Export generation: Republic of Korea

Abstract

South Korea is one of the top 10 exporters in the world, registering a growth of exports as percentage of GDP from 29 in 1995 to 52 in 2009. This export performance has helped the country of 50 million people grow from “low-income” to “industrialized economy” status in less than 50 years. Today its exports, mainly heavy industry products, are worth nearly US$50 billion. Several factors account for this success. First, Korea has maintained a good environment for doing business, especially by keeping the tax wedge one of the lowest in the OECD. Second, the government has promoted exports since the 1950s, recognizing their importance when much of the world was engaged in import substitution. It has been aggressive in negotiating free-trade agreements with large and growing economies. Third, it has taken advantage of its neighborhood, first by attracting off-shored production by Japanese manufacturers, and then by off-shoring some of its own industry to cheaper Asian economies such as China and Vietnam. Fourth, it has diversified its markets. Today, about 23 percent of exports go to China, 13 percent to the EU, 10 percent to the United States, and 5 percent to Japan. China was responsible for more than 85 percent of South Korea’s export growth in 2009. This diversification of markets and a growing diversity of exported goods have helped South Korea during times of recession in different parts of the world. In 2009, for example, Korean export growth was the highest in the OECD. Korea provides valuable lessons in putting in place a generally favorable environment for exporters combined with selective interventions to speed up growth and diversification.

Economic growth in Asia has altered the way economists see the world. The export performance of East Asian economies has been a big part of this success. Perhaps the most remarkable story is that of South Korea (henceforth Korea)—a good example of how a low-income country can change its economic future through export-led growth. In just 50 years, Korea went from being one of the poorest in the world (conflict-ridden in 1953, and with a GDP per capita of US$1,110 in 1960) to a high-income, industrialized economy (with a per capita GDP of US$15,444 in 2009). When it joined the OECD Development Assistance Committee in 2009, Korea was the first former recipient of international development aid to become a donor.

Exporting to economic success

In the past two decades Korea has experienced an exceptional export performance (figure 32). Between 2001 and 2007 exports contributed to 68 percent of growth, which was less than for Taiwan (China) and Singapore, but more than in China, Japan, and Thailand. More interestingly, the country of less than 50 million people was among the top 10 world exporters in 2009, with exports valued at nearly US$50 billion in April 2011. Even in times of global economic turbulence, the performance of Korean exports in 2009 was the best in the region and its GDP growth the strongest among OECD economies.

The World Trade Organization estimates that between 2000 and 2009 Korea’s exports of goods and services grew at an average annual pace of 10 percent. In 2009 the ratio of exports to GDP was 51.8 percent, up from 28.8 percent in 1995. There was also a shift in structure of exports. Since the 1960s the country has moved from commodities and processed foods (75 percent of total exports in 1962), through manufactured goods (88.7 percent of total exports in 1985),
toward emphasis on high-tech products since the 1990s (Dornbusch and Park 1987). Currently, Korea exports mostly semiconductors, wireless telecommunications equipment, motor vehicles, computers, steel, ships, and petrochemicals. Heavy industry products accounted for 90 percent of all exports. China, the European Union, and the United States are the main export markets for Korean enterprises. It is estimated that in 2009 exports to China accounted for 10.4 percent of Korean GDP (Ali and Dadush 2010). Korean exporters have been able to catch up to their Japanese counterparts, as Korean exports were 95 percent as varied as those of Japan.3

Figure 32: Average real GDP growth between 1995 and 2009 and exports/GDP (% in 2009 or latest available) in selected economies

Source: World Bank staff estimates.

The making of an export miracle

There are several factors that allowed Korean enterprises to be so successful in international markets.

First, the Korean government has managed to keep its business environment friendly for exporters; in 2008 the country had the second lowest tax wedge (as a percent of total labor costs) among OECD countries (figure 33). Korea ranked 16th in the World Bank’s Doing Business ranking in 2010. Keeping the nominal exchange rate low vis-à-vis its key trading partners has also fueled the expansion of exports. Well-priced labor and reasonable production costs made Korean companies relatively nimble, and the export mix changed to maintain competitiveness. Revealed Competitiveness Advantage (RCA) indices suggest, for example, that the Korean shipbuilding industry managed to remain exceptionally competitive.4 The RCA index also suggests favorable positions of Korean chemical, iron, steel, and electronics industries, but an increasingly less favorable situation for the textile industry. The ability to compete comes mainly from a strategy to produce a limited variety of goods but in higher quantities, thus at lower prices. High concentration of export products (the top 20 percent of product categories accounted for 95 percent of total product exports) allowed Korean entrepreneurs to obtain higher profits and invest in R&D.5 Large enterprises account for nearly 60 percent of total R&D expenditures.

Second, starting in the 1950s, at a time when a large part of the developing world was engaging in import substitution, the government actively encouraged exports. Sectors that focused on foreign markets were granted special finance and tax policies, including subsidizing transport costs as
well as promoting infant industries. Exporters, mainly large, vertically integrated business groups (the so-called chaebol), were allowed to import inputs at world prices. From 1990 onward, the authorities supported the development of high-tech and next-generation industries. However, there is an inconclusive discussion in the literature on the extent to which activist industrial policy contributed to the growth of exports. Some argue that the role of government was crucial for the country. Others believe that additional factors (such as outward orientation and the role of the neighbors) were much more important than the industrial policy.

**Figure 33: Total tax wedge (as percentage of total labor costs) in the OECD countries in 2008**

![Graph showing tax wedge](image)

Source: OECD.

Third, deepening regional integration contributed greatly to Korea’s success. Castley (1995), for example, points out the role Japan played in the development of Korean exports. By off-shoring their production to Korea, Japanese companies gave Korean companies access to international markets (such as the United States and European Economic Community) together with prospective clients. In 1972 nearly three-quarters of all Korean exports went to Japan and the United States, while 81 percent of imports to Korea came from those two countries. Having access to the most sophisticated markets in the world contributed greatly to the growth of exports. The country also took advantage of its proximity to other Asian markets by off-shoring parts of production to China or Vietnam.

Fourth, Korea successfully diversified its portfolio of target markets. In 2009, 23 percent of total exports went to China, followed by the EU27 (12.8 percent), the United States (10.4 percent), and Japan (6.0 percent). Increasing economic ties with the biggest economy in the region and second biggest in the world proved to be beneficial, especially in times of global recession. In 2009 exports to China were responsible for 87 percent of the rise in Korea’s total exports, according to OECD (2010) estimates. Eichengreen et al. (2004) suggest that economic growth in China had a positive impact on exports in both middle-income Asian countries (such as Thailand and the Philippines) and high-income Asian countries (such as Japan and South Korea).

Finally, in order to ensure greater access to important markets, South Korea joined a number of international associations (ASEAN, OECD) and entered several free trade agreements (FTAs), including those with Chile, Singapore, and India. According to the Ministry of Foreign Affairs and Trade, three new FTAs are in effect: with the European Union, the United States, and Peru. The country is also negotiating further agreements with New Zealand, Canada, Mexico, Australia, Colombia, Turkey and the Gulf Cooperation Council.
Relying on exports during the crisis

During the recent economic crisis and decline in global demand for high-tech products, Korean exports fell by 15.4 percent in May 2009 compared to May 2008. Yet relative to other countries in the region, the drop in exports was relatively small and the rebound quick. Among OECD countries, in 2009 Korea was the leader of the recovery, with the highest real GDP growth (6.1 percent) and the second highest real export growth (10 percent), after Iceland (10.5 percent) (figure 34). Good trade performance fueled the recovery, partly due to the growth of Asian economies, mainly China. There were also other important contributors to growing exports: a relatively weak won, a sizeable fiscal stimulus, and good policy coordination in the OECD group. Thus, the consequences of the current global slowdown were less severe in Korea than those of the Asian crisis of 1997.9

Figure 34: Recovery in the OECD, selected economies: GDP and exports, percentage change in 2009 (4th quarter on 4th quarter)

Source: OECD (2010).

Although Korean exporters have successfully tackled the crisis, there are several challenges ahead. The IMF (2010), for example, argues that Korea could balance manufacturing and services better, thus making its economic growth less volatile. By decreasing the government’s support for export-oriented industries, the country could move from export-oriented sectors toward nontradables. Second, the competitive pressure from China is here to stay. Third, Korean population is aging, households remain highly indebted, and deteriorating terms of trade, though favorable to exports, limit income growth as well as domestic consumption. Double-digit growth rates of spending on health care can be offset only with higher productivity, raising labor force participation, and/or immigration.10

Export-led accomplishments

The magnitude of the economic expansion in South Korea during the past 50 years has been staggering; the GDP in 2009 was more than 30 times higher than in 1960.11 Even more importantly, Korean authorities have shown that they are capable of successfully managing the economy in the times of crisis. During both recent downturns—in 1997 as well as 2008—the government was able to react quickly and decisively. The macroeconomic prospects are good too. After one of the most severe crises in the past century, economic growth is robust, unemployment low (3.3
percent), and public finances stable.\textsuperscript{12} The public deficit is forecast to be close to zero in 2013. IMF (2010) points out that despite high dependence on exports, the country’s current account surpluses are relatively modest. GDP is expected to grow on average at about 4 percent per year between 2011 and 2016, while exports of goods will increase on average by more than 10 percent annually.\textsuperscript{13}

Korea has managed to leapfrog in 50 years from a low-income country to an industrialized economy. Its nondistorted labor costs and skilled labor allowed the country to expand exports for several decades. Taking advantage of regional integration and the rise of, first, Japan and then China—positioning itself first as a recipient of off-shoring from Japan and then off-shoring its activities to emerging Asia—gave Korea an important advantage. Korea’s FDI in the region exceeded US$10 billion in 2007 and ultimately, if other Asian economies grow, so will South Korea. Moreover, due to rapid growth in exports of movies, videogames, and soap operas, Korea is also becoming a cultural center of the region.\textsuperscript{14}

Government support for exports (industrial policies), outward orientation (opening trade, free market institutions) and external support from more advanced economies (especially Japan) were significant factors for export development in the past, and an evolving mix of similar factors (especially trade links with China) may prove to be beneficial for growth in the future. It is difficult to assess how replicable the Korean model is. But over the past 60 years Korea has shown one feature that others would be well-advised to study: a mix of policies that allows for successful adjustment to changing domestic, regional, and global conditions.
Sources


Notes

1. Constant prices, 2000 USD.
2. When measured as a monthly percentage growth of exports throughout 2009. Countries included in the comparison are China, India, Japan, Korea, Malaysia, Thailand, and Chinese Taiwan.
6. Including Hong Kong, China.
7. ASEAN = the Association of Southeast Asian Nations: Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei Darussalam, Vietnam, Lao PDR, Myanmar, and Cambodia.
8. The Gulf Cooperation Council is an economic union of the United Arab Emirates, Bahrain, Saudi Arabia, Oman, Qatar, and Kuwait.
9. The downturn of 1997, triggered by accumulation of short-term debt and nonperforming assets, was followed by a sharp decline in GDP, collapse of Korean won, and IMF loans as well as a restructuring of the banking sector after the crisis.
10. Though expenditure itself is below OECD average.
13. IMF WEO.
14. Some attribute the popularity of Korean movies and soap operas to a rise in Chinese tourism to Korea. See Li and Xiong (2007).