Export-led Growth and Economic Development of South Korea: Lessons for Kyrgyzstan

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Abstract

Data of South Korean economic development and export promotion measures in the period of 1960-2010 were employed to assess policy appeals and limits through documentary analysis and to develop the possible model for follower countries like Kyrgyzstan. On this background it is necessary for Kyrgyz Republic to follow Korean development path and change our policy stance in favor of export oriented policies and move on the high growth trajectories. Korean experience asserts that strong manufactured export growth integrated with the absence of macroeconomic imbalances can built sound base for cumulative process of high exports-high profits-high savings-high investment-high exports. Another basic lesson is creation of rents for manufacturing enterprises to achieve sustained export promotion with time-bound nature. In addition to these, evolutionary expansion goal must be set to build up export competitiveness in a number of broad categories of light manufacturing and agro-processing activities such as footwear, garment, toys, sports goods and food processing.

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1 Introduction

Today South Korea, hereafter Korea, belongs to group of the countries with high level of the income per capita - \$31410(see Table 1) and ranked 12th economy in the world comparable for its total output. The unemployment rate in 2011 has made 3.3 %, and inflation did not exceed 4.5%.

GDP (PPP), billion US$	1,541.02
GDP Per Capita (PPP), US$	31,410.47
Investment (% of GDP)	29.13%
Gross National Savings (% of GDP)	30.19%
Inflation (Average Consumer Price Change %)	4.50%
Unemployment Rate (% of Labour Force)	3.30%
Current Account Balance (billionUS$)	11.89
Gini index	31.4(2009)

Table1. *Macroeconomic indicators (2011)* ***Source:*** *EconomyWatch, 2011*

But 50 years ago the country concerned one of the poorest countries of the world, comparable with the African countries with GDP per capita no more than 87 US$ (Shung, 2005). The rate of unemployment deviated from 22.3%. Under colonial rule from 1910 to 1945, the Korean economy became highly dependent upon Japan for capital, technology, and management. Of the total authorized capital of business establishments in Korea, the Japanese owned approximately 94 percent, as of 1940. Japanese engineers and technicians employed in manufacturing, construction, and public utilities in 1944 constituted about 80 percent of the total technical manpower in Korea. (Charles, et al. 1975) Therefore, the sudden retreat of the Japanese and the separation of the economy from the Japanese economic bloc brought about a suspension of many production activities in Korea. Partition also had deleterious effects on the South Korean economy. Metals, electric power, and chemical industries were located mainly in North Korea at the time of liberation, while light industries and machinery production tended to be located in the South. In addition to these, in 1945, 87 % of the population of Korea was illiterate. South Korea represented the small country deprived of natural resources, with small home market and weak technological base where human resources were the unique factor of growth.

This paper investigates export-led growth strategy of Korea since 1960s and to draw some policy lessons for the Kyrgyz economy. The paper consists of three sections. Section I presents theoretical explanation of export-led growth hypothesis. Section II considers the export growth and economic development of the South Korea. Section III provides some policy lessons for further development of the Kyrgyz Republic.

2 Theoretical framework: Export-led growth hypothesis

Level of economic development is positively correlated with the growth of trade with foreign countries within comparative advantage adjustment. Although the theoretical links between trade and economic growth have been discussed for over two centuries, controversy still persists regarding their real effects. The favorable arguments that provide several plausible explanations with respect to trade can be traced back to the classical school of economic thoughts. A country gains by trading what it produces most cheaply to people for whom production is costly or even impossible. In exchange, the country receives what it produces expensively at the other country’s cheaper costs. To explain these mutual trade benefits, international economists still accept the doctrine of comparative advantage formulated by Adam Smith and David Ricardo, English classical economists of the late 18th and early 19th centuries. On the other hand, neocolonial dependency theory presents convincing argument against the classical trade doctrine. Theory points out that developed countries usually exploit less developed countries.

Since the early 1960s policy makers and scholars alike, have shown great interest in the possible relationship between exports and economic growth. The motivation is clear. Should a country promote exports to speed up economic growth or should it primarily focus on economic growth, which in turn will generate exports? The export-led growth hypothesis (ELGH) postulates that export expansion is one of the main determinants of growth. It holds that the overall growth of countries can be generated not only by increasing the amounts of labor and capital within the economy, but also by expanding exports. According to its advocates, exports can perform as an "engine of growth".

Study	**/Sample/ /Period of study/ /Data set/**	**Economic growth**	**Exports**	**Conclusions**
Emery (1967)	50 1953-1963 Averages Cross-section	GNP growth	Export growth	Support for the export-led hypothesis.
Syron & Walsh (1968)	50 1953-1963 Cross-section	GNP growth	Exports	Support for the hypothesis but the results are sensitive depending on the type of country under scrutiny LDCs or developed countries.
Balassa (1978)	11 1960-1973 Cross-section	Real GNP growth	Real export growth	Support for the export growth hypothesis.
Moschos (1989)	71 1970-1980 Averages Cross-section	Real GDP growth	Real export growth	Supports the export-led growth hypothesis and suggests the existence of an threshold effect. The rate of growth seems unaffected by labor because of its magnitude, while capital has limited effects owing to its low productivity levels.
Lussier (1993)	24 & 19 1960-1990 African Economies Cross-section and panel data	GDP growth	Real export growth	Supports the hypothesis in panel data but fails to find any positive association when using export growth as a share of GDP.
Van den Berg & Schmidt (1994)	17 1960-1987 Latin America Time series	Real GDP growth	Real export growth	Points to a positive long-run relationship between exports and growth in 11 of the 16 cases analysed. Costa Rica is among those countries where the hypothesis was verified.
Henriques & Sadorsky (1996)	1 1870-1991 Canada Time series	Real GDP growth	Real export growth	No support for the export-growth hypothesis but failed to reject it.
Al-Yousif (1997)	4 1973-1993 Arab Gulf Time series	Real GDP growth	Real growth of exports and export change/ output	Evidence that supports the hypothesis in the short run; however, it fails to find any long-run relationship, i.e. does not find cointegration.
Islam (1998)	15 1967-1991 NICs of Asia 1967-1991 NICs of Asia	Real GDP growth	Export growth and export change / output	Evidence that supports the hypothesis in the short-run but only in 5 cases was a long-run relation (no cointegration) found.

Table 2. *Empirical studies* ***Source:*** *United Nations conference on trade and development, Policy issue No.7*

Table 2 presents a summary of a set of 10 empirical studies conducted between 1967 and 1998. Substantial part of the studies found evidence of a positive correlation between exports and economic growth, that is, export as a main contributor of economic growth.

Theoretical agreement on export-led growth emerged among neoclassical economists after the successful story of newly industrialized countries. They argue that, for instance, Hong Kong (China), Taiwan, Singapore and the Republic of Korea, the so called Four Tigers, have been successful in achieving high and sustained rates of economic growth since early 1960s because of their free-market, outward-oriented economies (World Bank, 1993). However, the reality of the tigers does not support this view of how their export success was achieved. The production and composition of export was not left to the market but resulted as much from carefully planned intervention by the governments. As Amsden (1989) states that the approach behind the emergence of this new 'Asian Tiger' is a strong, interventionist state, which has willfully and abundantly provided tariff protection and subsidies, change interest and exchange rates, investment management, and controlled industry using both lucrative carrots and threatening sticks. Again, the neoclassical school insists that the free markets are responsible for the East Asian growth and even when interventions emerged, it was pro-market interventions.

3 Export growth and economic development of South Korea

Korea's unprecedented record of economic growth started in the early 1960s when government policy shifted away from import substitution towards export orientation. Superior export performance has been the striking feature of Korea. The government has provided various incentives to promote exports, expecting export-led economic growth. Export values increased from US$87 million in 1963 to US$17.5 billion in 1980, and then to US$363.5 billion in 2009 (see table 3). Although import values were more than 6 (2.3) times larger than export values in 1963 (1971), trade surpluses have been recorded since 1998. The trade dependence ratio defined as (export values + import values)/GNP increased from 46.6 percent in 1972 to 78.9 percent in 1980, to 76.6 percent in 2001 and then to 98.6 percent in 2009. Thus, the Korean economy is regarded as one showing very high trade dependence ratio.

Years	real GDP growthrate (percent)	export values (US$ billions)	exports/GDP (percent)
1962-1966	8	1	7.7
1967-1971	9.7	3	13.7
1972-1976	8.4	22	27.8
1977-1981	6.1	77	31.5
1982-1986	8.7	141	34.4
1987-1991	9.2	307	32.1
1992-1996	7	510	28.7
1997-2001	4.3	734	42.8
2002-2006	4.8	1,239	31.2
2007-2009	2.5	1,186	42.2

Table 3. *Economic growth, Export and Export/GDP* ***Source:*** *S. Mah, 2010, table 1, page 3*

By the early 1960s, the Korean government had pursued import substitution policy. In 1964, the government announced pursuing export promotion policies with the slogan "Export Number One", i.e. export promotion is the most important policy. The government began to increase the amount of export subsidy, placing emphasis on exports of the products of the labor intensive Light Industries (LI), in particular textile and garment industry where the Korean economy had a comparative advantage.

During the 1970s, the main thrust of the industrial policy of Korea shifted from the LI to developing the high value-added Heavy and Chemical Industry (HCI). The rising wage level which tended to undermine the international competitiveness of the labor intensive LI also forced the government to change the engine of economic growth. The government chose iron and steel, non-ferrous metal, shipbuilding, electronics and chemical industries as the most important HCI. Overall, the spectacular economic growth of Korea in the 1960s and 1970s, as shown in Table 8, was accompanied by rapid export growth.

In 1981, the government began to emphasize the importance of research and development (R&D) and expressed to continue the export-led growth strategy. Such an emphasis on R&D led to increase in exports of technology-based electronic products since the late 1980s

In the late 1990s, the government decided to promote the capital goods industry. Therefore, in 1995, it announced the Capital Goods Industries Promotion Plan, which was expected to promote the high value-added capital goods industries by supporting the development of new products and establishing them as the main export industries. Meanwhile, the government has pursued deregulation and market opening measures to strengthen the market mechanism and even right after the occurrence of the economic crisis in 1998, Korea eliminated several remaining direct export subsidies. The government currently promotes exports by supporting international marketing activities and exhibitions abroad. In addition to such indirect measures, certain export promotion measures such as provision of export insurances and duty drawback not exceeding threshold levels are provided to the exporters, since they are not prohibited by the current WTO regulations.

The assessment of abovementioned policies can be explained by structural transformation of export composition since 1960s (see table 4).

Republic of Korea	**1965**	**1975**	**1985**	**1994**
Food	17.5	14.1	4.4	2.8
Textiles, clothing, footwear	30.9	43.9	32.1	22.7
Wood and paper products	11.1	5.6	0.7	1.1
Non-electrical machinery	1.5	0.7	2.0	5.7
Electrical machinery	0.3	6.4	7.2	20.8
Chemicals and pharmaceuticals	0.2	1.6	3.6	7.1
Computer and office equipment	0	1.0	2.1	4.0
Communications equipment	0.9	3.0	5.7	6.7

Table 4. *Export composition in South Korea as a percent of total export*. ***Source:*** *J. Weiss, 2005, table 2, page 5*

The data in table 2 reveal a number of trends that are the core feature of industrial transformation of South Korea;

- the decline in the relative importance of primary product exports (principally food), which were important initially
- the initial importance and subsequent relative decline in textile, clothing and footwear exports from these economies;
- the emergence of substantial exports of more capital and technology-intensive goods, such as electrical machinery, chemicals and pharmaceuticals, computer and communications equipment; some of these goods embodied advanced, international best-practice technology;

Indeed, during the period of rapid economic growth, the Korean government provided tax and financial incentives and established export-promoting organizations. As a result of EP policies, export values rose significantly. Beginning from the early 1980s, the government changed the policy direction from direct subsidization of selective industries and firms toward function-oriented support such as general support for R&D activities. The transition from the LI to the HCI and then to technology-intensive industries led to the higher value-added industrial structure and contributed to economic growth. Thus, the experience of economic growth of Korea has been regarded as an example of pursuing the export-led economic growth strategy. Then, what policy lessons can be drawn from Korean development experience for follower economies, particularly for the Kyrgyz Republic?

4 Some policy lessons for the Kyrgyz Republic

Since the heyday of export industrialization, the world has changed and Korean experience has little to offer today’s lower income and emerging economies. Two arguments are put forward: The first, absence of efficient bureaucracy and the second, WTO regulations that prevent selective interventions applied in the past.

However, Korean experience asserts that strong manufactured export growth integrated with the absence of macroeconomic imbalances can built sound base for cumulative process of high exports-high profits-high savings-high investment-high exports. Another basic lesson is creation of rents for manufacturing enterprises to achieve sustained export promotion with time-bound nature. In addition to these, evolutionary expansion goal must be set to build up export competitiveness in a number of broad categories of light manufacturing and agro-processing activities such as footwear, garment, toys, sports goods and food processing;

Also, it may be reasonable to encourage local linkages to input suppliers, duty-free access to imported inputs; to finance for export credits and export insurance schemes are also counted to be useful; to reform financial sector to develop long-term sources of finance for industry. Furthermore, sound physical infrastructure, if knowledge-based industries are at the frontiers then a strong telecommunications sector is required; sound social infrastructure, that is high level skills in the workforce for export upgrading; and innovation, that is more than simply importing and adopting technology but public support for R&D in established firms, creation in number of high technology areas – science parks.

5 Conclusion

The Republic of Korea is well-known for its remarkable economic achievements. It has grown by more than 8 percent each year since the early 1960s, making it the fastest growing economy in the world. Korea's performance is considered particularly impressive because it has been achieved in spite of such obstacles as

Japanese colonial rule, the devastation of the Korean War, political turmoil and heavy military expenditures under national partition.

Korea's unprecedented record of economic growth started in the early 1960s when government policy shifted away from import substitution towards export orientation. Export expansion has been believed to be possible by aggressive export promotion (EP) policies, in particular in the early stage of economic development. The Korean government provided tax and financial incentives in addition to incentives such as establishment of organizations to promote exports. Thus, the experience of economic growth of Korea has been regarded as an example of pursuing the export-led economic growth strategy. Accordingly, for the further development of Kyrgyz economy, export promotion strategies obviously will help, although some adverse arguments put forward.

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