Case Study 13

Trade, Capital Flows, and Development Strategy: South Korea

South Korea is one of the developing world's great long-term success stories. Many developing countries have reached middle-income status but remained there; a much smaller number have reached nominal high-income status but are still not considered fully developed (either by their own definitions or by development economists). Only a handful of countries have graduated to the ranks of advanced industrialized economies, of which South Korea is perhaps the most prominent example.

In the mid-1950s, South Korea was one of the poorest countries in the world. The country is now classified by the World Bank as a high-income economy, with purchasing power parity (PPP) income exceeding $30,800 in 2012. Korean consumer electronics and other goods have become synonymous with high quality at reasonable prices. Even more impressive are Korea's social development achievements. By 2004, Korea had attained the highest postsecondary enrollment rate in the world, with graduates concentrated in technical fields. Ironically, in 2013, a major policy question was whether corresponding jobs could be found for all these highly educated citizens. By 2012, life expectancy exceeded 80 years. The country regularly ranks even higher on the Human Development Index than it does in income per capita, and on the 2012 New Human Development Index, South Korea ranked 12th globally. How did South Korea succeed so spectacularly where so many other developing countries had not? Certainly one component was its robust industrialization strategy.

Exports, particularly manufactures in such key sectors as consumer electronics and motor vehicles and recently in high technology, have grown at an extraordinary rate in Korea. One apparent reason for South Korea's remarkable industrial achievements is a national strategy that has favored the promotion of exports, reflecting increasingly sophisticated skills and technology. Strong financial incentives for industrial firms to move up the ladder of skills and technology have been built into most of its policies.

In its years of rapid catching up, South Korea used at least 19 major types of export-promotion-oriented industrial policy interventions (note that only some of these policies were in effect in any one industry and at any one time and that subsidies were considerably scaled back in later years):

1. Currency undervaluation. The effective exchange rate (EER) for exporters was kept higher than that for importers. As early as 1964, South Korea's EER for exports was 281 and its EER for imports was 247, reflecting not trade neutrality but a pro-export bias.
2. Preferential access to imported intermediate inputs needed for producing exports, with strict controls to prevent abuse. Rebates were paid only after completion of the exports had been documented.
3. Targeted infant industry protection as a first stage before launching an export drive. South Korea has had a high dispersion of effective rates of protection even with a relatively low average.
4. Tariff exemptions on inputs of capital goods needed in exporting activities. This is a price incentive, whereas preferential access (intervention 2) is based on quantity restriction.
5. Tax breaks for domestic suppliers of inputs to exporting firms, which constitutes a domestic-content incentive.

6. Domestic indirect tax exemptions for successful exporters.
7. Lower direct taxes on income earned from exports.
8. Accelerated depreciation for exporters.
9. Import entitlement certificates (exemptions from import restrictions) linked directly to export levels. South Korea long has maintained an extensive list of items generally prohibited for import, including both luxury goods and import substitution targets. Profitable exemptions from this prohibition have often been available for firms exporting specified goods that have low profit margins.
10. Direct export subsidies for selected industries (no longer in use).
11. Monopoly rights granted to the firm first to achieve exports in targeted industries.
12. Subsidized interest rates and preferential credit access for exporters in selected industries, including automatic access to bank loans for the working capital needed for all export activities. Medium- and long-term loans for investment were rationed and often available only to firms that met government export targets and pursued other requested activities.
13. A system of export credit insurance and guarantees, as well as tax incentives, for overseas marketing and postshipment export loans by the Korean Export-Import Bank.
14. The creation of free-trade zones, industrial parks, and export-oriented infrastructure.
15. The creation of public enterprises to lead the way in establishing a new industry. Howard Pack and Larry Westphal found that "the share of public enterprises in [South] Korea's nonagricultural output is comparatively high, being similar to India's."
16. Activities of the Korean Traders Association and the Korea Trade Promotion Corporation to promote South Korean exports on behalf of South Korean firms worldwide.
17. General orchestration of sector-wide efforts to upgrade the average technological level through the use of a new generation of machinery.
18. Government coordination of foreign technology licensing agreements, using national bargaining power to secure better terms for the private sector in utilizing proprietary foreign technology.
19. The setting of export targets for firms (since the early 1960s). Firms set their own targets, which could be adjusted by the government.

Enforcement of export targets in South Korea was mostly based on moral suasion rather than administrative sanctions or economic incentives, but the evidence suggests that these have been among the most powerful incentives. South Korea as a whole has had an extensive pattern of "rituals" reinforcing these economic incentives with cultural ones. In the period of rapid catching up, a key ritual in the nation's economic life was the monthly national trade promotion meeting. According to Yung Whee Rhee, Bruce Ross-Larson, and Gary Pursell:

> Chaired by the president, the monthly trade promotion meetings are select gatherings of the ministers and top bureaucrats responsible for trade and the economy; the chief executives of export associations, research organizations, and educational institutions; and the heads of a few firms, mainly the general trading companies and other large firms. The prominence of those attending shows that the monthly meetings are far more than perfunctory meetings to improve coordination between the private and public sectors.

Firms were represented either by their particular export association or, in many cases for large firms, directly. After briefings, awards were typically presented for excellent export performance. Nationally, many types of annual export prizes were publicly awarded and proudly displayed by companies.

Richard Luedde-Neurath has described how South Korea maintained, in addition to domestic-content regulations, an extensive system of import controls that lasted well into the 1980s. What he terms the "Korean kaleidoscope" included restrictive trader licensing, widespread quantitative controls, systematic foreign-exchange allocation under the Foreign Exchange Demand and Supply Plan, required advance deposits (which have been as high as 200% of import value), and capricious customs practices. For example, prospective importers had to achieve minimum export earnings before becoming eligible to import.

Pack and Westphal reported that "through import restrictions, selectively promoted infant industries were often initially granted whatever levels of effective protection were required to secure an adequate market for their output as well as a satisfactory rate of return on investment." They also found that after the export promotion reforms of the early 1960s, "imports...for the domestic market remained subject to tariffs and quantitative controls." As Robert Wade notes, tariff rates appear much higher when they are averaged over non-export-related imports only. Peter Petri presented evidence that South Korea has had "an unusually protection-prone export bundle."

Sanjaya Lall concluded that in South Korea, in sharp contrast to Latin American style import substitution, "industrial targeting and promotion was pragmatic and flexible, and developed in concert with private industry. Moreover, only a relatively small number of activities were supported at a given time, and the effects of protection were offset by strong export orientation."[54]

Thus, in the South Korean case, import controls may be called a "handmaiden" of successful industrial export promotion. In the first instance, many export industries begin as infant industries requiring protection. Luedde-Neurath goes so far as to argue that the developing industrial sector functions as a whole and benefits from externalities and linkages between firms, making a market failure case for general protection of manufacturing at a critical stage of development. Alice Amsden has pointed out that in South Korea, subsidization across divisions within firms as a company enters new export markets, such as shipbuilding, is intentionally facilitated by the government. Diversified companies are made to understand that they expected to use the monopoly rents that they earn from these various import barriers as working capital for expansion into new sectors. The state also offers supplemental support for entering new markets as needed.

As Pack and Westphal summarize the evidence, "Something approximating neutrality" applied to "established industries.…But there has been substantial industry bias in favor of the promoted infant industries."

Also important to South Korea's success was that it avoided the temptation to meddle in sectors, including new entrepreneurial ventures, that were not central to the current plan. If these private ventures proved successful, the government would include their sector in future strategy considerations.

A World Bank study by Westphal, Rhee, and Pursell concluded that South Korea's export industrialization "has overwhelmingly and in fundamental respects been directed and controlled by nationals" and that "technology has been acquired from abroad largely through means other than direct foreign investment." The role of multinational corporations in the economy (see Chapter 14) has been much smaller than in most other (then) middle-income countries.

As Lall concluded, the deliberate fostering of large conglomerates, known as *chaebol*, was also important to South Korea's industrial strategy: "The chaebol were hand picked from successful exporters and were given various subsidies and privileges, including the restriction of [foreign-firm] entry, in return for furthering a strategy of setting up capital- and technology-intensive activities geared to export markets." Closely regulated large firms could help to make up for "deficient markets for capital, skills, technology and even infrastructure, large and diversified firms could internalize many of their functions. They could undertake the cost and risk of absorbing very complex technologies…, further develop it by their own R&D, set up world-scale facilities and create their own brand names and distribution network." Lall concluded that, "The risks were contained by the strict discipline imposed by the government: export performance, vigorous domestic competition and deliberate interventions to rationalize the industrial structure."[55]

Moreover, Erik Thorbecke and Henry Wan concluded that the establishment of South Korean brand names rather than contract (or original equipment) manufacturing were the result of government support of heavy industries.

Peter Evans examined ties between the state and industrial elites in South Korea (as well as Brazil and India) and concluded that it was the interaction between genuine state autonomy and the "dense connecting networks" of social ties between state and private sectors—which he terms "embedded autonomy"—that is a key to a successful industrialization strategy. Again, it is strategic coordination among the key actors, whether in the private sector alone or in the public and citizen sectors as well, that is critical to success.

Unquestionably, in the late 1980s and 1990s, South Korea substantially liberalized, particularly before but also after the 1997 financial crisis and subsequent severe recession. One open question is whether South Korea would have done as well had it liberalized sooner. Some economists have argued that South Korea would have industrialized even faster if it had maintained a free-trade policy from the beginning. Other analysts, such as Ha-Joon Chang, Hong-Jae Park, and Chul Gyue Yoo, argue that some aspects of mid-1990s liberalization were a major cause of the 1997 crisis. In particular, capital account liberalization allowed first for speculative inflows and then for outflows once the crisis hit. But the effect was smaller than for many other countries that have experienced crises, partly because of the significant increase in saving and repatriation of South Korean capital abroad.

Active industrial policy continues emphasizing South Korean entry into leading-edge, high-technology fields. For example, the country's Highly Advanced National Projects Program supports the development of high-tech products that the government believes would successfully compete with those of advanced countries such as the United States and Japan within one to two decades and also supports development of core technologies believed essential for South Korea to achieve capabilities for independent national innovation. South Korea's Ministry of Trade and Industry has targeted new materials, computer-controlled machine tools, bioengineering, microelectronics, fine chemistry, optics, and aircraft as fields in which it predicted that the country could catch up with the United States and Japan economically and technologically. As Lall notes, "Korea alone accounts for some 53% of the developing world's total enterprise-financed R&D." He concludes that "the main stimulus to industrial R&D in [South] Korea came less from specific incentives than from the overall strategy that created large firms, gave them finance and protected markets, minimized their reliance on foreign direct investment, and forced them into export markets."

What stands out in the case of industrial policy in South Korea is the selective involvement of the government in projects in which technological progress (product, process, or organizational) has been a central concern. This policy theme may be traced from early attempts at achieving technology transfer in relatively basic industries to the nation's current efforts to develop original innovative capacity in high-technology sectors.

What are the alternative arguments? Beyond the claim that South Korea could have grown even faster if government had stayed out of industrial strategy, one can also argue, like Joseph Stern and his colleagues, that the central role of the state was necessary in industrial policy in large part because of the way that government set up the rules of the economic game, including government allocation of credit, which ensured that major initiatives such as the chemical and heavy industry drive were impossible without government direction. Because South Korea often looked to the example of Japan in setting industrial policy, one could argue that the country followed a "patterns of development" analysis rather than a classic industrial policy. The costs of industrial policy in Japan did not become apparent until many years later, and the same could prove true of South Korea. The 1997 financial crisis may well have been abetted by some of the less sagacious of the industrial policy legacy. But in South Korea, few experts hold the view that the strategy was seriously flawed.

The interpretation that seems most favored by the evidence is that the South Korean industrial policy mix has served to overcome market failures involved in the process of technological progress.

By the 1997–1998 crisis, the chaebol came to be seen by many observers as liabilities to further growth. They were also seen as political liabilities or as companies that unfairly received government advantages in the past from which other companies did not benefit. Antitrust regulations are making the South Korean economy more competitive. And as the economy matures, the government's role in the productive sector will continue to become more indirect.

As an energy importer, South Korea's economy was negatively affected by the oil shocks of 1973 and 1979, as pointed out by Vittorio Corbo and Sang-Mok Suh. Its current account deficit reached 8.7% of gross national income (GNI) in 1980. But with real interest rates rising dramatically from 1979, South

Korea began adjusting early. This is in marked contrast to other countries hurt by the debt crisis, such as Brazil, which continued borrowing aggressively despite the increase in rates. Thus, while both South Korea and Brazil were among the widely noted "17 highly indebted countries" at the onset of the debt crisis, and both had experienced high growth over the previous two decades, Brazil (along with many other countries on the list) was to experience a long period of slow growth. South Korea continued with the adjustment it had already begun. Despite the concerns generated by South Korea's debt-to-GNI ratio of about 50%, the country's ability to pay was never really in doubt. But by 1985, the country had lowered its current account deficit to just 1.1% and then moved to a surplus of 2.8% of GNI in 1986, as rapid growth had now returned to the country.

Growth was briefly interrupted again in the East Asian "contagion" crisis. The rapidity of recovery of the South Korean economy from the 1997–1998 financial crisis surprised many observers, but in some ways, its speed was foreshadowed by the unusually rapid recovery in the 1982 debt crisis. South Korea borrowed the then enormous sum of $21 billion from the IMF in December 1997, evoking great concern at the time, but went on to repay the loan ahead of schedule. The South Korean government implemented needed reforms quickly. The country had reached a nearly developed stage, and adjustment was easier than for other afflicted countries, notably Indonesia.

When the very different 2008 global crisis erupted, exports from South Korea, now a high-income country, were severely hit. But the country's fairly rapid adjustment—unusual for the fully-industrialized club in which it now found itself—again underscored both the resilience and the robustness of the economy and its policymaking.

South Korea will face steep challenges in the coming years. One that will be common to many societies is how it will adjust to its rapidly aging population. Another challenge unique to South Korea is how it will handle the inevitable collapse of the regime in North Korea. But societal resilience is one of the most important and enduring benefits of successful economic development—something the country will continue to draw upon in ample supply. ■

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