



India's Middle-Income Trap

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Background

- Since 1990, 34 Middle-Income Countries have shifted to high-income status and more than a third's shift was due to their integration with the European Union or with the discovery of oil.
- According to the World Bank Country and Lending Groups, countries are classified into 4 income groups based on their GNI per capita which is calculated using the World Bank Atlas method.
 - The low-income economies have a GNI per capita between \$1,135 or less in 2022.
 - Lower middle-income economies have a GNI per capita between \$ 4,466 and \$13,845.
 - Upper-middle-income economies have GNI per capita between \$4,466 and \$13,845.
 - High-income economies have GNI per capita between \$13,846 or more.
- At the end of 2023, 108 countries were classified as middle-income and these countries comprise 75% of the global population, generate 40% of the global GDP and two out of three people were living in extreme poverty.
- Middle-Income Trap (MIT) is a situation in which the middle-income countries are not able to shift to high-income countries for decades and it indicates an economic downturn occurring in the middle-income countries after a period of rapid growth.

Factors that lead to a Middle-Income Trap

- The main factors that lead to the middle-income trap when the economies develop include.
 - High labour costs lead to a reduction in the competitive advantage of the country compared to other lower-wage competitors.
 - Difficulties in technological advancement.
 - Structural challenges like inequality and ageing of the population.
 - Inequality in the level of income hinders economic growth by weakening consumption.
 - Ageing of the population reduces labour participation, savings and investments which will lead to a decline in economic growth.
- **India's Middle-Income Story**
- Since 2007, India has been categorised as a middle-income economy.
- India's per capita GDP stood at \$ 2730 in 2024
- The World Bank Report revealed that countries enter the MIT when they reach 10% of the annual US GDP per capita which is equivalent to \$8,0000 at present (Livemint, 2024).

India's Status as a Middle-Income Economy

- India as per data from the World Economic Outlook, 2024 has not reached that point as the projected annual US GDP per capita of 2029 is \$ 4281.
- Figure 1 plots the GDP per capita from the period 2007 to 2029 to understand the growth of GDP per capita annually.
- According to the report by India Ratings and Research for India to reach the upper-middle income level, the per-capita income has to be between \$4,466- \$13,845.
- India could shift to the upper-middle-income economy by fiscal years 2033 to 2036.
- The India Ratings and Research observes that for India to become a \$30 trillion by FY2047, it will need to have GDP growth of 9.7% per annum over FY24-FY47 in the current USD terms.

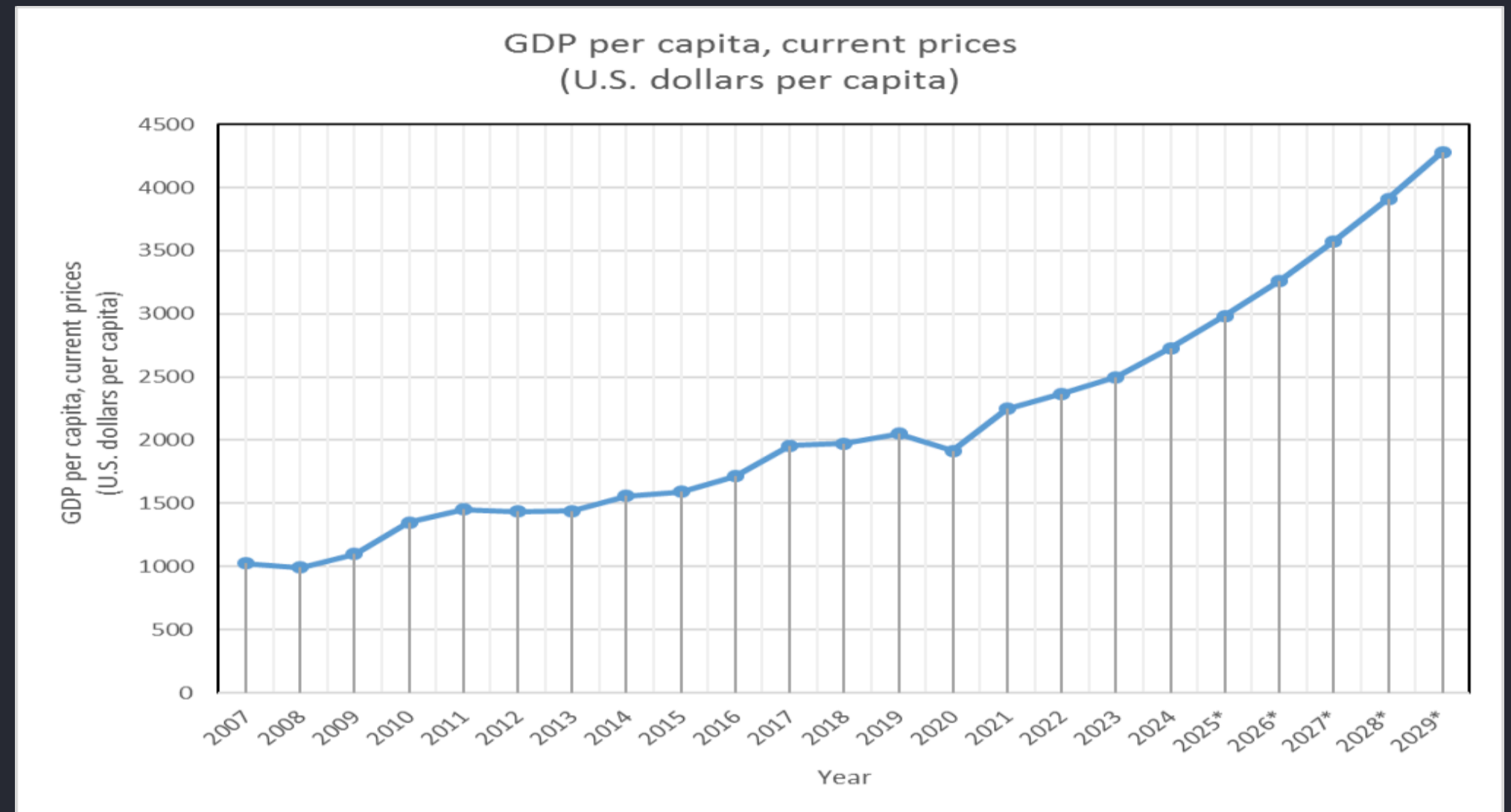


Figure 1

Source: World Economic Outlook (April 2024).

- Figure 2 shows that in 2024 India only had a growth of 7.58%, so only consistent growth will help in achieving the goal which can be met with several obstacles including political and economic instability and the introduction of more protectionist policies by the countries.
- The World Development Report 2024 titled 'The Middle-Income Trap' reveals that it will take India 75 years to reach one-quarter (25%) of the US per capita.

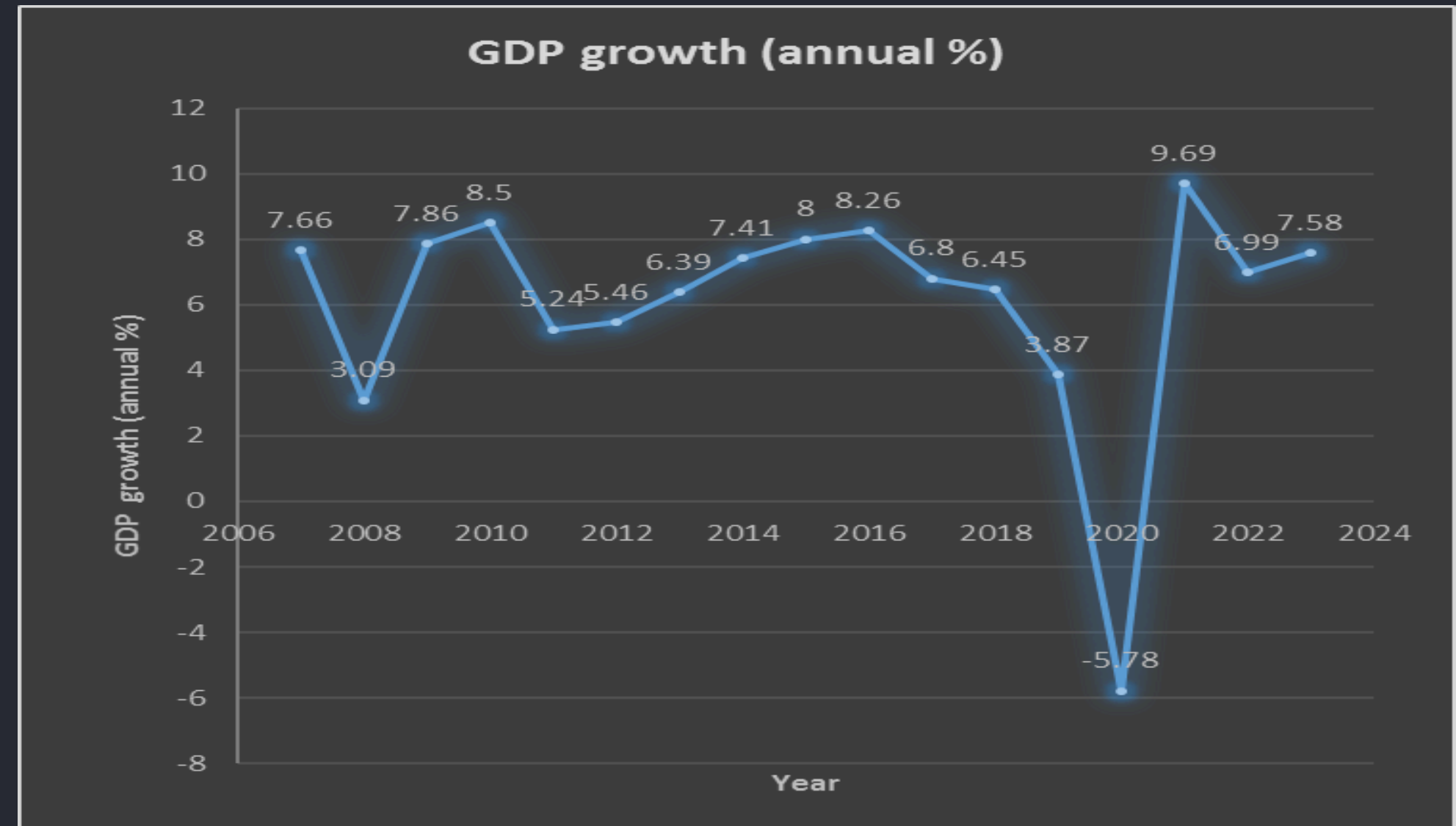


Figure 2

Source: World Bank national accounts data

Case Study Analysis

Japan's transition from a Middle-income economy to a high-income economy.

Technological Changes

Japan's capital depreciation post WWII allowed its economy to adopt new technologies without waiting for old assets to depreciate. Japan focused on high-growth industries like steel, electronics, and motor manufacturing, importing new technologies and improving them by an estimated 20%. The government supported this technological shift with expansionary monetary policies, keeping interest rates low and providing tax incentives for rapidly growing businesses. Additionally, Japan made foreign scientific knowledge widely accessible, further boosting innovation and economic growth.

Accumulation of Capital

Between 1959 and 1970, Japan's personal savings rate averaged 18.3%, significantly higher than Germany's 12% and the U.S.'s 7%. High savings rate fuelled investments in manufacturing, driven by Japan's goal to close the technological gap with other countries and boost international competitiveness. High returns on these investments, due to strong capital productivity, were balanced by maintaining a high savings rate to prevent inflation.

Quality & Quantity of Labour

Japan's postwar economic success was driven by a 30% contribution from labor growth and a strategic shift from low- to high-productivity sectors. The keiretsu, large business groups with government support, dominated markets, while policies focused on key industries and improving labour skills further boosted productivity.

International Trade

Japan's postwar economic growth was significantly boosted by the Industrial Rationalization Policy, which helped exports grow rapidly. The government supported this by offering tax deductions and preferential loans, making Japanese exports cheaper. Key sectors involved in exports benefited from mergers and anticompetitive practices. However, Japan's real edge in international trade came from its ability to adapt quickly, shifting from exporting textiles to machinery and metals between 1950 and 1965. This adaptability allowed Japan to meet global demand, driving up exports and fueling economic growth.

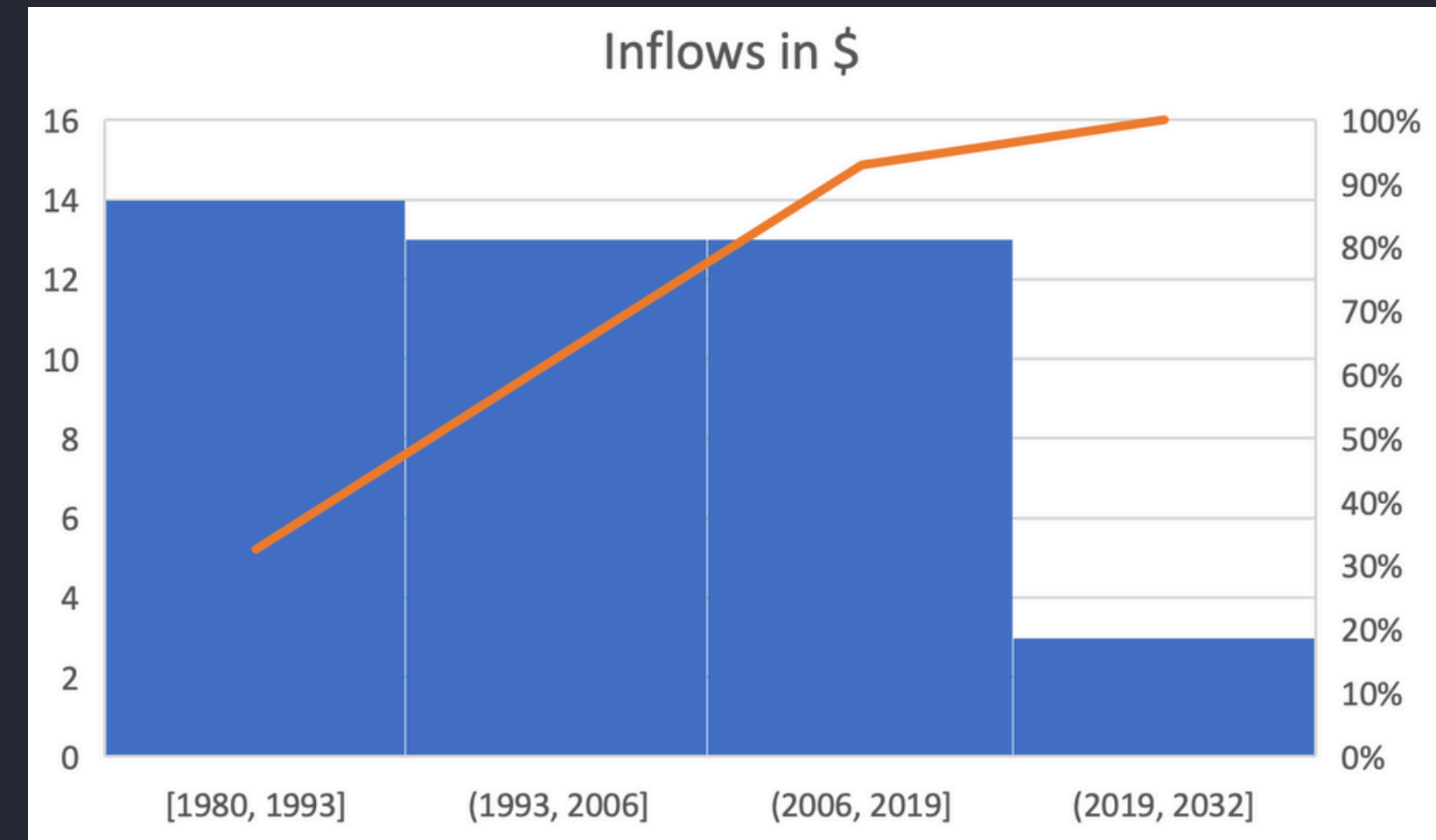


Figure 3

The Pareto chart shows Japan's steady investment inflows from 1980 to 2006, covering 90% of the total. The orange line indicates the cumulative percentage of these inflows over time.

South Korea: 'Miracle on the Han River'

Land Reforms

Before South Korea's land reform, a few wealthy landlords owned most of the land, while most rural folks worked as tenant farmers under tough conditions. Starting in the late 1940s, the government took steps to register land and reassign ownership from these landlords to landless farmers. This reform cut down land inequality, boosted agricultural output, and improved rural living standards. It also encouraged investment in education, leading to a highly skilled workforce that became 2.5 times more productive than American workers.

Five Year Plan

South Korea's journey from the 1960s to the 1990s, guided by its Five-Year Plans, is a testament to its drive from an agrarian society to a tech-savvy industrial giant. The focus was on boosting key sectors, improving infrastructure like highways and ports, and investing in technology. A major part of the success was the export-oriented approach, which helped South Korea become one of the top 10 exporters globally. Exports as a percentage of GDP skyrocketed from 25.9% in 1995 to 56.3% in 2012. This success was also fuelled by policies encouraging investment in innovation.

Industrialization of High-end Enterprises

To escape the middle-income trap, South Korea focused on upgrading its industries and targeting high-end markets. Key sectors like shipbuilding, steel, automobiles, and petrochemicals were prioritized for heavy investment. The government played a major role, funding infrastructure, research, and development. By offering grants, subsidies, and collaborating on R&D, they helped companies invest in advanced technologies and innovate, boosting economic growth and global competitiveness.

Characteristics of a Developmental State Economy

By strategically investing in sectors like manufacturing, biotechnology, and IT, nations transform their industries.

An export-driven approach then boosts domestic industries by tapping into global markets, increasing foreign exchange, and fuelling economic growth. South Korea, in particular, liberalized its economy, reduced direct control over industries, and invested in sectors like chemicals to replace imports. In the 1980s and 1990s, it shifted focus to high-tech industries such as electronics and semiconductors. Companies like Samsung, LG, and Hyundai emerged as global leaders, driving the country's export-driven success.

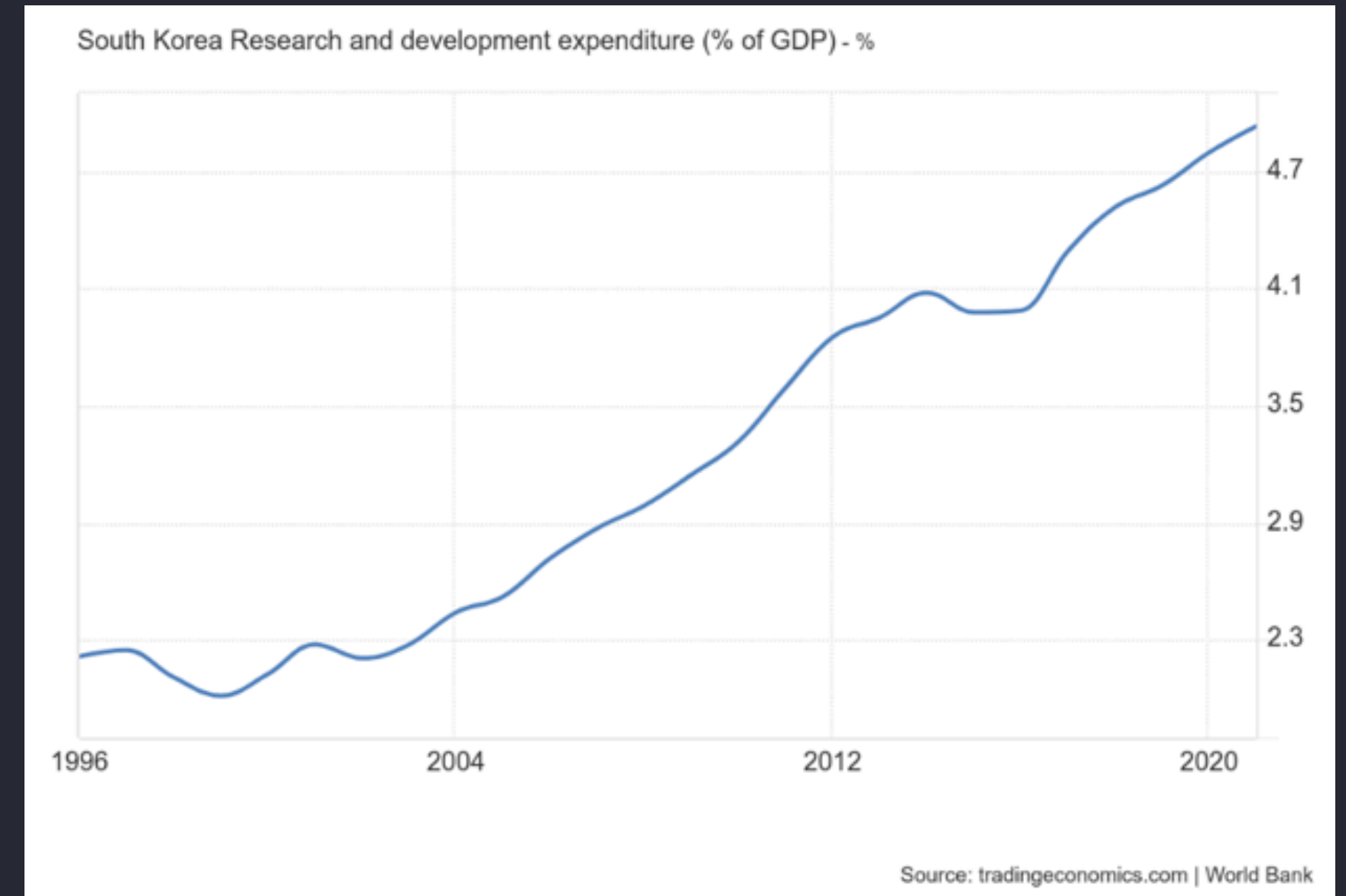


Figure 4

Growth Trajectories and Macroeconomic Indicators

TFP's Measurement of Growth

- 'Economic growth' plays a limited role in assessing a country's growth trajectory, as it takes into account factors like physical capital, working hours of the labor and production, without consideration of aspects like technological developments, labor and capital input. Thus, **TFP (Total Factor Productivity)** emerges as one of the most important macroeconomic indicators used to assess a country's income categorisation, however, this was not always the case.
- Research conducted by eminent scholars like Barry Eichengreen proves that 85% of the growth decline in economies result from downward trends in TFP. Furthermore, economic growth literature and empirical evidence suggest that the slowdown of Latin America's economic growth was a result of declining TFP growth rates. Rapid growth in economies like China is rooted in high TFP rates.
- TFP is mathematically expressed through the Cobb-Douglas Production function:

$$Y = AL^{\alpha} K^{\beta}$$

Here, Y is the total output (GDP), A is the total factor productivity, K is capital input, L is labour input.

α represents output elasticity of labour and β is output elasticity of capital.

India's Growth Statistics

- IMF's working paper titled 'Unleashing India's Growth Potential' studies the trends that drove India's economic growth.
- Figure 6 shows a steady increase in Capital and TFP since the early 2000s, in determining India's growth trajectory.
- Visibly, this trend has witnessed a downturn since 2017 when Capital input was on the decline. Figure 6 also demonstrates a declining trend in labor input over the past 20 years.

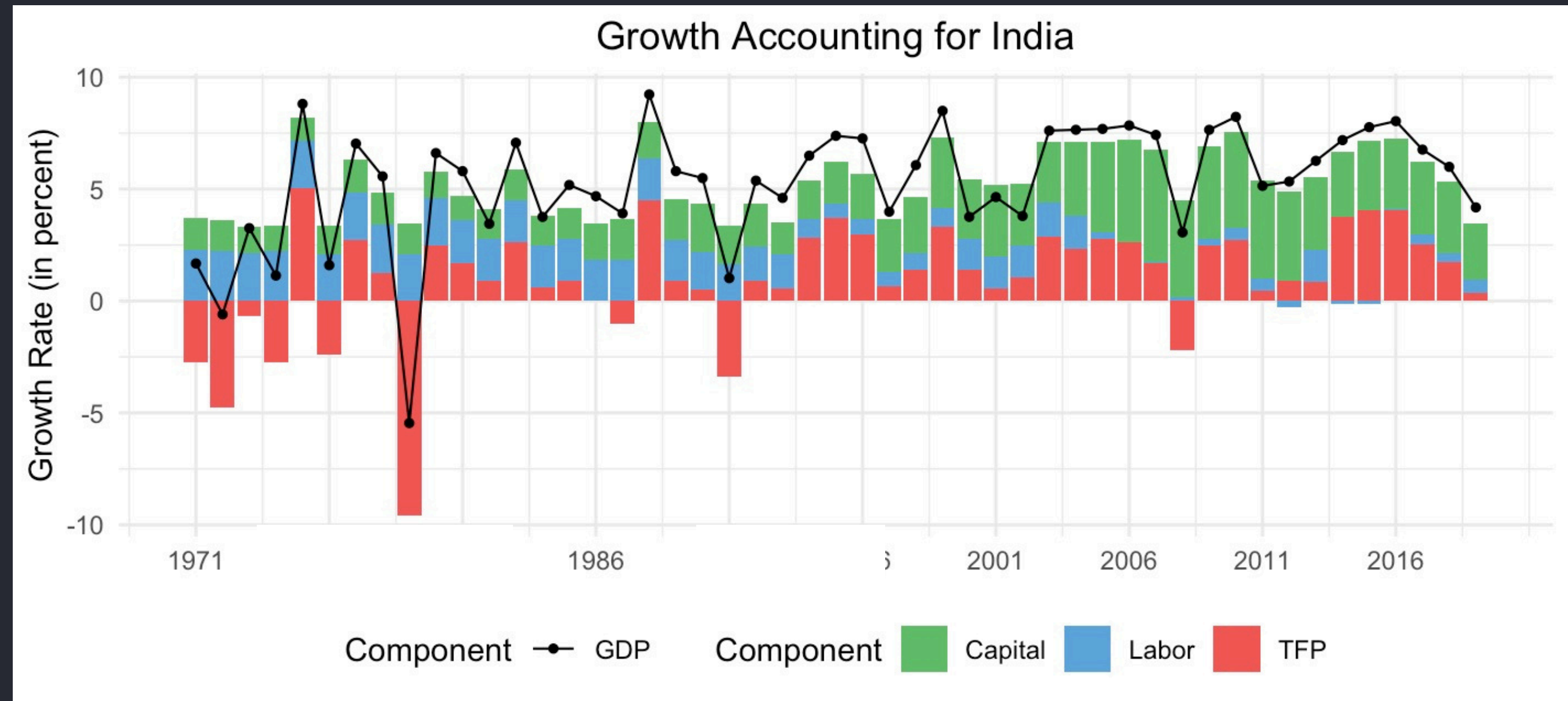


Figure 5
Source: Penn World Table 10.0

TFP and R&D

- Recent empirical evidence and research suggest that past TFP growth in India is linked to sufficient capital accumulation and capital expenditure, specifically regarding R&D.
- The 2024 World Development Report calls for the adoption of the 3I's Strategy- **Investment, Infusion and Innovation**, in order to transition to a high-income economy.
- By increasing its R&D-specific expenditure, India can move away from its current strategy of 2I's and embody the 3I's strategy, where it specifically focuses on its innovation capabilities.
- This could be possible only with India stepping up its expenditure on research and development.
- Figure 6 explains the percentage of spending by the government on research and development from 2007 to 2020 is very low.

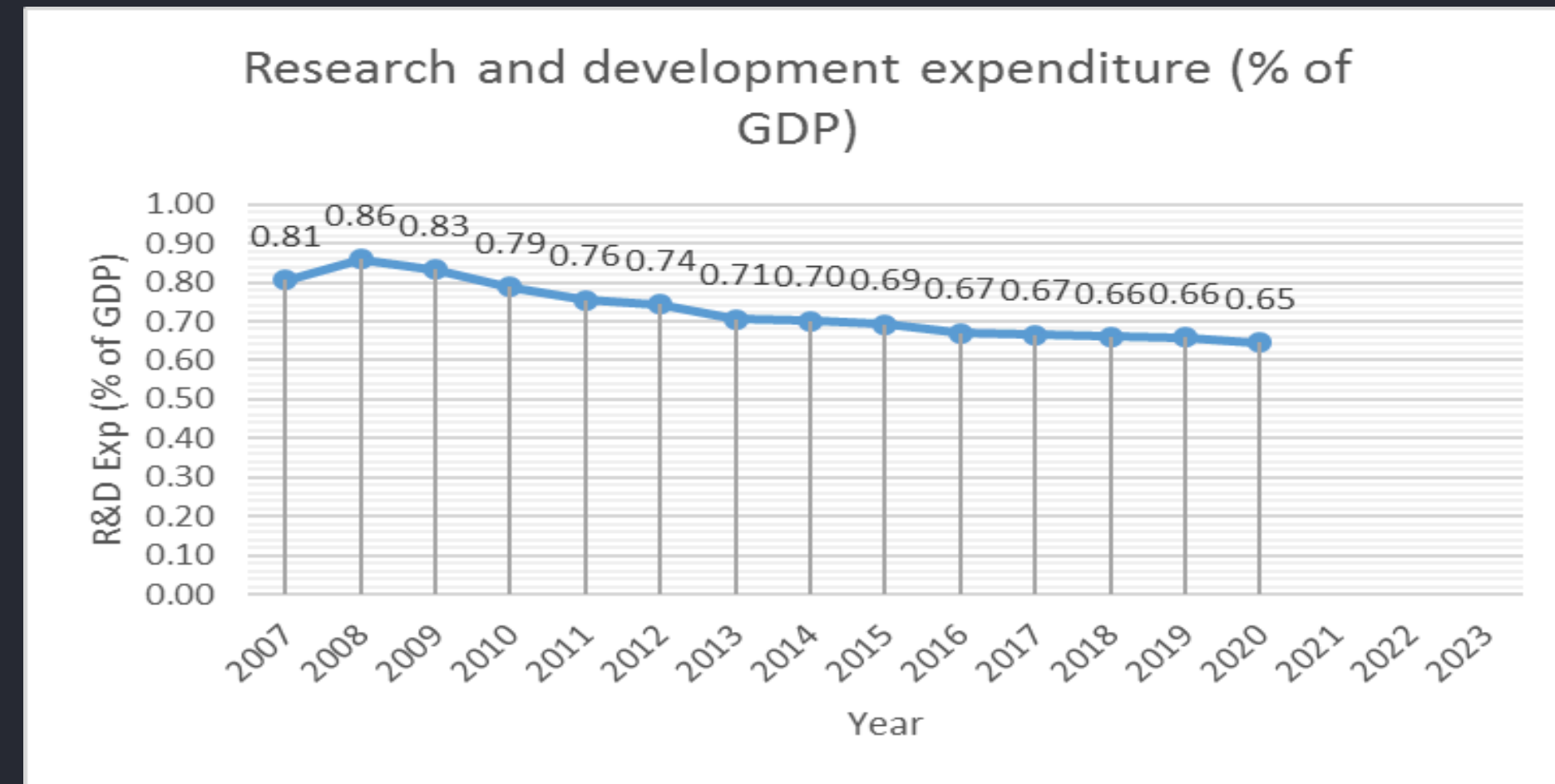
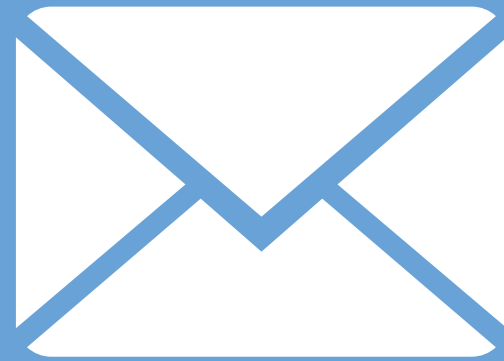


Figure 6

The Way Forward

- Based on the data in Figure 5, factors like TFP and Capital play a major role in determining India's growth. Recent trends have also demonstrated a reduced reliance on human capital and labor that accounts for India's growth.
- Despite that, focusing on **labor-intensive industries** that require high R&D capabilities and manufacturing would not only drive high TFPs, aiding India in the long run to transition from its middle-income status. But it would also ensure employment generation and increased labor participation.
- While India's Labor Force Participation (LFPR) for 2022-23 increased to 49.4% and 56.7% in rural and urban areas respectively, the figures remain relatively low.
- Ensuring that India focuses on labor and R&D-intensive industries should not discourage it from investing in **Human Capital Investments** and policies that focus on skilling and employment.
- The World Development Report and reports by the IMF and Asian Development Bank implicate the adoption of a similar model to that of Japan and South Korea, whereby high technological output is prioritised.
- Recently, India has shifted its focus towards establishing itself as a 'manufacturing hub', a focal point in India's 2024-25 Budget.
- Thus, similar to Japan's steady flow of foreign investments, India must capitalise on its FDI inflows that stand at \$70 Billion as of 2023-24.

- **Early Investments Matter:** Just as Japan's early investment periods were critical, India's initial post-liberalization growth attracted significant foreign investments. However, failing to sustain this momentum could hinder long-term economic advancement.
- **Diminishing Returns:** India may experience diminishing returns from investments if growth drivers like manufacturing and infrastructure aren't continuously upgraded, risking stagnation.
- **Concentration of Impact:** India's economic growth has been uneven, with some states and sectors benefiting more than others. This concentration can limit broad-based development, trapping the country in a middle-income status.
- **Importance of Policy Stability:** Like Japan, India needs consistent and stable economic policies to attract continuous investments. Policy instability could deter investors, slowing growth and making it difficult to escape the middle-income trap.
- **Potential Saturation:** If India relies too heavily on traditional growth sectors without innovation, it might face market saturation. Diversifying the economy and fostering new industries are crucial to avoiding stagnation and breaking out of the middle-income trap.



For inputs, comments or
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