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Kozul-Wright, Richard; Poon, Daniel

# Working Paper Asian development after the Asian Drama

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# WIDER Working Paper 2018/135

# Asian development after the Asian Drama

Richard Kozul-Wright<sup>1</sup> and Daniel Poon<sup>1,\*</sup>

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Abstract: Inspired by Gunnar Myrdal's core concepts discussed in his seminal work, Asian Drama: An Inquiry into the Poverty of Nations, published in 1968, this paper analyses the opening-up experiences of three Asian countries (China, India, and Malaysia) by triangulating between the following: (i) the orientation of selected policy tools in trade, technology, investment, and finance in shaping a country's degree of economic openness; (ii) the rational coordination of operational controls of these policy tools to achieve stated objectives; and (iii) the overall development trends observed in the Asia region. The 'rational coordination of operational controls' is interpreted with reference to the strategic use of selected policy tools in the historically successful cases of earlier East Asian industrialization. Under this framework, the paper contends that divergence in Asian growth experiences can be understood by variations in institutional capabilities to address market and firm-level (and government) failures in the catch-up process, and the pragmatic experimentation by policymakers in search of more effective institutional mechanisms—carrots, sticks, and competitive pressures—in pursuit of desired development outcomes.

Keywords: economic openness, operational controls, strategic integration

**JEL classification:** F63, B52, O25, O53

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Katajanokanlaituri 6 B, 00160 Helsinki, Finland

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<sup>&</sup>lt;sup>1</sup> United Nations Conference on Trade and Development (UNCTAD), Geneva, Switzerland; \* corresponding author, email: daniel.poon@unctad.org.

### 1 Introduction: Economic openness and Asian divergence

The Asian Drama is something of a misnomer; as Gunnar Myrdal himself acknowledged, it was a South Asian drama based, in particular, around the experiences of India and Pakistan. Myrdal was not optimistic about the region's prospects, in large part because the institutional prerequisites for development were missing and he saw few signs of a break in the class relations that underpinned their soft states, perpetuating a 'fateful development' (Myrdal 1970a: 380) of high, and possibly rising, inequality that would hold back structural transformation and sustained growth.

Myrdal had less to say about Southeast Asia, although Indonesia, Thailand, and others from the region do appear episodically throughout the study (see Myrdal 1968), and there is almost nothing about East Asia. These gaps in the analysis could be overlooked to the extent that these other regions were still largely agricultural with weak industrial sectors, faced much the same external constraints as South Asian economies, and shared similar institutional weaknesses. Such convergence could be inferred from the fact that differences in income levels across the region were confined to a relatively narrow band at the time Myrdal was researching his book, annual growth rates were similar in the sub-regions (and too slow to close the income gap with the advanced economies), and manufacturing performance (whether measured in terms of output, jobs, or exports) was weak (UNCTAD 2016a: Chapter 3).

In fact, with hindsight, Myrdal was writing on the cusp of a great divergence across the Asia subregions: growth accelerated in the East Asian newly industrialized economies (NIEs) as they embarked on catching up with advanced economies; South Asia would continue to stagnate for most of the remainder of the century; and Southeast Asia exhibited a more erratic development path with growth spurts and subsequent setbacks. As an even later latecomer, China's gross domestic product (GDP) per capita level lagged behind through the 1970s, but had surpassed Southeast Asia by the mid-2000s and reached a level of one-quarter the GDP per capita of the United States by 2017 (see Figure 1).

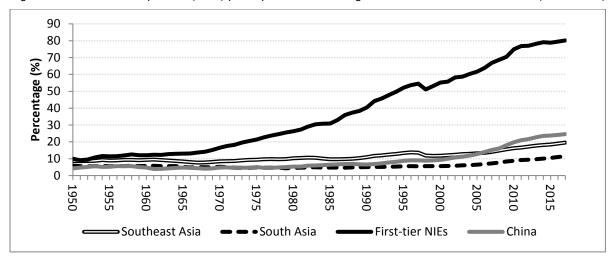


Figure 1: Gross domestic product (GDP) per capita: Asian sub-regions relative to the United States (1950–2017)

Notes: First-tier newly industrialized economies (NIEs): Hong Kong (SAR), Republic of Korea (ROK), Singapore, and Taiwan (China). South Asia: Bangladesh, India, Pakistan, and Sri Lanka. Southeast Asia: Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Thailand, and Viet Nam. Sub-regional GDP per capita at constant 2016 US\$, weighted by country population size.

Source: Authors' compilation of data based on UNCTAD secretariat calculations from The Conference Board (2017).

This paper seeks to understand these Asian sub-regional trends by examining key features in country approaches to economic openness in the areas of trade, technology, investment, and finance. There is no single accepted measure of economic openness, whether based on import tariff levels, foreign direct investment (FDI) regimes, financial sector integration, or other metrics, and the authors do not attempt a comprehensive assessment in this regard.

Other contributions in this volume delve into the fine-grained detail and diversity of development processes in Asian countries and sub-regions, but this paper is confined to the experiences of one country per sub-region: China, India, and Malaysia. These stylized accounts cover the range of approaches to Asian economic openness, which are often classified as 'high' (Malaysia), 'medium' (China), and 'low' (India). While such a classification by degrees of openness offers a loosely descriptive formula for locating the integration efforts of countries into the global economy, it says little about the mix of different policies used to manage integration and, in particular, the strategic approach to integration adopted by the East Asian NIEs during their formative stages of catch-up development.<sup>1</sup>

Central to analysing the direction and impact of the opening-up process in shaping the Asian divergence is Myrdal's concept of soft states and their pragmatic use and coordination of 'operational controls' (or policy levers) over the domestic economy, which includes the nature and scope of interactions with foreign economic entities and flows. As Myrdal argued:

operational controls are different from long-range reforms in that they are meant to be flexible and continually adjusted to meet variations in economic conditions. They are the levers of policy, the manipulation of which is needed to ensure that development proceeds from month to month and year to year as closely in line with the targets of the plans as is feasible in a context of change (1968: 902).

This paper contends that the Asian divergence can be interpreted in large part by the variations in the institutional capabilities and operational controls to address market (and government) failures encountered in the process of latecomer economic opening, and the pragmatic experimentation of policymakers in search of more effective institutional mechanisms—carrots, sticks, and competitive pressures—in pursuit of desired development outcomes.

To set the broad analytical framework used in the remainder of the paper, Section 2 outlines four key concepts closely associated with Myrdal's contributions to the development canon. In Section 3, Myrdal's concepts are set in the context of the experience of East Asian NIEs and subsequently contrasted with the three selected Asian countries in relation to policy instruments linked to trade, technology, and global value chains (GVCs) (Section 3.1); foreign and domestic resource mobilization (Section 3.2); and development finance (Section 3.3). Section 4 summarizes the paper's policy lessons—particularly the notion of soft states and the rational coordination of

<sup>&</sup>lt;sup>1</sup> Despite the repeated assertion by conventional economists and the vast econometric literature testing the links between openness and economic growth, there are plenty of familiar methodological pitfalls in trying to capture a process as complex as economic integration in a linear statistical classification: (i) the often vague definition of openness and the failure to separate episodes of export promotion from those of import liberalization can easily lead to the misrepresentation of trade regimes, making it difficult to draw cross-country comparisons and interpret the findings; (ii) cross-sectional averages hide country-specific differences and breaks in the series; (iii) the failure to present an explicit counterfactual, together with biases in country selection, raises further doubts about the robustness of results; and (iv) the inability of such exercises to analyse non-linear historical processes greatly diminished their value for guiding policy.

operational controls—to inform the ongoing and unfinished drama of economic development in Asia.

# 2 The abiding legacy of Myrdal's Asian Drama

Myrdal's Asian Drama: An Inquiry into the Poverty of Nations was an ambitious project, involving over a decade of research and ranging over three lengthy volumes. It not only aimed to discover the constraints on economic and social progress in one of the most populous regions of the world but, as its subtitle suggested, to uncover more broadly the causes of (and remedies for) global poverty. The Asian Drama also provided Myrdal with an opportunity to survey the methodological and analytical debates that had accompanied the rise of development economics over the previous two decades, to which he had been a prominent contributor. Four concepts, all closely associated with Myrdal's contribution to the development canon, are key to his analysis of both the regional and global challenges: (i) interdependent development, (ii) circular causation and cumulative change, (iii) spread (and backwash) effects, and (iv) soft states.

For the post-war generation of economists that shaped the classical development canon, and its accompanying policy advice, the interrelationships between economic growth, structural transformation, and institutional conditions took centre stage. Myrdal was no exception, defining development as 'a movement upward of a whole system of interdependent conditions, of which economic growth, assuming that it could be properly defined and measured, is only one of several categories of causally interrelated conditions' (1970a: 391).

The challenge of 'interdependent development' focused on predominantly agrarian economies most of which had recently gained political independence after decades (or longer) of colonial (mis)rule. While there were differences among development scholars and practitioners about where best to begin meeting the challenge and how best to manage it, there was general agreement that shifting resources towards the industrial sector was key to eliminating poverty and catching up with countries higher up the development ladder. Myrdal was in no doubt that 'no substantial development in South Asia is possible over the long run unless the countries can employ a much larger part of their labour force in modern industry or other productive non-agricultural occupations' (1970b: 1185)

The case for industrial development in South Asia—and the South more generally—rested on its capacity to generate and combine a series of linkages and complementarities that together could sustain a virtuous circle of resource mobilization, rising productivity, increasing incomes, and expanding market demand, both at home and abroad (Toner 2000). Moreover, industrialization was closely tied to social and demographic transitions involving a younger, more urban, more educated, and more productive workforce, which would reinforce this virtuous circle. Myrdal associated the spread effects of industrialization with aggregate shifts on both the demand side, operating through higher incomes and investment levels, as well as the supply (or cost) side, operating through scale economies, new skills, and higher productivity. But he also acknowledged the role of Hirschman-type backward and forward linkages within and across sectors of the economy and with external economies in a wider sense associated with changes in the organization of work and attitudes towards it. At the same time, Myrdal recognized that industrialization carried destructive impulses through 'backwash' effects such as the elimination of labour-intensive jobs in traditional small-scale enterprises unable to compete with larger and more capital-intensive modern firms.

The central role for industry in triggering a circular and cumulative process of self-sustaining development helped frame a policy of planning for development through a series of interrelated investments in infrastructure, skills, and new industries, as well as institutional reforms to help strengthen spread effects. For Myrdal, it also implied a methodological break with the 'biased theoretical approach' of conventional growth models that were guilty not only of abstracting from attitudes and institutions but also of employing unrealistic assumptions that reduced the development process to a series of incremental supply-side adjustments that, guided by price signals, would automatically push a developing economy towards its optimal equilibrium state.

The nature and impact of spread and backwash effects, and the ability of policymakers to manage these in support of a sustained virtuous development circle, were not confined to domestic circumstances and conditions but included the international context. Myrdal believed that while international trade and capital flows had earlier allowed a small group of countries in Western Europe (particularly Sweden) to raise their standard of living at an historically unprecedented rate, episodes of export growth in Asia, linked to commodity production, had failed to produce a cumulative process of development. Rather, these had created (often highly profitable) enclaves with strong links to the developed country from which capital and management had originated, and to where the commodity was often exported, but isolated from the local economy.

As a result, Asian economies found themselves part of an international division of labour dominated by a high-income and technologically sophisticated 'core' that exported mainly manufactured goods and a low-income and a technologically weak 'periphery' that was largely dependent on primary exports. Under these conditions, the backwash from trade and capital flows would more than likely reinforce a distorted process of development, and which, according to Myrdal, had precluded South Asia from replicating the development path found in Western Europe. Moreover, with their large first-mover advantages, manufacturing firms from advanced countries had established a strong grip on global markets compounding the entry difficulty of potential newcomers into manufacturing sectors.

From this perspective, industrialization would need to be a much more planned process than it had been in the past. By this Myrdal did not have in mind the Soviet model of central planning but rather a series of coordinated policy initiatives across a broad range of economic and social activities, including concerted measures to raise labour utilization and to improve productivity in all sectors. In particular, following a path well-trodden by almost all developed economies, domestic industries needed to be supported and protected in their early stages, until they developed their own capacities to compete. In addition, and more so than for earlier generations of industrial catch-up economies, additional targeted support would be needed to promote manufactured exports from the South, given the first-mover advantages of firms in the leading industrial economies, the productivity and technological gaps this generated, and the size of the domestic market in most developing countries.

In all these respects, Myrdal's approach was very much in line with conventional development wisdom in the 1950s and 1960s. However, Myrdal insisted that there was no automatic guarantee that state structures would be in place to ensure that virtuous circles would be established. Indeed, central to his *Asian Drama* was a longstanding weakness of South Asian states to manage the policy initiatives he had in mind. In particular, he highlighted a lack of discipline in public institutions (and their officials) which created a 'soft state', too easily captured by special interests and, in turn, promoting a more widespread resistance to public policies and regulations (see Myrdal 1970a: Chapter 7).

Myrdal recognized that a harder state would be needed to steer Asian development. Key to moving in this direction would be the application of operational controls over the private sector aimed at

influencing its behaviour, both positively and negatively. These could be used in a discretionary or non-discretionary manner by policymakers seeking to align business decisions with wider development goals and targets.<sup>2</sup> But in the absence of an environment that would lend itself to the use of non-discretionary positive control measures (typical of the successful late industrializing states of Northern Europe) and an inability to design effective discretionary negative controls, Myrdal argued that soft states in South Asia had a tendency to resort to overly generous discretionary positive controls to achieve the desired response from business, oftentimes accompanied by an excessive use of broader negative controls that curtailed business development more generally. Myrdal likened this to 'driving a car with the accelerator pushed to the floor but the brakes on' (1968: 925), a combination that favoured incumbent firms and perpetuated vested interests and was more likely to give rise to swerving and skidding in the economy than to producing a sustainable process of catching up.<sup>3</sup>

# 3 Trade and investment patterns in the Asian divergence

Divergence across the Asian region suggests different development pathways at the sub-regional level. Countries within a sub-region are not homogeneous and there can be important outliers, at least for some periods of time. Nonetheless, the rest of this paper focuses on the catch-up experiences of China, India, and Malaysia—one country per sub-region—to compare broad sub-regional approaches with economic openness and differences in development strategy with the first-tier East Asian NIEs, particularly Republic of Korea (ROK) and Taiwan (China), the star catch-up performers who had earlier employed a strategic development strategy.

A vast body of literature has described the performance of these East Asian tiger economies, and, in particular, their emergence, as strong manufacturing exporters. However, there is less agreement about how they did it. A conventional narrative has long argued that rapid opening up to international trade and to foreign firms allowed these countries to fully exploit their comparative advantages with attendant growth impulses (Lal 1985; World Bank 1993). This is, at best, a partial account, recognizing that any poor and predominantly rural country integrating into the global economy can only begin to do so by better mobilizing its existing resources on the basis of inherited institutional conditions. But what distinguished these economies from most other developing countries (including elsewhere in Asia) was not only the pace at which the export of labour-intensive manufactures grew, especially in textiles and clothing, but also their early diversification into other light industry sectors, followed in quick succession by an even more

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<sup>&</sup>lt;sup>2</sup> For Myrdal, positive controls are used to stimulate, encourage, facilitate, and induce production or consumption, generally or in a specific sector, and include information support services, technical assistance, fiscal measures, cheap credit, tariff protection, access to foreign exchange, etc.; negative controls are meant to limit production or consumption by means of bullying, administrative restrictions, denial of foreign exchange, and in general raising production and transaction costs. Discretionary use involves a targeted decision by an administrative authority with power to act at its own discretion; non-discretionary follows a definite rule or induced price change that is not specific to any particular firm.

<sup>&</sup>lt;sup>3</sup> While Myrdal insisted on the central importance of domestic reforms, he also drew attention to weaknesses in the governance of the international economy that could hinder efforts at catching up. This referred not only to the backwash effects linked to trade and capital flows noted earlier but also to vulnerabilities linked to changes in market conditions and policies in developed countries. Reform of global governance and related efforts to strengthen development cooperation, to ease the balance of payments constraint on faster growth and to mobilize more (and more predictable) international resources to boost investment, would thus be central to industrialization efforts in developing countries.

spectacular shift into capital- and technologically-intensive products such as transportation, chemicals, and electronics.

There is no doubt that this success with manufacturing exports demonstrates the potential of outward-oriented catch-up strategies built on the expansion of manufacturing capacity. Indeed, in many of these cases given their small domestic markets and the unavoidably heavy demand for imports of intermediate and capital goods, exporting was crucial in creating a virtuous interdependence between structural change, investment, and market expansion. Particularly in the early stages of industrialization, a 'vent for surplus' allowed these countries to meet growing import demand without threatening domestic output growth and, subsequently, to achieve scale economies as they sought to compete internationally, less on the basis of low wages and more through product diversification and rising productivity. In all cases, a very rapid rate of capital formation helped to raise and sustain the rate of economic growth, beginning in the earliest stages of their development, and underpinned by high rates of reinvested profits (UNCTAD 1994, 1996).

In doing so, none of these economies, including the city states of Hong Kong and Singapore, relied only on market forces or on foreign capital, to generate sizeable resources for investment and successfully harness capital accumulation to build a dynamic 'export—investment nexus'.<sup>5</sup> It was the establishment of this nexus between profits, investment and exports, not the simple logic of comparative advantage, that underpinned East Asian success.

Investment here should not be equated with FDI which is a hybrid category including elements other than capital formation in new plant and equipment.<sup>6</sup> In fact, the East Asia region contains a remarkable diversity of experience, using FDI to build an investment–export nexus (see Table 1). FDI did not play such a prominent role in the industrialization of the two larger economies in the first-tier NIEs, partly because they were very selective and restrictive towards FDI, and partly because Japan, the obvious source country, had not yet become a major overseas investor.<sup>7</sup> Aggregate figures, such as the share of foreign affiliates in manufacturing sales or the share of FDI in domestic capital formation, do not necessarily measure the full importance of international firms in the industrialization process. In ROK, for example, foreign affiliates accounted for a quarter of all manufactured exports, which is many times greater than their small shares of GDP or gross capital formation. In the key electrical and electronics sector, the share of foreign affiliates was between 65 and 73 per cent.<sup>8</sup>

Thus, although development in ROK and Taiwan (China) relied mainly on domestic firms, an important role was, and still is, played by FDI in certain sectors of the economy. However, in all cases, policymakers have used an array of instruments to ensure that FDI complemented wider

<sup>6</sup> This confusion has become commonplace in development policy discussions; for further discussions, see Blanchard and Acalin (2016) and Akyuz (2017).

<sup>&</sup>lt;sup>4</sup> 'Vent for surplus' differs from conventional trade theory, which assumes full employment of resources, by emphasizing the role of international trade in providing an outlet for domestic productive capacities that would otherwise remain underutilized. This was one of the elements in Adam Smith's attempt to explore the relationship between trade and development (see Myint 1977).

<sup>&</sup>lt;sup>5</sup> On Singapore's developmental pragmatism, see Low (2001).

<sup>&</sup>lt;sup>7</sup> In this respect, the 'flying geese model of development', which is often used to describe the importance of regional interactions in the East Asian catch-up story, can be misleading (see UNCTAD 1996).

<sup>&</sup>lt;sup>8</sup> However, these statistics should be treated with caution since many affiliates are part of joint ventures and may include a large domestic contribution. For example, according to some estimates, in 1986 foreign affiliates employed 11.4 per cent of all manufacturing workers in Taiwan, but when the numbers are weighted by equity holdings the foreign share falls to 6.5 per cent (see Tu and Schive 1995).

developmental objectives. The larger economies of the first tier—following the earlier lead of Japan—adopted a dirigiste approach to FDI with the aim of building domestic technological capabilities. Policymakers in both ROK and Taiwan (China) consciously chose to tap foreign capital in ways other than FDI, while drawing on various other forms of technology transfer to fill gaps in their productive structure. Managerial and technical assistance from Japanese companies played an important role. Thus, with help from companies such as Kawasaki Shipbuilding and Nippon Steel from Japan, world-class industries were created within the space of a decade in ROK. Singapore, which had a much more open policy, also used a variety of measures to direct FDI into strategic sectors.

Table 1: Asian investment-export nexus: Diversity of experiences

	FDI flows (inward) as % of GDP			International merchandise trade as % of GDP		
_	1970–79	1980–99	2000–17	1970–79	1980–99	2000–17
	Average	Average	Average	Average	Average	Average
Bangladesh	0.0	0.3	1.0	2.4	7.7	16.5
China	0.0	2.9	1.7	4.4	15.2	23.5
China, Taiwan Province of	0.2	0.6	0.8	41.2	41.3	55.6
India	0.0	0.3	1.8	4.6	6.5	13.5
Indonesia	0.7	0.9	1.6	20.3	21.5	21.5
Korea, Republic of	0.2	0.6	1.0	22.8	25.3	37.5
Malaysia	1.6	5.6	3.2	45.4	73.0	78.9
Pakistan	0.1	0.5	1.2	7.6	10.1	10.7
Philippines	0.2	1.4	1.5	14.5	21.7	26.4
Singapore	2.8	11.8	19.1	112.4	130.3	142.7
Thailand	0.3	2.1	2.4	15.8	30.6	55.8

Source: Authors' calculations based on UNCTAD (2018).

A defining feature of the successful East Asian development strategies was how business and development interests were 'forcibly aligned' (Studwell 2013: 61) through the use of effective control mechanisms to both encourage and discipline profits, particularly in an expanding manufacturing sector, as the animus linking a virtuous circle of rising productivity, growing incomes, expanding markets (at home and abroad), and higher investment, feeding back to rising productivity (UNCTAD 1994, 1996, 2003). Just as importantly, those control mechanisms extended to managing their integration into the global economy. From this perspective, integration, through both trade and FDI, was approached from a strategic perspective: in terms of goals to realize scale economies, job creation, technology transfer, and generate foreign exchange, while promoting local linkages and productive capacities, including in favoured sectors, and reducing vulnerability to external shocks. This involved all the East Asian economies adopting a smart and selective combination of policy measures that included trade opening, export promotion, selective attraction of foreign firms, and support for, along with surveillance of, infant industries and domestic content, as part of a broad set of policies to stimulate structural transformation (Thurborn and Weiss 2006).

East Asia's use of special economic zones (SEZs), or export processing zones (EPZs), provides a fitting illustration of the strategic approach to global economic integration. Despite often heralded as having the most successful EPZ cases, the role of EPZs in ROK and Taiwan never gained great significance in terms of respective shares of total exports or employment. Both countries were nonetheless able to deepen their industrial base in diversifying away from low value-added labour-intensive industries, while also building strong input—output linkages between firms located inside the zones and domestic industries located outside the zones (Madani 1999; Warr 1984).

ROK's first EPZ was established in Masan in 1970. The zone granted the 'standard' package of EPZ investor incentives, including preferential access to imports of intermediate goods and raw materials to domestic firms supplying EPZs. Non-fiscal policy tools were also actively deployed

(Chang 2009), including domestic content requirements, and the zone proactively provided technical assistance to domestic suppliers and sub-contractors. A key complementary measure was the government's creation in 1973 of the National Investment Fund (NIF) to provide funds to financial institutions which would extend preferential lending for long-term investment in heavy and chemical industries. From 1974 to 1981, 62 per cent of NIF lending was assigned to the Korean Development Bank, and the NIF accounted for 57 per cent of total manufacturing equipment loans by financial institutions. By the late 1970s, this share rose to 70 per cent, with the creation of large industrial complexes around the country (Sakong and Koh 2010: 22).

With this array of policy tools, domestic content in Masan EPZ rose quickly. In 1971, domestic firms accounted for 3.3 per cent of the materials and intermediate goods used by firms in the zone; by 1975, this rose to 25 per cent and would later reach 44 per cent. Domestic value-added rose steadily from 28 per cent in 1971 to 52 per cent in 1979. In 1976, sub-contractors supplying Masan EPZ firms employed an equivalent of 15 per cent of the zone's workforce; by 1988, this figure grew to half. The use of similar tools in Taiwan saw domestic content increase from 8 per cent of total imports to 46 per cent from 1969 to 1979 (Jenkins et al. 1998: 5–6; Madani 1999: 31–2; Milberg and Winkler 2013: 246–7).

In these cases, EPZs evolved as part of the country's efforts to build an industrial base by fostering domestic capabilities in higher value-added strategic industries, particularly in capital goods sectors and later in high-technology sectors. As ROK's light industry exports began to weaken in the early 1970s, the country also faced persistent trade deficits from the industry's reliance on imports of materials and equipment. To ease this structural trade imbalance, the country switched to promoting heavy and chemical industries and established a host of specialized industrial complexes for specific industries such as steel, refineries and petrochemicals, non-ferrous metals, shipbuilding, and machinery industries. In this way, ROK's industrial complex development is generally associated with the push to establish heavy and chemical industries rather than light industries (Lim 2010: 202–3; Jo et al. 2012).

Importantly, East Asian countries relied on traditional industrial policy instruments to support domestic capital goods sectors, while other tools were used to promote high-technology sectors in the 1980s, including proactive investments of public research and development (R&D) institutes, strategic spin-offs from research institutes, and conditional subsidies to public and private R&D. In Taiwan, the Industrial Technology Research Institute (ITRI) became the government's premier research centre for high-technology industries. Founded in 1973, ITRI would support strategic industries with key technology projects, such as in semiconductors and personal computers. ITRI also undertook projects with major potential to guide private sector investment and would initiate smaller-scale projects to support the substitution of imports of key components. Thus, the government's efforts to enhance local growth opportunities and local value-added were integral to the process of upgrading domestic technological capabilities (Amsden 2004: 80).

It is commonly argued that these earlier episodes of East Asian development are not relevant to subsequent development experiences due to changes in international trade rules and production systems organized around GVCs. While such changes have undoubtedly reduced the policy space

<sup>&</sup>lt;sup>9</sup> In some cases, administrative measures were effectively used to 'promote' linkages between foreign firms operating in EPZs and domestic suppliers. Wade (2010: 156), for example, recounts the case of officials from Taiwan's Industrial Development Bureau delaying approvals for imports of glass needed by a foreign firm producing televisions, while reminding the company of the advantages of switching to domestic suppliers (a proposition the foreign firm had previously refused to consider).

available to many countries in the era of hyperglobalization, this does not detract from the need for a strategic approach to global engagement, but only reinforces the importance of coherent national economic planning in the development process (UNCTAD 2014, 2016a). These issues are further explored in the following sub-section.

#### 3.1 Trade and technology flows in the era of hyperglobalization

As already noted, Southeast and South Asian development paths have exhibited considerable diversity in terms of their reliance on exports and FDI, which has continued albeit with a general rising trend in both elements since the mid-1980s (see Table 1). This trend coincides with the broader consensus of letting international market forces and firms determine the pattern of integration into the global economy. This broad consensus has led to the rise of the era of hyperglobalization characterized by more footloose capital and the proliferation of free trade agreements which together have narrowed the options on domestic economic and trade policies. Paradoxically, while this has made it easier to establish a shallow export—investment nexus through participation in GVCs, it has become more challenging for many developing countries to establish a deeper nexus linked to a pattern of diversified development and higher domestic value-added activities (UNCTAD 2014, 2016a).

Some of the diversity in experiences reflects initial conditions and patterns of economic integration inherited from their respective colonial histories, but policy choices continue to matter. Most countries in both regions began their post-independence development efforts by adopting some form of economic planning, and in pursuit of similar objectives, all pursued industrialization through import substitution. But even as countries in both regions, albeit with differences in timing and degree, shifted towards greater openness, the strategic use of controls, both of a discretionary and non-discretionary nature, such as employed in East Asia to discipline and align the interests of firms with a wider developing strategy, has been elusive. The remainder of this paper compares the three selected countries with East Asia in the areas of trade, technology, resource mobilization, and development finance.

At the outset, and albeit with important differences in the commitment to private property rights and the reach of the price mechanism, policymakers in both post-1947 India and post-1949 China adopted Soviet-inspired five-year centralized plans that focused on the domestic market, pursued goals of self-sufficiency, and prioritized heavy industries led by the public sector. These development strategies persisted for several decades before decisive market reforms were introduced in the late 1970s for China, and in the 1990s for India. Both reforms were gradual, but they had important differences: China's reforms began in agriculture and continued sequentially in the industrial and financial sectors, whereas India's reforms stretched, from the outset, across all sectors but were also more piecemeal in nature; China actively promoted FDI inflows from the 1990s as part of its export push, whereas India's reforms also attracted FDI but did not greatly alter the economy's focus towards foreign markets.

Post-1957 Malaysia also initially pursued import substitution through five-year plans, but with a stronger emphasis on private enterprise including a strong presence of foreign investors using foreign technologies in primary sectors and later in manufacturing sectors. Malaysia's first phase of import substitution lasted ten years from 1957 to 1967 before the promotion of export-oriented manufacturing in the 1970s centred on electronics and textiles sectors. A second import substitution phase focusing on heavier industries began in 1981, followed by another export-oriented phase from the mid-1980s onwards that placed greater attention on fostering domestic technologies and know-how.

All countries in the region have used SEZs, or EPZs, <sup>10</sup> as part of their opening-up strategy. In the remainder of this sub-section, each of the three countries' experience with SEZs is briefly examined with emphasis on broad patterns in the application of operational controls to align these policy instruments with wider development strategy.

India was among the first in Asia to establish an EPZ, in the port city of Kandla in 1965, followed by a second EPZ built in a suburb of Mumbai in 1973. Established to foster an electronics manufacturing sector, this second EPZ would later also include firms in the gems and jewellery sector. Unlike Kandla, this EPZ was located in an urbanized area with a history of industrial development and with infrastructure facilities. Four more EPZs were set up in 1984–86, and a fifth in 1989. At the time, EPZs were owned and managed by the central government with three-tiers of administration; it was only in the 1990s that state governments, autonomous agencies, and the private sector were allowed to develop EPZs (Mukherjee et al. 2016: 53).

Although there were success stories from the first EPZ regime, particularly related to the jewellery sector, these zones had difficulty in attracting firms due to a lack of government commitment, piecemeal reforms and policy reversals, poor site selection and infrastructure provision, weak incentives, and inadequate regulation of the zones. It was not until the mid-2000s that the government introduced a new SEZ regime with added incentives.

Whereas the old EPZ scheme had fostered industrial enclaves, the new regime simplified administrative procedures and promoted an integrated township with fully developed infrastructure (Aggarwal 2006). Exports from SEZs have been growing, but they still accounted for less than a fifth of the total in 2013–14 and remained heavily focused on the information technology sector (Mukherjee et al. 2016: 69–75). The new scheme has generally failed to achieve its main objectives of increasing manufacturing output, exports, employment, and FDI as well as improving infrastructure. The main problems related to over-emphasis on information and communication technology software sectors rather than manufacturing sectors, erosion of incentives through free trade agreements, a lack of supporting infrastructure, particularly transportation, and complications related to land acquisition (Athukorala 2018: 24–5). In response to these challenges, the 'Make in India' initiative seeks to establish five economic corridors to serve as the backbone of a globally competitive manufacturing sector. However, in the absence of clear operational controls to align private and public investment it remains unclear whether this strategy will be any more successful than past efforts.

In the case of Malaysia, it first established SEZs in 1971 in Penang to attract export-oriented FDI in light manufacturing activities such as textiles and electronics assembly operations. Though generally regarded as successful, the approach did not stimulate a shift from low to high value-added activities in the electronics industry. After a brief interlude, the government began a more successful second round of export orientation in 1986, attracting FDI inflows from Japan and the first-tier NIEs following the Plaza Accord of 1985 which led to appreciations in the currencies of Japan, ROK, Taiwan (China), and Singapore. By the late 1980s, the electronics industry was the largest generator of manufacturing employment, exports, and value-added activities in Malaysia (Rasiah 2015: 9–10).

However, increasing export competition from China and other lower-cost Asian countries, as well as the Asian financial crisis, exposed key structural weaknesses of the Malaysian electronics industry: an asymmetric industry structure; a heavy import dependence due to weak domestic support industries and undeveloped linkages; a heavy reliance on export markets; a highly

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<sup>&</sup>lt;sup>10</sup> Including other related zones such as free trade zones, industrial parks, free ports, and enterprise zones.

concentrated export basket of products, mainly of low-end assembly operations; a declining capacity to generate employment; and a mismatch between the demand and supply for labour skills (Ernst 2002: 38–40; Athukorala 2017: 189–91). Positive operational controls to attract higher value-added activities has had some success but shortcomings in government monitoring and evaluation have reduced the effectiveness of policy tools: for example, it was only in the mid-2000s that the provision of government grants were made conditional on the achievement of upgrading targets and milestones (Rasiah 2015: 12, 16).

China was a relative latecomer in the use of SEZs, with the first four zones created in southern coastal areas in 1980 (Shantou, Shenzhen, Xiamen, and Zhuhai). Since then SEZs were scaled up nationwide and their role evolved over time to involve more capital- and technology-intensive activities, including production and services activities aimed at the domestic market. In the latest phase, established zones have adapted to rapid increases in costs by leveraging scale economies, insertion with GVCs, and production clusters to move into higher value-added production and chain functions. In addition to the traditional benefits provided to firms in SEZs, the government also provided measures such as grants, informational and professional platforms, and testing centres, which facilitated links between firms and universities/technical institutions to support the economic upgrading process (Dinh et al. 2013).

Domestic technology-intensive firms generally benefited from a package of government measures, including imports of foreign technologies, joint venture requirements, and incentives for indigenous R&D—promoted through the next iteration of the SEZ concept, namely, the high-technology industrial development zones (HIDZs). Initiated in 1988 and promoted by China's Torch Program, HIDZs sought to harness the technological capacity and resources of domestic research institutes, universities, and enterprises to foster high-technology products and the commercialization of R&D. HIDZs have subsequently spearheaded China's efforts to move into new sectors, including through cooperation between Chinese and foreign firms (Heilmann et al. 2013) and according to one estimate, by the mid-2000s, the share of HIDZs in China's R&D expenditure reached over one-third (Fu and Gao 2007). Other studies have emphasized China's hands-on approach to raising domestic value-added in GVC-linked exports by enhancing the indigenous R&D capacities of domestic firms (Gallagher and Shafaeddin 2009).

To provide a sense of the above-mentioned trends, Figure 2 plots the domestic value-added share of gross exports in the computer, electronics and optical equipment industry for selected countries. Countries such as Japan and the United States exhibit high levels of domestic value-added commensurate with their role as core technology suppliers. ROK has relatively high domestic value-added, albeit declining from 72.2 per cent to 57.8 per cent from 1995 to 2011. Over the same period, Malaysia and China had lower respective starting points at 54.2 per cent and 32.9 per cent, but Malaysia's share fell to 33.2 per cent, while China's share rose to 46.2 per cent. India's relatively high level of domestic value-added—declining from 84.6 per cent in 1995 to 68.8 per cent in 2011—can be understood in the context of its relatively lower level of GVC engagement (discussed further later in the paper).

Figure 2: Domestic value-added share of gross exports in computers, electronics and optical equipment for selected countries (1995–2011)

Source: Authors' compilation based on OECD (2018).

Figure 3 provides further insight into country-level trends in trade flows and technology structure for the electronics sector—one of the main industries linked to GVCs. Given its relatively early engagement with electronics GVCs, ROK can be used as a rough benchmark as it maintained a net trade surplus over the years even as the share of the electronics sector in total exports has been declining, and its trade structure has shifted from consumer electronic equipment and computer and peripheral equipment to higher value-added communication equipment, and later in electronic components (such as integrated circuits). By comparison, trade flows and technology structure for the electronics sector in China, India, and Malaysia reveal trends that are reflective of each country's approach to engaging GVCs. The cases of China and Malaysia draw the closest similarities to that of ROK, in terms of maintaining net export surpluses, albeit with qualifications given each country's overall stage of development in general and in the electronics sector in particular.

Over the period 1992–2016, China moved from deficit to surplus in net exports, as the share of electronics exports grew from 6.3 per cent to 26.5 per cent of total exports and electronics imports grew from 8.2 to 23.8 per cent of total imports. Strong net exports in computers and peripheral equipment are evident by the mid- to late 2000s, with increasing product diversification into communication equipment and, to a lesser extent, consumer electronic equipment. Unlike ROK, China maintains relatively large trade deficits in electronic components, especially in integrated circuits, which is consistent with China's lower relative position in electronics GVCs.

China India 500 35 10 Net trade balance (US\$ billions) Net trade balance (US\$ billions) 400 30 300 25 Percentage (%) -10 200 20 -15 15 100 -20 -25 -100 5 -30 -200 0 -35 1998 Misc. (\$) Electronic components (\$) Electronic components (\$) Consumer electronic equipment (\$) Consumer electronic equipment (\$) Communication equipment (\$) Communication equipment (\$) □ Computers and peripheral equipment (\$) Computers and peripheral equipment (\$) Electronics exports (% of total exports) Electronics exports (% of total exports) Electronics imports (% of total imports) Electronics imports (% of total imports) Republic of Korea Malaysia 30 60 60 40 Net trade balance (US\$ billions) Net trade balance (US\$ billions) 25 35 50 50 20 30 40 15 25 Percentage 10 20 20 10 10 -10 -15 0 2016 1990 9661 1998 1990 2014 966 Misc. (\$) Misc. (\$) Electronic components (\$) Electronic components (\$) Consumer electronic equipment (\$) Consumer electronic equipment (\$) Communication equipment (\$) Communication equipment (\$) Computers and peripheral equipment (\$) Computers and peripheral equipment (\$) Electronics exports (% of total exports) Electronics exports (% of total exports) Electronics imports (% of total imports) →Electronics imports (% of total imports)

Figure 3: Electronics industry trade flows and structure for selected countries (1990–2016)

Source: Authors' compilation based on UNCTAD (2018) and United Nations (2018).

For Malaysia, in 1990, the share of electronics exports was 48.6 per cent and imports was 18.1 per cent; by 2016, electronics exports declined to 30.5 per cent and imports to 24.7 per cent. These trends led to a rise in net exports to US\$21.3 billion by 2006, which declined to US\$16.2 billion by 2016. As for product mix, net exports consisted mainly of consumer electronic equipment until the mid-1990s, followed by computers and peripheral equipment until the late 2000s. As of 2011, net exports of consumer electronics and electronic components have been more prominent. Malaysia had net trade deficits in electronic components from 1990 to 2010 (except in 2009), but these deficits then turned into surpluses. This is due in part to improved production capabilities in higher value-added semiconductor design and wafer fabrication linked to foreign firms in Malaysia (Rasiah 2015: 12–15), which also helps to explain the downward trend in net exports and domestic value-added (see Figure 2).

For India, its trade flows and structure in the electronics sector reflect an approach to electronics GVCs that have led to increasing net trade deficits. In 1990, the share of electronics exports in India's total exports was 1 per cent and in imports was 3 per cent; by 2016, exports fell to 0.9 per cent and imports rose to 9.2 per cent. The net trade deficit rose from US\$540 million in 1990, to US\$2.2 billion in 2000, to US\$30.8 billion in 2016. The product mix in terms of net trade deficits has been largely concentrated in communication equipment, followed by computers and peripheral equipment, and then by electronic components.

It is also important to consider the relative order of magnitude of electronic sector gross trade flows for each country. In 1992, China exported US\$5.4 billion and imported US\$6.6 billion in total electronic goods; by 2016, exports were US\$555.8 billion and imports were US\$377.2 billion. Malaysia exported US\$14.3 billion and imported US\$5.3 billion in electronics in 1990; by 2016, exports were US\$57.8 billion, while imports were US\$41.6 billion. In contrast, in 1990, India exported US\$175.5 million and imported US\$715.9 million in electronic goods; by 2016, it exported US\$2.5 billion and imported US\$33.3 billion. For its part, ROK exported US\$14.3 billion and imported US\$7.8 billion in total electronic goods in 1990. In 2016, it exported US\$110.3 billion and imported US\$63.8 billion.

Beyond the electronics sector, the broader trend appears to be China's steady success in adding more domestic value-added to its manufactured exports while this measure of successful upgrading has declined sharply in the other countries (Table 2).

Table 2: Changes in value-added shares in gross exports (1995–2014) (percentage points)

	Foreign	Domestic				
		Agriculture and extractives	Manufacturing	Services		
China	-1.7	-2.8	11.9	-7.4		
India	11.6	-3.5	-12.9	4.8		
Malaysia	8.7	1.4	-5.8	-4.3		
Developing economies	4.2	4.3	-3.5	-5.1		
Developed economies	7.2	1.7	-10.1	1.1		

Source: Authors' compilation based on UNCTAD secretariat calculations from OECD (2018).

#### 3.2 Foreign and domestic resource mobilization

As noted earlier, the first-tier NIEs adopted a strategic approach to managing foreign capital flows and engaging GVCs with a clear focus on ensuring that spillovers from hosting international firms would enhance productivity in the rest of the economy. Despite receiving different absolute volumes of inward FDI, each country designed policy frameworks to regulate the presence and activities of foreign companies. Each country had its own interpretation of what constitutes a 'strategic sector', but the effectiveness of FDI restrictions to foster national ownership and upgrading of domestic technological capabilities also depended on the management of the underlying growth structure of the sector in question and of the economy as a whole.

Differences in the operational controls used to manage trade, FDI, and technology flows explain much of the Asian divergence. But consideration must also be given to broader controls linked to the macroeconomic policy framework in which trade, FDI, and technology policies operate and which modulate the domestic impact of global financial flows. In particular, the configuration of a country's capital account regime can shape the nature of interaction between monetary and exchange rate policies, which carries significant implications in terms of animating the profit—investment nexus, the strength of domestic resource mobilization, and the structure of domestic growth.

The development paths struck in Southeast Asia have generally been more welcoming of FDI, albeit with variation across sectors, and the same is true in India since the 1990s. China has attracted large volumes of FDI since the early-1990s, but compared with India and Malaysia, it has done so in the context of an unorthodox macroeconomic framework that sustained very high levels of domestic investment—a quintessential feature of the East Asian development model (UNCTAD 1996; Singh 1996)—whereas in India and Malaysia, consumption (household and government) has been a more prominent driver of GDP growth (particularly so in Malaysia following the Asian financial crisis).

Figure 4 contrasts gross FDI inflows for selected Asian countries with FDI as a percentage of gross fixed capital formation (GFCF). In early stages of development, FDI may account for a larger share of GFCF, but in cases where a country has pursued an investment-led growth path, the influence of inward FDI flows on GFCF should be reduced over time. Using ROK as a rough benchmark, the country's period of fast growth occurred at a time when FDI was not the primary mode of economic globalization, and the country could rely on foreign grants and concessional loans to support its investment and consumption rates, while utilizing licensing agreements and technical assistance to access foreign technologies. FDI inflows were more thoroughly liberalized in ROK after the Asian financial crisis, as FDI as a percentage of GFCF reached a peak of 7.3 per cent in 1999 before falling to a level of 2.6 per cent in 2016.

China, 1980-2016 India, 1970-2016 18 140 12 16 billions (current prices) 120 10 14 100 % % 12 (current Percentage 80 Percentage 6 10 8 60 JS\$ billions 6 2 40 4 JS\$ 0 20 2 0 -10 -2 1990 1995 2000 2005 2010 2015 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015 1980 FDI as share of GFCF (left scale) FDI as share of GFCF (left scale) Inward FDI (right scale) Inward FDI (right scale) Malaysia, 1970-2016 Republic of Korea, 1970-2016 25 25 billions (current prices) 12 20 20 % Percentage (%) billions (current 15 15 Percentage 6 10 5 5 US\$ US\$ 2 2 0 0 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015 FDI as share of GFCF (left scale) FDI as share of GFCF (left scale) Inward FDI (right scale) Inward FDI (right scale)

Figure 4: Gross fixed capital formation (GFCF) and inward foreign direct investment (FDI)

Source: Authors' compilation based on UNCTAD (2018).

With the proliferation of free trade agreements and bilateral investment treaties, most latecomer countries have not been able to use the same set of industrial policy tools as the earlier cohort of East Asian NIEs and have struggled to adapt to the growing prominence of FDI as the main conduit of international economic, technological, and knowledge flows. China, which has maintained strategic use of operational controls to achieve its rapid catch-up development, appears to be an exception.

In the case of China, rising FDI inflows at the start of the 1990s is associated with the country's encouragement of FDI in SEZs. Since that time, inward FDI flows have climbed steadily, but due to the country's policy framework of maintaining high levels of domestic investment, FDI as a share of GFCF has been on the decline since reaching a peak of 17 per cent in 1994. By 2016, gross inward FDI inflow was US\$133.7 billion but FDI as a share of GFCF was 2.8 per cent. These trends contrast to those of India and Malaysia, which have both received growing FDI inflows over time, particularly since the mid-2000s for India and in the aftermath of the Asian financial crisis for Malaysia. However, because both countries' growth experiences involved lower levels of domestic investment (and higher levels of final consumption), GFCF rates appear more directly influenced by (volatile) FDI inflows.

#### 3.3 Role of national development banks (NDBs)

There is no straightforward way to comprehensively depict the multi-layered policies that comprise a country's macroeconomic framework and its link to sustained resource mobilization, domestic investment, and structural transformation (Ocampo and Vos 2008; UNCTAD 2016a). A vast, but far from conclusive, body of literature around financial deepening has tried to link the growing use of 'financial instruments, markets, and intermediaries to ameliorate the effects of information, enforcement, and transactions costs by providing broad categories of financial services to the economy' (Loayza et al. 2017: 2) to a faster pace of investment, growth, and structural transformation.

An alternative approach is to examine the structure of the domestic banking sector, and, in particular, the role of NDBs in supporting national policy goals such as boosting domestic investment, industrial diversification and upgrading, and employment creation. In principle, NDBs are potent policy instruments since they operate in market segments at the core of the process of structural transformation. Their main function is to address imperfect capital markets that are unwilling to bear the risks associated with extending finance to large-scale capital-intensive projects (or new sectors, products) characterized by high degrees of uncertainty, and long gestation and learning periods. As private investors cannot capture the positive externalities often generated from such projects, the result is underinvestment in these areas. NDBs can institutionally bridge asset—liability mismatches between long-term investment in infrastructure projects and short-term deposits in the banking system. NDBs can also play a proactive role by utilizing its accumulation of research, technical support, and institutional capabilities to shape and create markets, in anticipation of demand and in coordination of domestic supply responses (UNCTAD 2016b).

In practice, the effectiveness of NDBs as a policy tool has been uneven and their role remains contested. With the rise of the Washington Consensus, NDBs carried strong negative connotations and in the 1990s were even associated, in some quarters, with a kind of crony capitalism that led to the Asian financial crisis. By the 2008 financial crisis, however, as lending from private sector banks dried up, NDBs regained prominence as key sources of long-term counter-cyclical finance for investment in infrastructure, public facilities, and strategic sectors. The 2008 crisis underscored the enduring importance of development finance, as policymakers began rethinking the role of NDBs in structural transformation and how to effectively wield them (Caixin Media 2017; Studart and Gallagher 2016).

One main lesson from past East Asian experiences with NDBs is the adaptability of government policies to abandon policies that are not functioning and to adjust policies to changing circumstances—that is, adjustments made in the operational controls of these institutions. The design of East Asian development finance institutions (DFIs) included measures to mitigate their susceptibility to political discretion in decision-making and to enhance the likelihood that resources are used effectively. Such measures included the use of performance-based criteria for credit allocation, applying commercial criteria to firms that receive credit and requiring these firms to raise part of their own funds while also contributing their own equity (Stiglitz and Uy 1996: 271–3).

Figure 5 shows broad trends in the respective use of NDBs in China, India, and Malaysia, in contributing to growth patterns that gave rise to the Asian divergence. These rough estimates reveal an increasing domestic role of NDB outstanding loans as a share of GDP in China and Malaysia. In contrast, outstanding loans of NDBs in India have stagnated at low levels over the past decade and have fallen dramatically from early 2000 levels. Individual NDB country experiences are examined later to further underscore the different approaches in adjusting the operational controls of these institutions as part of an overall national development strategy. In general terms, trends in Figure 5 are consistent with each countries' respective approach to economic (and financial) openness: low for India, medium for China, and high for Malaysia.

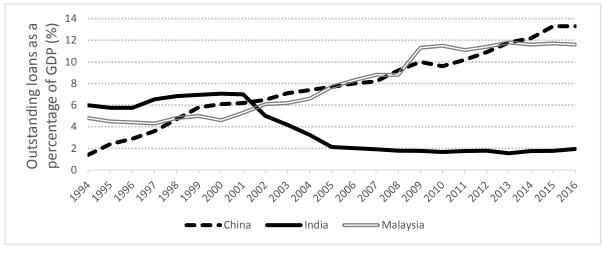


Figure 5: Role of national development banks (1994–2016)

Notes: China includes: China Development Bank. India includes: Industrial Credit and Investment Corporation of India, Industrial Development Bank of India, Industrial Finance Corporation of India, National Bank for Agriculture and Rural Development, National Housing Bank, State Finance Corporations, Small Industries Development Bank of India, and Export–Import Bank of India. Malaysia includes: from 2004 and after, Bank Pembangunan Malaysia, Bank Perusahaan Kecil and Sederhana Malaysia, Export–Import Bank of Malaysia, Bank Kerjasama Rakyat Malaysia, Bank Simpanan Nasional, Bank Pertanian Malaysia. Pre-2004 DFIs are those listed here as well as: Malaysian Industrial Development Finance, Credit Guarantee Corp., Lembaga Tabung Haji, Sabah Development Bank, Sabah Credit Corp, Borneo Development Corp (Sabah) Sendirian, and Borneo Development Corp. (Sarawak) Sendirian.

Source: Authors' compilation based on data from China Development Bank (various years), Xu (2016), Reserve Bank of India (various years), Bank Negara Malaysia (various years), and International Monetary Fund (2018).

In China, three NDBs were created in 1994 as part of overall banking sector reforms, as government authorities sought to better distinguish between commercial-based lending and policy-based lending. The three NDBs were the China Development Bank (CDB), the Export–Import Bank of China (CEXIM), and the Agricultural Development Bank of China, of which CDB has the largest balance sheet and a primary focus on financing large-scale infrastructure and industrial projects. Despite initial difficulties, China's NDBs were backed by state resources and political leadership, which allowed them an increasingly prominent role as providers of long-term financing

at the centre of the country's high-investment growth strategy. In terms of its funding sources, CDB is not a deposit-taking institution, but relies on borrowing from domestic capital markets rather than direct government support (UNCTAD 2016b). In 2015, CDB and CEXIM received respective capital injections of US\$48 billion and US\$45 billion to further bolster their lending capacity.

Plans to place CDB on a greater commercial footing through measures to bring in an outside strategic investor, take deposits from the public, assume greater responsibility for the risks of its investments, and sell shares in an initial public offering were halted in the advent of the 2008 global financial crisis—an event in which local government financing vehicles, an institutional innovation pioneered by CDB since the late 1990s, played a critical counter-cyclical role. Since the late 2000s, CDB and CEXIM have also been a major source of China's overseas development finance.

Malaysia's history with NDBs began with the Malaysian Industrial Development Finance, created in 1960 to extend medium- to long-term financing to private industrial enterprises. This was followed by subsequent DFIs: Bank Pertanian (the agricultural sector), Bank Pembangunan (Bumiputera groups in commerce and industry), and Bank Industri (industry and manufacturing sectors), and export-related DFIs such as the Export–Import Bank of Malaysia (MEXIM). From the mid-2000s onwards, Malaysia had 13 DFIs (Islam 2015; Ghani 2005).

After the Asian financial crisis, Malaysia's fragmented banking sector was consolidated and DFIs were rationalized in the mid-2000s. Aside from concerns over financial sustainability, policymakers wanted to increase DFI financing to priority sectors and reduce overlapping functions. For instance, the formation of a small- and medium-sized enterprise bank was the result of restructuring Bank Pembangunan and Bank Industri. The other major DFI consolidation involved MEXIM and Malaysia's export credit insurance agency. In light of the myriad of DFI entities, at the end of 2005, the sectoral allocation of DFI lending (by assets) supported both domestic investment and consumption levels, with the latter accounting for 40 per cent of the total. DFI funding sources can vary, with some mainly drawn from government borrowings and multilateral development agencies and others from bank deposits (Bank Negara Malaysia 2006: 178–9, 183).

In the case of India, it has a longer experience with NDBs that can be divided into three phases: (i) the late 1940s to mid-1960s, (ii) the 1980s, and (iii) the late 1990s to early 2000s. The first phase kick-started industrialization, mainly with the creation of long-term nationwide lending institutions: the Industrial Finance Corporation of India (IFCI) (1948), the Industrial Credit and Investment Corporation of India (ICICI) (1955), and the Industrial Development Bank of India (IDBI) (1964). The 1980s phase featured the creation of refinancing and issue-specific institutions such as the National Bank for Agriculture and Rural Development, the National Housing Bank, and the Small Industries Development Bank of India. In the third phase, however, India's financial sector underwent major reforms that eliminated DFIs' preferential access to concessional government finance and issuance of government-guaranteed bonds (Nayyar 2015; UNCTAD 2016b).

These structural changes reduced the role of development finance in India, as major DFIs were converted into commercial banks (except for IFCI). Over time, the distinction between short-term and long-term finance providers in the Indian banking system was blurred (Reddy 2005), which has led to renewed interest in reviving DFIs for infrastructure sectors (Reddy 2017). India's DFIs have historically played a strong role, but major challenges remain. In particular, they did not focus on infrastructure; and sectors in which they did engage, the relationships with firms often did not extend beyond lending. Moreover, there was little coordination between DFIs and industrial policy priorities in terms of sectoral focus. This lack of coordination has been attributed to weak institutional control mechanisms that (i) adjusted incentives according to performance, and that

(ii) provided effective checks and balances to prevent and dissuade rent-seeking between governments and firms, or between development banks and firms (Nayyar 2015).

# 4 Concluding remarks

In a sense, Myrdal's study of Asia anticipated the Asian divergence even as it missed its genesis; the policy lessons drawn from his work—if broadly implemented—would lead a developing country on a growth path that would separate it from the rest. While Myrdal did not include East Asia, he did so indirectly by outlining the basic institutional, organizational, and policy ingredients needed for sustained development that were already being adopted by East Asian policymakers. As such, *Asian Drama* remains remarkably prescient 50 years after its publication, by still providing core insights to understand (if not predict) the Asian divergence.

The four concepts of Myrdal's analysis have been gradually adopted into mainstream development discourse over time, albeit to different extents. Of the four, the soft states concept has arguably received the least attention, but Myrdal's elaboration of operational controls and the need for coordination of these controls, predated similar concepts of policy space, reciprocal control mechanism, and export—investment nexus that would become essential tenets of heterodox economic policy-thinking.

With the global development discourse gradually progressing from the *why* of conducting industrial policy strategy to the *how* of implementing it, this paper does not try to comprehensively assess economic openness in the three selected Asian countries, but has sought to advance the discussion by triangulating between (i) the orientation of selected policy tools in trade, technology, investment, and finance in shaping a country's degree of economic openness (low, medium, or high); (ii) the rational coordination of operational controls of these policy tools to achieve desired objectives; and (iii) the overall development outcomes observed in the Asian divergence. The rational coordination of operational controls is in reference to the strategic use of selected policy tools in the historically successful experiences of the East Asian NIEs. By this measure, evidence presented in this paper seems consistent with the idea that China has adopted and adapted the strategic approach to integration from earlier East Asian development strategies.

In the area of trade, India deployed SEZs as a policy instrument in the 1960s, but weak coordination of related operational controls hindered the role of SEZS in driving manufacturing sector exports—an issue that confronts the Make in India initiative. China began experimenting with SEZs in the 1980s, which were scaled up in the 1990s and 2000s. The number of SEZs was later reduced due to over-capacity, but their role has evolved over time as the government actively promoted domestic upgrading by enhancing the absorptive capacity of domestic firms and fostering indigenous R&D capabilities. Malaysia initially engaged with electronics GVCs in the 1970s, and the sector became a major contributor to manufacturing activities in Malaysia by the late 1980s. However, it was only in the mid-2000s that government SEZ incentives were linked to upgrading targets.

Similar patterns in operational controls can be seen in the management of resource mobilization in contributing to sustained growth. India has been slow to attract FDI inflows and its share of GFCF has stayed below 10 per cent, despite the economy being at an early stage of development. By contrast, China's FDI inflows were coordinated with scale-up of SEZs in the mid-1990s, as part of an investment-led growth strategy with a subsequently sharply reduced role of FDI in GFCF, even as inward FDI flows rose in absolute terms. For Malaysia, the role of FDI in GFCF

was high in the 1970s and has remained relatively high and exposed to volatility as FDI inflows recovered after financial crises in the late 1990s and again in the late 2000s.

These investment trends are reflected in each country's orientation of NDBs. In both China and Malaysia, the role of NDBs has grown since the mid-1990s, but whereas CDB was central to China's investment-led growth strategy, the proliferation of Malaysian DFIs led to policy fragmentation. In India, difficulties with operational controls led to the conversion of major DFIs into commercial banks, which reduced the provision of long-term development finance. Having largely relinquished DFIs as a potent policy tool by the early 2000s, policymakers in India are now actively debating their revival.

From a wider perspective, in comparing the opening-up experiences of the three Asian countries, each could be considered as separate development pathways based on different approaches to economic reforms. In this respect, these cases provide insights into the application of the theory of the second best, and the likely role of operational controls and their coordination, in influencing different reform outcomes. Going forward, it is imperative that the scope of operational controls be calibrated in each country according to the level of openness appropriate for the realization of national objectives at its current stage of development. For China, its transition from medium-income to high-income status entails a continued gradual path towards greater openness with strategic retention of policy space—particularly as it seeks to upgrade its position within existing GVCs and to build its own. At a lower income level, India likely needs more doses of pragmatic openness to spur its manufacturing sector and to better engage with GVCs; while, at a higher income level, Malaysia may need to adopt selective separation from existing GVCs and to generate competitive pressure for upgrading by fostering local value chains.

Perhaps the most striking illustration of a second-best mindset is China's use of DFIs: returned to financial health in the late 1990s without privatization, NDBs were at the heart of China's high-investment industrialization drive. By the mid-2000s, China's DFIs backed the internationalization of Chinese firms, and, more recently, are supporting upgrading efforts in the Made in China 2025 plan. China also led the creation of two new multilateral development banks, which, in conjunction with its NDBs, are spearheading China's Belt and Road initiative—a foreign economic policy focused on building regional infrastructure that could transform development prospects in Asia.

While Myrdal's *Asian Drama* provided a rich portrayal of development prospects in South and Southeast Asia, this paper also considers the rapid catch-up growth experiences of East Asia, and more recently China, in matching Myrdal's analytical concepts with the few instructive development cases where 'driving a car with the accelerator pushed to the floor' was coordinated with use of the brakes. This simple notion goes to the heart of the Asian divergence and to ongoing episodes of Asian development drama.

#### References

- Aggarwal, A. (2006). 'Special Economic Zones: Revisiting the Policy Debate.' *Economic & Political Weekly*, 41(43-44): Commentary.
- Akyuz, Y. (2017). Playing With Fire. Oxford: Oxford University Press.
- Amsden, A. (2004). 'Import Substitution in High-Tech Industries: Prebisch Lives in Asia!'. CEPAL Review, 82: 75–89.
- Athukorala, P.C. (2017). 'Global Productions Sharing and Local Entrepreneurship in Developing Countries: Evidence from Penang Export Hub, Malaysia'. *Asia & The Pacific Policy Studies*, 4(2): 180–94.
- Athukorala, P.C. (2018). Joining Global Production Networks: Experience and Prospects of India. Paper presented at the 27the conference of Asian Economic Policy Review (AEPR), Tokyo, Japan, April. Japan Center for Economic Research (JCER) Working Paper 2018-1-4. Tokyo: JCER.
- Bank Negara Malaysia (2006). Annual Report 2005, March. Available at: http://www.bnm.gov.my/index.php?ch=en\_publication&pg=en\_ar&ac=11 (accessed October 2018).
- Bank Negara Malaysia (various years). Annual Report. Available at: http://www.bnm.gov.my/index.php?ch=en\_publication&pub=ararc (accessed October 2018).
- Blanchard, O., and J. Acalin (2016). 'What Does FDI Actually Measure?'. Policy Brief 16–17., Washington DC: Peterson Institute for International Economics.
- Caixin Media (2017). 'Zhou Xiaochuan: "Belt and Road" Investment Finance Should Be Market-Oriented' [in Chinese], March. Available at: http://opinion.caixin.com/2017-05-19/101092460.html (accessed October 2018).
- Chang, H.J. (2009). 'Industrial Policy: Can We Go Beyond an Unproductive Confrontation?'.

  Paper prepared for Annual World Bank Conference on Development Economics, 22–24

  June, Seoul, South Korea. Available at: http://siteresources.worldbank.org/

  INTABCDESK2009/Resources/Ha-Joon-Chang.pdf (accessed October 2018).
- China Development Bank (various years). Annual Report. Beijing: CDB.
- Conference Board, The (2017). Total Economy Database, November. Available at: https://www.conference-board.org/data/economydatabase/ (accessed October 2018).
- Dinh, H.T., T.G. Rawski, A. Zafar, L. Wang, and E. Mavroeidi (2013). Tales from the Development Frontier: How China and Other Countries Harness Light Manufacturing to Create Jobs and Prosperity. Washington DC: World Bank.
- Ernst, D. (2002). 'Global Production Networks in East Asia's Electronics Industry and Upgrading Perspectives in Malaysia'. East-West Center Working Papers 44, October. Honolulu: East-West Center. Available at: https://www.eastwestcenter.org/publications/global-production-networks-east-asias-electronics-industry-and-upgrading-perspectives-m (accessed October 2018).
- Fu, X.L., and Y. Gao (2007). 'Export Processing Zones in China: A Survey'. Report submitted to ILO, October. Available at: http://www.ilo.org/public/french/dialogue/download/epzchineenglish.pdf (accessed October 2018).
- Gallagher, K.P., and M. Shafaeddin (2009). 'Policies for Industrial Learning in China and Mexico'. RIS Discussion Papers RIS-DP 150, February. New Delhi: Research and Information System

- for Developing Countries. Available at: http://www.ase.tufts.edu/gdae/Pubs/rp/RIS\_DP150ChinaMexicoMar09.pdf (accessed October 2018).
- Ghani, D.Z.A. (2005). 'Role of Development Financial Institutions in the Financial System'. Bank of International Settlements, 12 September. Available at: https://www.bis.org/review/r050923e.pdf (accessed October 2018).
- Heilmann, S., L. Shih, and A. Hofem (2013). 'National Planning and Local Technology Zones: Experimental Governance in China's Torch Program'. *The China Quarterly*, 216: 896–919.
- Islam, M.A. (2015). 'An Empirical Assessment of the Impact of Development Financial Institutions (DFIs) on Malaysian Economy'. *International Journal of Financial Economics*, 4(4): 176–84.
- International Monetary Fund (2018). International Financial Statistics. Available at: https://www.imf.org/en/Data (accessed October 2018).
- Jenkins, M., G. Esquivel, and F. Larraín (1998). 'Export Processing Zones in Central America'. Development Discussion Papers 4, Central America Project Series, July. Cambridge, MA: Harvard Institute for International Development. Available at: https://sites.hks.harvard.edu/cid/archive/hiid/papers/epzfinal.pdf (accessed October 2018).
- Jo, J., J. Kim, Y. Lim, C. Chang, D. Kwon, U. Lee, and U. Jung (2012). 'Korea's Development Experience Modularization: Industrial Complex Development Policy in Korea'. Korea Research Institute for Human Settlements (KRIHS). Republic of Korea: Ministry of Land, Transport and Maritime Affairs.
- Lal, D. (1985). The Poverty of Development Economics. Cambridge: Harvard University Press.
- Lim, W. (2010). 'Joint Discovery and Upgrading of Comparative Advantage: Lessons from Korea's Development Experience'. In S. Fardoust, Y. Kim, and C. Sepulveda (eds), *Posterisis Growth and Development: A Development Agenda for the G20*: 173–226. Washington DC: World Bank.
- Loayza, N., A. Ouazad, and R. Ranciere (2017). 'Financial Development, Growth, and Crisis: Is There a Trade-off?'. World Bank Policy Research Working Paper Series 8237, November. Washington DC: World Bank.
- Low, L. (2001). 'The Role of the Government in Singapore's Industrialization'. In K.S. Jomo (ed.), Southeast Asia's Industrialization: Industrial Policy, Capabilities and Sustainability: 113–28. Houndmills: Palgrave.
- Madani, D. (1999). 'A Review of the Role and Impact of Export Processing Zones. World Bank Policy Research Working Paper 2238, November. Washington, DC: World Bank. Available at: http://documents.worldbank.org/curated/en/789981468766806342/A-review-of-the-role-and-impact-of-export-processing-zones (accessed October 2018).
- Milberg, W., and D. Winkler (2013). Outsourcing Economics: Global Value Chains in Capitalist Development. Cambridge: Cambridge University Press.
- Mukherjee, A., P. Pal, S. Deb, S. Ray, and T.M. Goyal (2016). *Special Economic Zones in India: Status, Issues and Potential.* New Delhi: Indian Council for Research on International Economic Relations.
- Myint, M. (1977). 'Adam Smith's Theory of International Trade in the Perspective of Economic Development'. *Economica*, 44(175): 231–48.
- Myrdal, G. (1968). Asian Drama: An Inquiry into the Poverty of Nations. New York: Pantheon.
- Myrdal, G. (1970a). The Challenge of World Poverty: A World Anti-Poverty Programme in Outline. London: Pelican Books.

- Myrdal, G. (1970b). An Approach to the Asian Drama: Methodological and Theoretical. New York: Vintage Books.
- Nayyar, D. (2015). 'Birth, Life, and Death of Development Finance Institutions in India'. *Economic & Political Weekly*, 1(33): 51–60.
- Ocampo, J.A., and R. Vos (2008). 'Policy Space and the Changing Paradigm in Conducting Macroeconomic Policies in Developing Countries'. BIS Papers 36, February. Available at: https://core.ac.uk/download/pdf/7354269.pdf (accessed October 2018).
- OECD (2018). Trade in Value Added (TiVA) Database. Available at: https://stats.oecd.org/(accessed October 2018).
- Rasiah, R. (2015). 'The Industrial Policy Experience of the Electronics Industry in Malaysia'. WIDER Working Paper 2015/123. Helsinki: UNU-WIDER.
- Reddy, Y.V. (2005). 'Banking Sector Reforms in India—An Overview'. BIS Review 35/2005, May. Available at: https://www.bis.org/review/r050519b.pdf (accessed October 2018).
- Reddy, Y.V. (2017). 'Development Banking—Way Forward'. NSE-IEA Lecture on Financial Economics, 27–30 December. Available at: https://www.nseindia.com/research/content/NSE\_IEA\_Lecture\_on\_Financial\_Economics\_2017\_Development\_Banking.pdf (accessed October 2018).
- Reserve Bank of India (various years). *Handbook of Statistics on Indian Economy*. Available at: https://rbi.org.in/Scripts/AnnualPublications.aspx?head=Handbook%20of%20Statistics% 20on%20Indian%20Economy (accessed October 2018).
- Sakong, I., and Y. Koh (2010). *The Korean Economy: Six Decades of Growth and Development.* Seoul: Korea Development Institute.
- Singh, A. (1996). 'Savings, Investment and the Corporation in the East Asian Miracle'. UNCTAD Study 9, March. Available at: https://mpra.ub.uni-muenchen.de/53884/1/MPRA\_paper\_53884.pdf (accessed October 2018).
- Stiglitz, J.E., and M. Uy (1996). 'Financial Markets, Public Policy, and the East Asian Miracle'. World Bank Research Observer, 11(2): 249–76.
- Studart, R., and K.P. Gallagher (2016). 'Infrastructure for Sustainable Development: The Role of National Development Banks'. GEGI Policy Brief 007, October. Boston, MA: Boston University. Available at: https://www.bu.edu/pardeeschool/files/2016/08/Infrastructure. Sustainable.Final\_.pdf (accessed October 2018).
- Studwell, J. (2013). How Asia Works: Success and Failure in the World's Most Dynamic Region. New York: Grove Press.
- Thurborn, E., and L. Weiss (2006). 'Investing in Openness: The Evolution of FDI Strategy in South Korea and Taiwan'. *New Political Economy*, 11(1): 1–22.
- Toner, P. (2000). Main Currents in Cumulative Causation: The Dynamics of Growth and Development. London: Palgrave.
- Tu, J.H., and C. Schive (1995). 'Determinants of Foreign Direct Investment in Taiwan Province of China: A New Approach and Findings'. *Transnational Corporations*, 4(2): 93–103.
- United Nations (2018). UN Comtrade Database. Available at: https://comtrade.un.org/ (accessed October 2018).
- UNCTAD (1994). Trade and Development Report, 1994. New York and Geneva: United Nations.
- UNCTAD (1996). Trade and Development Report, 1996. New York and Geneva: United Nations.

- UNCTAD (2003). Trade and Development Report, 2003. New York and Geneva: United Nations.
- UNCTAD (2014). Trade and Development Report, 2014. New York and Geneva: United Nations.
- UNCTAD (2016a). Structural Transformation for Inclusive and Sustained Growth. Trade and Development Report 2016. New York and Geneva: United Nations.
- UNCTAD (2016b). 'The Role of Development Banks in Promoting Growth and Sustainable Development in the South'. UNCTAD Report, December. New York and Geneva: United Nations. Available at: https://unctad.org/en/PublicationsLibrary/gdsecidc2016d1\_en.pdf (accessed October 2018).
- UNCTAD (2018). UNCTADstat. Available at: http://unctadstat.unctad.org/EN/ (accessed October 2018).
- Wade, R. (2010). 'After the Crisis: Industrial Policy and the Developmental State in Low-Income Countries'. *Global Policy*, 1(2): 150–61.
- Warr, P.G. (1984). 'Korea's Masan Free Export Zone: Benefits and Costs'. *The Developing Economies*, 22(2): 169–84.
- World Bank (1993). The East Asian Miracle: Economic Growth and Public Policy. Washington DC: World Bank.
- Xu, Q.Y. (2016). 'CDB: Born Bankrupt, Born Shaper'. Presentation to BNDES-CAF-IPD Conference, 15–16 September, Rio de Janeiro.