
East Asia's Paths to Industrialisation and Prosperity

Lessons for India and Other Latecomers in South Asia

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The transformation of Asia from its status as the most impoverished region to the growth locomotive of the world economy within five decades is unprecedented and nothing short of a miracle. The achievement seems all the more profound when juxtaposed with a very pessimistic outlook of Asia's development prospects made by Gunnar Myrdal in his three-volume tome *Asian Drama: An Inquiry into the Poverty of Nations*, published in 1968.

What have been the patterns of development and transformation in the continent across countries and subregions? What paths have been taken by the successful industrialisers in Asia on their way out of poverty to prosperity? Is there an emerging "Asian Consensus" that is unique and different from the conventional wisdom summed up by the Washington Consensus? Why have South Asia and India lagged behind the East Asian economies in industrialisation? And what lessons are there for latecomers like India to chart out their own transition to industrialisation and prosperity?

Though there have been some sporadic attempts at finding answers such as the country studies for newly industrialising economies (NIEs) such as the Republic of Korea (ROK) and Taiwan Province of China (henceforth Taiwan) (Amsden 1989, 2001; Lall 2005; Chang 2002; Johnson 1982; UNESCAP 2014), a comprehensive analysis of the Asian transformation has been lacking. But the past year has been bountiful in terms of providing answers to these questions in the form of three well-written and produced books.

Asia's Journey to Prosperity: Policy, Market, and Technology over 50 Years has been produced by the Asian Development Bank to celebrate its 50th anniversary. Covering diverse themes in 15 chapters—

REVIEW ARTICLE

Resurgent Asia: Diversity in Development by Deepak Nayyar, *New Delhi: Oxford University Press, 2019; pp xx + 295, ₹895.*

Asian Transformations: An Inquiry into the Development of Nations edited by Deepak Nayyar, *Oxford: Oxford University Press, 2019; pp xxiv + 577, price not indicated.*

Asia's Journey to Prosperity: Policy, Market, and Technology Over 50 Years by Asian Development Bank, *Manila: ADB, 2020 (ebook), <http://dx.doi.org/10.22617/TCS190290>.*

such as role of markets, the state and institutions; structural transformation; agriculture and rural development; technological progress; education, health and demography; investment, savings and finance; infrastructure development; trade, foreign direct investment (FDI) and openness; macroeconomic stability; poverty reduction and income distribution; gender and development; environmental sustainability and climate change; bilateral and multilateral development finance; regional cooperation and integration—it is a voluminous book. Generally, the chapters cover the descriptive account of evolution of the respective theme over 50 years in the region, typically in the form of where the region was five decades ago and where it has reached in the particular sector. It also tends to accept the conventional wisdom too readily, as discussed later.

Deepak Nayyar, on the other hand, in the two volumes—one authored and the other edited—has analysed and documented this astonishing transformation of Asia since Myrdal's prognosis, with great care and detail. In particular, he tries to develop an analytical narrative focused at finding answers to some of the questions raised above. Supported by United Nations University World Institute for Development Economics Research (UNU-WIDER),

the project has been enriched by the contributions (in the edited volume) by a band of well-known scholars from across the region and beyond.

Resurgent Asia: Diversity in Development is magisterial in profundity of analysis of the transformation of the region over the five decades, bringing out a diversity of experiences, highlighting the achievements, and the causative factors. Highlighting rising inequalities between and among the countries in Asia, Nayyar also reflects on Asia's role in the changing world economy and contemplates the future of the continent including on the prospects for an "Asian Century." The book is rich in detail of the patterns and trends, and it would serve as an authoritative analysis for any observer of Asian development and political economy for many years to come.

Asian Transformations: An Inquiry into the Development of Nations is an edited volume with 21 essays classified in three parts (Nayyar 2019b). Part I begins with Nayyar's introductory chapter, which, along with contributions by Ravi Kanbur, Frances Stewart, and Ronald Findlay (2019), sets the stage for the book by reflecting on Myrdal's work and providing a longer-term historical perspective of Asia in the world economy. Part II covers 10 thematic cross-country studies that analyse the role that different factors play: Peter Evans and Patrick Heller examine the role of the state; Richard Kozul-Wright and Daniel Poon, that of economic openness; Rob Vos of agricultural and rural transformations; Ha-Joon Chang and Kiryl Zach of industrialisation; Amit Bhaduri of macroeconomics; Guanghua Wan and Chen Wang (2019) on poverty and inequality; Sudipto Mundle on education and health; Ralph van der Hoeven of employment and unemployment; Mushtaq Khan on institutions; and

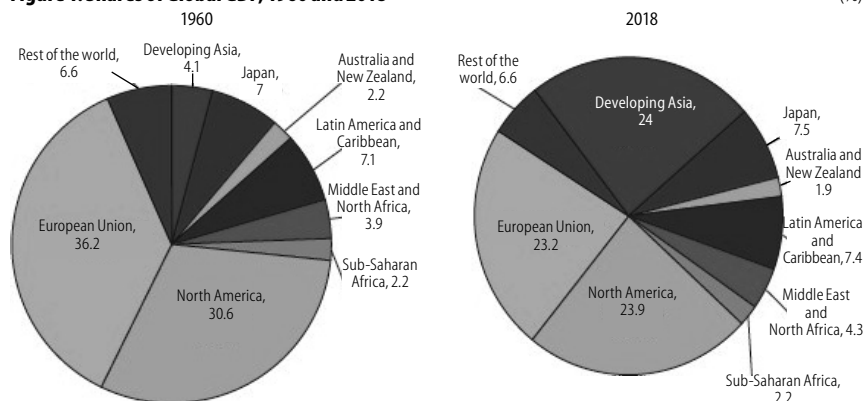
Prasenjit Duara on nationalism. Finally, part III covers country and sub-regional studies: Justine Yifu Lin on China; Kaushik Basu on India; Peter Timmer on Indonesia and Finn Tarp on Vietnam; Robert Wade on East Asia, Manuel Montes on South East Asia and Syed Osmani (2019) on South Asia. One can but only admire Nayar's thoughtfulness in capturing all the relevant themes and finding authors who can bring an authoritative perspective on each subject.

Between them, the two Nayar volumes present rich, insightful and authoritative material on not only what happened in Asia over the past five decades, but also how it happened, draw lessons, and contemplate the future. One could argue that they represent the *real* Asian drama. Myrdal's was actually the South Asian drama, given that he had focused largely on the Indian subcontinent.

Industrial transformation of the Asian countries may have lessons for the late-comers in the continent and beyond. Historically, no country, except a few resource-rich ones like Australia and Canada, has attained prosperity without a period of sustained industrialisation (Kaldor 1967). The transformative potential of industrialisation has been recognised by the 2030 Agenda for Sustainable Development adopted at the United Nations Summit in September 2015 comprising 17 Sustainable Development Goals (SDGs).

Particularly from India's perspective, such an analysis would be extremely topical. Not only has India missed the opportunity to industrialise, but has been deindustrialising in the last few decades resulting into growing dependence on imports of manufactured products, including some highly labour-intensive goods besides the telecom and power equipment, and active ingredients of medicines (Kumar 2018). Hence, an attempt to catch up in manufacturing through "Make in India" programmes is timely. The lessons from the East Asian industrialisation could inform the policy formulation. The compulsions of rebuilding the Indian economy in the aftermath of the COVID-19 shock makes such focus on manufacturing-based industrialisation even more critical, as Prime Minister

Figure 1: Shares of Global GDP, 1960 and 2018



For 1960, data for the Middle East and North Africa refer to 1968 and data for New Zealand refer to 1970. Shares calculated using GDP is constant in 2010 United States dollars. Source: ADB (2020).

Narendra Modi has emphasised in his statement on "Atmanirbhar Bharat."

This review article presents a selective overview of the analysis and lessons coming out from the three volumes (and other supportive evidence) that could be useful for countries like India, seeking to emulate the footsteps of the East Asia countries. The next section summarises the Asian re-emergence and transformation, followed by an overview of the industrial policy that led to the emergence of East Asian countries, and some explanations for different outcomes of industrial policy in India. The article concludes with a few policy lessons for India.

Re-emergence and Transformation

Asia's transformation, as both Nayar as well as ADB (2020) point out rightly, should be characterised as re-emergence of the continent, given its the dominant position in the world economy all through history until the early 19th century, as documented by Maddison (2001). Asia emerged from colonialism as the poorest continent in the developing world, with the gross domestic product (GDP) per capita in Asia at only 5% of the GDP per capita in industrialised countries in 1970, and with their economies dominated by the primary sector sustaining four-fifths of the population.

Political independence, that most of the Asian countries achieved by the mid-1960s, restored economic autonomy to pursue national development policies and re-emerge as a significant player in the world economy. The share of developing

Asia in global GDP rose nearly six times from 4.1% to 24% between 1960 and 2018 (Figure 1), while the shares of Japan, Australia and New Zealand, Latin America and the Caribbean, West Asia and North Africa, and sub-Saharan Africa stagnated, and those of the European Union and North America declined (ADB 2020). The faster economic growth of Asia was the result of considerable structural transformation as is clear from Asia's share in world industrial production increasing 10 times from a minuscule 4% to over 40% (Nayar 2019a).

East Asia led, South Asia lagged: Although all the subregions of Asia were growing faster than the rest, there were differences between them. East Asia led the continent contributing about two-thirds of the increase in Asia's share in the global GDP and an even greater share in manufacturing value added and global exports. South Asia generally lagged behind in all respects with South East Asia in the middle. While the share of manufacturing value added (MVA) in GDP more than doubled, rising rapidly in East Asia, moderately in South East Asia, and marginally in South Asia.

Transformation shaped by industrialisation and constant upgrading: Structural transformation in Japan, South Korea, Taiwan, Singapore, Thailand, Malaysia, and China followed the classical pattern from agriculture through manufacturing, or industry. On the contrary, South Asian countries especially India, Pakistan, Sri Lanka, Bangladesh, along with a few

South East Asian countries, moved from agricultural-based economy to services-dominated economy, bypassing the manufacturing sector. These diverging paths to structural transformation explain much higher rates of economic growth sustained by the East Asian countries and rising shares of global exports.

East Asian countries exploiting opportunities of globalisation: Another aspect of the East Asian transformation has been their ability to upgrade their product structure with technology-intensive goods dominating their exports (Chang and Zach 2019). Greater reliance on international trade was evident from its share of world merchandise trade rising from 8% to 33%. The role of net exports as a demand stimulus to growth has been significant. The analysis presented in Nayyar (2019a) also shows a change to a new steeper trajectory in East Asia's shares in the global GDP since the turn of the century. Was the World Trade Organization (WTO) Accession of China in 2002 a turning point, facilitating access to the global markets during the rapid expansion of world trade during 2003–08?

Creating decent jobs, alleviating poverty, achieving human development: Rapid industrialisation also helped East Asian countries create millions of decent jobs. During 1971–90, the job creation rate in industry and services in ROK, China, Malaysia, and Thailand exceeded 5% per annum and 4.5% in Taiwan. The poor rate of job creation in secondary and tertiary sectors explains the slow rate of decline in the employment share of agriculture in India, much of South Asia, and to a lesser extent in Indonesia, Thailand, Vietnam, and the Philippines (Vos 2019). The benefits of faster growth and job creation through industrialisation led to a substantial reduction in absolute poverty. The number of people in extreme poverty (\$1.9 a day) in East Asia declined from 877 million in 1981 to 10.1 million by 2015, while in South Asia from 506 million to 212 million over the same period (ADB 2020). It is clear that while poverty declined all across Asia, the rate of poverty reduction has been much faster and dramatic in the East

Asian countries compared to South Asian countries, which now account for nearly 36% of people living in extreme poverty in the world (UNESCAP 2018). Mundle (2019) concludes that Japan, Singapore, and ROK are approaching the best feasible standards of education and health, and China, Malaysia, Thailand, and Vietnam are likely to catch up over the next decade or so. South Asian countries, except Sri Lanka, will need more time to catch up.

East Asia's Transformation

East Asian countries have been heterodox in their approaches to macroeconomic management, targeted job creation and economic growth rather than price stability (Nayyar 2019a). The Nayyar volumes attribute the stunning success of East Asian industrialisation to the role played by industrial policy, that is, strategic interventions by the governments to foster industrialisation. The developmental state has been a prime determinant of Asia's transformation (Evans and Heller 2019). The scale and scope of strategic interventions in Japan, ROK, Taiwan, Singapore, China, and Vietnam has been extensive and has included coordinated policies across sectors and over time. Thus, effectively implemented industrial policy works, and the issue was not the “why” but the “how” of industrial policy. The East Asian countries have effectively used both markets and the state in a complementary fashion, exploding the myth that it is either the markets or the state that have to lead the economic activities. A defining feature of East Asian industrialisation strategies was to “forcibly align” the business and development interests (Kozul-Wright and Poon 2019: 142, 155).

Let us take a brief look at the key elements of industrial policy employed by East Asian countries to draw some lessons for the latecomers.

Strategic approach towards openness and exchange rate management: The openness to trade is generally made out to be critical for industrialisation and development in the neoclassical literature (ADB 2020). The East Asian countries have pursued calibrated and strategic integration with the world economy in conjunction with industrial policy, rather

than passive opening to world trade (Nayyar 2019a). The trade policy followed has been characterised by a dualism, open for the export sector but restrictive for importing sectors. Exchange rates were undervalued over long periods to strengthen competitiveness of domestic industries in the world market. East Asian countries have widely used managed exchange rates as a tool for fostering industrialisation. Japan has extensively used the depreciated exchange rate of yen to boost competitiveness of its exports until the Plaza Accord of 1985. In the early years of industrialisation, ROK rationed foreign exchange, giving priority to importers of capital goods and intermediate inputs (Chang and Zach 2019: 203). The Chinese government initially adopted a dual-track exchange rate system, allowing the market-determined exchange rate to operate parallel with the overvalued official exchange rate, and the dual-track system converged to a managed floating system in 1994 (Lin 2019). This was followed by a hard peg during 1995–2005, allowing the exchange rate of the yuan to move within a narrow band since 2005, as international pressure mounted with growing trade surpluses.

Achieving scale economies through import substitution and export promotion: Import substitution and export orientation are posited as two alternative industrialisation strategies. The East Asian countries have generally combined the elements of both import substitution and export orientation to exploit the economies of scale, although the emphasis has changed with needs. Before embarking on export-oriented manufacturing in the 1970s focused on electronics and textiles, Malaysia had focused on import substitution during 1957–67. In 1981, it launched another import substitution focusing on heavier industries followed by an export-oriented phase from the mid-1980s with greater emphasis on fostering domestic technologies (Kozul-Wright and Poon 2019). The ROK government embarked on the Heavy and Chemical Industrialization (HCI) programme in 1973 when the country was at a relatively low level of development by

protecting domestic “infant industries” including through quantitative restrictions that were prevalent until 1980. Performance-based subsidies were provided based on export performance or for development of research and development (R&D) capabilities (Chang and Zach 2019: 203).

Selective approach towards FDI inflows: The East Asian countries adopted a selective approach to FDI to achieve their industrial policy objectives. ROK and Taiwan, following Japan, relied on non-equity modes to tap the resources of multinational enterprises (MNEs), such as technology licencing, and managerial and technical assistance from Japanese companies, such as Nippon Steel and Kawasaki Shipbuilding, to build world-class industries. They also used the special economic zones (SEZs) or export processing zones (EPZs) in a strategic manner to leverage FDI for building export capabilities but ensured domestic linkages by imposing local content requirements (Kozul-Wright and Poon 2019: 142).

China engaged MNEs into strategic bargaining, leveraging its high-quality infrastructure in its SEZs, disciplined skilled workers, and a large domestic market, to impose informal conditions on local sourcing, export commitments, or technology transfer (Nayyar 2019a). The governments, at all levels, proactively approached prospective foreign investors to relocate their production to China, with incentives such as tax holidays in SEZs and industrial parks (Lin 2019). As a result, the share of FDI in China reached 17% of gross fixed capital formation by 1994 (Kozul-Wright and Poon 2019). The preferential tax treatment of FDI in China was such that some of the domestic investment was round-tripped to China via Hong Kong to take advantage of the incentives.

East Asian countries have also used performance requirements extensively to make FDI meet their objectives—deepening their integration with the local economy or export promotion, among others (Kumar and Gallagher 2007). Thailand, for instance, has emerged as the third largest exporter of automobiles in Asia through performance requirements

imposed on Toyota and Honda by initially insisting on local content requirements to deepen production linkages and, once integrated production bases developed, to impose export performance requirements to virtually turn these facilities into global sourcing hubs for certain models (Kumar 2005). The quantitative evidence also found that the East Asian countries were able to manage FDI inflows to crowd-in domestic investments rather than crowding them out through the selective approach (Kumar and Pradhan 2005). Hence, the quality of FDI received by the East Asian countries was perceived to be better (Kumar 2002).

Enterprise development and national champions: East Asian countries provided support to selected firms to nurture their managerial or technological capabilities, or encourage their horizontal and vertical expansion, so that they were able to realise scale economies, not only in production but also in marketing, to develop global brand names and operations, as ROK and Taiwan did to create national champions like Samsung, LG, and Foxconn. ROK promoted the chaebols, large and highly diversified industrial conglomerates, in an effort to harness scale economies. However, ROK also promoted fierce rivalry based on innovation between the chaebols in order to enhance their competitiveness. China has facilitated mergers in an effort to create large-scale national champions besides extensively using state-owned enterprise (SOE), subsidised credit, public procurement and public investments (Chang and Zach 2019).

Directed credit through national development banks and investment incentives: East Asian countries also intervened to develop sunrise industries through the use of subsidised credit in ROK and by tax credits in Taiwan. National Development Banks (NDBs) have been employed extensively by East Asian countries to foster industrialisation. In conjunction with its HCI programme, the ROK government created in 1973 the National Investment Fund that accounted for 70% of total manufacturing investment lending by institutions in the late 1970s. China established the China Development Bank,

to finance large-scale infrastructure and industrial projects by providing long-term financing. Kozul-Wright and Poon (2019: 153) have shown how the outstanding loans extended by NDBs as a proportion of the GDP has grown consistently since 1994 from under 2% to over 13% in China in 2016 and from over 4% to over 11% in Malaysia. Starting with Malaysian Industrial Development Finance established in 1960, Malaysia has created 13 NDBs over time. Malaysia has also instituted a pioneer industry programme to provide investment incentives to new industries. SOEs in China did not have to bear any cost for capital before the transition in 1978 (Lin 2019).

Domestic technological capability building through public funding and soft intellectual property regimes: Building domestic technological and innovative capability has been an important objective of industrial policy. ROK created a powerful science and technology (S&T) agency in the Prime Minister’s Office in 1967 besides a network of government research institutes, such as Korea Institute for S&T and the Korea Advanced Institute of Science in the late 1960s, which also received assistance from the United States (US) besides political patronage (Wade 2019). Taiwan established the Industrial Technology Research Institute (ITRI) in 1973 to support strategic industries with key technology projects and had 10,000 employees by the early 1980s (Kozul-Wright and Poon 2019). After building domestic production capabilities, China focused on development of local R&D capacity, expansion of domestic linkages, and vertical diversification, especially in strategic sectors. The 2006 Medium and Long-term Programme of Science and Technology funded 16 megaprojects in pharmaceuticals, semiconductors, large commercial aircraft, and military industries. The Strategic Emerging Industries programme launched in 2010 targeted 20 strategic industries to enhance their share in Chinese GDP to 8% by 2015 and 15% by 2020. The Made-in-China 2025 initiative was launched in 2015 to upgrade Chinese industries and to enhance local content of core components to 40% by 2020 and 70% by 2025, especially in

priority sectors such as aerospace, robotics, information technology, energy, and pharmaceuticals (Chang and Zach 2019).

The East Asian countries have also used weak patent regimes extensively to facilitate the absorption of foreign inventions. Japan did not recognise product patents until the mid-1970s, ROK till the mid-1980s, and China till 2002 to facilitate absorption of others' innovations. Japan, ROK, Taiwan, China, and Thailand, among others have also used petty patents to promote incremental innovations by domestic enterprises, including the small- and medium-sized enterprises (SMEs) that would not stand rigorous scrutiny of patent examinations (Kumar 2003).

Pragmatism and adaptability of industrial policy: ROK initially focused on labour-intensive products (toys, textiles and garments, and shoes) in the 1960s, started heavy and chemical industries in the early 1970s as wage costs started to rise to stay competitive, and focused on emerging industries such as automobiles and electronics. Similarly, China upgraded its export structure from simple toys, textiles, and other cheap products in the 1980s and 1990s to high-value, technologically advanced machinery and information and communications technology products in the 2000s (Lin 2019).

Assisted by external factors: The East Asian industrialisation was also facilitated by a number of external factors or enabling conditions. First, the existential threats faced by East Asian countries, especially ROK and Taiwan, may have pushed them to prioritise industrialisation (Chang and Zach 2019). Second, their colonisation experience was different compared to others in Asia. The Japanese colonial government treated ROK and Taiwan as offshore bases integrated with the core and replicated Japanese institutional architecture focused on providing mass school education, mining, agriculture, and manufacturing activities. By 1940, around 70% children in ROK and Taiwan were in school. In contrast, only 2% of children were in school in Vietnam, a French colony (Wade 2019). Third, a strong state also pushed their objectives hard. Wade (2019) documents how

leading businessmen in ROK were threatened during President Park's regime (1961–79) with imprisonment unless they left for the US and returned with export orders.

Finally, the role of the US assistance to its three North East Asian allies in the post-World War and post-Korean War periods has played an important role in their industrialisation. In the wake of the Korean War in 1950–53, Japan became the main source of American procurement. Between the late 1940s and mid-1960s, the US supported Japan, ROK and Taiwan to create the development state and receive “tens of billions of dollars in grants, loans, tech transfer, and preferential markets from Johnson and Nixon governments” (Wade 2019: 486).

Unique model of East Asian industrialisation and transformation: Notwithstanding the external factors pointed out above, the Nayyar volumes clearly bring out that the rapid industrialisation of Japan, ROK, Taiwan, Singapore, Malaysia, Thailand, China, and Vietnam, has been achieved through extensive strategic interventions by the governments to build domestic production capacities, ensure competitiveness through harnessing scale economies, foster technological upgrading and innovation, and create national champions and global brands. There is a clear pattern emerging on the East Asian model of industrial transformation that is quite different from the Washington Consensus.

Despite the overwhelming evidence on the role and effectiveness of industrial policy in East Asia's transformation, surprisingly, ADB (2020: 10) notes that the policies pursued in Asia “are not so different from those prescribed by the Washington Consensus” and that “there is no such thing as an Asian Consensus”! It is not the first time that the role of strategic interventions or the industrial policy in the East Asian industrialisation has been underplayed. Earlier, the World Bank (1993) acknowledged the extensive use of state interventions in the successful East Asian economies but concluded that East Asian industrialisation was a result of market-friendly policies and concluded

that the “industrial policies were largely ineffective” or “not successful” (World Bank 1993: 312, 354). These distorted conclusions generated a huge controversy and led to a rather sharp reaction from a number of analysts (Lall [1994], among others).

Industrial Policy and India

India pursued import substituting industrialisation (ISI) since the mid-1960s till the reforms of 1991, covering many aspects of industrial policy, including high tariffs, import licencing and industrial licensing policy. Yet, structural transformation in India bypassed the manufacturing-based industrialisation and the economy is dominated by services. The share of manufacturing in India actually has declined after peaking around 1995. Neglect of industry has cost the country in terms of creation of productive jobs because the manufacturing sector has the highest backward and forward linkages of any productive sector (Kumar 2018).

Does it imply that industrial policy was ineffective in India? Nayyar (2019a) argues that there were limitations implicit in the implementation, rather than the design, of industrial policy during that period. Basu (2019) points out that democratic setting in India with a vibrant media made governments in India wary of policy experiments that were possible in ROK, China, or Singapore.

To be fair, the industrial policy did succeed in its avowed objective of import substitution by the end of the 1980s, building a diversified industrial base that produced virtually all items of consumption in India. The overall import dependence came down dramatically, even for heavy machinery and capital goods. However, the Indian industry was not highly competitive and had failed to keep itself technologically up to date and when exposed to external competition after 1991, many of the enterprises could not compete and stay in business. A large number of Indian companies entered into joint ventures with MNEs to update their technology to enhance their competitiveness. Many of them were acquired by MNEs in horizontal acquisitions or mergers (Kumar 2000). This highlights a crucial difference between

the objectives of industrial policy in India vis-à-vis East Asian countries. Indian policy targeted import substituting industrialisation in a closed economy context and did not particularly seek international competitiveness. The East Asian countries, on the other hand, clearly focused on building an internationally competitive industry. They constantly leveraged rivalry between domestic champions and pushed domestic firms to international markets through export incentives and performance requirements. The outcomes were also different.

It is not to say, however, that industrial policy failed completely in India. India's success in pharmaceuticals, automobiles, and software can be attributed to industrial policy (Nayyar 2019a). By abolishing product patents, the India Patents Act of 1970 enabled the domestic enterprises to reverse engineer new processes to manufacture known drugs in a cost-effective manner, transforming India into a pharmacy for the developing world. In the passenger car industry, the government joint venture formed in 1982 with Suzuki, a Japanese company, was with a phased manufacturing programme to progressively enhance local value addition to 70% to be achieved within five years. This led to the development of a vertically integrated automobile industry in India, with investment made to develop the auto-components sector helping transform India into a hub of small cars that are also exported to many countries, including Japan. Besides passenger cars, India has also emerged a competitive exporter of auto parts in recent times that owes itself to a particular strategic intervention by the government in the form of an erstwhile performance requirement that required foreign-owned companies in consumer goods industries to balance imports by foreign exchange earnings (Kumar 2005).

In software, Nayyar attributes it to the forced exit of IBM in 1977, leading to local capacity development for computer maintenance and followed by software development and exports facilitated by the Software Technology Parks of India, established by the government. A lesser-known fact that also helped India emerge as a leading exporter of software services

was the creation of institutional architecture for building skills in computer applications and networking following the farsighted recommendations of the Bhabha Committee way back in 1963 and establishment of the Electronics Commission in 1971 (Kumar 2014). Furthermore, a number of leading Indian enterprises that are rapidly acquiring global footprints with significant export orientation and acquisitions of large global companies, including Hindalco, Tata Motors, Tata Global Beverages, Mahindra and Mahindra, Bajaj Auto, TVS Motors, and Hero Motors, have their origins in the import-substituting industrialisation era (Kumar 2008).

In recent times, Indian industry has been facing the challenge of premature deindustrialisation. It was attributed to the appreciation of the rupee since 2007 that has led to the outsourcing of production by a number of companies to cheaper locations, a trend sometimes referred to as "hollowing out" (Kumar 2018). Industrial policy, therefore, needs to be geared to not only building internationally competitive manufacturing capacities but also to sustain the competitiveness over time. Otherwise, such capacities can be eroded in no time in the era of globalisation.

Concluding Remarks

The transformation of Asia from the poorest region to its new status of the emerging centre of gravity of the world economy within a space of five decades, as the three new books surveyed in this article show, is truly dramatic. The transformation driven by the East Asian countries, while South Asia has lagged behind, has involved impressive structural transformation from agriculture to industry and upgrading to high value adding modern industries, harnessing the opportunities provided by globalisation.

Industrial transformation has also helped the region achieve poverty reduction and social development. While all the subregions have witnessed significant socio-economic progress over the past five decades, East Asia's achievements are truly dramatic, while those of South Asian countries have been much less impressive. The key difference is the

industry-oriented structural transformation sustained by the East Asian countries in contrast to the services-oriented one by South Asian countries.

The Nayyar volumes also analyse how industrial transformation of the East Asian countries happened. Industrialisation of Japan, ROK, Taiwan, Singapore, Malaysia, Thailand, China, and Vietnam has been achieved through extensive strategic interventions by the governments to build domestic production capacities, ensure competitiveness through harnessing scale economies, foster technological upgrading and innovation, create national champions and global brands, with a selective approach to trade openness, FDI, and exchange rate management. While there are variations and nuances in each case in terms of relative reliance on domestic versus foreign enterprises, in sequencing the reforms, etc, all these countries followed state interventions to achieve transformation that formed part of the industrial policy prescriptions.

Therefore, the new evidence presented reinforces the emerging consensus on the relevance of the developmental state and of well-defined strategic interventions or industrial policy implemented in a coordinated manner to achieve the industrial transformation of developing countries. Although the East Asian model of industrial transformation is different from the Washington Consensus, history corroborates the extensive reliance by the Western industrialised countries on industrial policy, including infant industry protection, in the period of their industrialisation (Bairoch 1993; Wade 2003). The case for state interventions has been made at regular intervals. The argument for infant industry protection had been around for a long time since List (1909), and was used to justify high tariff barriers imposed in the US in its period of industrialisation (Chang 2002). Strategic trade theory has also justified state intervention that can be welfare-enhancing, shifting profits from international to domestic firms under certain conditions (Brander and Spencer 1985). More recently, the New Structural Economics has justified state intervention for building industrial capabilities (Lin 2012). Industrial policy, after falling out of

favour for a while, has become fashionable again across the world, including in the industrialised world (*Economist* 2010; Rodrik 2004; Stiglitz et al 2013; Salazar-Xirinachs et al 2014). Wade (2014) highlights how industrial policy has been revived in the US, otherwise a strong proponent of trade liberalisation in multilateral trade negotiations.

Then, the question arises: Why the outcomes of industrial policy in India, implemented with rather heavy state intervention, geared to ISI between the 1960s and 1980s were different from those in the East Asian countries? It has been shown above that the outcomes were different because of different objectives. The East Asian countries targeted building internationally competitive industrial capabilities while India was trying to substitute imports in a closed economy context. The industrial capacities were built up, but many of them crumbled in the face of international competition after liberalisation since 1991. Yet, the industrial policy did produce successes in pharmaceuticals, automobiles, and software, where India built an internationally competitive niche. It also created a number of enterprises that are building their global footprints successfully. Yet, the industrial transformation of India remains an unfinished agenda with some premature deindustrialisation and hollowing-out, spurred by appreciating exchange rates.

One may argue that the East Asian countries pursued industrial policy when world trade was expanding and the multilateral framework was more benign and flexible, enabling them to take advantage of opportunities presented by globalisation. Indeed, the context has changed. A lot of policy space has been lost under the Uruguay Round under TRIPS (Trade-related Aspects of Intellectual Property Rights) and TRIMS (Trade-related Investment Measures) Agreements of the WTO. The spectre of trade wars and protectionism and stalled progress of multilateral trade negotiations, the onset of the fourth industrial revolution (IR4.0), and the dramatic collapse of world trade following the outbreak of the COVID-19 pandemic call into question the replicability of the East Asian strategy.

Indeed, any strategy needs to be fine-tuned to a particular context and time. While the case for pursuing a wholesale export-oriented industrialisation strategy would appear to be diminished at the current juncture, India's large domestic market offers opportunities for building productive capacities through strategic import substitution that can be scaled up when the world trade growth recovers.

There is a compelling case for strategic interventions for reversing the trend of premature deindustrialisation that the Indian economy has faced and complete its industrial transformation, particularly to meet the challenge of job creation. United Nations Economic and Social Commission for Asia and the Pacific's (UNESCAP) Computable General Equilibrium simulations indicate that an industrialisation-dominated growth strategy could help generate over 34 million more jobs and lift over 48 million more people out of extreme poverty in India, compared to the business-as-usual strategy by 2030 (UNESCAP 2018). In that context, the Government of India's focus on industry through programmes like Make in India is timely. The relevant elements of industrial policy in the Indian context could include strategic import substitution in the sectors with high import content through infant industry protection and pioneer industry programmes, establishment of NDBs for directing longer-term credit to industry, and preferences in public procurement, infrastructure support, and skill development, among others. Maintaining a competitive exchange rate is perhaps most critical in an open economy environment of low tariff barriers. Leveraging the large domestic market for proactively attracting MNEs to set up world-scale manufacturing plants in India for global sourcing could be promising in a post-COVID-19 scenario as they seek to diversify their locations.

Another lesson is the criticality of sustaining international competitiveness of the manufacturing sector through fostering domestic and international competition as soon as the domestic capacities get entrenched. Innovation is an important driver of modern manufacturing and competitiveness. Government support through direct subsidies may be

more effective than tax incentives for promoting R&D activities of firms (Kumar and Aggarwal 2005). Finally, a petty patents regime may help harness India's strengths in incremental innovations, frugal engineering, and software design for developing new, more affordable and resource-saving products and processes for domestic and international markets (Kumar and Joseph 2007).

To conclude, the new books, especially those by Nayyar, present a very profound analysis to characterise East Asia's transformation, bring out the diversity of experiences, and analyse the factors explaining their stunning success that have rich lessons for latecomers like India. One hopes that they will be read with great interest and will inspire policymakers across the developing world to harness the potential of industrialisation for inclusive and sustainable prosperity and to provide a life of dignity to all their people by creating decent jobs.

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