

Taking a Turnpike: A Korean Perspective

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Abstract

Catch-up is very much like taking interstate turnpikes to travel from a destitute backward state to an advanced state of material affluence in the shortest time. This paper presents an overview of the catch-up process in Korea, analyzing the process of taking a turnpike. It delineates the advantage of export-oriented growth strategy and examines the institutionalization of an export-oriented regime in Korea. It amplifies the nature of Korea's "governed" market policies that bred the seeds of eventual catastrophe in light of the 1997 crisis that has dramatically revealed Korea's Achilles heel. It also addresses the political economy of switching turnpikes, amplifying the necessity of a fundamental institutional restructuring at certain points in the catch-up process.

1. Introduction

Korea adopted an outward-looking export-oriented growth strategy and commenced its catch-up process in the early 1960s. Korea's per capita gross domestic product (GDP) was a mere one-thirty-seventh of that of the US in 1960, but grew to one-quarter of the latter by the 1990s (KITA, 2002, p. 133). As of 1985, the average monthly wage in the manufacturing sector in the US was 5.4 times larger than that in Korea, but it had become only 1.8 times larger by the year 2000 (KLI, 2002, p. 140). This is reminiscent of Samuelson's factor price equalization theorem with a time framework of, say, half a century or so.

Starting the catch-up process is a great feat for a backward economy. Furthermore, as dramatized by the 1997 crisis of near bankruptcy in Korea, catch-up is not always an uneventful process. The country can fall into chronic stagnation for an indefinite period, or might even return to backwardness. Catch-up necessarily involves some form of institutionalization, which might well sow the seeds of an eventual catastrophe and possible self-destruction. There may have to be a fundamental restructuring of the initial institutional setting to avoid a disastrous ending. Unfortunately, according to North (1994), the context of competition among fragmented political/economic units does not ensure the success of such a restructuring.

There have been substantial differences between countries and between periods in growth performance. So, in order to understand the initiation of the catch-up process, one may first have to delve into the basic nature of the mechanism of high growth in an economy such as Korea, Taiwan, or Japan (Hong, 1998). That is, one may have to delve into the actual commencement of the catch-up process, the engine of sustained growth, the dynamic interaction between motivating forces, and the interactive and cumulative character of the catch-up process in such a country, and then see whether one can make any generalizations and build a model to explain differences among

* Hong: School of Economics, Seoul University, San 56-1, Shinlim-dong, Kwankak-ku, Seoul 151-742, Korea. Tel: 82-2-743-1838; Fax: 82-2-3673-3066; E-mail: wthong2002@hotmail.com. At a workshop hosted by the Kiel Institute of World Economics on 25 November 2002, Professor Bjarne S. Jensen of Copenhagen Business School encouraged me to give an afterthought on my recent study of the catch-up and crisis in Korea (Hong, 2002). I do appreciate his encouragement, though needless to say, I am solely responsible for any possible errors in my thesis.

countries, and to predict what will happen to a particular country in the future. It might be possible to build a model that is perhaps not very elegant but which is useful for understanding the real world.

I contend that catch-up is very much like taking interstate turnpikes to travel from a destitute backward state to an advanced state of material affluence in the shortest time. There is, however, neither a ready-made passageway to a turnpike at the point of departure, nor any ready-made ramps connecting to other turnpikes that one may have to switch to at various junctions on the way to the final destination. Once on a turnpike, there is no built-in means to switch automatically to another turnpike or to get off it at the right moment. What is more, inertia is somewhat conducive to keeping an economy driving all the way to possible downfall.

I propose that the commencement of catch-up in Korea owed very much to the government's leadership. By this I mean that the late president Park Chung-hee (in office 1961–79) was able to identify a turnpike for the nation's economy, which was international specialization in labor-intensive export manufacturing. He was capable of constructing a passageway to the turnpike—institutionalizing an export-promotion (EP) system that could mobilize the energy and effort of each individual member of society. He could channel these mobilized energies into what had been clearly identified as the most productive and most dynamic activities—exporting. The Korean government could maintain the autogenous (i.e. self-generating) dynamism of the new system by exposing its people to the incessant price/quality competition of international markets, and hence could keep the economy riding on the chosen turnpike. But I do wish to emphasize the necessity of switching turnpikes at certain points in the catch-up process. The lack of subsequent political leadership to execute a fundamental institutional restructuring led the Korean economy to suffer from the 1997 crisis and to face a quite uncertain outlook today.

This paper presents a concise overview of the catch-up process in Korea, analyzing the process of taking a turnpike. Section 2 delineates the advantage of export-oriented growth strategy, and section 3 examines the institutionalization of an export-oriented regime in Korea. Section 4 summarizes the export-oriented high growth in Korea during 1960–2000. Section 5 examines the role of large conglomerates in Korea's export-oriented growth. I contend that the difference between Korea and Taiwan in terms of the size structure of firms may reflect the divergent responses of entrepreneurs in each country to different “semipermanent” sociopolitical conditions that determine the costs of market transactions. Section 6 amplifies the nature of “governed” market policies that sowed the seeds of eventual catastrophe. Section 7 examines the legacy of the credit rationing system, and section 8 the legacy of militant labor unions in Korea. Section 9 examines the 1997 crisis that has dramatically revealed its Achilles heel. The last section addresses the political economy of switching turnpikes, amplifying the necessity for a fundamental institutional restructuring at certain points in the catch-up process.

2. The Export-oriented Turnpike

On the basis of the Heckscher–Ohlin theorem, one can assume that a resource-poor developing country has a comparative advantage in labor-intensive production activities *vis-à-vis* advanced countries. If we further assume, however, that the benefits associated with the production activities of infant labor-intensive industries largely take the form of external economies, then the so-called comparative advantage becomes merely a potential advantage. Unless the government intervenes with tax-

subsidy measures to take care of such external economies, this potential advantage will remain potential and will not materialize in the actual export pattern.

The promotion of infant industries is justified in principle by economic theories—the question in the real world is how to promote them. There are several possible strategies, but a seemingly plausible strategy and a seemingly optimal turnpike may well lead to a disastrous end. Basically, the government may promote infant industries through an outward-looking export-promotion strategy or through an inward-looking import-substitution (IS) strategy. They are not equally efficient paths.

It is believed that, under an EP regime, international competition forces domestic entrepreneurs to pay close attention to possibilities for innovation and for speeding up learning processes (Keesing, 1967; Bhagwati and Krueger, 1973; Krueger, 1974). Entrepreneurs learn at an early stage to cater for the discriminating tastes of the affluent consumers of developed countries. Exporting firms face price and quality competition in international markets, so the survival and success of each exporter depends on active absorption of up-to-date production techniques and adaptive innovations based on imported technologies. As a result, the ability of these entrepreneurs to respond to new challenges and to transform themselves to meet the changing business environment is continuously strengthened. As Keesing (1967) says, the innovative entrepreneurial class produced under an EP regime is believed to be more conducive to generating sustained high growth in the long run than the lackadaisical entrepreneurial class produced under an IS regime based on monopolistic rents. That is, the IS regime generates the wrong kind of learning effects.

Apart from realistic exchange rates, export promotion can be achieved mostly by subsidies. Since the costs of export promotion are visible, there are built-in forces against excessive promotion. International trade conventions, furthermore, do not tolerate an extreme abuse of export subsidies. The costs of import substitution, on the other hand, are mostly borne by firms and consumers within the country, so no obvious internal or external pressures emerge as rapidly when incentives are biased excessively toward import substitution.

In a developing economy, import demand may mostly reflect locally unattainable natural resources, skills, and technology. There may be a lack of substitutability of local resources for foreign-supplied resources, so even with an ample supply of domestic savings the inability to pay for needed imports may severely limit economic growth. In such cases, an EP regime is believed to relieve the foreign-exchange constraint on growth more readily than an IS regime. Any industry that is promoted to become an export sector can automatically substitute its products for imports. An industry that is promoted to substitute its products for imports behind high protection barriers, however, cannot automatically export its products. Commodities produced for captive domestic markets are usually characterized by poor quality and high cost of production.

In a macroeconomic framework of analysis, a country's chronic trade deficit may be interpreted as reflecting habitual aggregate overspending. Then one may expect to reduce the trade deficit by cutting back aggregate spending in relation to national income. However, if the quality of the country's products is poor and their production costs are high due to the IS bias of the regime, the country cannot sell all its surplus output (generated by cuts in domestic spending) in international markets. Output that is not consumed will result in unwanted inventory accumulation and a recession with nationwide excess production capacity. So, even with an increased rate of domestic savings, failure to sell abroad the products that are not consumed domestically would still result in a trade deficit that matches the unrealized sales (or unexpected lack of

sales) abroad. On the other hand, an EP regime can liberate the country's economy from the yoke of Keynesian unemployment. Unlike an IS regime, it can enjoy a virtually infinite effective demand for its products in international markets, and hence it can always enjoy nearly full employment, unless there is a worldwide recession. A small export-oriented country may be able to sell any amount of commodities it produces; that is, the supply capacity of the country will likely be the only constraint on the sales of its products.

Due to the enhanced foreign-exchange earning ability and export-oriented industrial characteristics, an EP regime can afford to reduce or dismantle its import-restriction system much more rapidly than an IS regime, once domestic savings cease to impose a severe constraint on growth (Hong, 1991). At any rate, the adverse efficiency impact of protection in an EP regime is much less serious than in an IS regime because the exporting firms at least have to compete in the international market.

Simple assembling activities of imported parts and raw materials with imported machinery enable a full utilization of abundant labor and can also relieve the foreign-exchange constraint. The static efficiency gains include massive employment opportunities created by labor-intensive export production activities, enhanced national output based on improved overall allocation efficiency (by reallocating productive resources from low-productivity primary sectors to high-productivity manufacturing sectors), and scale economies arising from mass production for the world market.¹ The gains also include the tremendous dynamic learning effects arising from the forced international competition in terms of quality, unit price, and marketing.

3. Building a Passageway to a Turnpike

Whatever the initial endowments, a society can waste the enormous potential in energy and knowledge by institutionalizing a system that severely represses people's latent energies or a system which channels the available energies into unproductive activities. In many countries, the government intentionally or unintentionally designs and institutes a frustrating economic system such that the energy of every person offsets every other (say, a self-contained counteracting system).

Baumol (1990) argued that the contribution of society's entrepreneurial activities suffers by being divided between productive activities such as innovation and largely unproductive activities such as rent-seeking or organized crime. He contends that this division is heavily influenced by the relative payoffs. Baumol believes that government policy can influence the allocation of entrepreneurship more effectively than it can influence the aggregate magnitude of its supply.

According to North (1994), institutions define the incentive structure and are the underlying determinants of economic performance. Political and economic institutions set the rules of the game, and organizations such as firms and their entrepreneurs are the players. Institutions and rules are altered by changes in perceptions and beliefs. North, however, contends that the redefining of mental models in the context of decision-making under uncertainty does not necessarily produce economic institutions and a political structure that are conducive to economic growth. In other words, reaching a turnpike or switching to another turnpike is anything but automatic.

The ideology of "Export First" in Korea was consolidated by the late President Park in the later part of the first Five-Year Economic Development Plan (FYEDP) period (1962–66), and was officially recorded in the second FYEDP document. It was understood to imply that, apart from investment in a few key import-substituting industries and social overhead capital (SOC) facilities, all the efforts of the government would

concentrate on direct promotion of export expansion. The government mobilized four major policy tools to reward those who contributed to export expansion—a preferential tax system, a preferential subsidy system (such as preferential rationing of bank loans and foreign exchange), a discretionary trade system, and an administrative support system. As far as export activities were concerned, the government maintained a free-trade system: the exporters were, in principle, free to import any intermediate and investment goods needed for their production activities. Import restrictions were applied almost entirely to consumer goods and materials imported for production activities oriented toward domestic consumption.

Most Koreans would now agree that Korea's successful export-oriented growth resulted in large part from President Park's leadership, determination and devotion to the cause of "nation-building by exporting." Since the president emphasized export promotion with such intensity and zeal, the relevant ministers were expected to show no less enthusiasm for the cause. With the given initial endowments, President Park constructed a passageway to reach the turnpike. Democracy was the first thing to be disposed of. Once on the export-oriented turnpike, he stuck to it.

Until the early 1970s, Korea's export-oriented growth strategy was the promotion of various labor-intensive commodity exports. The government, however, observed steady rises in domestic wage rates, and intensifying protectionist policies against labor-intensive imports in advanced countries. It also noted the increasing competition from other countries with cheap labor, such as China. As a result, the Korean government tried, as early as the beginning of the 1970s, to move its industrial base for exports away from simple labor-intensive consumer-good sectors towards skill- and capital-intensive sectors. In January 1973, President Park officially announced the "Promotion of Heavy and Chemical Industrialization" at his New Year's press conference. The selected sectors were the manufacturing of steel, nonferrous metals, machinery, ships, electronics products, and petrochemicals, as well as armaments.

Since new investments were increasingly undertaken not on the basis of direct market signals but rather on the basis of inspiration by top decision-makers, the businessmen who were entrusted with the actual activities could not be blamed if their assigned projects performed poorly. Whenever a major failure occurred, the government-operated banking system had to assume full responsibility, defraying the losses with seigniorage and inflation taxes. The entrepreneurial risk was very much socialized and transferred to the general public. The rent income of the selected businessmen rapidly increased. Concentration of economic power in the hands of a small number of selected conglomerates was justified in terms of the real or imagined scale economies.²

The Korean government tried to take advantage of the merits of the competitive market mechanism and yet it did not hesitate to intervene heavily whenever it wanted to. The government intervened with subsidized credit rationing, preferential tax treatment (without generating large fiscal deficits), import restrictions (combined with relatively free imports of intermediate and capital goods), somewhat undervalued exchange rates, socialization of risk, and vigorous administrative support (or the so-called "paternalistic administrative guidance"). The government amplified the market profit signal by exaggerating the rates of return on export activities. In short, Korea maintained a kind of "bounded market economy" in which the allocation of resources was heavily dictated by government intervention in the market mechanism.

I contend that the outward-oriented growth strategy is more than a simple unbiased trade regime with minimal or neutral government interventions (Ito and Krueger, 1995; World Bank, 1993). I argue that, due to externalities and the associated market

failures, the latent comparative advantage in labor-intensive manufactures will not assert itself in a developing economy, particularly in its early phase of growth, simply by the removal of trade distortions.

Every nation consists of human minds that may be regarded as a set of specific action-bound instincts trained and evolved by experience and learning, but triggered by outside stimuli. These human instincts might really have been designed by natural selection to respond in a specific fashion to various challenges and motivations. The outward-looking export-orientation of the Korean economy may well have acted as a special kind of environmental trigger on the genetic nature of Korean people. One may thus view the differences in growth performance among countries as the result of different environmental triggers or motivations acting on the same genetic nature. One only has to compare (pre-Chinese) British Hong Kong, Republic of China (ROC) Taiwan, Lee Kuan Yew's Singapore, and pre-Deng China to see what the Chinese can do under different regimes. One may also compare North Korea and South Korea, and see what the Koreans can do under different regimes.

4. Export-oriented High Growth

Korea in the 1950s, with a per capita gross national product of less than \$100 (in current dollar prices) and more than two-thirds of its population engaged in the primary sector, possessed all the familiar characteristics of an extremely underdeveloped economy. With an energetic execution of export-oriented growth strategy from the early 1960s, however, annual commodity exports expanded from less than \$30 million (of mostly primary products) in the 1950s to \$17.5 billion (of almost entirely manufactured products) by the year 1980 (Table 1).

The growth rate of the Korean economy jumped from an average of about 4% per annum in 1953–61 to about 8% in 1962–80. The commodity-export/GNP ratio increased from less than 1% in 1960 to nearly 30% in 1980. Per capita GNP amounted to about \$1660 in 1980. Employment in the primary sector declined from about 64% of total employed persons in 1963 to about 34% in 1980 (producing about 15% of GNP), while that in the manufacturing sector expanded from about 8% to 22% (producing about 28% of GNP in 1980).

Table 2 shows that Korea's commodity exports were more labor-intensive than its competitive import replacement. But as Table 3 shows, the major difference between factor intensities was reflected, not between exports and competing imports, but between both categories and noncompeting imports. Table 2 also shows that the capital

Table 1. Trade and Growth: Major Statistical Indicators

	1960	1970	1980	1990	2000
Exports (\$ billion)	0.03	0.8	17.5	65.0	172.0
Share in world exports	0.03%	0.3%	0.9%	1.9%	2.7%
Share of heavy and chemical products in total exports	—	13%	42%	57%	81%
Per capita GDP (\$000)	0.08	0.25	1.66	5.89	9.82

Source: KITA (2002).

Table 2. Capital Intensity of Korea's Commodity Trade

	1960	1966	1978	1985
Exports	1.8	2.3	7.1	12.3
Competitive import replacement	1.8	3.3	8.8	14.0

Note: Capital intensity of trade represents the ratio of total physical capital (in thousand 1985 dollars) to labor, directly and indirectly required in whole industries in order to produce Korea's entire commodity exports or to replace Korea's entire competitive imports.

Source: Hong (1994, p. 144).

Table 3. Capital Intensity of Korea's Noncompetitive Imports, Competitive Imports, and Exports in 1970

Noncompetitive import replacement, applying:	
1958 US coefficients	22.6
1970 Japanese coefficients	4.8
Competitive import replacement	1.6
Exports	1.5

Note: Capital intensity represents physical capital (in thousand 1970 dollars) per labor.

Source: Hong (1994, p. 179).

intensity of Korea's commodity exports and competitive imports both kept rising with economic growth (Hong, 1969, 1970, 1976, 1987, 1989, 1990; Krueger, 1977).

Within 20 years under President Park, Korea transformed itself from a typical backward economy to one of the so-called "newly industrialized countries" (NICs). In the 20 years after 1980, Korea's per capita income grew to about \$10,000 (as of the year 2000), exporting \$172 billion worth of mostly so-called "heavy and chemical products." The exports/GDP ratio reached about 38%, and the share of manufacturing in GDP amounted to about 34%. The proportion of persons employed in the primary sector amounted to only about 11% in 2000, producing less than 5% of GDP. After one more thrust, Korea might well find itself transformed into a newly advanced country. It is possible for Korea to become a fully fledged advanced country within the next 20 years, say, before the year 2020. If that happens, Korea's journey of catch-up will have been finished in less than 60 years since it took the export-oriented turnpike.

5. Engine of Growth: Large Conglomerates

The principal actors in Korea's outward-looking catch-up have so far been the large conglomerates (*chaebols*), so its economy and exports have come to depend heavily on a few major items mass-produced by the *chaebols*. According to a survey conducted by the Korea International Trade Association (KITA), 13 firms exported about 50% of Korea's total exports and 89 firms about 65% in 2002.

In Taiwan, export expansion has been achieved mostly by the entry of new firms that have refined the art of subdividing orders, process specialization, subcontracting among independent small firms, channeling worldwide small orders to numerous firms

through a multitude of independent export traders, and diversifying the export product mix. Export-oriented growth as in Taiwan has minimized the cost of production and contracting in international market transactions by maximizing the advantage of small-scale market-intensive production activities (Levy, 1991).

In Korea, on the other hand, export expansion has been achieved mostly by the expansion of the size of existing firms that have refined the art of hierarchically (and vertically) integrating production organization such that the centralist tradition of loyalty to intrafirm hierarchical superiors is nurtured. Buyers and manufacturers have minimized international transaction costs by dealing in large-volume orders (that happen to limit the opportunities of small firms in trading and manufacturing) and by mass-producing a less diversified product mix, such as the massive assembling of passenger cars, taking advantage of internalized economies of scale. Korea's large conglomerates are said to excel in large-scale, capital-intensive, highly complex manufacturing or in activities involving extensive distribution networks.

Levy (1991) attributed this differing role of small firms in manufacturing and (export) trading in Taiwan and Korea to efficient private and government decisions in the face of varying conditions that determined market transaction costs at the outset of export-oriented growth. Levy suggested that, at the outset, Taiwan had a larger number of market participants, more substantial commercial experience, more sophisticated business skills, and a greater pool of potential participants of educated people in manufacturing and trade; and these, as a whole, constituted more favorable conditions for small-scale market-intensive activities. The "conditions" emphasized by Levy, however, are bound to change as time passes.

I suggest that, in Taiwan, human relationships based on trust have always been valued more highly than in Korea. Both societies seem to have very inefficient legal institutions, which means that the cost of legally enforcing contracts can be extremely high. And yet, in Taiwan, *guanxi* (human relations) based on trust, at least among business transaction partners, is valued very highly. This reduces the cost of market transactions, and permits the efficient operation of small family businesses based on the *guanxi* network. Furthermore, there seems to be a diehard pro-*chaebol* policy bias on the part of the Korean government and an opposite policy bias on the part of the Taiwanese government. I contend that the difference between Korea and Taiwan in the size structure of firms reflects the responses of entrepreneurs to different, "semi-permanent," sociopolitical conditions that determine the costs of market transactions.

The competitive power of Taiwan in exporting, say, highly differentiated knitwear products, plastic products, wood products, furniture, umbrellas, toys, computers, and parts including motherboards, (customized) machine tools, automobile parts, etc. seems to have reflected the strength and efficiency of small firms. On the other hand, the competitive power of Korea in exporting petrochemical intermediate products, containers, steel products, railroad vehicles, high-definition TVs, DVD players, microwave ovens, passenger cars, ships, TFT LCD monitors, SDRAM, mobile phones, etc. seems to have reflected the strength of large conglomerates.³

Fukuyama (1995, 1996) argues that Korea has the cultural proclivity of a "low-trust" society. He claims that Korea could have developed as a small-firm-dominated economy, similar to Taiwan, if there had been no deliberate promotion of large-scale, hierarchical, professionally managed *chaebols* by the "competent and determined" state, overcoming the cultural tendency towards small organizations. Fukuyama ignores the aspect of transaction costs being substantially increased in a low-trust society that discourages market-intensive activities among small firms. I contend that the pro-*chaebol* policy bias simply reinforces such a tendency against small firms. A

low-trust society cannot be conducive for market-intensive activities among small firms. In a low-trust society, each individual or each small firm is on its own. There cannot be a small-firm-dominated society. Low trust does not by itself promote small firms. In a low-trust society, there is rather a tendency for conglomeration to minimize market transactions, and the pro-*chaebol* policy simply reinforces such a tendency for ever-expanding conglomeration.

And yet, not only Taiwan, but also Korea have (so far) successfully achieved “catch-up” and have become the so-called NICs. Hence we may argue that, apart from the undesirable distribution aspect, the advantages of conglomerates have been large enough to more than offset the adverse impact of a smaller pool of active entrepreneurs in Korea.

An ideal environment might enable any person with entrepreneurial talent to contribute to export-oriented growth. This may make the Korean economy nimbler and more resilient. In general, small firms are believed to be venturesome innovators while large conglomerates are aggressive imitators of proven profitable activities. The lack of competition or the prevalence of monopolistic power in a *chaebol*-dominated economy may inhibit economic change. On the other hand, the intensive competition in a small-firm-dominated economy may accelerate the rate of change. Furthermore, a small-firm-dominated society may be conducive to generating flexible institutional structures that can more readily accommodate, with adaptive efficiency, the possible shocks and changes associated with the catch-up process. Decentralization, deverticalization, and downsizing based on “make-or-buy” decisions and subcontracting are very conspicuous in every advanced nation today.

Converting Korea into a high-trust society, however, cannot be achieved in a short period. The Korean government may instead try to establish (legal) institutions to reduce the cost of market transactions. It may try to reduce the legal cost of enforcing contracts in general. Such a shift may also be conducive to converting Korea into a high-trust society in the long run. High legal costs of cheating, for instance, may well be an incentive for people to stay honest. Furthermore, the Korean government may at least try to eliminate the pro-*chaebol* bias in its policy formulation and institutional arrangements.

6. Sowing the Seeds of Eventual Catastrophe

The Korean government relied on noninstitutionalized command devices to secure compliance. Various pressures were brought to bear on an enterprise’s behavior. Selective criminal prosecution of tax evasion, and selective control of bank credit and access to foreign borrowings for highly leveraged Korean firms, constituted a sufficient behavioral compliance mechanism. This kind of mechanism, however, sowed the seeds of eventual catastrophe as dramatized by the crisis of 1997.

President Park pursued export-oriented growth very much in the fashion of a command economy, rationing loan funds and distributing various subsidies. He was a sort of benevolent dictator with a secular missionary zeal who could, quite fortunately, establish a workable institutional setting to pursue his professed goal of “nation-building through exports.” The politicians and bureaucrats in Korea came to wield great influence over the fate of individual firms and entrepreneurs. Absolute power, however, breeds absolute corruption. The specific form of institution that was established by Park became disastrous after his death.

Wade (1990, p. 349–50) enthusiastically endorsed the prescription of enhancing the power and autonomy of the state to “govern” the market for newly industrializing or

industrialized countries, assuming the presence of nonpredatory, nonmalicious, and rather benign political leaders whose concerns go beyond using state power to support the affluence of a small group. Wade argued that it was what the governments of very successful economies such as Korea, Taiwan, and Japan actually did, and believed in the benefits of “governed” market policies. If Wade could have the luxury of hindsight after observing the lethargic stagnation of the Japanese economy in the 1990s and the “1997 Crisis” of the Korean economy, he would have recognized the urgency in the NICs of establishing an institutional arrangement that can weather nonbenign, ignorant, and avaricious bureaucrats and nonbenevolent, predatory, and malicious political leaders.

The series of rulers who succeeded President Park in Korea did not recognize the urgency for a fundamental institutional restructuring. They were more like the Olson (2000) type rulers. The ruling groups have been indulging in picking up the spoils of the old system handed down from the predecessor that had apparently outlived its useful life. Korea is now experiencing a shadowland of its own making.

7. Legacy of the Credit Rationing System

The success of Korea’s export-oriented growth owed very much to President Park’s effort to establish an automatic loan allocation system for exporters, minimizing the interference of politicians and bureaucrats. Under Park’s regime, any entrepreneur could automatically attain access to short-term bank credits at subsidized interest rates “without collateral” by undertaking export-related activities. Firms engaged in export activities could also receive favorable treatment, though less automatic, in the allocation of long-term domestic and foreign loans (ones which received government repayment guarantees). On the other hand, the allocation of bank loans for import-substituting activities was very much discretionary.

A repressed financial system is believed to allocate a nation’s saving inefficiently. Loan allocation based on export performance, however, very much overcame the adverse selection problems inherent to financial repression (Hong, 1986). Prospective entrepreneurs were evaluated not by the banks but by the natural selection process of cost/quality competition in international export markets (King and Levine, 1993). Owing to the automatic nature of loan allocation for export activities, the nation’s potential entrepreneurial talent could be mobilized for export activities and the entrepreneurial dynamism in export sectors could be maintained with minimum intervention from bureaucrats and bank officials on domestic and foreign borrowing.

After 1980, bank credits began to be allocated less to export entrepreneurs in proportion to their export performance and more to entrepreneurs whose abilities were not tested and proved in international export markets. Entrepreneurs did not have to engage in risky export activities in order to obtain bank credits. That is, Korean banks began to lose the effective means to compensate for their backwardness, and the adverse selection problems were aggravated in credit markets.

Korean banks were not capable of evaluating risks and expected rates of return, and they did not need such capabilities. Banks made loans on the basis of collateral unless they were bribed or ordered not to take collateral, or unless they could secure loan repayment guarantees issued by the government-operated assurance companies.

There were moderate financial reforms after the early 1980s, but the Korean government kept exerting a heavy hand in directing credit, setting interest rates, and regulating daily activities of banking institutions. One might say that Korean banks were privatized in appearance but, in effect, controlled by politicians and managed by

government bureaucrats. The nominal financial reforms did, however, allow a rapid expansion of nonbank financial intermediaries (NBFIs). The Korean government imposed a ceiling on the private ownership of commercial banks (such as 10% of total shares during 1961–83, 8% during 1983–95, and 4% since 1995), but allowed small and large conglomerates to own local banks and NBFIs without ceiling and let them serve their owners as if they were private vaults.⁴ The government allowed industrial capital to dominate (local bank and nonbank) financial capital.

Top managers of banks, appointed by the government, have mostly been ex-Ministry of Finance (MOF) or ex-Bank of Korea (BOK) officers, who have been promoted on the basis of the growth of deposits. Since the management of banks is so thoroughly controlled right down to the minor details by the government, only ex-bureaucrats can comfortably conduct the so-called managerial functions.⁵ The NBFIs have been supervised directly by former MOF officials. The latter have intervened to keep NBFIs lending and borrowing rates in line with the rates at the deposit money banks (DMBs). A combination of bureaucratic over-regulation of petty management details and grossly inadequate supervision of core functions has led to widespread insolvency of the NBFIs. As of December 2000, the ratio of nonperforming loans in total NBFIs loans amounted to 23.6% (OECD, 2001, p. 126).

In the 1970s the Korean government had maintained a regime based on high inflation and negative real interest rates, but after the early 1980s the regime changed to one with stable prices and positive real interest rates. During 1972–81, the prime rates of commercial banks amounted to 17% per annum on average, while the average annual rate of inflation amounted to 21.6%, implying a negative real interest rate of minus 4.6%. During 1982–89, the nominal prime rates amounted to 10.1% on average, while the average annual inflation rate amounted to 5.9%, implying a positive real interest rate of 4.2% per annum on average (KITA, 2002, p. 122).

Although increases in the real rates of interest in the 1980s seem to have increased deposits in the banks and expanded the proportion of savings allocated through the banking system, bank loans were still very much allocated by the government, and the expanded intermediation of the banks owing to increased real rates of interest do not seem to have raised the average rate of return on investment in Korea.⁶ That is, financial deepening without real financial liberalization may not result in the intermediation of increased financial savings to the highest return investment activities.

The potential entrepreneurial talent in Korean society has not been fully mobilized. The most severe entry barrier is the lack of access to low-cost bank loans. There is no efficient means of financial intermediation for unprivileged entrepreneurs. Survival and expansion of a firm require its owner to master the art of utilizing policy loans, the curb market, NBFIs, and the almost institutionalized system of bribery. The so-called “entrepreneurial talent” has to be understood in a rather broader context in Korea. A man of financial talent, however, is not necessarily a man of traditional entrepreneurial talent. A man of political and financial talent, for example, can mobilize a huge sum of bank funds but, quite often, owing to limited entrepreneurial capability, ends up in bankruptcy—resulting in a substantial waste of the nation’s resources.

Due to the lack of financial disclosures and transparency in *chaebol* firms, and to the system of mutual guarantee of loan repayments among *chaebol* subsidiaries, Korean banks and NBFIs keep lending to a conglomerate, even without any government intervention, making its debt-to-equity ratio easily exceed, say, 1000 or 2000 percent. Balance sheets of banks, NBFIs, or conglomerates are seldom reliable. The Korean government has been routinely intervening with special central bank loans in order to prevent the bankruptcy of large conglomerates locked in mutual-guarantee as well as

the financial institutions that have extended loans (and guarantees) to it. According to data provided by the Financial Supervisory Commission, the ratio of nonperforming loans to total loans of banks amounted to 8.4% as of December 1999 (OECD, 2000, p. 184). According to Chung (1999), however, the ratio of nonperforming loans to total bank lending exceeded 20% in 1995–97 if the US standard is followed, whereby loans in arrears by three months or more are included. In the US, the ratio amounts to around 1–2%.

When a conglomerate that owns an NBFIs goes bankrupt, the government is obliged to rescue those financial institutions operated by the conglomerate (from the simultaneous bankruptcy) with tax money. Regardless of the magnitude of bad loans, the conglomerate that owned the NBFIs can walk away simply by giving up the equity ownership, without being subject to any kind of criminal prosecution in most cases. The value of equity that is given up usually amounts to a fraction of the amount of bad loans extended to the bankrupt owner. A substantial portion of those borrowed funds can easily be smuggled out of the firm (that goes bankrupt) by the principal owner of a conglomerate. Of course the politicians or bureaucrats take their share of the spoils. All these are ultimately paid by taxpayers' money.

During the 1999/2000 fiscal year, the Korean government spent about 110 trillion won (about 22% of 1999 GDP) through the Korea Asset Management Corporation (KAMCO) and the Korea Deposit Insurance Corporation (KDIC) in purchasing impaired assets at a discount to face value (in the form of debt-reduction or debt equity swaps), in recapitalizing viable financial institutions, and in reimbursing depositors in closed insolvent institutions. The total bank borrowing and corporate bonds issued by the 12 Daewoo affiliates, the second-largest conglomerate that entered into workout programs in July 1999, totaled around 85 trillion won, amounting to about 17% of GDP. The total amount of government (and government-guaranteed) debt had already jumped from about 17% in 1997 to about 40% of GDP by the end of 1999 (OECD, 2000, p. 67, 155, 182–3). Hyundai, the largest conglomerate, was saved from outright bankruptcy in 2001 by government rescue packages. One has yet to figure out how much Korean taxpayers' money Hyundai will ultimately cost.⁷

Since the 1997 crisis, Korean banks have refrained from reckless lending to conglomerates. The average debt-to-equity ratio of all Korean firms fell from about 400% in 1997 to about 135% in 2002. In order to avoid gigantic insolvency, the banks have rapidly expanded petty household consumption loans, securing petty collaterals or securing the assurance of repayment from relatives or friends of the person taking a loan. The share of the household sector in total bank lending increased from 27–28% in 1995–97 to 35% in 2000 and to 44% in 2002 (excluding consumer installment financing and huge credit card loans), while the share of all manufacturing firms in bank lending fell from 41% in 1995 to 32% in 1999, to 29% in 2000, and to 25% in 2001 (according to the BOK data). “Rationing banking” has been transforming itself into “pawnshop banking.”

Since the 1997 crisis, funds have left the unreliable investment trust companies, merchant banks, and bank trust accounts in favor of secure bank deposits that still enjoy deposit insurance, though not with such complete coverage as before the crisis. Since Korean banks are not yet capable of modern financial intermediation, they cannot absorb large amounts of deposits. In order to restrict deposits within the limit of their lending capabilities, the banks have been discouraging would-be depositors with meager interest rates. The after-tax real rates of interest on time deposits were close to zero percent in 2001. The only alternative open to household savers is to participate directly in the extremely risky stocks and bonds markets.

Although the absolute magnitude of the funds directly raised from the money and equity markets has substantially expanded, the markets for stocks and bonds themselves have not developed, resulting in a relative scarcity of genuine long-term financial instruments. The corporate bond markets have long depended on implicit and explicit guarantees. Because of unreliable reporting practices, would-be participants in stocks and bonds markets have almost no way of rationally analyzing the riskiness of Korean firms.

In the wake of the 1997 crisis, the Korean government has taken various conspicuous steps to upgrade prudential supervision of financial institutions. A unified supervisory body (the Financial Supervisory Commission) was created in 1998, and accounting and disclosure standards were brought closer into line with international accounting standards. The calculation of Bank for International Settlements (BIS) capital adequacy standards has been improved, and a solvency standard based on that used by the European Union was introduced for the insurance companies (OECD, 2001, p. 125). And yet, very few Korean firms and NBFIs maintain transparency with internationally accepted standards of accounting, disclosure, and auditing procedures. It inhibits the rapid expansion of direct financing in the corporate sector. In the aftermath of the 1997 crisis, the NBFIs have shrunk considerably, resulting in a sharp decline in the corporate bond market. The lack of reliable savings instruments that can yield positive rates of return must lead to a tremendous underutilization and waste of Korea's savings potential.

The government ownership stakes in financial institutions have increased tremendously in the aftermath of the crisis. Most of the commercial banks (as well as many of the nonbank financial institutions) that had been "controlled" by the Korean government before the crisis came to be "owned" by the government after massive bailouts with taxpayers' money. As of mid-2000, the Korean government owned 58% of commercial bank capital (IMF, 2001, p. 88). The remaining banks have mostly been, or recently became, owned by foreign capital.

Fry (1993, p. 38) had contended that the ownership of financial institutions either by the government or by conglomerates (which seemed to have been the only alternatives open to Korean people) would lead to lack of competition, high cost of credit intermediation, bureaucratic procedures, inefficient credit allocation, and frequent insolvency.

8. Legacy of Militant Labor Unions

Until the late 1980s, Korean entrepreneurs were free from labor disputes because the authoritarian (military) government had always been ready to intervene brutally on behalf of the entrepreneurs. The government severely suppressed labor union activities using naked force, and was able to maintain competitive labor markets and market-clearing wage rates. As a result, Korean entrepreneurs developed the habit of delegating intrafirm labor-relations problems to the government and of making minimal efforts to reduce potential sources of labor disputes.

The pendulum, however, swings from one extreme to the other. With the march of democratization in the late 1980s, the labor movement at last burst into bloom all at once with fearfully destructive force. The latent grievances of the workers exploded into extremely violent and destructive confrontations. The nontransparent and authoritarian management practices of Korean firms had enhanced the workers' feeling of being exploited by the owners who, from the viewpoint of workers, seem to smuggle out large amounts of company money. Under the authoritarian regime, employers,

employees, and the government never had any chance to learn the advantages of free collective bargaining, how to handle disputes and grievances in an orderly fashion, and how to institutionalize harmonious labor–management relations.

The leaders of the civilian government that appeared in the early 1990s were willing to enact very biased labor laws and then, in order to appease the belligerent labor unions, did not really try to uphold even those biased laws. The managerial rights of hiring and firing workers or relocating them within a firm were almost completely lost, and the government led by populist politicians closed its eyes to illegal strikes and physical violence, encouraging labor unions to act unlawfully with immunity, allowing the militant union leaders unilaterally to dictate the terms of settlement, and inducing wage hikes unrelated to productivity. A conspicuous result of the extreme rigidity of the labor market is the steadily falling proportion of regular employees among waged-workers. The proportion of temporary workers (with less than one-year employment contract) rose from 41% in 1993 to 51% in 2001 (KLI, 2002, p. 21). Furthermore, about half of unemployed persons now fell in the age group of 15–29 years.

Militant labor groups have damaged the international competitiveness of Korean industries. Labor disputes resemble chaotic and lawless battlegrounds. The experiences of the 1990s give the impression that neither the militant union leaders nor the populist politicians are in a position to pursue productive labor relations within a rational and consistent legal framework. At the start of the new century, not only the success of individual entrepreneurs but also the growth performance of the Korean economy itself has become seriously influenced by the development of nationwide labor disputes. Depending on how the labor movement evolves, the future course of Korea's growth will become markedly different from its past pattern. Consolidation of power under Perón-type politicians may well accelerate the loss of competitive power of Korean firms and induce wholesale relocation of manufacturing activities to foreign countries such as China, hollowing out the industrial base of Korea.

9. The 1997 Crisis

Prior to the 1990s, capital account transactions were tightly regulated in Korea. Under heavy pressure from the US government, however, the Korean government extensively opened up its financial markets and deregulated short-term capital movement in the early 1990s. The Korean government eliminated traditional control measures without installing in their place a new system of prudential regulation. Korean merchant banks, whose number increased from 6 to 30 during 1994–96, borrowed cheap short-term Japanese funds in Hong Kong and then financed domestic long-term loans at high interest rates. Korean *chaebols* became able to borrow massively from international financial markets owing to the system of intra-conglomerate cross-guarantee and (explicit or implicit) government repayment guarantee.

The ratio of foreign liabilities to GDP almost doubled between 1995 and 1996, and the ratio of short-term foreign liabilities to GDP more than doubled during the same period (Park, 1998, p. 44–5). Korea's total foreign borrowing jumped from \$89 billion in 1994 to \$170 billion in September 1997, two-thirds of it being short-term borrowing (OECD, 1998, p. 12–13). It was difficult for many foreign financiers who were familiar with the traditional Korean model to imagine the Korean government allowing the bankruptcy of a bank or an entire conglomerate locked in cross-guarantee. Instead, they presumed (quite correctly) that there would ultimately be government bailouts, and hence did not conduct any careful credit analysis. The average debt-to-equity ratio

of all Korean firms jumped from about 300% in 1996 to 400% in 1997 (OECD, 1998, p. 12).⁸

In the mid-1990s, about \$2.5 trillion in transactions were made daily in the world financial market. Volatile movement of short-term capital could make any small country bankrupt overnight. Korea as well as Thailand and Indonesia were free from sudden financial crisis until they were flooded with international short-term capital in the 1990s. Their primitive financial sectors could not afford the rapid integration into the global financial system. These countries were not capable of instituting proper regulatory and supervisory systems. Korea's commercial banks and merchant banks invested the funds secured from the international short-term money market in highly risky securities issued by firms in Southeast Asian countries, financed the very risky operation of offshore funds and financial derivatives, and made long-term domestic loans to *chaebols*, ignoring the mismatch problem. Triggered by the financial crisis of Southeast Asian countries in early 1997, the international financiers started to take back the short-term loans extended to Korean firms, and by November 1997 Korea's foreign reserves disappeared.

The tight fiscal and monetary prescriptions (together with a free floating exchange rate system) initially imposed by IMF caused widespread bankruptcy of highly leveraged Korean firms. The market interest rate jumped from 12% to 27% in 1997, while the growth rate of M3 fell from 16% in 1997 to 13% in 1998. The IMF prescription of high interest rates and a tight money policy was capable of completely dislocating Korea's industrial base itself, thereby fatally undermining the economy's debt servicing capability (Park, 1998, p. 57). There followed some adjustment in the IMF policy prescriptions. Meanwhile, foreign capitalists could leisurely pick and buy various industrial assets and financial companies in Korea at fire sale prices, after ensuring that the defaulted (domestic and foreign) debts of the bankrupt firms were fully paid by the Korean taxpayers. The ratio of government debt to GDP doubled from about 10% in 1996 to about 20% in 1997, and doubled again to about 40% in 1998 (Hahm, 1999, p. 82; OECD, 2000, p. 67). In early 1998, foreigners owned about 17% of the entire publicly held stocks in Korea; by the end of 2001, foreigners came to own about 37% of them. Foreigners came to hold as much as 45% of the publicly held (blue chip) stocks of the top 10 conglomerates. It is nightmarish to imagine what would happen if Korea had to undergo another round of such a crisis scenario.

In Korea, neither the bureaucrats nor the politicians, though quite ignorant about modern finance, have really been willing to yield their control over the financial system for the sake of deregulation and modernization. Even after the 1997 crisis and the so-called restructuring of financial institutions, there has been no fundamental change in the "inability" of Korea's financial institutions to properly evaluate the rate of expected return and riskiness of any investment project proposed by a firm seeking a loan. The immediate consequences of the so-called financial restructuring were government ownership of a large number of financial institutions, and ever-tight control of the financial system by the same MOF-EPB bureaucrats.⁹

10. Switching Turnpikes: the Political Economy

According to Olson (2000), autocrats and roving bands of thieves are alike, in that they both are out for whatever they can extract from their subjects. The tyrant, however, has a stake (an "encompassing interest") in the domain he is exploiting. If the country prospers, he can extract more for himself in taxes and other ways. A roving bandit merely destroys and moves on. A stationary bandit keeps taxes low in order to spur

growth and gather more revenue later. He may even provide growth-promoting public goods in order to improve his take.

Democratic governments, on the other hand, rule in the interests of the majority that keeps them in power. They try to exploit the minority just like the autocrat tries to exploit all his subjects. Even in a predatory democracy, however, a government has a greater encompassing interest in the society's productivity than a tyranny. The bigger the majority in whose interests the government is ruling, the larger the encompassing interest. Constitutions with checks and balances requiring super-majorities for certain actions may create "super-encompassing" interests. This may lead to even smaller growth-retarding exactions on the minority and greater attention to the supply of growth-promoting public goods. According to Olson, the dispersal of political power and the emergence of representative government have been the trigger for faster economic growth.

Plato's philosopher king or a simple benevolent despot might have super-encompassing interest in the country he is ruling, say, out of enlightened self-interest. Olson (2000, p. 43), however, observes that although "relatively poor countries can grow extraordinarily rapidly when they have a strong dictator who happens to have unusually good economic policies, such growth lasts only for the ruling span of one or two dictators." The system would be likely to revert to the reign of stationary or roving banditry.

Olson (1982) does not sufficiently take account of the possibility, that, in a pseudo-democratic society, a minority may be able to manipulate the system so as to generate a majority vote for themselves. A minority can cheat the people by propagating pseudo-encompassing interests and thereby obtain a majority vote (Olson, 2000, p. 94–6). With a gullible general public, an unscrupulous politician can sell a sure prescription for the society's self-destruction and get elected as a ruler. Then the ruler and his followers can exploit the majority in the name of democracy. This goes beyond the concept of (harmful) "special-interest groups" within a truly democratic society (where the majority rules) that Olson was particularly concerned about.

Korea has maintained a very expensive political system. It has required an enormous amount of funds for politicians (and especially for the political bosses) to maintain their power base and be elected. Quite naturally, the large conglomerates have been the most convenient source of funds needed by political leaders. As a result, various subsidies and preferential treatments came to be provided to selected businessmen by ruling politicians and powerful bureaucrats. With the acquisition of those enormous funds, political leaders can effectively manipulate "the system" to obtain majority votes in local and national elections. The result is a predatory pseudo-democracy.

I contend that Korea had a driver named Park Chung-hee to steer onto the export-oriented turnpike, but by failing to find a suitable new driver at an appropriate time to switch to the democratic market-economy turnpike it has been experiencing violent turbulences that might signal an approaching catastrophe. It seems that a predatory pseudo-democracy is not conducive for a country to take a truly competitive market-economy turnpike. Perhaps Korea is destined to stray about the outdated export-oriented turnpike for a long while yet.

In a clean political system, the politicians do not have to raise slush funds from businessmen to run expensive election campaigns every once in a while. An economic system based on true market competition may then be realized. But then the existing group of politicians is likely to be replaced by a new generation of politicians who can distinguish themselves in a clean political system. However, in terms of Olson's metaphor, prospective robber-rulers share the common interest of maintaining a corrupt system. They do

not really want to take the democratic market-economy turnpike. In Korea, “democracy” or “market economy” seems to have been a slogan of convenience for the contending robber-rulers who seldom could have any first-hand experience of the workings of a truly competitive market economy or of a real democracy.

Discretionary government intervention in markets with various subsidies and preferential treatment is not compatible with impartial market competition. It seems that businessmen with an extraordinary talent for bribing politicians and bureaucrats began to dominate the Korean economy, so an enormous amount of the nation’s resources has been wasted in the hands of incompetent pseudo-entrepreneurs. The established groups of politicians, bureaucrats, and owners of conglomerates are in the same boat. The most likely prospect for Korea may therefore be a continuation of the existing political and economic system. This is, admittedly, a very pessimistic view, so I will finish with an optimistic view.

A century ago, Korea was called a hermit kingdom. Koreans, however, did successfully transform their economy from one of the poorest in the world to a newly industrialized economy within three decades. Looking back on what Korean people have gone through, one cannot be too pessimistic. A country and its people become rich by “wising up.” The 1997 crisis was in a sense a blessing, though a very costly one. There is bound to be some social learning from such an experience. It may shorten the time necessary to overhaul the system. One way or the other, Korean people may get rid of the predatory pseudo-democracy led by vagrant opportunists aspiring to be robber-rulers, and join the democratic market-economy turnpike.

References

- Baumol, William J., “Entrepreneurship: Productive, Unproductive, and Destructive,” *Journal of Political Economy* 98 (1990):893–921.
- Bhagwati, Jagdish N. and Anne O. Krueger, “Exchange Control, Liberalization, and Economic Development,” *American Economic Review* 63 (1973):419–27.
- Chung, Unchan, “The East Asian Economic Crisis: What Is and What Ought to be Done,” paper presented at the Aju Conference on Econometrics, Macroeconomics and Finance in Honor of Professor Tong Hun Lee, held 19–21 August at Kyungju (1999).
- Corden, W. Max, “The Effects of Trade on the Rate of Growth,” in Jagdish N. Bhagwati (ed.), *Trade, Balance of Payments, and Growth*, Amsterdam: North-Holland (1971):117–43.
- Fry, Maxwell J., “Financial Repression and Economic Growth,” Birmingham Business School, IFG working paper 93-07 (1993).
- Fukuyama, Francis, *Trust: the Social Virtues and the Creation of Prosperity*, New York: Free Press (1995).
- , “Social Capital and the Future of Asia,” paper presented at the Samsung International Symposium on The Future of East Asia and Industry in the 21st Century held in Seoul on 28 June (1996).
- Hahm, Joon Ho, *Survey of National Foreign Debt Management and the Future Direction to Establish Debt Management System*, Korea Development Institute (KDI) policy study series 99-04, Seoul: KDI (1999) [in Korean].
- Hong, Wontack, “A Global Equilibrium Pattern of Specialization: a Model to Approximate Linder’s World of Production and Trade,” *Swedish Journal of Economics* 71 (1969):275–83.
- , “The Heckscher–Ohlin Theory of Factor Price Equalization and the Indeterminacy in International Specialization,” *International Economic Review* 11 (1970):328–33.
- , “Distortions and Static Negative Marginal Gains from Trade,” *Journal of International Economics* 6 (1976):299–308.
- , “Institutionalized Monopsonistic Capital Market in Developing Economy,” *Journal of Development Economics* 21 (1986):353–59.

- , “A Comparative Static Application of the Heckscher–Ohlin Model of Factor Proportions: Korean Experience,” *Weltwirtschaftliches Archiv* 123 (1987):309–24.
- , “Time Preference in Dynamic Trade Models: an Empirical Critique,” *Economic Development and Cultural Change* 36 (1988):741–51.
- , “Factor Intensities of Korea’s Domestic Demand, Production and Trade: 1960–85,” *International Economic Journal* 3(2) (1989):97–113.
- , “Market Distortions and Polarization of Trade Patterns: Korean Experience,” in Jene K. Kwon (ed.), *Korean Economic Development*, New York: Greenwood Press (1990):115–28.
- , “Import Restriction and Import Liberalization,” in Lawrence B. Krause and Kihwan Kim (eds), *Liberalization in the Process of Economic Development*, Berkeley: University of California Press (1991):244–82.
- , “Export-oriented Growth and Equity in Korea,” in Takatoshi Ito and Anne O. Krueger (eds), *Trade and Protection*, Chicago: University of Chicago Press (1993):413–36.
- , *Trade and Growth: a Korean Perspective*, Seoul: Kudara International (1994).
- , “The Catching-up: Lessons of East Asian Development,” in Justin Yifu Lin (ed.), *Contemporary Economic Issues*, Vol. 1, London: Macmillan/St Martin’s Press (1998):3–17.
- , *Catch-up and Crisis in Korea*, Cheltenham: Edward Elgar (2002).
- IMF (International Monetary Fund), *Korea: Selected Issues*, Washington, DC: IMF (2001).
- Keesing, Donald B., “Outward-looking Policies and Economic Development,” *Economic Journal* 77 (1967):303–19.
- King, Robert G. and Ross Levine, “Finance, Entrepreneurship, and Growth: Theory and Evidence,” *Journal of Monetary Economics* 32 (1993):513–42.
- KITA (Korea International Trade Association), *Main Trade Indicators: 2002*, Seoul: KITA (2002).
- KLI (Korea Labor Institute), *2002 KLI Labor Statistics*, Seoul: KLI (2002).
- Komiya, Ryutaro, *Japan’s Comparative Advantage in the Machinery Industry: Industrial Organization and Technological Progress*, San Domenico: European University Institute (1993).
- Krueger, Anne O., “The Political Economy of Rent-seeking Society,” *American Economic Review* 64 (1974):291–303.
- , *Growth, Distortions and Patterns of Trade among Many Countries*, Princeton: Princeton University Press (1977).
- Levy, Brian, “Transactions Costs, the Size of Firms and Industrial Policy,” *Journal of Development Economics* 34 (1991):151–78.
- North, Douglas C., “Economic Performance through Time,” *American Economic Review* 84 (1994):359–68.
- OECD (Organization for Economic Cooperation and Development), *Economic Surveys 1997–1998: Korea*, translated into Korean, Seoul: KDI (1998).
- , *Economic Surveys 1999–2000: Korea*, Paris: OECD (2000).
- , *Economic Surveys 2000–2001: Korea*, Paris: OECD (2001).
- Olson, Mancur, *The Rise and Decline of Nations*, New Haven: Yale University Press (1982).
- , *Power and Prosperity: Outgrowing Communist and Capitalist Dictatorships*, New York: Basic Books (2000).
- Park, Yung Chul, *Financial Liberalization and Opening in East Asia: Issues and Policy Challenges*, Seoul: Korea Institute of Finance (1998).
- Wade, Robert, *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*, Princeton: Princeton University Press (1990).
- World Bank, *The East Asian Miracle: Economic Growth and Public Policy*, New York: Oxford University Press (1993).

Notes

1. According to Corden (1971), opening up an economy to trade generates static efficiency gains which are very similar to once-and-for-all technical progress. Furthermore, given a constant propensity to save, the static efficiency gains will induce the rate of capital accumulation to rise

and consequently will raise the growth rate of the economy. This effect might be described as the induced growth gains from trade that will, if investment goods were mostly imported, also include the gains from reduced prices of investment goods. The opening-up to trade may raise the rate of growth, not only through static efficiency gains and the associated induced growth gains, but also by directly raising the country's propensity to save (Hong, 1988).

2. By the beginning of the 1980s, however, this system started to yield an alarming failure rate. The reaction of the government was to distance itself from the detailed investment decision-making process.

3. Japan seems to be a relatively high-trust society with pro-large-conglomerate policy bias of the government. The well-diversified prime manufacturers in Japan concentrate on product development, horizontal coordination, and marketing, while the host of small subcontractors focuses on cost-cutting in a specialized production process. Such a system can save entrepreneurs, which are scarce resources. According to Komiya (1993), the competitive power of Japan in exporting broadly defined machinery reflects the strength of the Japanese system in synchronizing the activities of parent companies and of numerous subcontracting firms.

4. As of 1990, the 30 largest conglomerates owned 38.4–44.5% of total shares of insurance companies, 63.1% of securities firms, 23.3% of merchant banks, 29.9% of investment and finance companies. About 60% of loans were made by DMB and the remaining 40% by NBF (OECD, 1998, p. 81, 132).

5. Insurance companies in fact have been the largest shareholders of commercial banks because they were not considered as individuals subject to the ownership ceiling, but the Korean government did not allow the conglomerates that own insurance companies to choose the bank managers. The owners of insurance companies were content to use the insurance funds for their own benefit as much as possible, ignoring the interests of policyholders, leading to widespread insolvency.

6. The Korean economy could maintain high growth rates throughout the 1960s, 1970s, and 1980s. However, since national savings began to exceed 30% of GNP and the M3/GDP ratio more than doubled only in the 1980s, some economists including myself believe that a negative-real-interest-rate regime coupled with high inflation (as was maintained before 1965 and after 1972 until 1981) can indeed be maintained at the cost of not only financial deepening but also of national savings.

7. During December 1997 and October 2001, the Korean government spent about 150 trillion won of public money. A cursory auditing by the Bureau of Inspection revealed that at least 5% of the public money was stolen by the ex-owners and caretakers of the bankrupt companies as of November 2001.

8. The average debt-to-equity ratio of the 30 largest conglomerates amounted to about 500% by the end of 1997 (OECD, 1998, p. 12, 131). These nominal debt-to-equity ratio figures very much underestimated the real ratios because of the system of mutual shareholdings among *chaebol* subsidiaries that had fictitiously inflated the magnitude of paid-up assets.

9. Korean bureaucrats and politicians have, on paper, substantially deregulated the banking sector. As a result, the foreign-owned banks in Korea can now manage the banks very much on the basis of capitalist market principles. The domestically owned banks in Korea are, however, subject to even tighter control of bureaucrats who are abusing unofficial off-the-record orders.