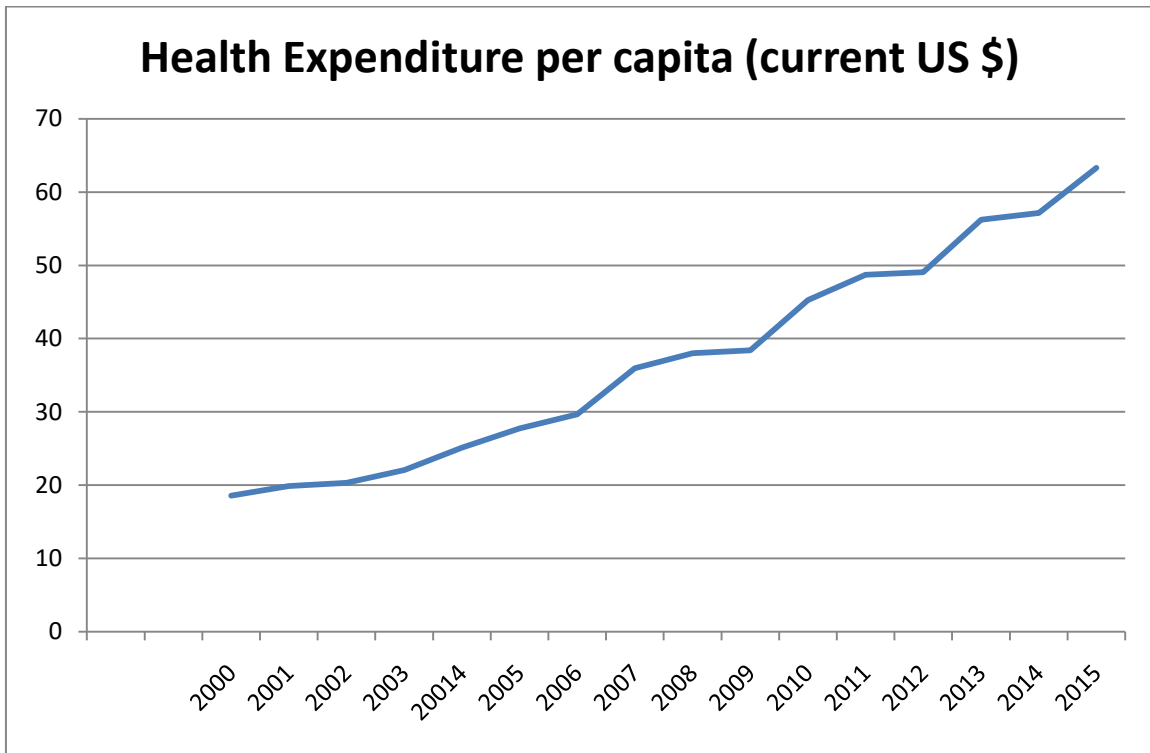
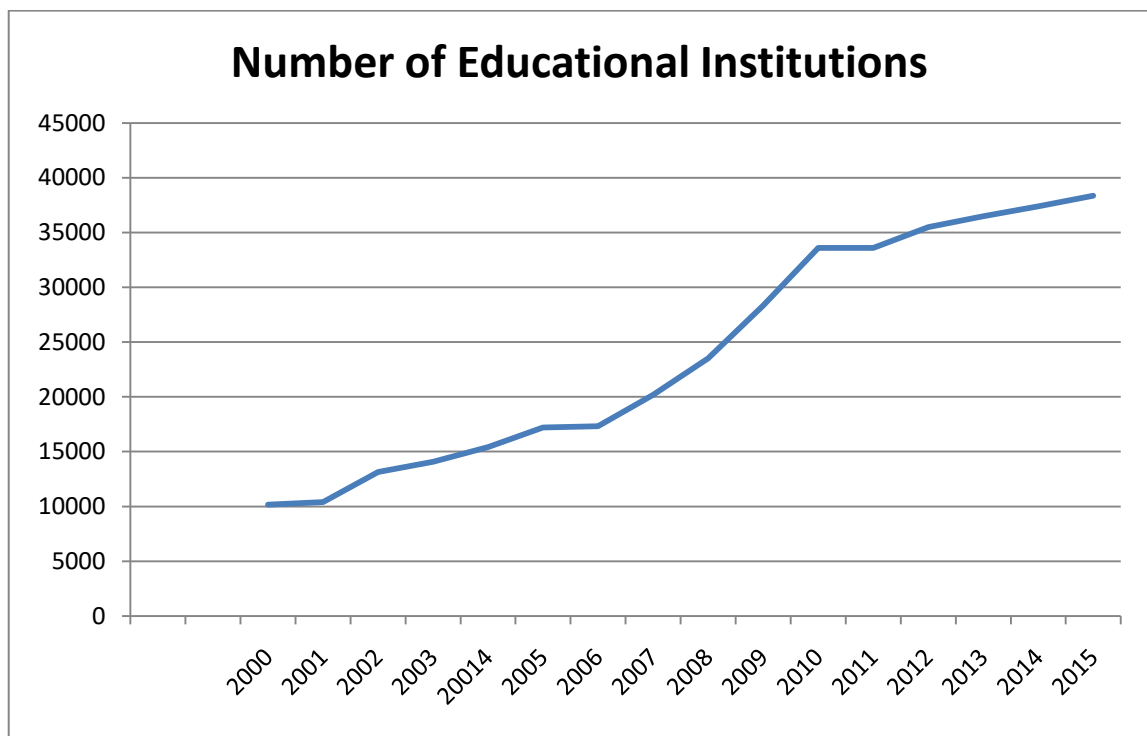


Figure 6.4 Number of Educational Institutions in India



The above data was used to run a multiple regressions analysis which has been done using Microsoft Excel. The findings and analysis of the same are as below:

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.9922
R Square	0.9844
Adjusted R Square	0.9820
Standard Error	58.2792
Observations	16

ANOVA

	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	2789105.3	1394552.67	410.589	1.78834E-12
Residual	13	44154.093	3396.46868		
Total	15	2833259.4			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-38.17	42.85	-0.89	0.39	-130.73	54.39	-130.73	54.39
Per Capita Health Expd	12.4409	4.87	2.55	0.0239	1.91	22.97	1.91	22.97
No. of Edu. Institutions	0.0239	0.01	3.50	0.0039	0.01	0.04	0.01	0.04

From the above results it can be seen that R^2 is 0.9844. It means that approximately 98.44 percent variation in Per Capita GDP is explained by the 2 independent variables i.e., Per capita health expenditure and Number of educational institutions. Also, the adjusted R^2 (adjusted for degrees of freedom) of 0.9820 is close to the R^2 indicative of the fact the model is quite robust. Standard error estimates the difference between actual values and predicted values, using the units of the response variable. The smaller the standard error, the better it is. Smaller values are better because it indicates that the observations are closer to the

fitted line. In this case, the standard error is 58.27 (approx), which can be considered to be acceptable.

Thus the model gives a multiple regression equation as:

$$\text{Per Capita GDP} = -38.17 + 12.44 X_1 + 0.02 X_2$$

Where X_1 = Per capita Health Expenditure

X_2 = Number of Educational Institutions

The t value for the intercept is -.89 which means that statistically speaking the intercept is nothing but zero. Now coming to the hypothesis regarding relationship between per capita GNP and Health & Education, the two sets of Hypothesis can be written as follows:

First Hypothesis

H₀: There is no significant relationship between per capita GDP and per capita Health Expenditure.

H₁: There is a significant relationship between per capita GDP and per capita Health Expenditure.

Second Hypothesis

H₀: There is no significant relationship between per capita GDP and Number of Educational Institutions.

H₁: There is a significant relationship between per capita GDP and Number of Educational Institutions.

The coefficient for per capita expenditure on health is 12.4409, indicating that with 1% change in expenditure on health in the total GDP, the GNI per capita in India is changing

by 12.44% (approx). The positive sign with this coefficient indicates that there is a direct relationship between the two i.e. changes are in the same direction. Also, with 5% level of significance, the p-value for expenditure on health is 0.02, which is less than 0.05, thus rejecting the null hypothesis and accepting the alternate hypothesis stating that there is a significant relationship between per capita GNI and per capita expenditure on health. It can be concluded in a way that, better the health of people in an economy, better would be the GNI per capita.

The coefficient for number of educational institutions is 0.0239 (approx), stating that with 1% change in number of educational institutions, the GNI per capita in India is changing by 0.0239%, in the same direction. Also, with 5% level of significance, the p-value for number of educational institutions is 0.039, which is less than 0.05, thus stating that there is a significant relationship between GNI and number of educational institutions in the country, rejecting the null hypothesis.

Therefore, it can be concluded that education and health are main elements that keep an economy and its per capita income growing, and this is proved in case of India from the above regression results. South Korea can be a case in point for India in this regard as the circumstances and general approach towards handling this middle income trap has been quite similar. South Korea faced similar problems in the 1980s and 1990s, which India is facing now. At that time, South Korea emphasized on export driven growth. But it succeeded in its experiment as it enjoyed a huge demographic dividend at that time, and invested in human capital formation at an extraordinary pace.

An important feature of Korean policy has been its emphasis on exports through home-grown, internationally competitive industries. Korea could effectively utilize its labour force by shifting labour from underemployment in agriculture to high-productivity employment in export-oriented manufacturing. It not only focused on supplying to the

MNCs, but also attempted to manufacture products under its own brand and diversify its basket of exports. Hyundai is one of the prime examples of Korea export diversification. This was possible through combined efforts of public and private sectors in South Korean economy. The results were- sizable increases in their labour force participation, and consequently increase in output per capita. This, in turn lead to more capital available per worker and thus, increases in labour productivity.

Chapter 7

Conclusions & Recommendations

Today India represents a land of infinite opportunities. Its young demographic profile combined with its strong industrial base, rapid digitization, growing infrastructure, resilient startup ecosystem and clear growth vision from the Government, offers India a significant competitive advantage vis-a-vis other developing economies. Initiatives like 'Make in India' and 'Digital India' have contributed immensely to the growth of both the private and public sectors. The updated figures released by the World Bank for the year 2017 place India as the sixth largest economy of the world, surpassing global giant France. India is well poised to surpass Japan, Germany, Britain, and France to become the third largest economy by 2030.

India's current GDP (2017) is comparable to China's GDP in 2003, in fact, India may be slightly ahead of China. It took 58 years for India's GDP to grow to \$1 trillion and just 8 years to reach \$2 trillion (2016). In the last 26 years, the Compounded Annual Growth Rate (CAGR) was 8.5% in dollar terms; India's GDP increased significantly from \$275 billion in 1991 to \$2.25 trillion in 2017. However, India's economic growth journey thus far has not been very smooth. Despite variety of issues, India has made it to the category of middle income nations. This has been possible due to some improvement in skill-set of its natives, but the benefits have not been distributed among them so far, due to simultaneous rise in absolute poverty. Though the estimates of Gross National Income per capita (GNI) continue to show improved economic performance of the nation, but there are many other factors working behind such as, income distribution, expenditure on health, etc., which can impact the overall economic growth of a nation.

The respective governments in the past have not paid enough attention required to these social issues for economic overall development and growth. Negligence of these

elements pose a threat to India to remain stuck in the moribund of middle income trap, which can further hinder its scope of improved economic performance.

Some of the policy measures that can be undertaken in the context of India to keep the growth momentum going strong in the next two decades to ensure rising per capita GDP which will help it to escape the scope of middle income trap are as below:

- India's current macroeconomic fundamentals are healthy. Prudent fiscal management, economic and social reforms and effective regulatory policies can help India to register stable growth. The nation is making judicious efforts for global and regional integration. A challenging task ahead is its increasing urbanization. A report by World Bank estimates that between 2010 and 2050, India's urban population will increase by about 497 million going by present growth trends, and above mentioned measures can be a way out, to accommodate this increased proportion of population, in the growth process.
- A rapidly growing economy, increasing urbanization, and a government dedicated to bolstering the infrastructure of the nation. The Infrastructure sector currently employs 44 million people and contributes 9% to India's GDP. India needs about 1.5 trillion investment in the infrastructure sector in the next 10 years. India will be required to spend 454.8 billion on infrastructure development over the period of five years with 70% of funds needed for roads and urban infrastructure segments. India is expected to become the 3rd largest construction market globally by 2022 and CAGR of 15.7% expected to reach 738.55 bn by 2022. The real estate sector is estimated to grow to 650 billion by 2025 and surpass 850 billion by 2028 to touch 1 trillion by 2030. Presently, not even 10% infrastructure has been made so 90% infrastructure is needed. For every country, infrastructure is the catalyst to start the economy. So, the

infrastructure sector is likely to be one of the main drivers of future growth of India and the government should ensure that a major portion of the incremental revenues are allocated towards this sector.

- If the nation continues to depend upon any boom or outside world, it may be stuck temporarily in middle-income trap, as economic policies many a times, show diminishing returns. The need is to go beyond frugal invention and to focus on undertaking more original research. This can be undertaken at a lower cost by collaborating with research centres under universities, and encourage the culture by supporting the education system which shifts from equipping workers with basic skills to provide them with abilities to create new product. There are many examples for original research which the economy has already undertaken like e-learning, pharmaceuticals, etc. More emphasis may be put on developing indigenous brands for medicine like Ranbaxy.
- India today has 560 million young people under the age of 25 and 225 million between the ages of 10 and 19. So for the next 40 years it should have a youthful working-age population at a time when the broad industrialised world is ageing. This could be a huge demographic dividend, provided India is able to educate its youth, offering vocational training to some and university to others to equip them to take advantage of what the 21st-century global economy offers. If we get it right, India can become the workhorse of the world. Though, various initiatives have been undertaken by the government, but they are still inadequately proportionate to the population. The need is to create entrepreneurial spirit and atmosphere.

- The fast growing young population in the country is perceived to boost economic activity, outpacing the aging developed nations. Tapping the potential minds of this population and nurturing their entrepreneurial spirit is the need of the hour. This will not only lead to capital formation but also generate employment opportunities in the economy. More than 120 million people are expected to join the existing workforce in the next few years. Adopting conventional methods to enhance the skills and competence of this enormous workforce will not be possible. Hence, we need to come up with alternative methods like learning while doing to educate them and sharpen their technical skills at the same time. Thus, skilling the burgeoning workforce should be a top priority.
- India is one of the top nations, offering generous R&D related tax incentives. By doing just that it is not able to encourage innovation. Other areas such as collaborative R & D tax breaks to support universities, national labs and research consortia and encouragement to commercialize innovation, rather than just research are not in place. Further, tax breaks should be offered in areas of national importance and integrity like defence, military space, aerospace, nuclear energy, etc. The only reason, the economy is not able to give much of tax breaks, is because the balances are already running in deficits and taxes are a major source of income to the government. So a wholesome approach is required.
- Many investors are not interested to invest substantially because of lack of complete transparency and administrative capacity. Although the country has improved its rank from 142 among 189 nations to 77 in ease of doing business as per the latest rankings released by world bank in 2018, there is a tremendous scope for further improvement.

Many tax issues of Indian government with the corporate sector still remain unresolved. It is therefore important to resolve the tax issues internally and/or through international arbitration.

- India has established its forte in IT and BPO sectors for quite some time. The Indian IT and ITES industry is expected to grow to 350 billion by 2025 and Business Process Management (BPM) is expected to account for 50-55 billion out of the total revenue. The Industry currently contributes 7% share in GDP Indian e-commerce sector is also expected to go US 200 billion by 2026 from US 38.5 billion as of 2017. Accounting for 67% of global outsourcing market, India shall remain the top nation in terms of providing both on-shore and off -shore IT services across the globe generating massive employment opportunities. The quality and cost of services shall be the two most important factors making India the IT powerhouse in the global IT services market. MNCs are investing in India and setting up R&D centres in the country, thus hoping to tap into the vast workforce of India, which is committed to making their own lives better and contributing to a better tomorrow, like GE, IBM, and Philips. However, other sectors also need to catch up as engineering and research and development has been on growth trajectory in the economy. Investment is required from private sector (which is insignificant at present) to embody new technology in different verticals to help India move up the value chain. To name a few are the automobiles, consumer electronics, pharmaceuticals, and biotechnology specifically.
- Though Indian agricultural sector face many challenges, but it has huge untapped potential for augmenting value chains through crop diversification and forward and backward integrations. It can change the pattern of food demand in the nation and tap

international markets, thus generating additional exports and employment opportunities.

- A very small proportion of India's public R&D infrastructure is agriculture and health. More efforts are required apart from NREGA scheme and efforts by CSIR, to support joint venture of public R & D infrastructure with private sector, so as to increase productivity, which is a key mechanism for poverty reduction. Agriculture is a major employment sector in the nation even today; however the poor do not suffer from an absence of work, but rather from low productivity and the resultant low remuneration.
- Financial commercialization can be attained using bottom of the pyramid effect, as argued by C.K Prahalad. The needs of poor and underserved can be met, while creating a viable business opportunity, as the companies can use their technological and marketing capabilities to create and deliver products. For example- mobile telephones, micro lending, hypermarkets and is essentially a rallying cry for big business to put serving the world's 5 billion or so poorest people at the heart of their profit-making strategies. There are huge potential profits to be made from serving the 4 billion-5 billion people on under \$2 a day—an economic opportunity he values globally at \$13 trillion a year. The win for the poor of being served by big business includes, he says, being empowered by choice and being freed from having to pay the currently widespread “poverty penalty.” cold storage supply chain for farmers, low-cost internet connectivity (in lines with digital India initiative) and other grass root innovation networks).

- Poor citizens living in traditional styles desire to protect the secret knowledge. Though this pro-poor IPR framework would require revolutionary thinking and bold experimentation in the Indian culture, both legally and administratively, but can be adopted using the goal of compensation, wherein the person sharing the knowledge, and not the one, who possesses it, will be rewarded.
- India requires innovation in selected items, and which can be generated overtime. At present, the focus, should be on creation of more and more special economic zones (SEZs), supported by paperless trade. The easier for an MNC to do business in a nation is to invest in the host nation. Though “Make in India” venture has been undertaken with some seriousness, effective results are yet to be felt. Apart from all the measures, one major domain where the nation needs to focus upon is improvements in logistics and connectivity.
- The domestic energy sector needs to reduce its dependence on imports and for this new approaches and sources of renewable energy production will be needed. The Government is also committed to Clean Energy and is driving efforts to achieve 40% power installed capacity from non-fossil-fuel-based energy resources and reducing emissions by 33-35% of its GDP by 2030. The share of coal in the energy mix projected to fall to 50% by 2040, while the share of renewables rises significantly. Renewables will overtake gas and then oil by 2020 as the second largest source of energy production. India has the 4th largest installed capacity of wind power in the world, the 6th largest installed capacity of solar power and 70 GW installed renewable energy capacity (as of July 2018) and 34 new solar parks of capacity 20,000 MW sanctioned 60 solar cities approved and 1.3 billion allocated for setting up 50 solar parks of 40 GW by 2020 Entrepreneurship.

- The startup ecosystem in India is seeing an all-time high with more new entrepreneurs entering the system, budding angel investors, variety of Incubators & Accelerators and venture capital firms, both domestic and global, betting on India's 10 trillion dollar market by 2030. The Indian startup ecosystem has grown by 270 percent. We have over 26,000 startups, and we are the second largest ecosystem in the world. Every year, over 6,500 to 7,000 startups are formed in India, of which 1,200 get funded. These have created close to \$90 billion in terms of value. By 2025, it is expected that there will be 100,000 startups in India, creating close to \$1 trillion in value.
- India has the ability to lead the fourth industrial revolution. Interestingly, while India missed out in the first three revolutions of mechanisation, mass production and automation, India has an excellent opportunity to lead the fourth Industrial revolution by adopting the latest technology with the advent of data, connectivity and artificial intelligence. The initiation of the Digital India scheme has largely transformed the Indian economy thereby, preparing India's IT workforce for future technologies is very important. Hence, investing in technology is required for sustaining the rapid transformations.
- At present, India has more number of internet users than the US. The e-commerce industry has tremendous potential. Near 100% growth is expected in the e-commerce markets by 2020. Thus, unleashing the potential of this sector can help India significantly in its mission.

- Addressing gender inequality and increasing the assistance of women in the economy is also required. Without their participation India will continue to fall short of its economic potential.
- Each sector of the Indian economy will need to execute efficient solutions if it is to build its GDP to \$10 trillion dollars and avoid the middle income trap. For this, the sectors need to come up with solutions that are scalable, resource efficient, and environmentally sustainable. The private sector needs to invest more in Research and Development activities, especially for catering to challenges faced by the emerging markets. Government needs to build more Public Private Partnerships for constructing improved roads, ports, healthcare facilities, educational institutions, and to develop low cost and innovative financial models.
- There is a need to enhance the contribution of its exports to the GDP. India's exports as percentage of GDP currently average at around 13 percent. No country has managed to show aggressive, sustainable growth without the contribution of exports being 25 to 30 percent of its GDP. Therefore, there is an urgent need to increase our exports.
- A key challenge will be to get people out of agriculture and use them in the manufacturing and services sectors, while also ensuring that agricultural production in the country increases. Improved prospects of infrastructure will especially remain crucial to ensure the success of 'Make in India' initiative—which is aimed at attracting businesses and investors from around the globe to transform the country into a key global manufacturing hub.

While India moves ahead with hope to achieve its ambitious targets supported by numerous campaigns and reforms, the world has its eyes fixed on her. Much has been said, much has been done, but it's still a long road ahead. Not only is this a big challenge but also an enormous opportunity. If the country is able to utilize this enormous opportunity, it can certainly avoid the middle income trap.

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