Towards a New Economic Development Model for Korea*

Charles Harvie**
Department of Economics
University of Wollongong
NSW
Australia 2522

and

Hyun-Hoon Lee***
Division of Economics and International Trade
Kangwon National University
Chuncheon, 200-701
South Korea

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** Email: charvie@uow.edu.au
*** Correspondence: Hyun-Hoon Lee, Division of Economics and International Trade Kangwon National University, Chuncheon, 200-701, South Korea. Email: hhlee@kangwon.ac.kr

Abstract

This paper examines the "old" growth and economic development model of Korea and then constructs a "new" model which will give the Korean economy a new dynamism that will enable it to return to its earlier strong and sustained growth path. This paper first examines the "old" economic development model of Korea. That is, we construct a systemic framework which can explain the major factors behind Korea's success over the period from the early 1960s to the late 1980s. Then, we suggest a coherent explanation of why the financial crisis of 1997 occurred. We argue that the original development model has now run its course, but in the process has produced remarkable social and economic outcomes. The Korean economy is now matured and faces a different global trade and financial environment. Finally we construct a new development model of Korea. The new development paradigm calls for (1) intensifying the market based mechanisms of competitive discipline; (2) a new role for government in the economy that focuses upon establishing the necessary institutional framework that supports competitive and open markets; (3) more emphasis on the development of SMEs; (4) continuing an outward-looking development strategy which promotes not only exports but also imports; (5) continuing stable macroeconomic management; (6) developing an appropriate education system to produce a creative, skilled and adaptable workforce that will enable Korea to embrace the new economy; (7) stronger cooperation with other East Asian economies in both trade and finance; and (8) a gradual economic integration between the two Koreas.

1. Introduction

After the devastation of the Korean War and the partitioning of the country, South Korea was one of the poorest countries in the world. Economic recovery during the period 1953 to 1961 was characterised as being very slow, heavily dependent upon US financial assistance, and was focused upon an import substitution development policy. By the early 1960s the import substitution policy was recognised as having failed, and, by 1962, a "switching point" was reached whereby emphasis instead was to be placed on the development of export oriented industries. The country's starting point for its export led industrialisation was, however, inauspicious, with a per capita GDP at only US$87 in current prices in 1962, much lower than that of most of its regional neighbours.

The introduction of the country's First Five-Year Plan (1962-66) proved to be a catalyst for the remarkable transformation of the economy, enabling it to achieve by 1970 the status of a Newly Industrialising Country (NIC). Korea continued its rapid growth during the 1970s despite the two oil crises, and by the late 1970s had even overtaken Malaysia, on a per capita income basis, which was then the second most advanced ASEAN nation. By the mid 1980s Korea overtook countries such as Mexico, Argentina, Brazil, Portugal, Poland, Yugoslavia and Hungary. By 1989 Korea joined the highest income developing countries group, consisting of Israel, Hong Kong, Singapore and Taiwan. Over the period 1962-89, characterised by rapid and sustained economic and trade growth, per capita income increased from US$87 in 1962 to US$5,199 by 1989, the economy's GDP expanded from US$2.3 billion in 1962 to US$220.7 billion in 1989, and exports increased from US$55 million in 1962 to US$61.4 billion in 1989.

From the mid 1980s the economy entered a new phase with the onset of the so-called "three lows" – low oil prices, a lower US dollar, and low interest rates. For the first time in the economic history of Korea domestic savings began to consistently exceed investment, with the saving rate rising to over 30 percent of GDP, and the international balance of payments turning from a chronic deficit position to a surplus. As a result Korea was able to rapidly reduce its foreign debt, which had peaked at US$46.7 billion in 1985. It was no longer necessary for Korea to worry about foreign debt and rely on advanced countries for economic assistance. By the late 1980s Korea appeared to have achieved its earliest goal of realising economic independence. An economic 'miracle on the River Han' appeared to have been achieved

Few countries in history have attained so rapidly such a high level of development. In a single generation this poor nation, consisting primarily of subsistence farmers in the 1950s and early 1960s, had become by the mid 1990s the world's largest producer of home appliances, the second largest producer of semi-conductor chips, the second largest ship builder, the fifth largest car maker, the 11th largest economy, and the 12th largest trading nation. Rapid economic growth and development with low unemployment, driven by high savings and investment and export growth became the norm for the country. By 1996, per capita income surpassed US$10,000 and remained relatively equally distributed, while living standards for ordinary Koreans increased dramatically. The country's attainment of OECD membership in December 1996 signified the culmination of 35 years of extraordinary growth and the economy's coming of age. For many developing countries Korea's economic development model appeared to offer a viable framework with which to replicate such rapid development. Without doubt, the Korean economy was hailed as a model of achievement for other emerging economies to emulate.[1]

But the financial crisis of 1997 and economic crisis of 1998 revealed that the Korean development model, which had been adequate throughout most of the period of high growth until the late 1980s (or the early 1990s at the most), was no longer adequate in the face of a new international environment and for the country's stage of economic development. Therefore, the Korean growth and development model requires an overhaul. This chapter examines the "old" growth and economic development model of Korea and then constructs a "new" model which will give the Korean economy a new dynamism that will enable it to return to its earlier strong and sustained growth path.

In section 2, we first examine the "old" economic development model of Korea. That is, we construct a systemic framework which can explain the major factors behind Korea's success over the period from the early 1960s to the late 1980s. Then, in section 3, we suggest a coherent explanation of why the financial crisis of 1997 occurred. In section 4, we construct a new development model of Korea. Section 5 provides some concluding remarks.

[1] Korea was not alone. Japan, Hong Kong, Singapore, Taiwan, Indonesia, Malaysia, and Thailand were also high-performing Asian economies (HPAEs). This remarkable achievement of the East Asian economies was once described by the World Bank, (1993) as an "East Asian economic miracle".

2. The "Old" Korean Development Model[2]

Before suggesting a new development model for Korea, we start with a summary of the main elements of the "old" development model. There have been numerous attempts to explain the so-called "miracle" performance of Korea.[3] Table 1 summarises the major determinants of the performance of the Korean economy. As seen in the table we attempt to divide the framework into initial conditions, external environment, policy factors, and interim and final outcomes.

Initial Conditions[4]

First, and similar to that for most other East Asian countries, Korea's rapid development took place from an initial position of "economic backwardness", characterised by a low level of national income and income per capita. The historical record strongly suggests that really rapid growth of real income per capita is confined to cases where countries, that initially lag behind the leaders in terms of income and productivity levels, go through a phase of rapid catching up (Crafts, 1998). But catching-up is not automatic. In his famous discussion of the opportunities and difficulties of "economic backwardness," Gerschenkron (1962) suggested that economically backward countries could achieve a take-off into very rapid growth only if they take radical measures to promote development through institutional innovations and controlled capital markets. The development strategies of Korea and most of the East Asian countries to achieve rapid catch-up growth bear strong resemblance to Gerschenkron's recipe (Crafts, 1998).

[2] This section draws upon and develops further Harvie and Lee (2002).
[3] See Harvie and Lee (2003a; 2003b) for a more detailed discussion of the economic performance of the Korean economy up until the late 1980s.
[4] Korea's period of rapid economic growth was profoundly shaped by a number of social and historical developments. See Song (1990), Amsden (1989)), and Harvie and Lee (2003b) for a more detailed discussion.

Table 1. The "old" Development Model – key ingredients

Initial Conditions:

. Backward economies

. Sound work ethic and low labour costs

. High sprit of education and good primary education system

. Legacies from the period of Japanese rule

. Division of the country into North and South

External Environment:

. Trade liberalisation under the GATT

. Free trade approach by the U.S.

. Flying geese pattern pioneered by Japan

. Global capital flows/international capital markets

Policy Factors:

. Primarily market based mechanisms of competitive discipline

. Tailored government intervention

. Outward orientation

. Stable macroeconomic management

. Emphasis on education

Interim Outcome:

. High savings

. High investment

. Increasing human capital

. Rapid growth of exports

. Rapid catching-up of technology

Final Outcome:

. Rapid industrialisation

. Rapid and sustained economic growth

. Reduced poverty

. Improving social indicators

Economic backwardness has another dimension, not central to Gerschenkron's account. "As economies develop, they typically undergo a demographic transition in which birth and death rates both fall to a much lower level but during which there is an acceleration of population which tends initially to reduce and then significantly to increase the proportion of working age" (Crafts, 1998: p.11). Korea underwent a similar demographic transition. This change in age structure may have offered a substantial growth bonus in Korea.

Second, the sound work ethic of the Korean people was another asset. Koreans were diligent as proven by their long working hours and high savings rates. Such diligence in combination with low costs of labour employment made the products of Korea competitive in terms of both quality and price. A high pool of available savings, mainly from the mid 1970s, provided the necessary funds for high rates of domestic investment (see Table 1). A number of factors have been advanced to explain the high level of domestic saving in the economies of East Asia including Korea (see, for example, World Bank (1993)). (1) The rapid economic growth experienced by these countries. Studies suggest that savings are an outcome of high growth (see for example Carroll, Weil and Summers (1993)) although this does vary by country. (2) The rapid demographic transitions experienced by these countries. The size, age distribution, and ratio of working to non-working population can exert an influence on aggregate saving (see for example Ando and Modigliani (1963) and Modigliani (1970)). (3) Sound policy fundamentals. Low fiscal budget deficits, and surpluses, focusing upon restraining government spending, enabled public savings to complement private savings including that from the private corporate sector. (4) Specific policy measures to encourage saving were adopted including: the establishment of financial systems (for example postal savings institutions); effective protection of deposits at financial institutions; tax incentives; restrictions on consumer credit and spending; and forced savings through mandatory pension schemes.

Third, in Korea people were well educated due to the strong Confucian emphasis on education, focusing upon the development of a good primary education system. In the 1960s the illiteracy rate was already well below 10 percent. The strong desire for education provided a high quality labour force and modern management ability as the stages of industrialisation unfolded (see for example Tae (1972) p.56). Total expenditure, both public and private, on education regularly exceeded 10 percent of GDP, the highest level among all the developing countries.

Fourth, Japan formally colonised Korea from 1910-45, but even before this time it had already introduced a series of measures into traditional Korea that initiated the transformation of the country both economically and socially (see Amsden (1989)). Although the growth rate of the Korean economy during the whole colonial period was nearly 4 percent per annum, in absolute terms the well being of ordinary Koreans worsened. With liberation from the Japanese in 1945 the Koreans were, therefore, left in dire poverty. The deterioration of the Korean people's economic welfare during the colonial period can be traced to a number of factors (see Song (1990)). (1) Korea was regarded by the Japanese as a source of cheap rice. (2) The country's other resources, such as timber, fishing and mining were exploited for the benefit of the Japanese economy and not the Korean economy. (3) Korea was used to settle Japan's surplus population, and given the best jobs in Korea. (4) The Japanese used cheap workers from Korea for the development of Japanese mining and manufacturing industries. Skilled workers were also transferred to work in Japan. (5) Japan used Korea as a base for military training, and forcibly drafted young Koreans into the Japanese army. (6) Koreans were generally restricted to no more than a primary education. (7) Koreans were discriminated against and used in lower organizational positions and consequently had few opportunities to accumulate experience as leaders, managers, or negotiators. Hence Korea had a severe lack of competent politicians, bureaucrats, scholars, entrepreneurs and technocrats. (8) Finally, the period of colonialism resulted in Koreans being largely isolated from experience in the international arena.

For all the negative features of Japanese colonialism there were some positive impacts as well, such as education, infrastructure (finance, transportation and commerce), and management experience in modern organizations (Amsden (1989) p.32). Japan also dismantled one thousand year old dynastic institutions that had held back the advancement of the country. Koreans learned the Japanese way of doing business and managing the economy, and remain the Asians who understand Japan best. Because of the colonial experience Koreans were in a position to make selective use of various Japanese institutions. Not surprisingly, Korea's experience of rapid development is often compared with that of Japan's.

Fifth, another historical legacy was the division of the country after the liberalisation from the Japanese rule in 1945 and the Korean War in 1950-53. Despite the devastation of the physical infrastructure in both the North and the South, the North was in a better position to rehabilitate its economy. It had the best mines and most advanced heavy industries. The South's legacy was less auspicious, being primarily agricultural, having been developed by the Japanese as a supplier of cheap foodstuffs for Japan's industrial workforce. The country's capital city, Seoul, had been severely damaged during the period of the war[5], with over 80 percent of industrial and infrastructure facilities and over half its dwellings destroyed. In addition, after the war, the South experienced a flood of refugees from the North, resulting in it being left with two thirds of the entire Korean population. As stated by Song (1990), p.42 'The South began its national reconstruction with too many people on too little land'. In addition, the maintenance of its borders required considerable military expenditure. The urgent need to catch up with, and out-perform, the North necessitated the maximum possible growth, or growth at any cost, and became the basic cause of the forced expansion of exports and investment.

External Environment

Korea's fast growth occurred in favourable international circumstances, at least until the late 1980s. First, the international movement towards freer trade under the GATT enabled Korea, which became a member in 1967, to effectively pursue an export-oriented growth strategy. Following a number of multilateral trade talks under the auspices of the GATT the developed countries moved toward the opening of their domestic markets, yet Korea, as a developing country, was allowed to keep its domestic markets effectively closed until the end of the 1980s.

Second, the free trade approach on the part of the US, which provided the largest market for Korea's exports, assisted the export-oriented industrialisation strategy of Korea. Also, Korea received a considerable amount of explicit and implicit economic assistance from the United States during the cold war era, and this provided seed money at the initial stage of economic development.

Third, like flocks of geese flying in a "V" formation to make their flying easier, Korea (and the other East Asian countries) followed the export oriented development model of Japan – the lead goose. Japan successfully developed globally competitive high-technology products that it was able to export successfully, while its domestic market remained almost effectively closed to foreign competition. After the Plaza Accord in 1985, however, the yen began to increase in value relative to the US dollar. The strong yen encouraged many Japanese companies, particularly in the automotive and

[5] The city changed hands four times during the period of the war.

electronics industries, to establish overseas plants in order to maintain their international competitiveness (Sato and Rizzo (1986)). The stronger yen also increased the cost of employing labour, relative to that of its regional competitors such as Korea, and resulted in many of Japan's labour intensive industries moving offshore to production units in the lower labour cost countries of East Asia[6]. Instead of Japan exporting these products to East Asia, these countries now started to export to Japan. In the process Japan, through its foreign direct investment (FDI), had passed on its production technologies to the East Asian nations. Specifically Korea and Taiwan followed Japan with a certain time lag, and later, as their labour costs increased, the economies of Southeast Asia followed during the period of the 1980s, and increasingly so into the 1990s as they adopted a more export oriented policy and increasingly opened their financial sectors to further inflows of short and long term capital flows.

Fourth, it is also important to bear in mind that the Korean economy, particularly from the period after the breakdown of the Bretton Woods agreement, began to benefit from the rapid development of international financial markets and the globalisation of capital flows. This assisted Korea in foreign borrowing, the accumulation of FDI and the expansion of regional growth of output and exports. However, such flows of capital increased dramatically enabling Korea to sustain very high rates of investment, but also contributed to problems on current account and in the accumulation of foreign debt.

Policy Factors

First, the Korean economy operated within an environment of primarily market based mechanisms of competitive discipline. This contributed to the development of competitive enterprises subject to hard budget constraints, and, by limiting price distortions, the system contributed to a more efficient and productive allocation of scarce resources.

Second, there was a strong leadership role by the government in creating and developing the "markets", and their credible commitment to its long-run development. This is a somewhat controversial argument, as there is plenty of evidence that Korea's industrial policies did not contribute to the growth of industries' productivity.[7] But at

[6] Resulting in the so-called hollowing out of Japan's manufacturing industries.
[7] For instance, Lee (1996) finds that industrial policies in Korea were not directed towards the higher-growth industries.

least until the early 1980s a strong government leadership was rather necessary and desirable, because the domestic markets were incomplete or missing and the structure of domestic industry was rather simple. Even if the net benefits of government intervention policies are still controversial, they clearly allowed some Korean firms to establish themselves in industries, such as steel, chemical engineering, shipbuilding, electronics and automobiles, where the costs of entry were high.

Third, an outward-looking development strategy, particularly a dynamic export sector, has been a crucial ingredient of the miracle. There were several reasons for the Korean government pursuing this strategy (see Harvie and Lee, 2003b.) (1) The Korean economy started from a very low level of national income and income per capita. Consequently, domestic producers faced a very limited domestic market, suggesting that developing an industrial base through import substitution had severe limitations. (2) Korea's natural resource endowment was so poor that a development strategy based on domestic resource utilisation was inconceivable. (3) US assistance, which financed most of the post war Korean reconstruction, peaked in 1957, and was gradually but continually declining in the early 1960s. Faced with this reduction in foreign aid, Korean policy makers had to consider how best to expand domestic saving and generate an alternative source of foreign exchange to finance projects and meet balance of payments requirements. (4) The availability of an abundant, cohesive, and well motivated labour force with a high educational level, and relatively low wages, provided the country with an initial comparative advantage in exporting light manufactured labour intensive consumer goods whose capital, and technology, requirement was minimal. This was ideal given the country's shortage of capital. (5) There was the determination of the military leadership to attain a high rate of growth, and a virtual lack of constraints on its ability to make decisions and to carry them out.[8] The only way forward was an export oriented industrialisation growth and development policy, requiring the development of globally competitive enterprises.

Many export industries, and indeed the economy as a whole during the early stages of its development, was subject to extensive involvement by the government, and the country's initial export expansion was effectively 'forced' by the actions of the government (Song (1990), p.58). The Korean government set firm- and industry-specific export targets and developed export-marketing institutions. They also made selective use of tariff protection, export incentives ranging from moral suasion to subsidies, and provided industry with financing at lower cost. The outward-oriented development forced domestic firms to become more efficient and absorb foreign technology and managerial know-how in order to compete in world markets. It also promoted growth by providing access to larger markets and generating increasing returns to scale in production. The export-oriented development was a means of achieving viable external balances, generating foreign exchange to purchase essential technology and imported inputs, and generating the demand needed to accelerate GDP growth.

Fourth was the adherence to stable macroeconomic management. This was seen as being essential to: encourage the development of the privates sector; encourage domestic saving; contribute to vigorous accumulation of investment; encourage efficient resource allocation through the market by reducing inflation and distortions in relative prices; and to maintain international competitiveness through a competitive real exchange rate, and this required the attainment of stable prices. However, during much of the period of the 1960s and 1970s Korea experienced relatively high and volatile rates of inflation. From the early 1980s the need to reduce this became a key policy objective, and considerable success was achieved in this regard from 1982 onward.

As can be seen from Table 2, the saving rate increased rapidly from 1973 but was still insufficient to meet domestic investment requirements, resulting in the need to borrow from overseas and a consequential rapid accumulation of foreign debt. However, by 1986, for the first time during the period of rapid growth, domestic saving exceeded domestic investment requirements, and the level of foreign debt began to decline. The country was now able to finance most of its investment requirements from its own domestic resources. Reflecting this development exports exceeded imports for the first time also in 1986 and the trade balance moved into surplus.

Fifth, education policies that focused on primary and secondary schools generated rapid increases in labour force skills and enhanced the productivity and employability of the workforce. The Korean government successfully addressed the market failures of missing information and positive externalities in the educational field, by focusing

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[8] In a military coup on 16 May 1961, General Park Chung Hee ascended to power.

Table 2. Major indicators of Korean economic growth 1960-89

	GDP per capita (US$)*	GDP (US$ billion)	Real GDP growth rate (%)	CPI (%)	Savings ratio (%)	Investment ratio (%)	Trade balance US$ million)	Exports (US$ mill)	Foreign debt (US$ mill.)	Unemploy. rate (%)	Exchange rate (won/US$)
1960	79	2	1.2	na	0.8	10.9	-273	33	-	11.7	65
1961	82	2.1	5.9	na	2.8	13.2	-242	41	-	12.7	130
1962	87	2.3	2.1	na	3.3	12.8	-335	55	-	9.8	130
1963	100	2.7	9.1	na	8.7	18.1	-410	87	157	8.2	130
1964	103	2.9	9.7	na	8.7	14.0	-245	120	177	7.7	256
1965	105	3	5.7	na	7.4	15.0	-241	175	206	7.4	272.1
1966	125	3.6	12.2	12	11.8	21.6	-430	250	392	7.1	271.5
1967	142	4.2	5.9	10.7	11.4	21.9	-574	335	645	6.2	274.6
1968	169	5.2	11.3	11.3	15.1	25.9	-836	486	1199	5.1	281.5
1969	210	6.5	13.8	11.6	18.8	28.8	-992	658	1800	4.8	304.5
1970	248	8	8.8	16.9	16.2	24.6	-992	882	2245	4.5	316.7
1971	286	9.4	8.6	12.2	14.5	25.1	-1044	1133	2922	4.5	373.2
1972	316	10.6	4.9	11.9	15.7	20.9	-574	1676	3589	4.5	398.9
1973	396	13.5	12.3	3.5	21.4	24.7	-566	3284	4260	4	397.5
1974	542	18.8	7.4	24.8	19.3	31.8	-1938	4516	5937	4.1	484
1975	598	21.1	6.5	24.7	16.9	27.5	-1671	5003	8456	4.1	484
1976	806	28.9	11.2	15.4	22.2	25.7	-590	7814	10533	3.9	484
1977	1019	37.1	10	10	25.4	27.7	-477	10046	12648	3.8	484
1978	1407	52	9	14.7	27.3	31.9	-1780	12711	14871	3.2	484
1979	1649	61.9	7.1	18.5	26.5	36	-4395	14705	20287	3.8	484
1980	1632	62.2	-2.1	28.7	20.8	32.1	-4384	17214	27170	5.2	659.9
1981	1797	69.6	6.5	21.3	20.5	30.3	-3849	20747	32433	4.5	700.5
1982	1892	74.4	7.2	7.1	20.9	28.6	-2827	20934	37083	4.4	748.8
1983	2062	82.3	10.7	3.4	25.3	29.9	-1849	23272	40378	4.1	795.5
1984	2242	90.6	8.2	2.2	27.9	31.9	-1089	26486	43053	3.8	827.4
1985	2289	93.4	6.5	2.3	28.6	31.1	-19	26442	46729	4	890.2
1986	2611	107.6	11	2.8	32.8	30.2	4299	34128	44500	3.8	861.4
1987	3248	135.2	11	3.1	36.8	37.7	7529	46560	35600	3.1	792.3
1988	4302	180.8	10.5	7.1	38.6	39.1	11283	59973	31500	2.5	684.1
1989	5199	220.7	6.1	5.7	35.4	35.9	4597	61408		2.6	680

* GNP per capita before 1970

Notes: GNP and GNP per capita are in current prices. The rate of inflation is based on the GNP deflator. The rate of interest is the bank interest rate on time deposits for the period of one or more years.

Source: Song (1990), pp. 60-61

spending on universal primary and secondary education. The share of expenditure allocated to tertiary education tended to be low, and this was more focused upon the acquisition of technical skills, vocational training and technically sophisticated disciplines. The percentage of high school graduates advancing to colleges or university during the period of the 1980s was the second highest in the world after the US. This investment in education enabled Korean growth to be accompanied by a high level of income equality that remained relatively unchanged during the course of development. In fact, Rodrik (1994) showed that countries that were poorer, but that had good primary education systems and less inequality of income and land distribution around 1960, grew faster during subsequent periods.

Advocates of free markets saw the triumph of the Korean economy (and the East Asian economies) as being in its small government, the market mechanism and unfettered private initiative. On the other hand interventionists saw the Korean economic miracle as being the triumph of selective interventionist policies by the Korean government. Trade economists viewed it as a miracle based on outward orientation, labour economists stressed the early emphasis on education, and macroeconomists pointed to the region's fiscal conservatism. But the truth is in between: to varying degrees, all of these policy factors contributed to the fast growth performance of Korea.

Interim Outcome

The Korean development model produced impressive results by any standard. These included: high levels of domestic financial savings and private domestic investment; rapidly growing human capital; rapid growth of exports; and rapid catching-up of foreign technologies (see Table 2). These we describe here as being major interim outcomes which became the principal engines of growth.

The Korean government encouraged private investment with a wide array of mechanisms such as low capital goods prices, subsidised interest rates for corporate investment, and limited risk for private investors. Where investment could not be provided by the private sector alone, particularly during the early stages of economic development, the government used its own investment resources for the construction of key industries and for the formation of social overhead capital. A stable business environment with relatively low inflation also encouraged investment in long gestation fixed assets. High rates of investment were financed by domestic saving, as well as through increasing flows of foreign debt and investment. High human capital, rapid growth of exports, and rapid technological change further laid the foundations of rapid growth and development.

Final Outcome

The interim outcomes contributed to rapid industrialisation, rapid and sustained economic growth, and considerably improved social indicators. Poverty declined significantly and other social indicators, such as equality of income, life expectancy and fertility rates, compared favourably with other countries at a similar level of income before and during the period of rapid growth (Park and Kim, 1998). Table 3 indicates, for example, that the Korean economy compares very favourably with the economies of East Asia and Pacific, Sub-Saharan Africa, the Middle East, and Latin America and the Caribbean in terms of GDP per capita, adult literacy, primary, secondary and tertiary education gross enrolment, the UNDP Human Development Index, life expectancy, infant mortality rate, total fertility rate, and income inequality. While the gini coefficient improved only slightly in East Asia during the period of the 1990s in comparison to that of the 1980s, Korea's income inequality performance continued to improve. While East Asia compared very favourably against economies in South Asia, Sub-Saharan Africa, the Middle Eastern economies, and Latin America in terms of life expectancy, infant mortality, and particularly well in terms of fertility rates throughout its period of rapid economic development and growth, Korea's performance can certainly be regarded as outstanding within the context of this overall regional performance. Given the less than auspicious circumstances at the beginning of its growth and development from the early 1960s, characterised by a very low GDP per capita (Table 2), the outcomes from Korea's development model produced tangible social improvements for its citizens.

Adverse Consequences[9]

Of course there were also adverse consequences of the "old" model. First, the country experienced high but volatile economic growth (see Table 2). From the 1960s, because of the growth first development policy, the economy experienced more year-to-year fluctuations. Since the scale of the Korean economy was relatively small well into the 1970s, the growth rate was also susceptible to large fluctuations caused by construction

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[9] This draws on Harvie and Lee (2003b).

phases in large investment projects. The economy's outward orientation also exposed it to fluctuations from oil price hikes and other external influences. The inexperience of policy makers, especially during the 1960s, also contributed to economic fluctuations.

Second, as the expansion of industrial capacity tended to be excessive, the amount of domestic investment generally exceeded the amount of domestic savings (see Table 2). In addition, much of this domestic saving was diverted into real estate as a hedge against high inflation. Hence, the level of available domestic saving in Korea was lower than that required to meet the productive investment needs of the country. This gap had to be filled through foreign borrowing, and this, along with the need to import oil and many other industrial raw materials, explains why Korea's foreign debt continued to rise until 1985 (see Table 2). Also, the debt to equity ratio of large Korean firms, forced to over-expand their production and export capacity, tended to be higher than that of other Asian newly industrialised countries (NICs). Korean growth was, therefore, characterised by domestic investment exceeding domestic savings, a high debt-equity ratio for most firms, and a large foreign debt.

Third, the expansion of industrial capacity in Korea was achieved through an expansion of existing firms rather than through the creation of new firms. This pattern persisted for over two decades and resulted in the growth of a small number of very large firms and business conglomerates (*chaebols*), causing a large gap between large and small firms. The market concentration ratio in Korea was much higher than in either of its regional neighbours, Japan or Taiwan. In Japan, growth was based on a significant number of very large firms as well as a large number of small firms, while in Taiwan emphasis was placed on the development of small firms. Hence the Korean economy may be called a large firm economy, in contrast to the small firm economy of Taiwan or the bi-polar economy of Japan. The structural imbalance between large and small enterprises remained unchanged even though the government attempted to restrain market concentration during the period of the 1980s.

Table 3 Social indicators – an international regional comparison

	GDP per capita (PPP US$)	Adult literacy rate (%) age 15 and above)	Combined, primary, secondary and tertiary gross enrolment ratio (%)	Human Development Index (HDI) value	Life expectancy (Years)		Infant mortality rate per 1000 live births		Total fertility rate, births per woman		Income inequality – Average Gini coefficient	
	2000	2000	1999	2000	1970-75	1995-2000	1970	2000	1970-75	1995-2000	1980s	1990s**
Korea	17,380	97.8	90	0.882	62.6	74.3	43	5	4.3	1.5	33.6*	31.6**
East Asia and Pacific	4,290	85.9	71	0.726	60.4	68.8	87	33	5.0	2.1	38.7	38.1
South Asia	2,404	55.6	53	0.570	49.9	61.9	128	68	5.6	3.6	35.0	31.9
Sub Saharan Africa	1,690	61.5	42	0.471	45.3	48.8	135	107	6.8	5.8	43.7	47.0
Central & Eastern Europe and CIS	6,930	99.3	77	0.783	69.2	68.4	34	20	2.5	1.5	25.0	28.9
Arab States	4,793	62	62	0.653	51.9	65.9	132	46	6.5	4.1	40.5	38.0
Latin America and the Caribbean	7,234	88.3	74	0.767	61.1	69.4	86	30	5.1	2.7	49.8	49.3
OECD	23,569	-	87	0.905	70.4	76.4	40	12	2.5	1.8	-	-
High income OECD	27,848	-	94	0.932	72.1	77.8	20	6	2.1	1.7	33.2	33.8

* Figure for 1988

** Figure for 1993, source UNDP.

Sources: UNDP, Human Development Report, 2002, World Bank, World Development Reports (various), World Bank, World Development Indicators (various), Deininger and Squire (1996), Fourth, Korean growth was accompanied by trade and balance of payments deficits until 1985 (see Table 2). This was caused, to some extent, by Korea's resource poverty, but principally due to the policy of allowing exporting companies to import raw materials, parts, and machinery required for the production of export goods on a large scale. This has been called a negative import substitution policy because exporting firms tried to import as much as possible. From 1986, however, the trade and international balance of payments turned positive and Korea changed from a young debtor nation to a mature debtor nation.

Fifth, during its period of rapid economic development Korea experienced sharply fluctuating wholesale and consumer prices (see Table 2). Indeed from the early 1960s until 1981 Korea had the highest inflation rate among the Asian NICs. This was especially true when the economy was hit by: oil price hikes; poor harvests; changes in government; and high levels of investment and capacity building. This high inflation was mainly due to an excessive expansion of demand associated with a rapid expansion of industrial capacity and the abnormal, compulsory, expansion of exports. The aggressive export promotion and growth policy necessitated that the economy had to consistently perform far beyond normal capacity, resulting in the forced expansion of investment and output. This was particularly prevalent during the heavy and chemical industries (HCI) drive of the 1970s (see Harvie and Lee (2003b)). Overly ambitious investment plans caused the inflationary financing of investment. Excessive investment demand was, therefore, one of the links between the forced export growth strategy and the high inflation that persisted until 1982.

Finally, government driven industrialisation resulted in an excessive concentration of industries and population in large cities, especially in Seoul and the Seoul region. The level of urbanisation in Korea was generally higher than the norm observed in other countries. As a result, such urban problems as housing shortages, lack of educational facilities, and poor public services began to emerge as serious domestic issues, in particular, after the 1970s.

3. The Financial Crisis

Korea, one of the highest performing economies in the world, suffered an abrupt financial crisis in 1997. The crisis started with an unprecedented number of business insolvencies (including eight of the 30 largest *chaebols*), and the devaluation of the Thai baht the effect of which quickly spread to other regional currencies. Between October and December 1997 this new OECD member, and the world's eleventh largest economy, was reduced to an economy surviving on overnight loans from the international money markets. Assistance from the IMF was sought in November 1997.

The events of 1997 induced academics, policy makers, and journalists alike to re-evaluate the Korean development model (and more generally the East Asian Development Model), and to identify whether this required a fundamentally different economic growth paradigm, or model, or whether the old model was still applicable but just required some fine-tuning. Different views on the Korean development model (and the East Asian development model) stemmed from different explanations for the causes of the crisis. While a number of explanations have been offered for Korea' s financial crisis, they can be broadly divided into five groups.

Exogenous Shock

The first argument is that the crisis was nothing but an accident owing to an exogenous shock. For example, Kim In-Ho, the then chief economic advisor to the Korean President, was quoted as arguing later in an interview with a newspaper that[10]

> The foreign exchange crisis came all of a sudden in the last few days like a thunderstorm…. Up until the end of October, the situation was not that serious…. The situation became aggravated all of a sudden in November.

Kim In-Ho seems to be trying to avoid his responsibility for the unfortunate financial crisis, which had occurred during his stay in office. But this kind of argument has been raised not only by the then government officials, but also by some well-known economists. Jeffrey Sachs is the most prominent advocate of this kind of argument.[11]

> The Asian crisis was akin to a bank run… The weakness in the Asian economies were real, but far from fatal…But as often happens in financial

[10] <Interview> with Kim In-Ho, the ex Chief Economic Advisor for the President, *Chosun Ilbo*, February 23, 1998. (Translated by the author.)
[11] Sachs, Jeffrey D., "The Wrong Medicine for Asia," *New York Times*, November 3, 1997.

> markets, euphoria turned to panic without missing a beat. Suddenly, Asia's leaders could do no right. The money fled.

Unlike Kim, however, he uses a theoretically supporting framework called a self-fulfilling expectations model to explain the herding phenomenon of investors, leading to a sudden financial crisis. According to the self-fulfilling expectations model, there are multiple equilibria in the financial markets, and a financial panic is an adverse equilibrium outcome in which short-term creditors suddenly withdraw their loans from a solvent borrower. This happens because it is rational for each creditor to withdraw its credits if the other creditors are fleeing from the borrower, even though each creditor would also be willing to lend if the other creditors were to do the same (see also Radelet and Sachs, 1998).

Joseph Stiglitz, senior vice president of the World Bank, also agrees that the financial crisis of the Asian countries was more like an accident.[12]

> Small open economies are like rowing boats on an open sea. One cannot predict when they might capsize; bad steering increases the chances of disaster and a leaky boat makes it inevitable. But their chances of being broadsided by a wave are significant no matter how well they are steered and no matter how seaworthy they are.

In fact, in July 1997, when the financial crisis was at its climax in Thailand, most of the Korean economic research institutes and the Bank of Korea publicized their optimistic predictions for the second half of 1997 for the Korean economy.[13]

> In their newly adjusted economic forecasts, the national and private economic research institutes have recently anticipated that the Korean economy will perform even better this year than their previous anticipations. The Korea Development Institute (KDI), Bank of Korea and some private institutes increased their expected economic growth rate from their previous 5 percent to over 6 percent and expected that the Korean economy will be going upward in the second half of 1997.

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[12] Stiglitz, Joseph, "Boats, Planes and Capital Flows," *Financial Times*, March 25, 1998b.
[13] *Korea Economic Newspaper*, July 10, 1997. (Translated by the author.)

Thus, the financial crisis was not predicted by most of (maybe all of) the Korean economists, policy makers, research institutes and the like. Even the IMF's annual report, which was published just a few months before the crisis, praised Korea for its impressive macroeconomic performance and the government for its enviable fiscal record. Having done a cross-country probit analysis, Park and Rhee (1998) agreed that it was hard to predict the Korean crisis at least up until the first half of 1997. Thus, it seems undeniable that the crisis came as a surprise to the Korean public and to economists. This implies that no matter what the causes were, the crisis came as a sudden shock to the Korean economy.

Policy Mistakes

The second argument is that when the contagion from Southeast Asia was imminent and the foreign investors were gradually turning their backs on Korea, inappropriate and belated policy responses caused the crisis to actually occur and made the situation even worse. That is, had the Korean government swiftly and decisively responded to the herd-like panic among foreign investors in the months preceding the eruption of the crisis, Korea would not have suffered at least as much as it actually did. This argument seems to have been more supported by politicians than by academics.

For instance, the parliamentary hearing in early 1999 on the causes of the financial crisis was mainly focused on the policy mistakes made by the then president and government officials. Tthe then finance-economy minister and some other key government officials were later charged with neglect of duty. The prosecutors charged that the then government should have installed a very good lightning rod when thunder and lightning was striking. The following is a newspaper report on the charges.[14]

> The prosecutors rejected the argument made by the then vice-prime minister Kang Kyong-Shik and the then chief economic advisor Kim In-Ho that "they couldn't help it because the financial crisis erupted without an a priori symptom." The prosecutors claimed that they should have prepared for the financial crisis in the same way we prepare for lightning and thunder.

[14] *Chosun Ilbo*, June 6, 1998. (Translated by the author.)

In diagnosing the causes the IMF also focused on the policy mistakes made by the Korean government. But the IMF also pointed out that the major policy mistakes were made well before the actual crisis, mainly related to inadequate financial sector supervision. The following is part of an official document by the IMF on the Asian crisis, and is available at the IMF's Internet homepage.[15]

> The crisis unfolded against the backdrop of several decades of outstanding economic performance in Asia, and the difficulties that the Asian countries face are not primarily the result of macroeconomic imbalances. Rather, they stemmed from weaknesses in financial systems and, to a lesser extent, governance. A combination of inadequate financial sector supervision, poor assessment and management of financial risk, and the maintenance of relatively fixed exchange rates led banks and corporations to borrow large amounts of international capital, much of it short-term, denominated in foreign currency, and unhedged.

Fundamental Weaknesses

According to this argument, the financial crisis was like a volcanic eruption. That is, structural shortcomings and weaknesses had accumulated in Korea and other Asian countries, finally erupted when they reached their maximum level.

Interestingly, however, those who point out the fundamental weaknesses of Korea, and in other Asian crisis countries, are divided into two groups, depending upon the sector they blame most; some blame the public sector, while others blame the private sector.

(1) Structural Weaknesses in the Public Sector

This kind of argument is well summarized as the moral hazard model of financial crises. According to the model, implicit and/or explicit government bail-out guarantees, which were common practice in Korea and other Asian crisis countries, led to moral hazard among borrowers and lenders which resulted in over-borrowing and over-lending in the

[15] IMF, "The IMF's Response to the Asian Crisis," January 17, 1999, http://www.imf.org/External/np/exr/facts/asia.HTM.

financial sector.[16] According to Paul Krugman, a prominent exponent of this viewpoint,[17]

> The story I believe does not deny that there is a strong element of panic in the Asian crisis – but argues that the preconditions for that panic were created by bad policies in the years running up to the crisis. The crisis, in short, was a punishment for Asian sins, even if the punishment was disproportionate to the crime. What were these Asian sins?… The specific sin that pushed Asia to the brink was the problem of moral hazard in lending – mainly domestic lending.

Some of those in this group take the argument further, seeing the financial crisis of the Asian countries as a victory for the American model of free market capitalism over the Asian model of state-led capitalism. For instance, Jeffrey Frankel, a member of the Council of Economic Advisors in the United States, claims that[18]

> One lesson now widely drawn from the crisis – and I believe correctly so – is that the Anglo-American Style financial structure apparently works better after all, as compared to the Japanese-Asian model.

Charles Wolf, a senior economic advisor of RAND, comes to a similar conclusion. The crisis finally broke out because of the accumulated shortcomings of the Asian development model of too much government control.[19]

> What we are now seeing in Asia's financial turbulence are the (Asian development) model's accumulated shortcomings….. Lacking the corrective, mediating responses that market mechanisms and intensives provide, the shortcomings accumulate until a systemic breakdown occurs.

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[16] Authors who have stressed the role of moral hazard in the Asian crisis are, among others, Krugman (1998a) and Corsetti, Pesenti and Roubini (1998).
[17] Krugman, Paul, "Will Asia Bounce Back?" Speech for Credit Suisse First Boston, Hong Kong, March 1998b.
[18] Frankel, Jeffrey A., "The Asian Model, the Miracle, the Crisis and the Fund," Delivered at the U.S. International Trade Commission, April 16, 1998.
[19] Wolf, Charles, Jr., "Too Much Government Control," *Wall Street Journal*, February 4, 1998.

(2) Structural Weaknesses in the Private Sector

This group also points out that internal structural weaknesses were the main causes of the crisis. However, unlike those who see the crisis as the failure of government-led capitalism, this group argues that structural weaknesses are not rooted in the public sector, but in the private sector. Joseph Stiglitz, senior vice president of the World Bank, is one of the proponents of this viewpoint. According to him:[20]

> Many of the problems these countries face today arise not because governments did too much, but because they did too little – and because they themselves had deviated from the policies that had proved so successful over preceding decades.

Janet Yellen, chair of the Council of Economic Advisors in the U. S., also agrees that the crisis was rooted mainly in the fragile financial system of the private sector. She refutes the argument that the crisis revealed the failure of the Asian development model.[21]

> One irony of this interpretation is that the extensive press coverage of the crisis, and the view commonly expressed in the press that the crisis revealed the failure of an Asian or Japanese model of capitalism, may actually have substantially accelerated and exacerbated the failure of that model. Again, the point is that a transparent financial system in which investors can judge the soundness of banks and corporations on the basis of objective and reliable data would have been much less vulnerable to such contagion.

Stephen Marvin, who was considered a prominent critic of the Korean economy even before the crisis, claimed that the crisis erupted mainly because of huge over-investment by the family-controlled conglomerates (*chaebol*s).[22]

> The seeds of this destruction, however, were sown long before by senior *chaebol* management. From the 2nd half of 1993 to the first half of 1997, Korean companies indulged in an orgy of investment. Driving this spending

[20] Stiglitz, Joseph, "Bad Private-Sector Decisions," *Wall Street Journal*, February 4, 1998a.

[21] Yellen, Janet, "Lessons from the Asian Crisis," Remarks to the Council of Foreign Relatins, April 15, 1998.

> was the monomaniacal pursuit of market share and empire expansion; it was carried out in total disregard of market dynamics and return of investment. …. The beginning of the end came in the 2nd quarter of 1995,when export unit prices started to sag. As a result, cash flow came under pressure, and corporate balance sheets showed the initial signs of serious deterioration. Export volume growth, however, remained buoyant, and the reckless spending – and borrowing – continued for another 18 months. In the 3rd quarter of 1997, currency turmoil in Southeast Asia abruptly braked export volume growth, cutting deeply into cash flow. The investment spree finally lurched to a halt in the 4th quarter of 1997.

Hostile Environment

According to this argument, an unfriendly international environment in the years before the crisis contributed to the crisis. Some argue that there had been drastic shifts in external market conditions before the crisis erupted. For example, Korea's competitiveness dropped dramatically when the Chinese yuan was devalued by 50 percent in January 1994, and after the Japanese yen depreciated significantly against the U.S dollar from June 1995 until 1997. Furthermore, the price of semiconductors, which had accounted for about 20 percent of Korea's total exports by value in 1995, fell as much as 80 percent in 1996. As a result, Korea's current account recorded deficits for several years, resulting in a huge build-up of external debt.

Some advocates of Asian values, such as Malaysian Prime Minister, Mahatir Mohamad, claimed that the West could not accept the fact that Asia was becoming the centre of world power, and the Asian financial crisis was the result of hegemonic conflict between the East and the West.

The Stroke Hypothesis explanation of the Causes of the Crisis

As reviewed above, each group suggests its own explanation for Korea's (and East Asia's) financial crisis. Blaming only one factor for the crisis, however, does not seem to be appealing. For example, attributing it exclusively to irrational (or rational) speculative attacks and contagion does not seem to make sense, because the contagion varied widely across the East Asian countries. Blaming it solely on an economic system

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[22] Marvin, Stephen, "Death Throes," mimeo, June 2, 1998.

once praised as a successful model for development is also inconsistent. There is likely to be some truth in each of these explanations. That is, had at least one of these four factors been different from what they actually were, then the financial crisis would not have occurred, or it would not have been as destructive as it actually was. In other words, Korea's financial crisis, and perhaps most other Asian countries' crises as well, occurred not due to one single reason, but due to elements from all of the four explanatory categories. Using the 'stroke' hypothesis, Lee (2003)[23] synthesises most of the appealing explanations and theories of the financial crisis, and shows how the numerous factors were coherently intertwined in causing the financial crisis in Korea in 1997.[24]

The financial system of an economy is analogous to the human circulatory system in terms of its structure and functions. A financial crisis normally starts with a sudden liquidity crunch in the financial system. This is also analogous to the human stroke, which happens with the sudden blockage of an artery in the brain. These two are also very similar in that a financial crisis can result in the real sector's paralysis while a stroke can limit the body's normal functions such as thinking, movement, speech and the other senses.

Therefore, it may be very useful to understand the nature of a stroke in order to understand the nature of a financial crisis. To most people, a stroke normally seems to occur all of a sudden in a person who has been living his/her life quite normally. As a matter of fact, however, it does not strike a really healthy person. The chance of having a stroke is dependent upon the person's physical constitution, how well the person responds to the warning signs of a stroke, and how friendly the person's surroundings are.

Korea's financial crisis underwent a very similar process to that of a typical stroke. To most people, it appears to have erupted all of a sudden when the panicked foreign investors turned their backs on Korea. Like a stroke, however, it erupted after several early symptoms. Fundamental weaknesses, policy mistakes, unfriendly international circumstances and exogenous shocks all contributed to the crisis. The four factors

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[23] Lee, Hyun-Hoon, "A Stroke Hypothesis of Korea's 1997 Financial Crisis," in MoonJoong Tcha and Chung-sok Suh eds., *The Economic Crisis and the Korean Economy at the Crossroads*, London: Routledge, 2003 (forthcoming). This paper first appeared as a University of Melbourne Department of Economics Research Paper, 696, June 1999. Harvie and Lee (2003a) also discuss the stroke hypothesis.

[24] The same approach could be applied to the crisis elsewhere in East Asia.

played a role and intertwined with each other systematically, resulting in the financial crisis. That is, since the late 1980s the fundamental weaknesses have accumulated, and hence the international competitiveness of Korean corporations has weakened. On the other hand, the international environment, which used to be friendly towards Korea's export-oriented growth strategy, has rapidly become hostile. This also exerted adverse pressure on Korea's competitiveness, and made the Korean economy even more vulnerable to sudden changes in the world economy. However, the Korean government overlooked the signs of weakening competitiveness and the possibility of financial crisis and, instead, aggravated the situation by making consecutive policy mistakes. Finally, a sudden exogenous shock (i.e., a drastic increase in corporate insolvencies and the financial crisis in South-East Asia) in early 1997 triggered the financial crisis to erupt (see Lee (2003) and Harvie and Lee (2003) for more detailed explanations.)

4. Towards a New Development Model[25]

The events of 1997-98 induced academics, policy makers, and journalists alike to re-evaluate the Korean development model (and more generally the East Asian Development Model). The stroke hypothesis, our preferred explanation for the causes of the crisis, explains systematically that the financial crisis occurred as a result of a combination of fundamental weaknesses of the Korean economy that were aggravated by policy mistakes on the eve of the crisis and an increasingly hostile international environment. The financial crisis revealed the old Korean development model, which was adequate throughout most of the period of high growth until the late 1980s (or the early 1990s at the most), to be no longer adequate in the face of the new international environment and for the country's stage of economic development. If this is true, the old Korean development model will need to be overhauled in order to give the Korean economy a new dynamism that will enable it to return to its earlier strong growth path. Even if the main cause of the recent crisis was largely due to volatile international financial markets, the crisis exposed several structural problems that require urgent attention if Korea is to return to sustained rapid growth. In any case, the financial crisis has irrevocably altered the economic landscape of Korea.

[25] This section draws upon and develops further the ideas presented in Harvie and Lee (2002a).

In this section, we construct a new development model, the core ingredients of which are summarised in Table 4. As in Table 1 we begin with reviewing the initial conditions and external international environment, and attempt to suggest plausible policy factors and desired, or targeted, outcomes.

Initial Conditions

It is worth noting that Korea can no longer be described in early 1997 as a less developed, but more accurately as a maturing economy. However, there still remains a good deal of scope for rapid catch-up growth before diminishing returns to heavy capital accumulation bite severely (Crafts, 1998). But the growth bonus due to change in age structure in Korea, which was inherently temporary, is now over. This implies that the fast growth rates the Korean economy enjoyed before are no longer attainable. Korea still possesses a sound work ethic amongst its people, which still remains as a valuable asset. But as the Korean economy matures further, its workers will increasingly expect to be compensated in terms of higher wages and by improved social safety net coverage. Hence its traditional advantage in labour intensive production will be steadily eroded.

A high sprit of education also remains valid, but as Korea develops into an advanced economy, and with the technology and skill intensive demands of the "new economy", it will increasingly require a highly skilled and creative labour force. But deficiencies in the current education system in Korea means an inadequate provision of the kind of labour force needed most.

In the first year of the new millennium President Kim Dae Jung of South Korea and Chairman Kim Jong Il of North Korea held an inter-Korean Summit, marking a historic turning point in inter-Korean relations. The summit produced the South-North Joint Declaration, an agreement that aims to promote peace, reconciliation and co-operation between the two Koreas. North Korea, consisting of 22 million people, is the other half of the divided Korean peninsula, and has been effectively isolated from South Korea and the rest of the western world since the end of the Korean War in 1953. How the South copes with the newly shaping North Korea, will determine whether the country can find new ways to revive its own economy which presently stands at a crossroads.

External Environment

The global economic environment continues to change at a rapid pace, and those economies best able to adapt to these changes will be the big winners in the new millennium. First, with the conclusion of the Uruguay Round, and the establishment of the World Trade Organisation (WTO), the Korean economy will face a more rapid opening of its domestic markets to both trade and investment flows. Korea is no longer considered as a developing economy by the WTO, and hence cannot expect to be able to have access to global markets without at the same time opening its own markets to foreign competition.

Second, unlike in the earlier period of rapid growth, the Korean economy is now facing a proliferation of regionalism in both Europe and in the Americas, making the task of further expanding exports to these key markets increasingly difficult. Hence maintaining an export growth momentum in these markets appears to be increasingly unlikely. In recent years a new regionalism has begun to emerge in East Asia that represents a clear break from the region's strong history of multilateralism. The countries of East Asia have been giving more attention to ways of expanding intra regional trade that include: the establishment of regional trade agreements (RTAs) such as ASEAN+3; plans to establish a free trade area involving the economies of ASEAN and China; as well as moves towards bilateral trade agreements (BTAs).

Table 4. New Development Model Paradigm

Initial Conditions:

. Maturing economies

. Sound work ethic

. High sprit of education, and good primary and intermediary education system

. New relationship with North Korea

External Environment:

. WTO, trade and investment liberalisation (Globalisation)

. Proliferation of global regionalism

. Intensification of domestic and foreign market competition (including China, and Indo-China)

. Fair trade approach by the U.S.

. No more flying geese pattern, due to Japan's loss of economic momentum

. Rapid growth of international financial markets

. Worldwide knowledge revolution

Policy Factors:

. Primarily market based mechanisms of competitive discipline

. Improved Governance (corporate, banking and public sectors)

. Encouragement of small and medium enterprises

. Trade and domestic economy orientation (balanced growth)

. Stable macroeconomic management

. Emphasis on high quality education

. Stronger cooperation within East Asia in both trade and finance

. Economic integration with North Korea

"Targeted" Interim Outcome:

. High savings

. High investment with prudence

. Increasing human capital

. Rapid growth of trade

. Rapid catching-up and pioneering technology in some areas

. Rapid growth of the "new" economy and in the service sector

"Targeted" Final Outcome:

. Rapid and sustained economic growth

. Reduced poverty and improving social indicators

Third, within East Asia the next wave of rapidly developing economies is coming through. In particular China, the economies of Indo-China, and, more specifically, Vietnam. This will further intensify competition in both regional and global markets. China's recent accession to the WTO will represent a major threat to Korea and other East Asian economies that compete in labour intensive and low value added products (Lee and Koo, 2001).

Fourth, the US market, the single biggest market for Korean products, that previously emphasised a free trade approach, has changed its attitude toward a fair trade approach. Export-oriented industrial development has increasingly been constrained by protectionist policies in the U.S. and other industrial countries.

Fifth, the foundation of the flying geese process, whereby countries at different levels of industrialisation and development move together on the basis of a progressive upgrading of their industries, has recently been shaken by the economic difficulties faced by Japan. For instance, Japan, which had invested nearly US$50 billion in developing East Asia from the mid 1980s onward, lost its bearings in the early 1990s. Japan's foreign direct investment, which totalled 35.3 trillion yen at the end of 1997, dropped to 31.2 trillion yen at the end of 1998 and to 25.5 trillion yen at the end of 1999. No new lead goose has come forward to replace Japan.

Sixth, there has been a phenomenal growth of international financial markets and a rapid opening of domestic financial markets in Korea during the period of the 1990s. The crisis of 1997-98 was triggered by a rapid withdrawal of short-term capital from Korea and other crisis-afflicted economies in East Asia. The rapid growth of short-term capital flows has the potential to result in greater financial market volatility, and indeed to wreak havoc if there is a rapid reversal of such flows.

Finally, the world is today experiencing a knowledge revolution. In other words the world is currently experiencing a major transition from an industrial society to a new economic paradigm, where information and knowledge are the principal drivers of competitiveness. The driving force behind this has been rapid advances in information and communications technology (ICT). Rapid advances in ICT have brought fundamental changes to the economic transaction modes of business, government, and lifestyles. Indeed, access to ICT-related tools and skills are becoming crucial components in economic development worldwide (see Chapter 9 of this book).

Policy Factors

Given the changed economic circumstances in the wake of the financial crisis, as well as developments in the external environment previously identified, a re-appraisal of the conduct of certain aspects of policy becomes essential. First, the primarily market based mechanisms of competitive discipline will remain and intensify. It is no longer possible to protect certain sectors of the economy behind trade and non-trade barriers. Consequently, the development of domestic enterprises capable of competing domestically and internationally will be essential (see chapters 3-6 of this book).

Second, the Korean government needs to play a new role in the economy that focuses upon establishing the necessary institutional framework that supports competitive and open markets, and contributes towards capacity building. Key to this will be policies that focus upon good governance both in the private and public sectors. In the private sector the development of stock markets and financial institutions with the capacity to monitor the performance of private sector enterprises will be essential to ensure a more efficient and productive usage of financial resources (see chapters 3-6 of this book).

Third, more policy emphasis also needs to be devoted to the development of small and medium sized enterprises (SMEs). In the wake of the crisis a re-appraisal of the role of SMEs has taken place. Korea has traditionally emphasised the role and importance of large enterprises, the *chaebol*, and suffered severely during the period of the crisis, while Taiwan, dominated by SMEs, came through the crisis relatively unscathed (see for example Harvie and B. C. Lee (2002)). The development of the SME sector has the potential to expand growth, employment, exports, reduce poverty, enhance regional development, empower groups such as women, and contribute to a more crisis resilient economy (Harvie and Lee, 2002b). The issue of whether industry policy should give more focus to the development of large or small enterprises remains a contentious issue in the literature, see for example Hallberg (2000), however the contribution of SMEs to the future development of the region remains of paramount importance and particularly so for the developing economies.

Fourth, the Korean government should continue to pursue an outward-looking development strategy as the relationship between openness and growth appears to be fairly robust. But in the new framework, trade should be promoted not only by promoting exports but also imports. This is not just because of the increasing pressure from the industrialised and industrialising countries elsewhere in the world, but also because, by embodying technologies of the country of origin and other countries contributing to the product, imports are an effective vehicle for assimilating new technology (Bayoumi, Coe, and Helpman, 1996). In addition, higher priority should be given to greater integration between the domestic and external sectors of the economy, as well as giving more emphasis to the development of sectors that serve primarily the domestic market. The former, in particular, implies the need to increasingly incorporate domestic enterprises in the supply chain of multinational enterprises located domestically but also those located overseas. Hence an important change of emphasis would be to move towards a more balanced approach to growth of the economy, in which domestic and foreign market oriented enterprises are given a more equal treatment (see chapter 10 of this book).

Fifth, stable macroeconomic management should continue to be maintained. In the wake of the crisis in 1997-98, Korea built up a considerable amount of government debt to finance the restructuring of its financial institutions and corporations. Therefore special efforts to maintain stable macroeconomic policies are required which will entail: the maintenance of low budget deficits, or surpluses, and the reduction of public debt to a sustainable level; monetary policy aimed at price stability; ensuring that the real exchange rate remains competitive; ensure a reduction of foreign debt, particularly short term debt; and encourage the rapid repayment of any international loans arising from assistance given during the period of the financial and economic crisis of 1997-98. This, in collaboration with reform of the financial and corporate sectors, will be essential for the establishment of a platform for the long-term sustainable recovery of Korea and the regional economies more generally (see chapters 7-8 of this book).

Sixth, Korea will need to improve its current education system so as to provide the economy with a high skilled and creative labour force, which is in most need, as it advances towards the stage of being a developed economy. In addition, as noted previously, the world is moving towards a stage where knowledge and information are key to economic growth. But the current education system has not adequately provided the economy with the kind of labour force that is increasingly being required. Therefore, developing an appropriate education system to produce a creative, skilled and adaptable workforce will be fundamental for Korea to embrace the new economy for the 21st century. The Korean education system needs to embrace the new economy, and to encourage its businesses, individuals and government to create, acquire, transmit and use knowledge and information effectively for greater economic and social development (Harvie and Lee, 2003a).

Seventh, stronger cooperation with other East Asian economies in both trade and finance is desperately needed. As discussed in Lloyd and Lee (2001) and Harvie and Lee (2002a) there has been an increasing trend towards regionalism in East Asia. The driving forces behind this have been: the slowing liberalisation process under the WTO; proliferation of regionalism elsewhere in the world; and the 1997-98 financial crisis which demonstrated the risk of contagion and investors perception of the region as a "single market." If the world is a free market as a whole at the multilateral level, or keeps moving towards it, the policies of free trade on the part of Korea and other East Asian countries may be superior to one that relies on regionalism. However, more efforts to build regional cooperative frameworks within East Asia can be justified with the current worldwide trend towards regionalism. This suggests that the East Asian countries should pursue an outward-looking development strategy that relies on both worldwide globalisation and Asian-wide "regionalisation" by forming FTAs among themselves (see Chapter 11 of this book).

Finally, as Harvie and Lee (2003a, Chapter 7) note, the events of the year 2000, including the historic inter-Korean summit, herald a fundamental strategic reorientation on the part of North Korea, and it is now taking preparatory steps to introduce greater openness and carry out major reform to revive its moribund economy. South Korea will need to continue its efforts of engaging North Korea, especially in the form of economic exchanges and co-operation, and this will contribute to a reduction of tensions and ultimately lead to the attainment of reconciliation and unification. Of course economic co-operation alone cannot ensure reconciliation and peace, as long as military conflicts remain. But economic co-operation will increase mutual trust and lead to an institutionalised peaceful coexistence. In particular, a gradual economic integration between the two Koreas will pave the way to the ultimate peaceful reunification of the peninsula. One can imagine a series of progressively deeper steps of co-operation and integration that the two Koreas could undertake. Specifically, it is highly plausible that inter-Korean economic integration would take the simplest form such as a free trade area in the initial stage, and later move towards more complicated forms such as a customs union and so forth[26]. In the process the two Koreas will gain many different kinds of benefits, including enhancing the efficiency of resource allocation in both economies (see Harvie and Lee, 2003a).

"Targeted" Interim and Final Outcomes

It is essential that the fundamentals for achieving high and sustainable growth are put in place. Targeted interim outcomes must aim at the maintenance of high rates of domestic saving to reduce the reliance on foreign funds, foreign borrowing in particular, as much as possible. A second objective, and a key lesson from the crisis, is the need for such funds to be put to productive usage with prudence. Excessive investment in non-productive assets, such as real estate and property development, resulted in excessive borrowing for this purpose both from domestic and external sources. Third, attaining a high level of human capital to meet the demands of the new economy for a technologically literate and skilled workforce. Fourth, maintaining export growth while ensuring the development of domestic market opportunities. The expansion of export growth is likely to increasingly focus upon intra regional trade in East Asia. Sixth, in order to maintain its international competitiveness, it will be essential for Korea to continue the process of technological catch-up in key sectors, as well as to engage in pioneering technology development of its own. Finally, improved information and communications technology, and openness of markets, will have to flourish.

If these key building blocks can be put in place then Korea, in this new global environment of intensive competition, the Korean economy can return to relatively high and sustainable growth rates, achieve further major progress in alleviating poverty, despite the set backs arising from the recent crisis, and once again be at the forefront of developing economies in terms of improving social indicators.

5. Concluding Remarks

The World Bank (1993) study provided support for the high productivity growth thesis relating to the East Asian economies. High estimates were obtained for productivity growth, and higher contributions of TFP to output growth, in Korea, Taiwan, Thailand,

[26] Noland (2000) shares a similar view on this.

Hong Kong and Japan. The study concluded that this resulted from their superior success in allocating capital to high-yielding investments, to their catching-up technologically to the industrialized economies, and their pursuit of export oriented growth strategies. The World Bank claimed that compared with other economies `the East Asian economies stand out sharply with high absolute levels of total factor productivity' (World Bank, 1993, p.55). The study by Osaka (1997) also found significant growth in productivity in South Korea over the period 1981-1993.

The contrasting view, epitomized by the `Krugman thesis', questions the existence of the so-called East Asian miracle (Krugman (1994)). Krugman argued that capital accumulation rather than productivity growth was responsible for the rapid economic growth experienced by the East Asian developing economies. Krugman argued that economies that relied on the accumulation of factors of production as mechanisms for growth would eventually experience a slowdown in their growth performance as diminishing returns to factors of production take their effect. Empirical support for the view that the growth of the East Asian developing economies can largely be explained by the accumulation of factors of production is provided in the works of Young (1992, 1994b, 1995), Kim and Lau (1994) and Collins and Bosworth (1996). They all estimated productivity growth to be low in most East Asian developing economies except for Young's estimate for Hong Kong in the 1994 study and Taiwan in the 1995 study. Kim and Lau recorded zero growth for Korea, Taiwan, Hong Kong and Singapore.

The current state of the debate over the sources of growth for the East Asian developing economies, therefore, appears to have reached a stalemate (Cook and Uchida (2002)). One thing for sure is that during the past two decades, the contribution of factor inputs to growth has been slowing. A further deceleration in the contribution by factor inputs to growth is likely during the first decade of the new millenium as labour inputs are expected to slow sharply for demographic reasons (OECD, 2001). In addition, capital accumulation may make a smaller contribution than before as firms scale back investment arising from greater awareness of the risks of borrowing. On the other hand, the contribution of productivity growth will tend to fall as the technology gap between Korea and the leading industrial nations narrows. Therefore, whether Korea will be able to revive and sustain its economic miracle in the long term will depend on how it tackles the problem of these diminishing sources of economic growth.

Harvie and Lee (2003a) identified three areas that need to be dealt with successfully, in order to tackle the problems, and overarch challenges, facing Korea's future development. First of all, successful restructuring is important to increase the efficiency of the overall economy, including that of factor markets for labour and land, and particularly that of the "old" economy. Second, successfully implementing ICT and Internet innovation, and transforming the Korean economy into the new economy, will be crucial because ICT and Internet innovation assists in the accumulation of "knowledge", the most important production input, enabling an increase in the productivity of the overall economy. Third, expanding Korea's new economic territory, by successfully pursuing economic integration with North Korea, is another key to the revival of the Korean economic miracle. The gradual development of economic integration between the two Koreas will enable North Korea to become a new market for South Korean exports, a new investment opportunity for South Korean firms, and a new source for labour.

This chapter has reviewed Korea's old economic development paradigm. The original development model has now run its course, but in the process has produced remarkable social and economic outcomes. The Korean economy is now matured and faces a different global trade and financial environment. This chapter has developed a new growth and development paradigm. The new development paradigm calls for (1) intensifying the market based mechanisms of competitive discipline; (2) a new role for government in the economy that focuses upon establishing the necessary institutional framework that supports competitive and open markets; (3) more emphasis on the development of SMEs; (4) continuing an outward-looking development strategy which promotes not only exports but also imports; (5) continuing stable macroeconomic management; (6) developing an appropriate education system to produce a creative, skilled and adaptable workforce that will enable Korea to embrace the new economy; (7) stronger cooperation with other East Asian economies in both trade and finance; and (8) a gradual economic integration between the two Koreas.

If these key policy measures are tackled adequately, and positive preconditions are met, then Korea, in this new global environment, can flourish again and will move toward further relatively high and sustainable growth in the twenty-first century.

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