

Net Assessment of India's Economy with Particular Focus on International Trade and Commerce

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NET ASSESSMENT OF INDIA'S ECONOMY WITH PARTICULAR FOCUS ON INTERNATIONAL TRADE AND COMMERCE

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Abstract

This paper adapts the "net assessment" framework—originally pioneered by Andrew Marshall during the Cold War to evaluate long-term military asymmetries—and applies it directly to the global economic sphere. By shifting the analytical lens from defence to macroeconomics, this study avoids myopic, short-term evaluations. Instead, it conducts a data-intensive, decadal analysis of India's emerging economic heft relative to major global hegemonies, specifically focusing on structural competitiveness, human capital utilisation, and international trade dynamics.

Key Findings

- *The Structural Paradox: While India remains one of the world's fastest-growing major economies (targeting a nominal GDP of \$5.49 trillion by 2030 and \$6.6–6.8 trillion by 2035), its trajectory is uniquely asymmetrical. Unlike traditional development models, India has leapfrogged directly to a service-led economy (52–54% of GDP). However, nearly 50% of its workforce remains anchored in the lower-yielding primary sector, exposing the nation to risks of "premature deindustrialisation" and middle-income traps.*
- *The Demographic Mismatch: Despite being in a prime demographic dividend window (2005–2055), India faces systemic friction in human capital deployment. The paper notes a concerning decline in youth labour force participation rates (LFPR) alongside a pandemic-induced reversion of labour back into agriculture, highlighting an urgent need for targeted supply-side structural reforms and capital expenditure.*
- *Trade and Sunrise Sectors: On the commercial front, India aims to scale its exports to \$2 trillion by 2030 under the Foreign Trade Policy 2023. The analysis identifies 25 core commodities that currently dictate 85% of India's export value. Green shoots in high-value manufacturing—most notably a fifteen-fold increase in smartphone exports driven by the Production Linked Incentive (PLI) scheme—demonstrate India's latent capacity to correct historical trade deficits and build supply chain resilience.*

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- *The Comparative Lens (India vs. China): The study contrasts India's service-heavy, consumption-driven paradigm with China's mature, \$18 trillion industrial-dominant powerhouse. As China attempts a complex transition from an industrial giant to an R&D-based knowledge economy amidst its own demographic contraction, India stands at a critical geopolitical pivot point.*

Strategic Conclusion

For India to successfully cement its position as the world's third-largest economy by the mid-2030s, it must aggressively transition labour from agriculture to secondary industries. Achieving sustained 8–10% growth is contingent upon navigating external vulnerabilities (such as volatile crude prices and climate-induced agricultural shocks), scaling AI integration, and maintaining institutional momentum behind manufacturing-centric incentives.

Keywords: Net Assessment, Structural Transformation, International Trade, Demographic Dividend, Premature Deindustrialisation, Supply Chain Resilience.

Introduction

Net assessment is an exhaustive and systematic process of undertaking a surgical, clinical, and objective assessment of defence-related dynamics and asymmetries encapsulating the military of two or more competing countries to arrive at a reasonably consistent strategic decision system informing and guiding the broader policy direction and executive vision of the country's political, diplomatic and military apparatus over the long term. In essence, net assessment, pioneered by Andrew Marshall during the Cold War era, can be distilled coherently as an analytically rigorous process that endeavors to earnestly determine the relative strengths and weaknesses of a certain country with relation to its geopolitical and diplomatic rival(s), all the while taking a multi-year view of the strategic factors under consideration, to avoid forming myopic value judgments of evolving undercurrents.

The far-sighted application of the net assessment approach by the USA in the early 1970s enabled the creation of coherent assessments of the USSR's military and geopolitical capacities, given that the net assessment analysts were permitted access to intelligence reports from multiple intelligence organisations, thereby aiding these analysts to develop a reasonable approximation of the USSR's foreign military capabilities by theatre, region, function, or mission. Furthermore, the significance of this approach is validated by the fact that by 1987, the net assessment report prognosticated the decline of the USSR and the emergence of several middle-tier players in the 1990s from Asia over the next decade (Mahnken, 2020).

This paper seeks to emulate the same analytical technique of net assessment on an economic sphere for the Indian economy vis-à-vis other major economies in order to determine India's relative asymmetries as well as strengths and weaknesses in relation to the other nations. It seeks to conduct a data-intensive analysis of comparing India's emerging economic heft with respect to its strategically important counterparts over a broad horizon of decades on several vital parameters such as economic competitiveness, productivity growth (and labour utilisation), trade balances, supply chain resilience, and resource endowment.

Indian economy overview

The Indian economy is the fifth-largest economy in the world, with a nominal GDP of \$3.38 trillion, and a projected growth in GDP of 8.2% in 2023-24. The robustness of the Indian economy's growth story is demonstrated by the fact that the Indian economy grew at a CAGR of 6.1% from 2013 to 2023 despite Covid-19, conflict in Russia-Ukraine, stagnating global GDP and trade indices and tightening monetary conditions worldwide since 2021.

According to the economic survey of 2023-24, India's primary sector, secondary sector and tertiary sector account for 19.5-22 %, 25-26% and 52-54% (PIB, 2023) respectively, remaining consistent since 2019-20 despite the Covid-19 upheaval. The positive news is that India's secondary sector is now growing faster than the service sector in 1-2 years and can therefore help in alleviating unemployment pressures if this effect persists.

In the upcoming years, India needs to continue and even accelerate the pace of its economic growth to around 8-10% by pursuing market-friendly reforms relentlessly, to become the third-largest economy in the world by 2035. In this area, Maiti, Kumar, Jha, et.al. (2022) paper on forecasting long-term growth of the Indian economy is likely to be closer to 6% over the next decade in a business-as-usual scenario, factoring in adversarial weather conditions as well as oil prices. However, the paper affirms that 8% growth is attainable conditional on favourable extraneous factors over the next decade. According to these analysts, India's growth trajectory is governed by the government's capital expenditure on completed projects; RBI's monetary policy; global crude prices and average temperature and rainfall over the next decade. According to Burke and Tanutama (2016), it has been observed that the districts in India that have warmed at a faster rate have seen 56% less growth in the gross domestic product (GDP) compared to the slowly warming districts.

According to Niti Aayog's report on India's vision for 2036-37, based on a linear trend, the gross savings to GDP ratio is projected to be 48.0%, 57.0%, and 28.0% under the Baseline, Aspirational, and Pessimistic scenarios, respectively. Similarly, the Total Investments to GDP ratio is expected to be 51%, 60.0%, and 28.0% under the Baseline, Aspirational, and Pessimistic scenarios, respectively.

The Indian economy is unique compared to other fast-growing developing economies of the past because India's primary sector's contribution is substantially higher at 20% compared to other economies at the same stage of development, as India had a primary sector that contributed only 10-15%, unlike in India, where it still contributes 20% of national GDP. More alarmingly, around 50% of India's labour is still employed in the primary sector, making it imperative for India to transition and promote its oft-neglected industrial sector. The sectoral composition of India, with services contributing twice as much as the industrial sector, contributes to GDP and is unprecedented among developing countries that have successfully transitioned to a developed economy. This paradigm is thus unenviable because empirically, no country has charted its path to middle/high income status by leapfrogging and neglecting its industrial sector. Indeed, Rodrik, D. (2016), in his paper named 'Premature deindustrialisation', affirms via empirical analysis subjected to statistical treatment that countries transitioning to the service sector prematurely without increasing the share of the industrial sector are at risk of productivity stagnation and, by extension, will likely witness their growth stories cut short by the middle-income trap. Hence, it is vital to empower and promote the industrial sector via focused policies such as Production Linked Incentives (PLI), liberal labour regime, ease of credit access to MSMEs, etc.

Human Capital and Employment in India

At this juncture, it is essential to direct attention to the most abundantly available resource in India, viz., the population, especially the growing working-age population of India. India has the largest working-age population in the world, with around 750-850 million Indians being of working age (18-60 years). India is said to be in a phase of demographic dividend from 2005 to 2055, which is highly beneficial for growth, given that India will have more working-age and young population till 2055.

Nonetheless, three factors comprising insignificant employment generation, low levels of employability given sub-optimal investment by government in skill formation as well as education and low levels of female participation in the economy imply that the Indian demographic dividend is not being harnessed to the full extent, unlike in China and other East Asian countries that demonstrated maximal growth in that period. To elaborate on these pain points, as of 2022, 45% of Indian labour is employed in the primary sector, up by 3% compared to 2019. In other words, COVID-19 has pushed more people to revert to employment in the primary sector, which is an unwelcome trend.

According to an ILO report, India appears to be missing out on maximising its demographic dividend, with youth workforce participation declining despite a growing number of young people entering the workforce over the past two decades. The report highlights that India's working-age population (aged 15-59) has risen from 59 percent in 2011 to approximately 63 percent in 2022. However, this increase has not translated into a higher proportion of young people working. The youth labour force participation rate (LFPR) stood at 54 percent in 2000 but has since dropped to 42 percent by 2021, indicating a concerning trend of fewer young individuals being actively engaged in the workforce.

Similarly, India's direct leapfrogging to the service sector instead of a balanced growth in the secondary and tertiary sectors contributes to high unemployment of unskilled and semi-skilled workers alongside an overdependence on the primary sector. Findings from Jitendra Kumar Sinha (2023) are even more sobering as his analysis appears to show a negative link between growth and impact on employment in addition to the already noted phenomenon of jobless growth in India.

In order to reverse and overcome these negative linkages and difficulties, some reforms and strategic orientation have to change. Essentially, the government should strategically recalibrate budget allocations by reducing recurrent expenditures, thereby freeing up resources for capital spending, which drives employment and economic dynamism and thereby stimulates economic growth and job creation. A competitive private sector is essential for structural transformation, and that can be achieved by removing price controls and structural rigidities that currently hinder competition and investment in several sectors and constrict expansion in employment in those sectors. Additionally, sustainable subsidies should be directed toward production to encourage private sector investment, further boosting economic activity and reducing unemployment.

Targeted incentives should be crafted for key sectors like agriculture, transportation, energy production, renewable energy installation (i.e. solar panel installation), telecommunications, manufacturing, and mining, which are crucial for generating impactful employment. Finally, studies of M Chahal, P Kumar (2020) and Harish et al. (2011) affirm that prioritising government investment via the Mahatma Gandhi National Rural Employment

Guarantee Act (MGNREGA), 2005, towards improving irrigation, public works, building cold storage, etc., can successfully alleviate poverty and unemployment to an enormous extent.

Therefore, long-term decadal plans of Indian developmental aspirations are deeply conjoined with institutional will and socio-economic capability to deploy and redeploy a substantial proportion of the labour force from the primary sector to the industrial/secondary sector via a combination of supply-side policies to attract industrial establishments as well as ensure that labour is skilled and well-educated. Otherwise, India's growth story may stagnate compared to its hegemonic peers owing to chronic unemployment and hidden unemployment in the agricultural sector.

Trade competitiveness and trade balance

India's trade competitiveness, trade volume and external trade balance will be the pivotal axle in determining the strategic vitality and commercial strength of the Indian economy. It is only possible to project future trade trajectory via extant Indian trade data, and the economic survey of 2023-24 reveals that India exported \$776.68 billion and imported \$854.80 billion, resulting in a trade deficit of \$ -78.12 billion. In other words, a trade deficit equal to 2.3% of GDP. Compared to the previous year, 2022-23, the trade balance has reduced due to declining input costs of fuel and gas. Merchandise export has also declined, though service export has increased marginally. See Table 1 for details. Though total trade figures remained the same in 2023-24 and the previous year, in 2023-24 imports have declined, resulting in a reduction in trade deficit. Owing to a larger decline in imports than exports, the merchandise trade deficit narrowed to \$ 238.3 billion in FY24 compared to a deficit of \$264.9 billion in the previous year.

Remarkably, capital goods' share in merchandise exports significantly rose from 16.3% in FY23 to 18.9% in FY24. This growth indicates India's enhanced supply of machinery, equipment, and other durable goods, signalling potential expansions or updates in its industrial capabilities. Meanwhile, the share of consumer goods in merchandise exports slightly decreased from 48.9% in FY23 to 47.5% in FY24, suggesting a minor decline in the export of finished products meant for direct consumption. Additionally, the share of intermediate goods also declined, from 30.2% to 28.4%.

According to data published by the Directorate General of Commerce Intelligence and Statistics, India's exports are becoming more diverse over the last few years, with some emerging green shoots where Indian merchandise has capably substituted imported goods such as footwear, toys, defence manufacturing and smartphone exports. These developments are demonstrable indicators of the latent capacity possessed by the Indian manufacturing sector to be internationally competitive, given the right institutional incentives, as these are sectors where India faced consistent trade deficits several years ago in an inexplicable manner. The biggest exporting success story over the last few years is India's smartphone exports, where exports have risen to \$15.6 billion, up from parity/domestic self-sufficiency in 2019. In other words, Indian smartphone exports have grown fifteenfold over the last five years, owing to focused investments in this sector, accompanied by the Production Linked Incentive Scheme launched in 2020.

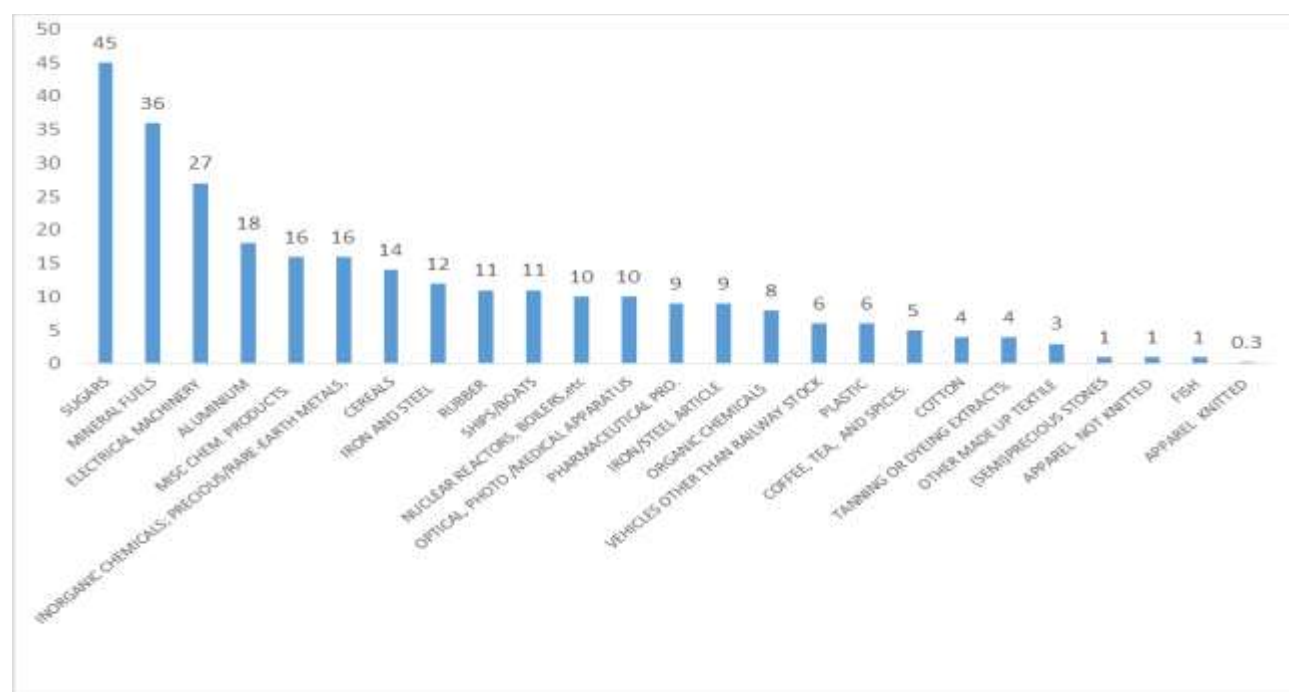
Similarly, the Indian footwear sector is also treading towards a similar trajectory where exports are estimated to double from \$2.5 billion as of 2024 to around \$5.3 billion over the next six years, in addition to a rough tripling of the domestic market in the same time period.

This growth will be driven by increased non-leather footwear demand and a possible shift in leather shoe production.

Upon conducting a deep dive into Indian export sectors, some other established high-volume merchandise export sectors have shown relentless growth and are estimated to continue on an upward trajectory, such as sugar and confectionery, mineral fuel and oils, electrical machinery and associated components, etc. From 2018-23, these three high volume sectors, namely, sugar and confectionery, mineral fuel and oils; & electrical machinery and parts, have registered 43%; 36% and 27% growth per annum.

The overall trade analysis of India's total exports and imports demonstrates that around 25 commodities and goods account for 85% of exports by value. The analysis of these 25 commodities reveals that the export value of 25 commodities has risen by 40% during 2018-23, compared to the growth of 36% in total exports from India. Hence, any analysis of the Indian economy's export potential and trade estimate needs to compute and project the growth outlook for these 25 key commodities that hold the potential to drive India's exports to \$1 trillion by 2030, up from \$450 billion in FY2023-24. In other words, the government, the industry stakeholders and financial institutions need to coordinate on a coherent roadmap that aims to drive the growth in exports of these 25 goods at 14-15% annually, till 2030, to achieve the target \$1 trillion merchandise exports target set forth by the Ministry of Commerce and Industry.

Below is the list of the 25 commodities that account for 85% of Indian exports and their CAGR from 2019-23. This chart broadly shows the composition of Indian exports, with some sunrise sectors such as defence manufacturing and e-commerce altering this structure moderately.



Assuming a 12-percent nominal GDP growth over the next seven years (7-8 percent real growth plus 4-5 percent inflation rate), India's GDP should rise from US\$ 3.31 trillion to US\$ 5.49 trillion by 2030. During this period, the Foreign Trade Policy 2023(FTP 2023) affirms its

commitment to increasing exports from \$ 760 billion to \$ 2 trillion. In other words, not only are exports expected to rise, but their share as a percentage of GDP is also expected to increase, from 23 percent to 27 percent. These developments will only embed and bolster India more firmly in global trade and augment its relative status among other major global powers. By 2035, conditional on continued exports growth, consistent investment in education and capital formation & reform in the labour, land, power markets and farming regulations, it is prudent to project 7 per cent growth annually over the next ten years, thereby ensuring that India will have a GDP of roughly \$6.6-6.8 trillion. In other words, India will be the third largest GDP, and its share in global GDP will increase to 15 %, up from 9% currently.

On the other hand, some optimistic estimates factoring in high reform commitment, low input costs of fuel & rapid assimilation of AI in industries and the service sector to improve productivity and increase capacity utilisation demonstrate the potential for India to increase its annual GDP growth over the next decade to 8-10%. For instance, a study by Accenture on scaling the application of AI shows that India can raise its GDP growth by 1.3% upon spearheading innovative multidisciplinary usage, complemented by government support for training students and employees in AI, as well as funding AI startups. Moreover, as Manvi Mehta, Ruchi Mamania, et al.'s (2019) paper on 'Declining crude oil prices and its implications on the Indian economy' demonstrates, a favourable crude oil price movement by \$10 per barrel can boost the Indian economy's performance by 0.5% approximately. Assuming that this link of crude oil prices remains consistent over time, it is natural to see why India's growth may be 0.5-1% higher in the case of favourable fuel prices over the long term.

At this point, it will be ideal to redirect focus to other global hegemonies and the evolution of commercial dynamics between them and endeavour to analyze its impact on India's foreign trade and global standing. In a world where China, the EU, the USA and the ASEAN group of countries account for 43% of global exports and 62-65% of total global GDP (TrendEconomy, 2026), the global trade paradigm will hinge on their policy orientation and openness towards free and rule-based commerce.

Chinese economy overview

China's economy, now the second largest in the world with a GDP of approximately \$18 trillion in 2023, has been at the forefront of global economic discourse for decades. It recorded a GDP growth of 4.6% in 2024. From a wider lens, China has demonstrated economic transformation without any parallel, as evidenced by its 9% GDP growth rate from 1978 to 2023, which enabled it to evolve from a predominantly agrarian society to an industrial and technological powerhouse in just four decades. Such a revolutionary cultural and economic transformation is unprecedented and nonpareil. Its accelerated growth over such a long period can perhaps be explained by its technocratic government's unique interpretation of capitalism and socialism in a country with Confucian values.

The Chinese economy's powerful achievements are derived from the tremendous motor that is the Chinese industrial sector, which accounts for nearly \$7.2 trillion or 40% of China's GDP and employs about 29% of its workforce. Its manufacturing sector alone accounts for almost 30% of global manufacturing output, making it the largest in the world. The country is the largest producer of steel, cement, and ships, and it dominates the production of electronics, textiles, and machinery. In 2022, China exported goods worth \$3.6 trillion, solidifying its position as the world's largest exporter. However, the sector is not without its challenges; rising

labour costs and a shrinking workforce due to demographic changes are squeezing margins, and there is increasing pressure to move up the value chain into more advanced manufacturing.

The services sector has become the largest contributor to China's economy, accounting for 52.8% of GDP. The rise of the middle class, which now numbers over 400 million people, has fueled demand for a wide range of services, from finance and real estate to healthcare and education. In 2022, retail sales in China reached \$6 trillion, underscoring the strength of domestic consumption. This has been a structural reordering when compared to earlier decades, when domestic consumption was suppressed to drive merchandise exports and investment in the economy.

Finally, agriculture, though it only contributes around 7.3% to GDP, remains crucial, particularly when accounting for the fact that this sector supports nearly 24% of the workforce and much of the rural Chinese economy. However, as urbanisation continues, with over 64% of the population now living in cities, the contribution of agriculture to the overall economy is diminishing.

Looking ahead, the Chinese economic contours over the next decade will be shaped and delineated by the success of its transition to renewable energy and by its transformation to a R&D-based knowledge economy in cutting-edge sectors such as semiconductors, AI and quantum computing.

Chinese economy till 2035

China has a well-articulated plan for 2030 that aims to propel Chinese GDP to \$33.7 trillion and raise its per capita income to around \$16,000 per person in order to achieve high-income status. Incidentally, this plan will mean that the Chinese economy will overtake the American GDP in nominal dollar terms by 2030.

The growth in forthcoming years is extremely vital in charting the Chinese economy's destiny because many countries have failed to make the structural adjustments necessary to make the transition from middle-income status to high-income status, and then these countries seem to stagnate therein. Therefore, Chinese planners taking cognisance of this risk aim to shift the Chinese economy from an industrial powerhouse to a knowledge-based economy. In other words, China aims to become an economy that is at the cutting edge of the latest technology, characterised by a more urbanised population that functions in a sustainable way. It is the aim of this net-assessment analysis to project till 2035 while assuming that China will meet its vision for 2030.

The success of this plan hinges on its ability to increase and scale its R&D investments as well as intellectual property filing, in addition to its capability to increase its labour productivity as well as total factor productivity over the next six to ten years. Therefore, the next section is devoted to the analysis of Chinese human capital and technological innovation.

Chinese human capital and technological innovation

However, any attempt to characterise and project the Chinese economy's future trajectory is fraught with under-recognition of its inherent structural distinctiveness and complexity, and thus needs to be tempered with cautious recognition of its tremendous institutional strength and brittle frailties.

At this point, it will be ideal to state that the evolution of commercial dynamics, either for more globalisation or de-globalisation, and its impact on India's foreign trade and global standing will depend on a few major hegemony and the political orientation and economic paths of their economies. In a world where China, the EU, USA and ASEAN group of countries account for 43% of global exports and 62-65% of total global GDP (Trend Economy, 2026), the global trade paradigm will hinge on their policy orientation and openness towards free and rule-based commerce.

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