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Why the Dragon and the Elephant Diverged: State Capability, Structural Transformation and Inclusive Development in China and India

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Abstract

China and India embarked on planned development at roughly the same time and had comparable per capita incomes about four decades ago. Yet they have since diverged sharply in economic growth, human development and inequality. This paper examines the sources of that divergence. It first analyses the contrasting trajectories of agricultural growth. Following agrarian reforms after 1980, China sustained much faster agricultural growth, strengthening rural incomes and domestic demand. India's agrarian transformation remained incomplete, with lasting consequences for growth and structural change. The paper then argues that deeper institutional differences explain the widening gap. It examines divergences in governance, state capability and administrative capacity, investment in education, and growth strategies, particularly the extent to which growth generated productive employment. These factors shaped both the pace and inclusiveness of development. The paper concludes by showing how differences in agricultural transformation, state capability, human capital formation and employment-intensive growth contributed to the contrasting trajectories of inequality in the two countries.

JEL classification

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China, India, state capability, structural transformation, human development, inequality

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Introduction

The rise of China and India has revived the claim that the twenty-first century may become "Asia's century". Until 1700, the two countries together accounted for roughly half of world output. Over the next three centuries, colonialism, unequal trade, and resource extraction contributed to the decline of the Asian giants and the simultaneous rise of Western Europe and later the United States. By the twentieth century, the West had come to account for around half of global GDP.

Since the turn of the millennium, this pattern has begun to reverse. In purchasing-power-parity (PPP) terms, the BRICS countries now collectively exceed the G7 economies and are substantially larger than the EU-27. IMF and other long-term projections suggest that by 2030–2040 the BRICS share of global GDP will continue to rise while that of the G7 declines. Within this broader shift, China and India remain the principal drivers. Although China's growth is slowing, it is likely to remain the world's largest economy in PPP terms. India, however, has been the fastest-growing major economy since 2021 and is expected to contribute significantly to future BRICS expansion.

Yet the contemporary success of the two countries masks a striking divergence in their development trajectories. After three decades of planned development, China and India had comparable levels of per capita income around 1980. Thereafter, however, China pulled sharply ahead not only in income but also in human development outcomes. Understanding the sources of this divergence is the central concern of this paper.

The foundations of China's subsequent success were laid during the Mao era. Extensive land reforms, investments in basic education and public health, and a relatively egalitarian distribution of productive assets created a broad base of human capital by 1980. India's post-independence experience was markedly different. While the abolition of the Zamindari system weakened feudal land relations and land ceilings reduced some concentration of ownership, land distribution remained highly unequal. Public investment in health and elementary education also remained limited. Consequently, the two countries entered the reform era with very different social foundations.

The contrast was already evident by 1980. Life expectancy in China was about 66 years compared with 54 years in India. Infant mortality stood at roughly 45 per thousand live births in China and 110 in India. Literacy rates were around 65 per cent in China but only 44 per cent in India. Fertility had fallen to about 2.7 children per woman in China, while India's total fertility rate remained close to 4.8. These differences reflected the much broader reach of basic education, health services, and social reform in China during the preceding three decades.[1]

Before examining the factors underlying post-1980 divergence, it is useful to note important civilizational differences between the two countries. China is relatively homogeneous, with

[1] Sen and Dreze discuss these differences in a series of their books, as does Bardhan (

the Han population accounting for over 90 per cent of the population, despite the presence of 55 officially recognized minority nationalities. India, by contrast, is one of the world's most diverse societies. It encompasses multiple ethnolinguistic groups, including Indo-Aryan, Dravidian, Tibeto-Burman, and Austroasiatic populations, as well as more than 700 officially recognized Scheduled Tribes.

Linguistic diversity also differs sharply between the two countries. Following the 1949 Revolution, China promoted Mandarin as a common national language. India, in contrast, recognizes 22 official languages and organized most states along linguistic lines after 1956. Religious diversity is similarly greater in India. While the Chinese state officially recognizes five religions and a large share of the population identifies as non-religious or practices multiple traditions simultaneously, India is home to several major world religions and constitutionally protects religious pluralism.

These differences matter because they shape governance. China's relative cultural homogeneity has facilitated centralized state-building and policy implementation. India's extraordinary diversity has required governance through a federal and democratic framework capable of accommodating multiple identities and interests. The resulting differences in state organization and capacity form an important part of the explanation for divergent development outcomes.

This paper identifies six interrelated factors that account for the widening gap between China and India after 1980. The first concerns the contrasting historical legacies of colonialism and their long-term developmental consequences. The second examines agrarian transformation, where China achieved a far more successful restructuring of rural production and asset ownership. The third analyzes state organization and fiscal arrangements, which enabled China to build greater state capacity than India despite the latter's formal federalism. The fourth explores differences in bureaucratic capability and administrative effectiveness. The fifth investigates the evolution of the two education systems and their implications for human capital formation. The sixth examines industrial policy, structural transformation, and employment creation in the non-farm sector. The paper then considers the implications of these processes for the evolution of income and wealth inequality in both countries and concludes by assessing the prospects for future convergence in per capita income (in PPP $) and human development.

1. Two Kinds of Colonization in India and China: Their Consequences

India and China were among the world's oldest civilizations and together accounted for over half of global GDP as late as 1700. Their encounters with Western imperialism, however, differed fundamentally, which then had consequences for post-independence economic development. India came under direct British colonial rule from the late eighteenth century until 1947. China, by contrast, experienced partial foreign domination after the First Opium War (1839–42) but was never fully colonized. Instead, it underwent what is often described

as “semi-colonization,” culminating in the Communist Revolution of 1949 after the so-called “century of humiliation.”

This distinction had profound consequences for state capacity, economic structure, and subsequent development. Economic historians such as Naoroji (1901) and Patnaik (2023) have shown how colonial India was reorganized to serve British industrial capitalism. India became an exporter of raw materials—cotton, jute, indigo, tea, and opium—and an importer of British manufactured goods. The result was large-scale deindustrialization, particularly in textiles, which had previously been among India's most important industries (Thorner and Thorner, 1962; **Bagchi, 1976**).

At the same time, substantial wealth was transferred from India to Britain through taxation, trade surpluses appropriated abroad, payments to British officials, and the financing of imperial wars. The colonial state prioritized revenue extraction, law and order, and export infrastructure rather than mass education or industrial development. Consequently, India began its post-independence development effort with very weak social indicators: literacy was only about 18 per cent and life expectancy at birth barely 32 years.

China's experience was different. Although foreign powers extracted commercial and territorial concessions, the Qing state survived and no single power exercised comprehensive control comparable to British rule in India. Chinese governments retained significant administrative authority, continued to collect taxes, maintained indigenous bureaucratic institutions, and preserved civilizational continuity. Thus, while Chinese state institutions were weakened, they were not destroyed.

The contrasting colonial legacies became especially important after 1950. China inherited a relatively centralized administrative apparatus and traditions of bureaucratic coordination that could be adapted by the revolutionary state. India inherited democratic institutions and a federal polity, but also a colonial bureaucracy originally designed for extraction rather than developmental mobilization. Both countries adopted state-led development strategies after 1950, yet they began with very different institutional foundations.

China's administrative system provided the basis for a highly penetrative state, strong local coordination, a disciplined cadre structure, and the capacity to implement policies rapidly. These institutional advantages proved important both during the era of central planning and after the market-oriented reforms initiated in 1978.

India's state, by contrast, was democratic and institutionally resilient but also more fragmented, legalistic, and slower in decision-making. Coordination across levels of government was more difficult, reducing the state's ability to pursue industrial transformation with the same effectiveness as China.

The historical irony is that India underwent extensive administrative modernization under British rule, whereas China did not. Yet after 1980, China's combination of inherited bureaucratic traditions, revolutionary mobilization, and Leninist organization generated a

more capable developmental state (GEnc et al, 2017). The differing legacies of colonialism therefore constitute the first major explanation for the divergence in income and human development outcomes between the two countries after 1980.

2. An Agrarian Revolution Preceded Rapid Industrialization in China

Both China and India implemented land reforms, but the transformation of agrarian relations was far more radical and consequential in China. Following the introduction of economic reforms under Deng Xiaoping, the commune system was dismantled between 1978 and 1984 and replaced by the Household Responsibility System (HRS) (Meng, 2024). While land remained collectively owned, rural households received long-term use rights and were allowed to retain and sell surplus output after fulfilling state procurement obligations. By 1984, almost all farmland had shifted to household cultivation. The reform substantially strengthened production incentives, leading to higher productivity, greater crop diversification, increased input use, and more rapid adoption of new technologies.

A second factor was the sharp increase in state procurement prices after 1978. Grain, oilseed, and cotton prices were raised significantly, reversing the price distortions of the Maoist planning era and providing strong incentives for farmers to expand production. Agricultural output responded rapidly.

Third, China gradually liberalized rural markets by relaxing restrictions on private trade, crop choice, and agricultural marketing. Growth increasingly shifted from grain production toward higher-value activities such as livestock, fisheries, fruits, vegetables, and oilseeds. This diversification generated faster growth in rural incomes than would have been possible under a grain-centred strategy.

Fourth, China promoted the rapid expansion of Township and Village Enterprises (TVEs) (Zou, 2000). These enterprises became a major source of rural industrialization, producing manufactured goods, construction materials, machinery, and services. Rising agricultural productivity released labour from farming, while TVEs absorbed much of this surplus labour into non-farm employment. By the 1990s, non-farm earnings had become the principal source of income for many rural households.

Finally, the agrarian transition was supported by large-scale public investment in irrigation, flood control, rural roads, electrification, agricultural research, extension services, education, and health. These complementary investments reinforced productivity growth and facilitated structural transformation.

The results were dramatic. Agricultural output grew by roughly 7–8 per cent annually between 1978 and 1984, real rural incomes doubled during the first half of the 1980s, and rural poverty declined rapidly (Lin, . In effect, China achieved an agrarian revolution that laid the foundations for subsequent industrialization.

The contrast with India was striking. Although agricultural growth accelerated after 1980 and the Green Revolution improved productivity in some regions, gains remained geographically

uneven. Rural wage growth was modest, the expansion of rural non-farm employment was much slower than in China, and poverty reduction proceeded at a considerably slower pace. In fact, India's agricultural output/income growth has not exceeded 3.2 % pa in any decade since 1950, which has remained a serious bottleneck preventing aggregate demand rising in the economy for non-farm goods. By contrast, China's rural income growth, driven by agrarian transformation thus became a critical driver of its subsequent economic divergence from India.

China industrialized the countryside after 1980. This may be the single biggest difference. China did not rely only on farming incomes. TVEs were created, and manufacturing jobs, local supply chains, rural entrepreneurship, export linkages. The result was that Chinese surplus labour moved into productive activities. By contrast, India's rural non-farm sector remained: informal, low productivity, weakly connected to industrial policy. In fact, India's lack of investment in education (and health), compared to China, was an important factor why India did not industrialize its rural areas. One of the most important reasons why rural industry did not take off in India is that there had been precious little investment into schooling for children, or on vocational education and training (see Mehrotra and Parida, 2026).

3. **Governance and State Organization**[2]

A third explanation for the divergence between China and India after 1980 lies in differences in state organization and governance. Although both are large and populous countries, they differ fundamentally in their political systems, constitutional structures, and fiscal arrangements. These differences have had important consequences for state capacity and developmental outcomes.

India's extraordinary ethnic, linguistic, and religious diversity makes democratic and federal governance virtually indispensable. China, by contrast, has been governed since the 1949 Revolution as a one-party state under the Communist Party of China (CPC). This is the first major difference between the two countries. In China, CPC cadres play an active role in policy implementation at all levels of government and are deeply involved in economic management and industrial policy. Such formal integration of party and state is absent in India, where bureaucratic neutrality is constitutionally expected and party involvement in administration is officially discouraged.

A second difference concerns constitutional structure. China is a unitary state, while India is a federal union. Indian states possess constitutionally protected powers that cannot easily be

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[2] Prof Sir Peter Nolan, Professor Emeritus at Cambridge University (and my Ph.d supervisory) and former Sinyi Prof of Chinese Business, wrote in a personal communication: "The root of the contrast, as you correctly observe, lies in the difference in the nature of the state in the two countries. The origins of the CPC are deeply rooted in Chinese history reinforced by 28 years fighting the KMT and the Japanese. The post-Independence Indian state was born in Cambridge University, the university-of-choice for the Indian upper class, nurtured by the British. One cannot give too much attention to the nature of the state in the respective countries!"

withdrawn by the centre. In China, local governments exercise authority delegated by the centre rather than constitutionally guaranteed powers. This arrangement permits experimentation within a hierarchical framework. Local governments can innovate, and successful experiments—such as Special Economic Zones and land-financing mechanisms—can subsequently be scaled up nationwide. Strong accountability mechanisms help ensure that local flexibility remains aligned with national objectives.

The most consequential difference, however, concerns fiscal decentralization. Paradoxically, although India is a federal democracy and China a unitary one-party state, China has been significantly more fiscally decentralized.[3] This distinction has had important implications for both economic growth and human development.

A substantial public finance literature argues that fiscal decentralization improves the efficiency of public service delivery and promotes growth (Bahl and Linn, 1992; Bird, 1996). The principle of subsidiarity suggests that public functions should be performed at the lowest level capable of delivering them effectively. While defence must remain centralized, services such as education, health, water supply, and local infrastructure are generally delivered more efficiently by sub-national governments. Historical evidence from the now-industrialized countries also suggests that rising incomes have typically been accompanied by both an expansion of the state and greater fiscal decentralization, particularly in social sectors such as health and education (Lindert, 2004).

China's post-1978 reforms reflected this logic. Prior to reform, revenue collection was highly centralized and sub-national governments had little fiscal autonomy. Beginning in the early 1980s, provinces, counties, and townships were increasingly permitted to retain locally generated revenues and finance a larger share of their own expenditures. In many provinces, township and county governments could retain the full marginal revenue generated within their jurisdictions.

These reforms fundamentally altered local incentives. Local governments could reinvest retained revenues in infrastructure, education, health, and economic development, thereby attracting investment and expanding their future revenue base. Lin and Liu (2000) found that fiscal decentralization had a significant positive effect on provincial growth rates, while Jin and Zou (2005) argue that economic reforms effectively transformed China's unitary system into a form of economic federalism.

Fiscal decentralization also contributed directly to rural industrialization. Township and county governments had strong incentives to establish and support Township and Village Enterprises (TVEs), which generated employment, expanded local revenues, and accelerated structural transformation. At the same time, China's cadre evaluation system linked promotion prospects to economic performance. Provincial and local leaders were rewarded

[3] For a detailed discussion of this issue, see Mehrotra (2016)

for achieving rapid growth and improving development outcomes, creating powerful incentives for developmental governance.[4]

India's trajectory was markedly different. At independence, a strong central state was understandable. The colonial state had been highly centralized, designed primarily for revenue extraction and maintenance of order. The new Indian state also faced the challenge of integrating more than 560 princely states into a single nation while coping with the disruptions of Partition. Centralization was therefore regarded as necessary for national consolidation.

However, the persistence of high levels of fiscal centralization long after these challenges had passed is more difficult to justify. Constitutional amendments in 1992–93 sought to strengthen local governments by devolving a range of functions to rural and urban local bodies. Yet meaningful decentralization requires not only functions but also funds and functionaries (Mehrotra, 2016). In practice, state governments have often been reluctant to transfer authority and resources to local governments. Consequently, local institutions remain dependent on higher levels of government and lack the autonomy needed to respond effectively to local development needs.

The contrast with China is striking. Chinese local governments acquired both the resources and incentives to promote growth, expand public services, build infrastructure, and attract investment. Fiscal decentralization strengthened local accountability while encouraging experimentation and policy innovation. Indian states and local governments, by contrast, have operated within a more centralized fiscal framework that has limited such initiative.

One of the key reasons for China's superior performance in both economic growth and human development has therefore been its ability to combine centralized political authority with extensive fiscal decentralization. India, despite being a federal democracy, has remained comparatively centralized in fiscal terms. Greater fiscal decentralization could help release the entrepreneurial and administrative energies of India's states and local governments, thereby strengthening both growth and human development outcomes.

4. Administrative Capability and Learning

A fourth explanation for the divergence between China and India lies in differences in administrative capability. The effectiveness of the state in delivering infrastructure, public services, and development programmes depends not only on fiscal resources but also on the competence, incentives, and learning capacity of public officials. In this regard, China developed a significantly more performance-oriented administrative system than India.

China's fiscal decentralization was accompanied by an incentive structure that placed strong pressure on local officials to deliver results. The target responsibility system established a set of performance criteria that guided local cadres in allocating resources and implementing policies (Tsui and Wang, 2004). Through a combination of rewards and penalties, higher

[4] For a detailed discussion of this issue, see Yuen Yuen Ang (2016)

levels of government assigned quantitative targets to subordinate administrations, shaping local priorities in economic development, social progress, and party-building (Ang, 2015). Responsibility contracts specified measurable goals to be achieved within a defined period, with promotion and compensation linked to performance. Since the 1990s, this system has operated from provincial governments down to counties, townships, and villages, translating national development objectives into concrete local targets. There is no comparable system in India.

Promotion incentives further distinguish the two systems. In China, advancement within the bureaucracy and party hierarchy is strongly influenced by developmental performance, with evaluations overseen by the Communist Party's Organisation Department. In India, promotions depend more heavily on seniority and confidential assessments by superiors. As a result, outcomes matter much more in China, whereas bureaucratic careers in India often reward procedural compliance and avoidance of error.

Differences in tenure reinforce these contrasting incentives. Chinese officials generally remain in positions long enough for their performance to be assessed, often for periods aligned with the five-year planning cycle. In India, by contrast, frequent transfers are common. Officers may be moved after only a year or two, often into entirely different departments regardless of prior experience or domain expertise. Such short tenures weaken accountability, discourage innovation, and limit opportunities for learning. They also make it difficult to attribute success or failure to individual administrators.

China has also institutionalized learning within its bureaucracy. Senior officials are frequently transferred across provinces, facilitating the diffusion of successful practices and administrative experience. India's Planning Commission could potentially have played a similar role by promoting policy learning across states, but it never effectively fulfilled this function (Mehrotra and Guichard, 2020).

The divergence became even more pronounced after 2014, when India abolished the Planning Commission. China, by contrast, retained and strengthened its planning apparatus. The former State Planning Commission, now the National Development and Reform Commission (NDRC), continues to play a central role in coordinating long-term development strategy and industrial policy. While India discontinued five-year plans after 2015, China has continued to rely on planning as an instrument for guiding structural transformation and policy coordination.

Finally, China has long embraced experimentation as a core principle of governance. Major reforms are typically piloted in selected localities before being expanded nationally. This process allows unsuccessful initiatives to be abandoned while successful innovations are refined and scaled up (Rodrik, 2008). China's Special Economic Zones are perhaps the best-known example of this approach.

India, in contrast, has rarely institutionalized policy experimentation before nationwide implementation. Combined with frequent bureaucratic transfers and weak incentives for

innovation, this has limited the state's capacity to learn from experience and adapt policies effectively. Moreover, political advancement in China generally requires a successful record in governing a province or major locality, whereas national political leadership in India is less systematically linked to sub-national administrative performance.

Taken together, these differences in incentives, tenure, learning, planning, and experimentation have contributed significantly to China's greater administrative effectiveness. They help explain why the Chinese state has generally been more successful than its Indian counterpart in implementing development policies and sustaining rapid economic and social transformation.

5. Education

A fifth explanation for the divergence between China and India lies in the evolution of their education systems. Both countries began the 1950s with very low literacy levels, but they adopted markedly different approaches to educational development.

The first difference was in the sequencing of educational expansion. China pursued a bottom-up strategy that prioritized mass literacy and universal basic education, whereas India adopted a more top-down approach that accorded relatively greater attention to higher education at an early stage (Bharti and Yang, 2023). As a result, China achieved broader access to schooling, higher average years of education, and lower educational inequality. India's strategy eventually contributed to its later success in information technology and skill-intensive services, but it delayed the universalization of basic education and limited the supply of educated workers needed for labour-intensive industrialization.

A second difference concerned the structure of educational provision. China diversified its education system through extensive vocational and technical education and developed a tertiary system with a much larger proportion of engineering and technical graduates. This generated the human capital required for manufacturing growth and industrial upgrading. By contrast, India largely neglected vocational education for much of the post-independence period, resulting in an education system heavily oriented towards general academic qualifications and university degrees (Mehrotra, 2014).

A third difference involved the sequencing of quantity and quality. China initially focused on expanding access to schooling and only later shifted attention to quality enhancement. India, in contrast, attempted to build high-quality institutions of higher education before achieving universal basic schooling. While this strategy produced pockets of excellence and a skilled elite, it also contributed to persistent inequalities in educational attainment.

A fourth difference is in respect of pace of expansion of higher education, when demand rose, and the quality of HE, as well as the disciplines that dominated student HE enrolment.

These differences are evident in the pace of educational expansion. India did not achieve near-universal primary enrolment until the mid-2000s and enacted compulsory education legislation only in 2009. China moved much earlier. Compulsory education was incorporated

into the Constitution in 1982, and subsequent legislation extended compulsory schooling from six to nine years. Educational targets were integrated into successive Five-Year Plans and supported by sustained public investment (Mehrotra, 2005).

Once mass enrolment had largely been achieved, China shifted its focus towards quality. Deng Xiaoping's call in 1977 to pay attention not only to educational expansion but also to educational quality marked an important policy transition. China established key institutions, strengthened standards, and introduced nationwide competitive examinations. The restoration of the gaokao university entrance examination in 1977 created a uniform national standard for entry into higher education and was subsequently complemented by standardized postgraduate admissions.

The contrast with India is striking. Until recently, admission to higher education depended largely on state-level school examination results, which varied significantly in quality and standards across states. A common undergraduate entrance system through the Common University Entrance Test (CUET) was introduced only in 2022 and still does not cover all universities. Consequently, higher education expanded rapidly, particularly through private institutions, but quality assurance remained uneven. The result was massification without a commensurate improvement in learning outcomes or graduate employability.

Another major difference is in respect of HE. HE enrolment for the relevant age cohort is **60.2% in 2023** (as the official number reported by China's Ministry of Education). China therefore entered what Martin Trow would classify as the **"universal" phase of higher education** (GER above 50%) (Trow, 1973; Scott 2019).[5] Within HE, the share of students in China studying STEM subjects is slightly greater than in India. China's higher education system is more heavily oriented toward engineering, technology and other STEM disciplines than India's. While both countries produce exceptionally large numbers of STEM graduates, estimates suggest that STEM fields account for roughly one-third of tertiary graduates in India and a somewhat larger share in China. The gap is especially pronounced in engineering and technical education, reflecting China's manufacturing-led development strategy." (OECD, 2019; Carnoy, M., et al., 2013; Loyalka, P. et al.,2021).

It is not that China's STEM share is dramatically larger than India's (the difference is probably only a few percentage points), but that China combines a slightly higher STEM share with far higher tertiary enrolment, much stronger engineering orientation, and closer integration between universities and manufacturing industry. That is how the dramatic hi-tech achievements and technological breakthroughs come.

Perhaps the most important contrast between the two countries education systems concerns Technical and Vocational Education and Training (TVET). China developed a dual-track upper-secondary system consisting of general academic schools and vocational schools.

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[5] According to Martin Trow's influential typology, higher education systems evolve from **elite** (GER below 15 per cent) to **mass** (15–50 per cent) and finally to **universal** systems (above 50 per cent participation of the relevant age cohort) (Trow, 1973; Scott, 2019

Beginning in the 1980s, vocational and technical enrolment expanded rapidly, and by the 1990s vocational students often accounted for 40–50 per cent of upper-secondary enrolment. Chinese policy explicitly sought parity between vocational and general education.

This extensive vocationalization served several developmental objectives. First, it facilitated the universalization of secondary education by providing alternatives to purely academic schooling. Without a large vocational stream, demand for academic secondary schools and universities would have expanded beyond the state's capacity to finance them.

Second, vocational education made educational expansion fiscally more sustainable. Many vocational institutions were linked to local industries, township enterprises, agricultural modernization programmes, and employer-supported training. Local governments therefore had strong incentives to support vocational schools because they directly contributed to local economic growth.

Third, vocational education created a close alignment between education and industrialization. China's manufacturing-led development strategy generated demand for technicians, machinists, welders, electronics workers, construction supervisors, logistics personnel, and other skilled workers. TVET institutions supplied much of this workforce. The connection between educational planning and industrial policy was therefore much tighter than in India (Mehrotra and Parida, 2026).

Finally, vocational education improved the employment prospects of rural youth and encouraged continued participation in education. For many students, vocational pathways offered a clearer route into productive employment than purely academic qualifications.

Demographic factors reinforced these educational advantages. China's investments in primary health care and family planning, followed by the one-child policy, accelerated fertility decline. Replacement-level fertility was achieved by 1991, reducing pressure on educational resources and increasing expenditure per student. India reached replacement fertility only in 2021, largely because demographic transition occurred much later in the northern Hindi-speaking states. China's earlier demographic transition therefore facilitated both the expansion and improvement of educational provision.

China's higher education reforms similarly reflected a phased approach. Universities were granted greater autonomy, while substantial resources were directed towards creating world-class institutions. Importantly, these reforms came only after broad-based literacy and secondary education had largely been achieved. India, by contrast, invested heavily in elite higher education institutions before achieving universal school education and without developing a comparable vocational system.

Taken together, these differences in educational strategy had major developmental consequences. China's emphasis on universal basic education, vocational training, standardized quality control, and alignment between education and industrial policy produced the human capital needed for rapid industrialization. India's strategy generated internationally

competitive elites and supported the growth of skill-intensive services, but it delayed educational universalization and failed to provide the broad-based technical workforce required for manufacturing-led growth. These educational choices therefore constituted another important factor underlying the divergence between China and India after 1980.

6. Growth, Jobs and Informality

A sixth explanation for the divergence between China and India lies in their contrasting growth strategies after economic reforms began. While the role of agriculture in structural transformation has already been discussed, a second major difference was the presence in China of a coherent industrial policy and an explicit employment strategy. India, particularly after 1991, lacked both, and still does. This difference helps explain the contrasting trajectories of growth, job creation, and labour-market outcomes in the two countries.

China's rapid growth between 1980 and 2020 was underpinned by a development strategy that combined agricultural transformation, rural industrialization, export-oriented manufacturing, and active state support for employment generation. As Noman (2020) argues, the first stage of this strategy involved raising agricultural productivity through the Household Responsibility System. Higher rural incomes increased demand for non-farm goods, while rising productivity released labour from agriculture.

The second stage was rural industrialization. Fiscal decentralization enabled township and county governments to establish and support Township and Village Enterprises (TVEs), which absorbed workers released from agriculture and generated new sources of rural income. Initially collectively owned by local governments, many TVEs were later privatized, but they had already laid the foundations for a broad-based process of industrialization extending beyond the major cities. This rural industrial transformation had no equivalent in India (mainly because no agrarian revolution had resulted in a sharp rise in demand for non-food related consumer goods, both durable and non-durable).[6]

The third stage involved the expansion of labour-intensive manufacturing linked to exports. Large-scale migration from rural areas to the eastern coastal provinces supplied labour to rapidly growing industries. Special Economic Zones attracted foreign direct investment, while restructuring and gradual privatization of state-owned enterprises improved efficiency. As a result, much of China's expanding non-farm sector emerged as formal employment.

This feature of China's development strategy is particularly important. Since most urban enterprises originated either as state-owned firms, collectively owned enterprises, or formally registered private firms, the growth of employment occurred largely within the formal economy. Formal enterprises generated tax revenues, provided greater labour protection, and facilitated productivity growth. By 1990, formal employment accounted for about 41 per cent of total employment in China, rising to around 55 per cent by 2011 (Noman, 2020). In other

[6] This classic middle income trap situation has beset Latin America for at least four decades, and has now beset India. See our discussion in Mehrotra and Parida (2026)

words, economic transformation was accompanied by substantial growth in formal-sector employment.

India's experience was very different.[7] Economic reforms accelerated growth, with GDP expanding at more than 6 per cent annually on average between 1992 and 2019. During certain periods, particularly between 2004 and 2014, growth approached 8 per cent per year. However, this growth was not accompanied by a comparable expansion of productive employment. Industrial policy was largely abandoned after 1991, and no explicit employment strategy emerged to guide structural transformation (MEhrotra and Parida, 2026).

As a result, India's labour market remains dominated by informality. Around 85 per cent of non-farm enterprises operate in the informal sector, and nearly 70 per cent are not registered with any government agency (Mehrotra and Giri, 2023). Unlike China, where industrialization created large numbers of formal enterprises, India's growth process generated relatively limited formal employment. Consequently, much of the workforce remains concentrated in low-productivity activities with limited access to social protection or labour rights.

India's growth pattern has increasingly relied on a relatively narrow set of high-productivity sectors, and its corporate industry is highly capital and import-intensive (while its MSMEs are are mostly small scale enterprises characterised by low-productivity and low tech). Since the late 1990s, information technology and business services have become major drivers of growth. More recently, sectors such as pharmaceuticals, automobiles, mobile-phone assembly, and digital services have expanded rapidly and increased India's share of global markets. India's Global Capability Centres (2200 of them in 2025) now provide sophisticated accounting, legal, research, and other business services for multinational corporations, while digital public infrastructure has stimulated innovation in fintech, e-commerce, logistics, and related activities.

However, these sectors are not sufficiently labour-intensive to absorb the 6-7 millions at least entering the labour force each year. The challenge is therefore not growth alone but the employment intensity of growth. Even sustained growth rates of around 6–6.5 per cent may be insufficient to generate the volume of productive jobs needed by a large and still relatively poor population.

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[7] A former India Planning Commissioner wrote to me in a personal communication: “China's planners were mostly engineers; India's mostly economists.” He went on to share the following quote from "How China Escaped Shock Therapy: The Market Reform Debate" (Routledge Studies on the Chinese Economy) by Isabella M. Weber:
"The famous Harvard development economist Dani Rodrik represents the economics profession more broadly when he answers his question of whether "anyone (can) name the (Western) economists or the piece of research that played an instrumental role in China's reforms" by claiming that "economic research, at least as conventionally understood' did not play "a significant role".

Recent policy discussions increasingly argue that digital technologies can transform India's vast small-enterprise sector by providing access to credit, markets, and new technologies. The expectation is that digital infrastructure will help small manufacturing firms achieve some of the advantages previously enjoyed only by larger enterprises. While this possibility is important, it faces a significant constraint: a large proportion of India's micro, small, and medium enterprises remain unregistered and outside formal regulatory systems. Their limited visibility to government agencies makes it difficult to provide effective support or integrate them into modern value chains (see Mehrotra and Giri, 2023; Mehrotra and Kumar, 2026).

The contrast with China is therefore clear. China's growth strategy combined agrarian reform, rural industrialization, export-oriented manufacturing, and active industrial policy to generate rapid structural transformation and large-scale formal employment. India's growth strategy produced internationally competitive service sectors and respectable aggregate growth, but it generated far fewer productive jobs and left the economy overwhelmingly informal. The differing relationship between growth and employment thus constitutes another major explanation for the widening developmental gap between the two countries after 1980.

7. Inequality in India and China: Different Causes, Different Outcomes

A final dimension of the India–China divergence concerns inequality. Although both countries have experienced rising inequality during their transition to market-oriented economies, the extent and underlying causes differ significantly.

Income inequality is lower in China than in India, partly because China has achieved much higher levels of urbanization, industrial employment, and structural transformation. According to the World Inequality Database (WIL), the top 10 per cent of income earners in India receive about 58 per cent of national income, compared to about 43 per cent in China. At the same time, China's per capita income is more than twice India's (in PPP, 2025), implying that even lower-income groups in China generally enjoy higher absolute living standards.

Wealth inequality is also exceptionally high in India. The share of wealth and income accruing to the top 1 per cent has risen sharply since economic liberalization and is now among the highest recorded in modern Indian history (WIL, 2023). The concentration of wealth at India's relatively low level of per capita income ($2820 in 2025 in nominal US $) is unusual by international standards and suggests that the gains from growth have been distributed very unevenly.

Several factors explain these differences. First, the education systems evolved differently. As discussed earlier, China prioritized universal basic education and later expanded vocational and technical training. India expanded higher education earlier but delayed universalization of schooling and invested far less in vocational education. Bharti and Yang (2024) argue that educational inequality has contributed significantly more to wage inequality in India than in China. Unequal access to education has therefore reinforced broader economic disparities.

Second, the nature of growth differed. China's industrialization strategy generated large numbers of relatively productive jobs in manufacturing and modern services, while India's growth has been more concentrated in skill-intensive services and capital-intensive sectors. Such growth creates fewer opportunities for less-educated workers and contributes to a widening gap between skilled and unskilled labour. Rising capital intensity in organized manufacturing has further increased the share of income accruing to owners of capital relative to labour.

Third, increasing market concentration appears to have contributed to wealth concentration in India. Recent research (Acharya, 2023; Commander et al, 2025) suggests that a growing share of manufacturing and service-sector activity is concentrated among a small number of large firms. This trend has strengthened the economic position of dominant business groups while limiting opportunities for smaller enterprises.

Finally, although both countries experience forms of crony capitalism, the Chinese state has generally demonstrated a greater capacity to discipline large firms and align business interests with broader developmental objectives. In India, the state's capacity to regulate powerful economic interests has often been weaker, allowing wealth concentration to deepen.

Thus, while market-oriented reforms increased inequality in both countries, India's combination of educational inequality, service-led growth, persistent informality, and concentrated economic power has produced a more unequal outcome than in China.

Concluding Remarks

China and India are two of the world’s four oldest civilizations (the others being Egypt and Mesopotamia).[8] They are also the oldest continuous surviving civilizations. This paper began by noting that India and China had broadly similar levels of per capita income around 1980–1990 after three decades of planned development. Thereafter, their trajectories diverged sharply. China grew much faster for nearly four decades, resulting in substantially higher per capita income, more rapid poverty reduction, better human-development outcomes, and a more advanced structural transformation.

The divergence was not the result of a single factor. Rather, it emerged from a combination of mutually reinforcing processes. China's earlier agrarian transformation created the foundations for industrialization. Fiscal decentralization strengthened incentives for local governments to promote development. Administrative systems rewarded performance, encouraged experimentation, and facilitated policy learning. Educational expansion prioritized universal schooling and vocational training, generating the human capital required for manufacturing growth. Industrial policy and employment-oriented growth strategies created large numbers of productive and increasingly formal jobs. Together, these factors contributed to faster growth and better human-development outcomes.

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[8] Mesopotamia

India followed a different path. Democratic governance and federalism reflected the realities of a highly diverse society, but fiscal centralization, weaker administrative incentives, delayed educational universalization, limited vocationalization, and the absence of a coherent industrial and employment strategy constrained structural transformation. Growth accelerated after economic reforms, but it generated fewer productive jobs and left much of the workforce in informal employment.

Looking ahead, convergence remains possible. China's growth is slowing as the country ages, while India continues to enjoy a relatively favourable demographic profile. Yet demography alone will not determine outcomes. The key question is whether India can raise productivity through faster manufacturing growth, better educational outcomes, higher female labour-force participation, greater urbanization, technological upgrading, and stronger state capacity. If these conditions are met, India can continue narrowing the gap with China in the coming decades. Whether convergence occurs, however, will ultimately depend on the quality of institutions and policies that shape India's future development trajectory.

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