India's Economic Future: The Pitfalls of Following South Korea's Industrial Playbook

Anisree Suresh

Takshashila Discussion Document 2024-20
Version 1.0, November 2024

This discussion document undertakes a critical analysis of South Korea's industrial policy, highlighting their role in economic growth and the flaws that led to the 1997 crisis. It draws several lessons for India and warns India against replicating South Korea's approach, particularly in terms of state control, protectionism, and over-reliance on large conglomerates. The focus should be on export-led growth and market efficiency.

Recommended Citation:
Anisree Suresh, "India's Economic Future: The Pitfalls of Following South Korea's Industrial Playbook," Takshashila Discussion Document No. 2024-20, November 2024, The Takshashila Institution.

Executive Summary

This discussion document critically examines South Korea's industrial policies and their economic transformation, highlighting both the successes and pitfalls of the country's approach. While South Korea's export promotion strategies and innovation policies were key drivers of its rapid economic growth, the document also underscores the structural flaws in these policies that contributed to the 1997 economic crisis. These lessons are particularly relevant for India as it seeks to enhance its industrial capabilities and economic future.

Despite initial successes, South Korea's financial system became overleveraged which led to inefficiencies, excessive debt, and ultimately the financial crisis of 1997. The crisis exposed several critical flaws in the country's industrial model, including excessive state control, over-reliance on credit, inefficient protection of infant industries, and policies that favoured large enterprises at the expense of small and medium-sized businesses (SMEs).

In analysing South Korea's experience, the document draws several key lessons for India. It cautions against directly replicating South Korea's industrial policies, especially in the context of India's current "Make in India" and Production Linked Incentive (PLI) schemes. While these initiatives aim

This document has been formatted to be read conveniently on screens with landscape aspect ratios. Please print only if absolutely necessary.

Author
Anisree Suresh is a Research Associate with the Geoeconomics Programme at the Takshashila Institution, Bengaluru, India.

She can be reached at anisree@takshashila.org.in

Acknowledgments
The Author would like to thank Sarthak Pradhan for his research comments for this paper.

to boost foreign direct investment (FDI) and create large, globally competitive firms, the document warns that they risk encouraging inefficiency through protectionism and financial incentives.

For India, the document advocates for a shift towards an export-oriented growth that prioritises competition, innovation, and integration into global value chains. It also stresses the importance of reducing excessive state intervention, fostering a level playing field for businesses, and creating an environment that encourages sustainable, innovative, and efficient industries.

In conclusion, while South Korea's industrial transformation offers valuable insights, India must learn from the mistakes of the past. The focus should be on fostering market-driven growth, reducing inefficiencies, and promoting competition to ensure long-term economic stability and prosperity.

Table of Contents

I. Introduction

South Korea (here onwards Korea) has carved a niche with a thriving global electronics export market and a burgeoning industrial sector. Its transformation from one of the poorest economies in the 1950s to an industrialised Organisation for Economic Co-operation and Development (OECD) country is a testament to its resilience. A poor agriculture-based economy in the 1960s, South Korea is currently the 11th largest economy and one of the most highly industrialised nations in the world. The GDP per capita of Korea was at a record low of US$1,027.65 in 1960; by 2023, it reached a record high of US$34,121.02, a clear indicator of its economic growth.[1] In 1960, the GDP of Korea was US$3.96 billion; by 2023, it had reached US$1,712.79 billion.[2]

South Korea's rapid economic growth has been fascinating. Many studies,[3,4,5] have analysed the causal factors of South Korea's industrialisation and how policy reforms increased South Korea's international trade and incentivised innovation and technological growth. However, casually replicating Korea's industrial policies in other economies to replicate its economic growth could significantly backfire if all the consequences and pitfalls are not considered and addressed. While there is a growing interest in shaping India's industrial policies based on the success models of East Asian economies,[6] it is essential that policymakers in India are fully informed about the implications of these policies to make appropriate choices. Therefore, examining the unintended consequences of Korea's industrial policies becomes crucial. This paper posits that while factors such as export promotion strategies and an active innovation policy played a role in boosting Korea's economic growth, the 1997 crisis and its impact on the Korean economy can also be traced back to some of the fault lines in the government's industrial policies.

This paper will first explore South Korea's industrial policies, analysing the critical success factors behind its economic transformation and the pitfalls in the country's industrial policy. Then, we will look at the learnings for India in its industrial policies, what India could adopt and what it should not.

II. Role of Industrial Policy in South Korea’s Economy

South Korea's industrial policies from the 1960s to the 1990s can be divided into three distinct phases[7] based on the focus area:

- import substitution
- export promotion
- balance and stabilisation

Import Substitution

In the 1960s and early 1970s, the government adopted an industrial policy that encouraged import substitution and industrial undertakings. The government's active involvement in industrial undertakings during the first (1962 to 1966) and second five-year plans (1967 to 1971) was a defining feature of the first phase of industrial policies. Korea's average tariff rate rose to 40 per cent in the 1960s from the 10 per cent uniform tariff rate of the 1950s.[8] The first five-year plan aimed to achieve the annual target growth rate of 7.1 per cent through import substitution of intermediate and capital goods. Along with high tariffs, non-tariff barriers were imposed to protect the domestic industries. Only a small percentage of all imported items were given automatic approval until the 1970s (see Figure 1). The import barriers[9] included import licenses, quantity controls, deposits in advance and customs clearance. The manufacturing sector, a key sector in South Korea's economic development, was highly protected.

Year	Average Tariffs	Automatic Approval
1955	27.4	1.0
1960	58.0	5.0
1965	52.7	5.9
1970	58.5	52.8
1975	48.1	47.8
1980	34.4	70.1
1981	34.4	75.5
1982	34.4	77.4
1983	34.4	81.2
1984	26.7	85.4

Figure 1. Overall trade liberalisation Index. Automatic approval items are shown as a percentage of all importable items. Table adapted from Journal of Economic Policy.[10]

In 1963, Korea faced a foreign exchange rate crisis due to its import substitution policies. Although the import substitution policies continued, some relaxations were allowed through import licensing given to selected firms. The selected firms imported intermediary goods and inputs equal to the value of their export earnings.

	1962	1969	Annual Change (1962-69) (%)
Per capita GNI (US$)	91	221	12.7
Real GDP Growth rate (%)	3.8	14.5	9.8
Current Account (Million US$)	-55.5	-548.6	
Balance of Trade	-335.3	-991.7	
Exports	54.8	658.3	41.5
Imports	390.1	1650.0	24.7
Gross Domestic Investment Ratio (%)	13.1	28.8	
Gross Saving Ratio (%)	10.1	21.0	
Consumer Prices (%)		12.4	11.3

Figure 2. Table adapted from Bank of Korea

Export Promotion

In the late 1960s, South Korea slowly moved towards an export-led strategy and started to phase out its import substitution policy. During that time, the state implemented various measures to boost exports in specific industries,[11] such as allowing direct cash payments and borrowing in foreign currency. By the mid-1970s, the South Korean economy provided exporters a virtual free-trade regime[12] through indirect tax and tariff exemptions, easy access to imported inputs, reduced charges on overhead inputs, and direct tax preferences to enhance exports. Through the gradual relaxation of import substitution policies, competition was allowed domestically. The multiple exchange rate system also acted as an incentive for exports in which export earnings were converted into foreign exchange certificates traded at a premium in a free market.[13]

A credit-led economy closely complemented Korea's export-led strategy. The Korean government exerted control over financing, particularly over banks, and coordinated a close relationship between industries and banks. This acted as risk insurance for banks and led to a credit-based economy.[14] To incentivise exports, the Regulation of Export Financing of 1972[15] allowed banks to lend money through credit programmes, with automatic approval of loans to businesses with export letters of credit or based on their previous export performance. Corporate firms leveraged this environment to explore

One of the policy measures taken under the Economic Development Plan (1962) to promote exports was to devaluate the Korean Won by nearly 100 per cent, from 130 Won per US dollar to 255.77 Won per US dollar in 1964. In 1963, Korea faced a balance of payments crisis, which led to the reintroduction of a multiple exchange rate system. South Korea kept the value of the Won near the level necessary to maintain Korea's export competitiveness by keeping the real effective exchange rate relatively stable over time. (In this system, the monetary authority determines reviews and adjusts the exchange rate occasionally.) In December 1974, the Won was pegged to the US dollar, resulting in a loss of external competitiveness.

In January 1980, Korea introduced a trade-weighted currency basket system1. Under this system, employed from 1980 to 1990, the movement of currencies from major trading partners such as the US, Japan and Germany determined the exchange rate. In March 1990, a kind of free market exchange system was introduced that still imposed a band within which the exchange rate could fluctuate daily. Until 1990, the exchange rate did not reflect the demand and supply situation in the Korean foreign exchange market.

risky investment opportunities, affecting the efficiency of the banking system.

In this phase of industrial policy, the South Korean government also provided massive support to strategic industries such as shipbuilding, petrochemicals, steel, consumer electronics, automobiles and construction. These industries were protected from imports, provided preferential access to subsidised credit. The government intervened heavily in the banking system to channel credit to the strategic industries.[16] In the 1960s, the Korean government also made significant investments in the strategic industries; more than one-third of government expenditures were for investment. Between 1963 and 1977, public enterprises in Korea grew at an annual rate of 10 per cent, and the share of these enterprises in the GDP rose from slightly over 6 per cent in 1963 to more than 9 per cent in 1980. Between 1972 and 1978, a massive effort was made to build heavy industries.

Since the nationalisation of commercial banks in the early 1960s, the government influenced the banking system's functioning through the appointment of bank regulations and management[17]. The government also played a role in administering the interest rates and sectoral allocation of credits. As a result, financial innovation was restricted, and competition in the banking system was limited. However, a programme of gradual domestic financial-sector reform was introduced in the early 1980s to reduce the reliance of the chaebols (large enterprises) on bank borrowing.

The collapse of the currency exchange rate system was caused the Asian Financial Crisis in 1997. On July 2, 1997, the Thai government ran out of foreign currency, the government floated the Thai baht, which was earlier pegged to the US dollar. The currency exchange rate of the baht thus collapsed immediately. This was followed by the other East Asian economies. The Korean won dropped to its new low on October 28.

One of the root causes of the East Asian crisis is the sizeable current account deficits in the region. By 1997, the Korean economy was dominated by large corporations highly dependent on borrowing, particularly from the banking system. Starting in 1997, an unprecedented number of the highly leveraged chaebols went bankrupt, dragged down by excessive investment, declining profits and a substantial debt burden. By the fall of 1997, the share of nonperforming loans amounted to about 80 per cent of the banks' capital. In their analysis of banking crises, Demigurc-Kunt and Detragiache (1998) suggest that the structural characteristics of an economy in general, and of its banking sector in particular, play a fundamental role in systemic banking problems.

Balance and Stabilisation

In the late 1970s, the Korean economy had overextended itself, resulting in widening structural imbalances associated with a prolonged period of rapid growth and relatively high inflation. The high growth rate led to a rapid buildup of foreign debt and stimulated inflation. In 1980, inflation soared to 35 per cent. During this time, South Korea moved towards balance and stabilisation policies with the help of a stabilisation and adjustment arrangement with the International Monetary Fund (IMF). Stabilisation and adjustment policies included tight financial policies, substantial depreciation of the currency, a comprehensive energy policy designed to reduce Korea's dependence on imported oil, and allocation of investments to industries with comparative advantages in the global market[18].

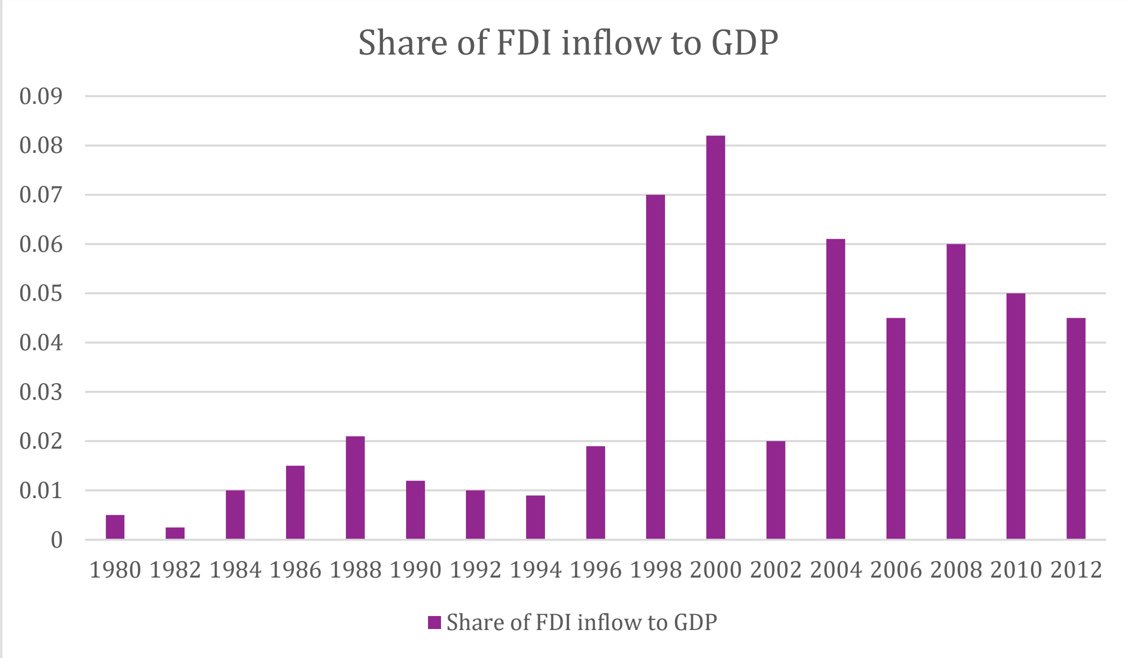

Figure 3. Data visualisation adapted from Tan Soo Kee's article from International Journal of East Asian Studies.[19]

Although the stabilisation measures were able to address some of the structural issues in the Korean economy for a short time, in 1997, the South Korean economy faced an economic crisis. The crisis was due to structural problems in the financial and corporate sectors: reeling from losses in other Southeast Asian economies, foreign investors decided to reduce their exposure to Korea. Following the crisis (see Box 2) on December 4, 1997, Korea committed to a programme of macroeconomic adjustment and structural reform supported by a stand-by arrangement from the IMF for Special Drawings Right (SDR) US$ 15.5 billion[20]. Following the oil-induced worldwide recession and Korea's crop failure in 1980-81, the Korean government revoked some subsidies and preferential policy loans[21]. By this time, policymakers had created the foundation for the heavy and chemical industries. In 1985, they replaced the positive list (allowing Foreign Direct Investment [FDI] in specific sectors) with the negative list (allowing FDI in all sectors except where expressly prohibited), which led to a substantial increase in the number of industries open to FDI[22] (see Figure 3).

Key Factors Behind South Korea's Economic Miracle

Historical Factors

From 1910 to 1945, under Japanese colonial rule, South Korea was introduced to legal and monetary institutions that played a crucial role in the country's economic development. These institutions promoted the formation of firms in Korea and grew financial capital markets. The introduction of the Japanese commercial code, post-annexation, provided foreign entrepreneurs with a regulatory environment of international standards to start businesses in Korea, leading to an 11-fold increase in the number of new companies between 1918 and 1940[23]. However, the Korean War of 1954 destroyed this industrial base.

During the post-Korean War reconstruction period of 1953-1960, the US government's aid played a pivotal role in South Korea's economic development. From 1945 to 1960, the total foreign aid to Korea amounted to US$ 2,935.7 million[24]. The US's contribution, at US$ 2,356.3 million, accounted for 80 per cent of the total aid received, and the rest was by the United Nations. In mid-1950s, American aid accounted for nearly 80 per cent of all government revenues[25]. About 75 per cent (74.7 per cent, to be exact) of US aid to South Korea was used for non-project assistance between 1954 and 1961. In the earlier years, most of these funds were allocated to import of raw materials and consumer goods and to facilitate investment. This aid, which continued well into the 1970s, significantly reduced the fiscal burden of South Korean military spending, allowing the government to commit substantial resources to long-term economic development[26].

Export Promotion and International Competition

In its first five-year plan (1962 to 1966), the South Korean government had stressed export promotion as part of its industrial policy. Firstly, exports were encouraged through borrowing from external sources[27] to meet the cost of production and manufacturing facilities and providing tax and financial incentives for exporters (see export promotion section in Part II for more information). Secondly, the Korean won was devalued by nearly 100 per cent, from 130 won per US dollar to 255.77 won per US dollar in 1964. Thirdly, a policy was adopted in 1967 to create a favourable export environment by shifting towards liberalising imports[28] and lessening exporters' difficulties in importing necessary intermediate materials and investment goods for producing exportable goods.

Innovation Policy

The government's innovation policy in the 1980s contributed significantly to its eventual resounding economic success. During this period, the government's focus shifted towards an innovation policy that which resulted in a sharp increase in R&D expenditure levels, in particular by the private sector (from 32% in 1971 to 80% in 1987)[29]. R&D was central to South Korean economic planning: the Korea Institute of Science and Technology, established in 1966, and the Ministry of Science and Technology, founded the following year, would play a key role. Chaebols were pushed to invest in R&D while they were shielded from competition. By the mid-1980s and early 1990s, the government focused on high-tech industries such as semiconductor design and technological manufacturing. The government began developing regional innovation centres such as Gyeonggi (an area of nearly 13 million people), surrounding Seoul, which brought industry R&D and production infrastructure with local and national universities and research facilities. By 2010, South Korea had 105 regional innovation centres, 18 techno-parks and seven federal programmes to strengthen the competitiveness of industrial cluster programmes[30]. Nearly 80% of South Korea's total R&D spending in 2019 was done by private players, ahead of leading innovative nations such as Germany, Sweden and Switzerland, who invested 70% (see Figures 4, 5). R&D tax incentives and importing of foreign technology supported the shift.

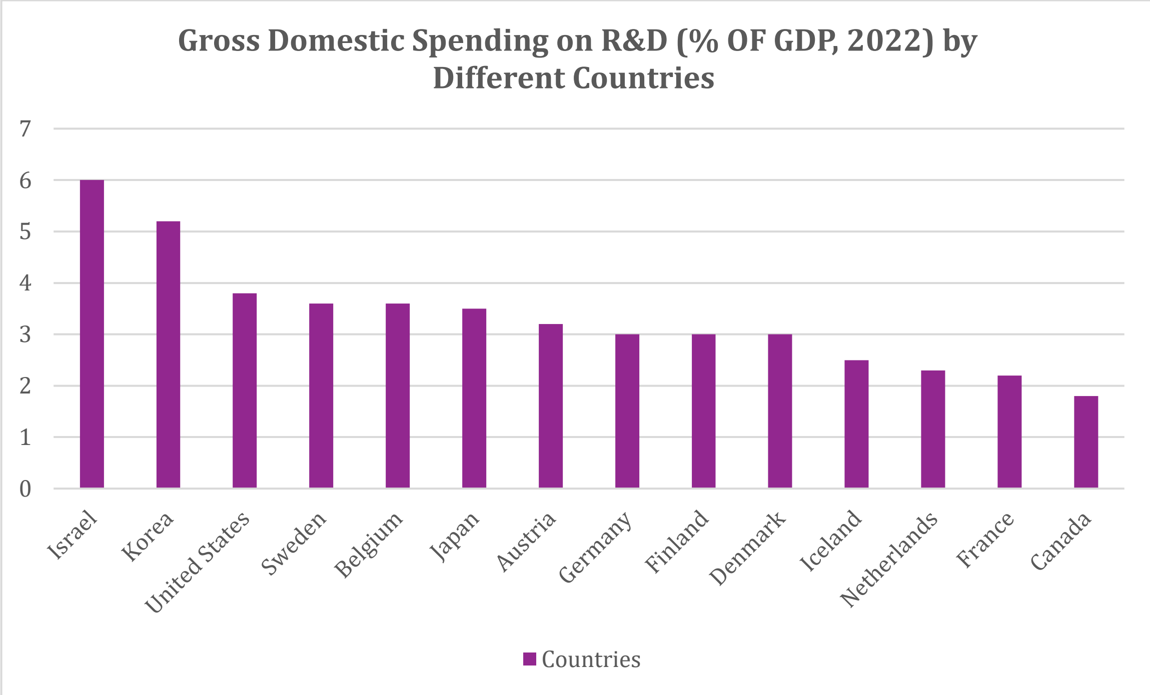

Figure 4. Data visualisation adapted from OECD

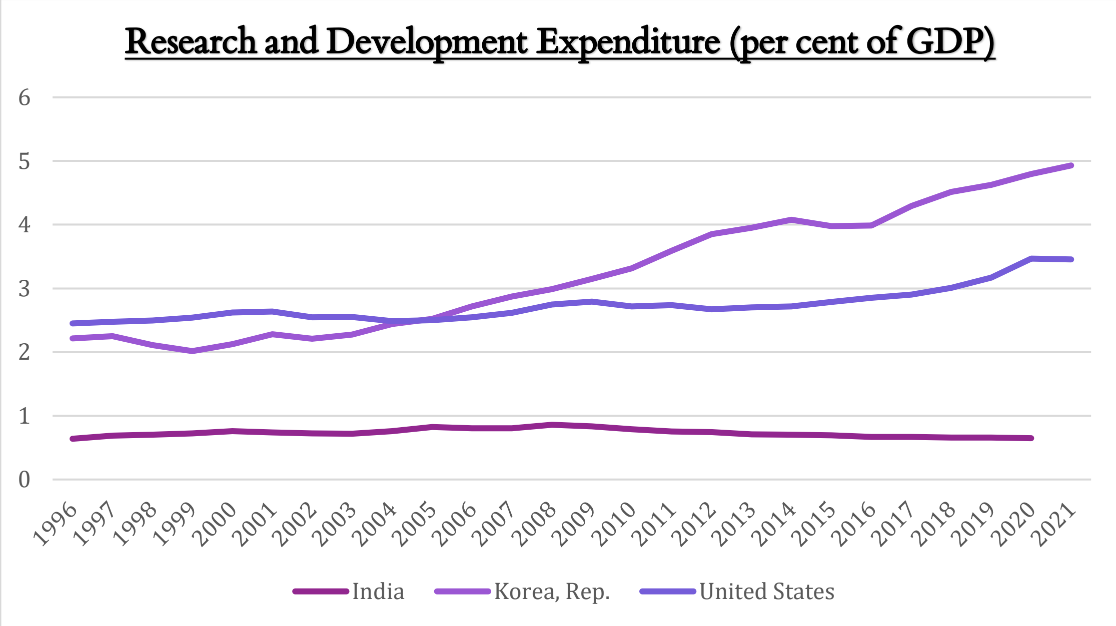

Figure 5. Data Visualisation adapted from World Bank

Trade Liberalisation

South Korea's economic policies had come under scrutiny and received flak, particularly after the severe economic crisis of 1997. Subsequent governments in the 1990s and post-1990s implemented various measures to liberalise the economy. South Korea gradually adopted a selectively liberal import strategy to build a highly competitive manufacturing sector. Korea's trade liberalisation accelerated after 1997, with several free trade agreements signed, marking a significant shift in economic policies post-crisis[31]. While

South Korea's industrial policies have evolved, Korea has adopted an outward-oriented growth strategy that involves free trade, liberal prices and equilibrium markets.

III. The Pitfalls in South Korean Industrial Policy

Interest in the South Korean economic miracle is often accompanied by the intention to generate a universally valid model to adapt elsewhere. While many scholars have analysed Korea's development experience, there still needs to be a consensus on what caused its success or whether the policies pursued in Korea hold lessons for other nations struggling to achieve more rapid growth. That requires a detailed critical analysis of the South Korean economic model and the impact of protectionist measures on long-term economic growth.

State Control

The South Korean economic model, particularly under President Park Chung-hee during the 1960s and 1970s, presents a nuanced case of rapid industrialisation through aggressive government intervention. One of the critical aspects of Park years was the Korean government's role as an 'entrepreneur manager'[32] in directing the activities undertaken by the surging private sector. As noted earlier, the South Korean government identified promising strategic industries as financial and technical support targets in its industrial policies. It channelled investment funds to these industries by exerting significant control over the financial sector. Commercial banks had been nationalised in the early 1960s, and the government influenced the sectoral allocation of credit both directly through the appointment of bank management and credit controls and indirectly through various regulations and incentives. The government-controlled foreign borrowing, and in the late 1970s, it guaranteed foreign investment financing in heavy and chemical industries. These policies resulted in a tightly controlled, government-administered financial system characterised by chronic excess demand for credit.[33]

Infant Industry Protection

In the early years of Korea's development plan, some industries were considered as infant industries and were given protection. Since the government supported and protected these domestic firms for a prolonged period, many were not equipped for international competition due to their inefficiency. The import substitution policies also often created continuous reliance on critical (imported) inputs (or on domestic inputs with mediocre quality), implicitly subsidised by an overvalued exchange rate[34]. Without accountability, state support could be hijacked by a few connected individuals or firms, certain chaebols, for instance. The industrial policies and protective measures fostered an environment that allowed minimum competition. However, Korean policymakers shifted their policies towards an export-led strategy from import substitution to overcome these challenges.

Over-reliance on Credit

Undoubtedly, over time, many mistakes were made that called into question the role of the government in the economy. One of the critical issues has been the reliance on credit.[35] State-controlled banks did not invest in non-priority industries owing to a lack of government support, hindering the development of an innovative banking sector. From 1960s to 1990s the government policy encouraged private companies and financial markets to rely on foreign loans for growth instead of domestic capital, resulting in a debt-dependent financial structure.[36] The share of nonperforming loans in total assets of commercial banks had increased by about 70 per cent between December 1996 and September 1997 and amounted to about 80 per cent of the banks' capital.[37]

By November 1997, South Korea was facing its severest economic crisis since the Korean War, despite three decades of economic growth. The solid central government backing of the financial sector and the chaebols led to inefficient resource allocations and large enterprise debts.[38] Due to an increase in foreign debts from US $ 31.7 billion in 1990 to US $104.5 billion in 1996, the South Korean government requested a bailout from the IMF on November 23,

1997. The primary cause of the economic crisis was South Korea's industrial policy, which indirectly led to imperfections in the capital market.[39]

Pro-Chaebol Policies: Monopolies?

The industrial policy favoured chaebols, providing financial and non-financial benefits to ones that strategically adapted economic development policies. The government under President Lee Myung-bak implemented company-friendly economic policies such as corporate tax reduction, abolition of limits on large companies' investment, several deregulation actions as well as a currency policy for boosting exports.[40] The government initially formed capital through direct investments: Free or paid financial support from foreign shores channelled economic resources to small companies actively engaged in the economic development programme. Such government support provided these companies with an opportunity to grow into large enterprises. Through its five-year plans, the government carried out specific allocations of resources, such as preferential allocation of funding for:

- the light industry (in the first plan)
- heavy industry (in the second plan)
- the chemical industry (in the third plan)

Following these plans, funding was given to specific operators in the field. While this had helped in the initial economic development, the focused allocation of resources to a small number of industry players introduced inequality in the economic system.[41] At the same time, chaebols have been a critical driver of the government's development policy and, simultaneously, the biggest beneficiary of the country’s economic growth. Large companies accounted for only 1 % of exporting companies in Korea, but they accounted for 67.7% of the total exports by volume in 2009.[42] Due to government control over the financial sector and excessive allocation of policy loans for industries, chaebols were able to take significant risks that resulted in an inefficient allocation of resources. It was believed that this policy undermined the growth foundation for Small and Medium Enterprises.[43]

IV. Learnings for India

What India should (not) follow

Exogenous shocks caused by geopolitical uncertainties in global value supply chains have led to the rise of industrial policies worldwide. The two primary objectives of these industrial policies have been to enhance the pace of domestic economic activities and to implement mechanisms to impart resilience to the industrial sector. In recent years, major economies such as the US, the EU and China have publicly announced their industrial policies. Those favouring a strong state intervention in the market often cite South Korea as a case study, stating that it achieved high growth with a very active state intervention in the economy. However, many developing countries that tried to create new industries, often beyond their capabilities, through a mix of subsidies and protectionism in the 1950s–1970s were not as successful as South Korea. Mostly, these experiments folded in the 1980s and 1990s amid financial crises and have remained, ever since, the epitome of failure.[44] Without market failures to address, industrial policies worldwide often lead to information asymmetry, corruption and rent-seeking.

Reda Cherif and Fuad Hasanov (2024) identify the success of the Asian miracles' version of industrial policy, defined as ‘True’ Industrial Policy, as based on three fundamental principles[45]:

- state intervention to channel resources towards sophisticated industries (e.g., electronics)
- ensuring intense competition and accountability for the support received
- export orientation

Although South Korea also used tools, including high tariffs, to protect domestic markets, the main priority of its strategy was to target export markets, significantly advanced markets, moving into more sophisticated industries and enforcing competition and accountability.

India also has been following various import substitution and industrial policies since its independence. The country led an ambitious import substitution policy in the wake of its independence in the late 1970s to produce domestically a high proportion of its consumption of most manufactured goods. However, India suffered from hard currency shortages and abysmal per capita growth rate. The import substitution goals were achieved through an intricate web of rules and regulations, at the centre of which was the licensing system.[46] The government wholly shielded domestic producers from international competition through restrictions on imports and (sometimes) import bans. As a result, domestic firms enjoyed monopoly rents because domestic competition was heavily curtailed. These policies resulted in a situation where profits depended more on securing adequate licenses than on competition through improved productivity or innovation.[47] India's industrial policies, particularly its import-substituting industrialisation from the mid-1960s to 1991, have led to challenges such as virtual monopolies, high prices, poor quality as well as limited variety for Indian consumers.

In India, some rules require firms to export a portion of their production in certain industries.[48] They must also generate enough exports to cover their initial investment in machinery. For example, firms producing for more than five years in the automotive industry must export 5 per cent of their output. However, the exports generated by these firms rarely exceeded the minimum requirements, which were small from the outset. Exports were disincentivising as profit margins were much too low compared to the domestic market.

In 2020, Production Linked Incentive (PLI) provided a financial boost to firms that expanded their manufacturing within the country, starting with sectors such as pharmaceuticals, electronics and medical devices and then expanding to cover many others. With the earlier Make in India policy and PLI, India is trying to attract FDI and create 'champion firms' —that is to say, these policies are trying to pick winners.[49] However, whether these firms will become lead firms remains a challenge. Increased tariffs on imported inputs to promote indigenous manufacturing increase the production cost in sectors without capacity. While infancy protection for industries might help indigenous production, the chances of such firms becoming internationally competitive and creating export-worthy products remains challenging, with the ample protection from foreign competition becoming a hindrance rather than a form of help. The PLI scheme also offers financial incentives and protects domestic companies, which could lead to inefficient firms, as learnt from South Korean experience.

India has improved its investment climate through various liberalisation efforts, such as removing quantitative restrictions on imports, import tariff reduction and rupee convertibility, which have led to a more outward trade strategy. With the return of the industrial policy, the East Asian miracle industrial playbook has been widely cited as a successful case for industrial policies. However, the advocates of these policies also need to emphasise that export promotion along with other historical contributing factors such as US aid, were the key success elements in the South Korean model.

In contrast, many industrial policies focusing on import substitution lack proper market feedback and may not encourage sufficient investment in innovation or generate significant productivity gains. Often, tariffs and other barriers to entry were meant to limit competition in the domestic market and, in some cases, protect a public monopoly. However, over time, the lack of competition creates little investment in R&D and innovations. In large economies such as India, import substitution policies could lead to sizeable misallocation of factors of production and resources, where inefficient firms would perpetually survive and efficient ones would be prevented from growing because of different constraints, such as access to imported inputs or other restrictions.[50] In the case of the Asian miracles, although import substitution was the objective at the onset, it was rectified and refocused towards export promotion. In contrast, the Indian case has not moved on from its import substitution phase.[51]

Policy Recommendations

Firstly, India's primary goal through its industrial policy should be export promotion while following a liberal market order. Export orientation will provide the state and firms with continuous market feedback while allowing domestic firms to focus on productivity gains through competition, keep up with the technological frontier and diligently innovate to survive. It will also provide a market large enough to take advantage of economies of scale and scope.

Secondly, the absence of export orientation hampers productivity improvements, innovation and dynamism, while import substitution policies introduce distortions and perverse incentives. This calls for removing import substitution policies, which limit consumer choice, increase prices and prevent access to market-competent international products. An export-oriented industrial policy, in contrast, could significantly enhance local content and add value without imposing prior requirements.

Thirdly, minimising links with global value chains and focusing on self-dependency hinders the transfer of technologies, resulting in outdated and low-quality products that barely change with time. It gives no incentives to innovate and compete while selling to a domestic market, and the industry stays well below the technological frontier. Hence, the domestic industries need to be well integrated with global value chains.

Lastly, the objective of an industrial policy should be to create sustainable, innovative and efficient industries with sophisticated products, the development of which tends to be riddled with market failures.

V. References

[1] TRADING ECONOMICS. "South Korea GDP per Capita," n.d. https://tradingeconomics.com/south-korea/gdp-per-capita.
[2] "South Korea GDP 1960-2024," MacroTrends, n.d., https://www.macrotrends.net/global-metrics/countries/KOR/south-korea/gdp-gross-domestic-product.
[3] Dae-II Kim and Robert H. Topel, "Labor Markets and Economic Growth: Lessons From Korea's Industrialization, 1970-1990," in *Differences and Changes in Wage Structures*, by Richard B. Freeman and Lawrence F. Katz (University of Chicago Press, 1995), 227–64, https://www.nber.org/system/files/chapters/c7859/c7859.pdf.
[4] Lane, Richard. *The Future of Regional Security: A New Strategic Approach*. (Canberra: Australian National University, 2019), https://rse.anu.edu.au/sites/default/files/2020-05/lane-paper-2019.pdf.
[5] Daniel R. Carroll, "How South Korea's Economy Developed So Quickly," *On the Economy* (blog), Federal Reserve Bank of St. Louis, March 5, 2018, https://www.stlouisfed.org/on-the-economy/2018/march/how-south-korea-economy-develop-quickly.
[6] Srijan Shukla, "The Machinery of India's Industrial Policy Is MIA," Lowy Institute, September 13, 2023, https://www.lowyinstitute.org/the-interpreter/machinery-india-s-industrial-policy-mia.
[7] Jeffrey J. Schott, *The WTO and Preferential Trade Agreements: From Coexistence to Coherence*, chapter 2 in *Preferential Trade Agreements and the WTO*, ed. Bernard Hoekman (Washington, D.C.: Peterson Institute for International Economics, 2007), https://www.piie.com/publications/chapters_preview/341/2iie3373.pdf?__cf_chl_tk=Z594KYEV5tPB23V9cU.ZGMoqkn6i5mdofKICoq.fbuQ-1714993915-0.0.1.1-1727.

[8] "A Historical Overview," in *WORLD SCIENTIFIC eBooks*, 2019, 1–23, https://doi.org/10.1142/9789813276000_0001.
[9] Soo Kee Tan, "Korean Economy: From Protectionism to Liberalism," *International Journal of East Asian Studies* 5, no. 1 (December 15, 2016): 29–41, https://doi.org/10.22452/ijeas.vol5no1.3.
[10] Hyung-Koo Lee, "Korea's Rapid Export Expansion in the 1960s: How It Began," *KDI Journal of Economic Policy* 39, no. 2 (2017): 1-27, https://kdijep.org/v.39/2/1/Korea's+Rapid+Export+Expansion+in+the+1960s+How+It+Began#r010.
[11] Robert Hassink, "South Korea's Economic Miracle and Crisis: Explanations and Regional Consequences," *European Planning Studies* 7, no. 2 (April 1, 1999): 127–43, https://doi.org/10.1080/09654319908720508.
[12] World Bank, *Korea's Experience with Export-Led Industrial Development* (Washington, D.C.: World Bank, 1993), https://documents1.worldbank.org/curated/en/346251468739299894/pdf/Koreas-exerience-with-export-led-industrial-development.pdf.
[13] World Bank, *Korea's Experience with Export-Led Industrial Development* (Washington, D.C.: World Bank, 1993), https://documents1.worldbank.org/curated/en/346251468739299894/pdf/Koreas-exerience-with-export-led-industrial-development.pdf.
[14] World Bank, *Korea's Experience with Export-Led Industrial Development* (Washington, D.C.: World Bank, 1993), https://documents1.worldbank.org/curated/en/346251468739299894/pdf/Koreas-exerience-with-export-led-industrial-development.pdf.
[15] World Bank, *Korea's Experience with Export-Led Industrial Development* (Washington, D.C.: World Bank, 1993), https://documents1.worldbank.org/curated/en/346251468739299894/pdf/Koreas-exerience-with-export-led-industrial-development.pdf.

[16] Angel Ubide and Tomás Baliño, "The Korean Financial Crisis of 1997-A Strategy of Financial Sector Reform," *International Monetary Fund* 1999, no. 28 (March 1, 1999): 1–66, https://doi.org/10.5089/9781451844641.001.a001.
[17] Angel Ubide and Tomás Baliño, "The Korean Financial Crisis of 1997-A Strategy of Financial Sector Reform," *International Monetary Fund* 1999, no. 28 (March 1, 1999): 1–66, https://doi.org/10.5089/9781451844641.001.a001.
[18] Richard E. Caves, "The Economic Theory of International Trade," in *The Political Economy of International Trade*, ed. Edward D. Mansfield and Helen V. Milner (Cambridge, MA: MIT Press, 1999), https://www.elibrary.imf.org/display/book/9780939934980/ch004.xml.
[19] Tan Soo Kee, "View of Korean Economy: From Protectionism to Liberalism," *International Journal of East Asian Studies* 5, no. 1 (2016): 29–41, https://ejournal.um.edu.my/index.php/IJEAS/article/view/18807/10218.
[20] Angel J. Ubide and Tomás J. T. Baliño, "The Korean Financial Crisis of 1997 : A Strategy of Financial Sector Reform," *IMF Working Paper* 99, no. 28 (January 1, 1999): 1, https://doi.org/10.5089/9781451844641.001.
[21] Kwan S. Kim, "THE KOREAN MIRACLE (1962-1980) REVISITED: MYTHS AND REALITIES IN STRATEGY AND DEVELOPMENT," *Working Paper*, November 1991, https://kellogg.nd.edu/sites/default/files/old_files/documents/166_0.pdf.
[22] Kwan S. Kim, "THE KOREAN MIRACLE (1962-1980) REVISITED: MYTHS AND REALITIES IN STRATEGY AND DEVELOPMENT," *Working Paper*, November 1991, https://kellogg.nd.edu/sites/default/files/old_files/documents/166_0.pdf.
[23] Cindy Wan, "The Economic Effects of Colonization in Korea," *Economic History* (blog), May 19, 2023, https://blogs.lse.ac.uk/economichistory/2023/05/19/the-economic-effects-of-colonization-in-korea/.
[24] "A Historical Overview," in *WORLD SCIENTIFIC eBooks*, 2019, 1–23, https://doi.org/10.1142/9789813276000_0001.

[25] David C. Kang, "An Unpromising Recovery: South Korea's Post-Korean War Economic Development, 1953–1961," *Education About Asia* 16, no. 1 (Spring 2011), https://www.asianstudies.org/publications/eaa/archives/an-unpromising-recovery-south-koreas-post-korean-war-economic-development-1953-1961/.
[26] Pil Ho Kim, "Guns Over Rice: The Impact of US Military Aid on South Korean Economic Reconstruction," *International Development and Cooperation Review*, vol. 9, 2017, https://bpb-us-w2.wpmucdn.com/u.osu.edu/dist/2/20360/files/2017/04/GoR-final-wolqqp.pdf.
[27] Asian Development Bank, *The Korean Economy: The Challenges of Transition* (Manila: Asian Development Bank, 2000), https://www.adb.org/sites/default/files/publication/28173/rs61.pdf.
[28] Asian Development Bank, *The Korean Economy: The Challenges of Transition* (Manila: Asian Development Bank, 2000), https://www.adb.org/sites/default/files/publication/28173/rs61.pdf.
[29] Sedef Duru, "The Role of Export-Led Growth in the Economic Development of South Korea," *International Journal of Economic Studies* 3, no. 1 (2015): 45-68, https://omeka.ibu.edu.ba/files/original/83705c838deeadb9132877dbc0b90171.pdf.
[30] Leigh Dayton, "How South Korea Made Itself a Global Innovation Leader," Nature Index, May 28, 2020, https://www.nature.com/nature-index/news/how-south-korea-made-itself-a-global-innovation-leader-research-science.
[31] Soo Kee Tan, "Korean Economy: From Protectionism to Liberalism," *International Journal of East Asian Studies* 5, no. 1 (December 15, 2016): 29–41, https://doi.org/10.22452/ijeas.vol5no1.3.
[32] Jeffrey J. Schott, *The WTO and Preferential Trade Agreements: From Coexistence to Coherence*, chapter 2 in *Preferential Trade Agreements and the WTO*, ed. Bernard Hoekman (Washington, D.C.: Peterson Institute for International Economics, 2007), https://www.piie.com/publications/chapters_preview/341/2iie3373.pdf?__cf_chl_tk=Z594KYEV5tPB23V9cU.ZGMoqkn6i5mdofKICoq.fbuQ-1714993915-0.0.1.1-1727.

[33] Angel J. Ubide and Tomás J. T. Baliño, "The Korean Financial Crisis of 1997 : A Strategy of Financial Sector Reform," *IMF Working Paper* 99, no. 28 (January 1, 1999): 1, https://doi.org/10.5089/9781451844641.001.
[34] Reda Cherif and Fuad Hasanov, "The Pitfalls of Protectionism: Import Substitution Vs. Export-Oriented Industrial Policy," *IMF eLibrary*, April 26, 2024, https://doi.org/10.5089/9798400270802.001.A001.
[35] Reda Cherif and Fuad Hasanov, "The Pitfalls of Protectionism: Import Substitution Vs. Export-Oriented Industrial Policy," *IMF eLibrary*, April 26, 2024, https://doi.org/10.5089/9798400270802.001.A001.
[36] Jeffrey J. Schott, *The WTO and Preferential Trade Agreements: From Coexistence to Coherence*, chapter 2 in *Preferential Trade Agreements and the WTO*, ed. Bernard Hoekman (Washington, D.C.: Peterson Institute for International Economics, 2007), https://www.piie.com/publications/chapters_preview/341/2iie3373.pdf?__cf_chl_tk=Z594KYEV5tPB23V9cU.ZGMoqkn6i5mdofKICoq.fbuQ-1714993915-0.0.1.1-1727.
[37] Angel Ubide and Tomás Baliño, "The Korean Financial Crisis of 1997-A Strategy of Financial Sector Reform," *International Monetary Fund* 1999, no. 28 (March 1, 1999): 1–66, https://doi.org/10.5089/9781451844641.001.a001.
[38] Robert Hassink, "South Korea's Economic Miracle and Crisis: Explanations and Regional Consequences," *European Planning Studies* 7, no. 2 (April 1, 1999): 127–43, https://doi.org/10.1080/09654319908720508.
[39] Soo Kee Tan, "Korean Economy: From Protectionism to Liberalism," *International Journal of East Asian Studies* 5, no. 1 (December 15, 2016): 29–41, https://doi.org/10.22452/ijeas.vol5no1.3.
[40] Keunsoo Kim, "Chaebols and Their Effect on Economic Growth in South Korea," journal-article, by Korean Social Sciences Review and Korean Development Economic Association, *Korean Social Sciences Review*, vol. 3–3, 2013.
[41] Myungsu Hong, "Korea's Chaebol Regulations and the Relationship Between Competition and Company Law," in *Cambridge University Press eBooks*, 2023, 110–30, https://doi.org/10.1017/9781108899956.009.

[42] Keunsoo Kim, "Chaebols and Their Effect on Economic Growth in South Korea," journal-article, by Korean Social Sciences Review and Korean Development Economic Association, *Korean Social Sciences Review*, vol. 3–3, 2013.
[43] Soo Kee Tan, "Korean Economy: From Protectionism to Liberalism," *International Journal of East Asian Studies* 5, no. 1 (December 15, 2016): 29–41, https://doi.org/10.22452/ijeas.vol5no1.3.
[44] Reda Cherif, "The Pitfalls of Protectionism: Import Substitution Vs. Export-Oriented Industrial Policy," *IMF Working Paper* 2024, no. 086 (April 1, 2024): 1, https://doi.org/10.5089/9798400270802.001.
[45] Ibid
[46] Ibid
[47] Ibid
[48] Ibid
[49] "The Role of Industrial Policy in Global Value Chains: The India Story," Center for the Advanced Study of India (CASI), November 6, 2023, https://casi.sas.upenn.edu/iit/saonray.
[50] Reda Cherif, "The Pitfalls of Protectionism: Import Substitution Vs. Export-Oriented Industrial Policy," *IMF Working Paper* 2024, no. 086 (April 1, 2024): 1, https://doi.org/10.5089/9798400270802.001.
[51] Ibid

The Takshashila Institution is an independent centre for research and education in public policy. It is a non-partisan, non-profit organisation that advocates the values of freedom, openness, tolerance, pluralism, and responsible citizenship. It seeks to transform India through better public policies, bridging the governance gap by developing better public servants, civil society leaders, professionals, and informed citizens.

Takshashila creates change by connecting good people, to good ideas and good networks. It produces independent policy research in a number of areas of governance, it grooms civic leaders through its online education programmes and engages in public discourse through its publications and digital media.