ISSN 0347-8769

Seminar Paper No. 382

EXPORT-ORIENTED GROWTH OF KOREA:
A POSSIBLE PATH TO ADVANCED ECONOMY

by

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Seminar Papers are preliminary material circulated to
stimulate discussion and critical comment.

June, 1987

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EXPORT-ORIENTED GROWTH OF KOREA:
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1. Introduction

For resource-poor backward economies, economic development is almost synonymous with industrialization. In the early 1960s the Korean government attempted to promote industrialization apparently without analyzing the merits of outward-looking policies or having any idea about the comparative advantages in labor-intensive manufactures exports as an outlet for its massive disguised unemployment. Good common sense and hindsight of the top decision makers, however, seem to have led the Korean economy in due course to an export-oriented growth path. The "successful" growth performance of the Korean economy since 1962 is now well-known history.

The objectives of this paper are to examine specifically the development mechanisms of the Korean economy since the early 1960s and then to analyse its "undesirable" consequences. Section 2 delineates the implications of "infant-industry promotion" in a developing country that pursues industrialization as a means to become an advanced economy. Section 3 presents the well-known characteristics of export-oriented regimes and import-substitution-oriented regimes. Section 4 delineates the development mechanisms in Korea, Section 5 analyses the undesirable consequences of such mechanisms, and the final section concludes that the path followed by Korea is only a possible

path leading to an advanced economy conspicuous with a lot of waste of resources.

This paper contends that any underdeveloped country contemplating to achieve rapid economic growth may learn more by critically examining the experiences of the Korean economy rather than by uncritically duplicating its development policies.

2. Promotion of Infant Industries

Infant industries may be defined as production activities which generate external economies in the form of learning-by-doing at their early (infant) stage of establishment but only for a limited period of time (Cf. Lucas 1984). Infant industries may also include exporting activities. The activities procuring commodities in domestic markets and selling them at international markets can generate substantial (time-limited) external economies in the form of learning-by-doing.

The existence of "large enough" external economies in infant industrial production activities warranting government intervention implies that the imputed losses associated with the initial period of low returns must be fully recovered with interest at a later date, though not necessarily by the individual entrepreneur starting up the activity. The case for a time-limited government intervention is based on the fact that the positive externalities that are generated for a limited period of time from the development of an infant activity will accrue to those other than the initial undertakers of the activity. (See Krueger and Tuncer 1982.) An industry stops being an infant

industry when it stops generating external economies.

On the basis of the Heckscher-Ohlin theorem, we may assume that a resource-poor developing country has comparative advantages in labor-intensive production vis-a-vis advanced countries. If we further assume the existence of (time-limited) external economies in the production processes of these labor-intensive industries (and/or in their exporting activities), however, the so-called comparative advantages expounded by the Heckscher-Ohlin theorem become 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. Now the question is how to promote them. The government may promote infant industries through the outward-looking export-oriented growth strategy or through the inward-looking import-substitution-oriented growth strategy. If the government decides to adopt the former approach, the promotion of infant export (sales) activities has to be included. Otherwise, domestically produced labor-intensive commodities may be sold in domestic markets only but would not be sold in the alien foreign markets. If the latter approach is adopted, however, then there is no need to promote infant export activities, because there is no plan, from the beginning, to sell them in international markets. In such a country, export marketing would stay at infant stage. In this case, even if by chance

the country happens to produce some labor-intensive commodities at low cost, they would unlikely be exported, because the people would not know how to sell them abroad. Furthermore, what Keesing (1967) and Bhagwati and Krueger (1973) argue is that these countries would, at any rate, never be able to produce those labor-intensive commodities at low cost. The potential comparative advantages will stay buried deep under the surface so that even very keen foreign buyers would fail to notice anything worthwhile for purchase from the country.

It is usually believed that there are tremendous learning effects associated with infant export (sales) activities which impart a lot of externalities. Any yet the success of Hong Kong is often attributed to its very laissez-faire system. Therefore, the case of Hong Kong seems to enable us to identity the mysterious time-limited external economies that are supposed to be associated with export activities.

Over a hundred year period, Hong Kong had served as an entrepot which enabled the native Hong Kong businessmen to master the art of doing business with the whole world market. Furthermore, the extensive network of overseas Chinese merchants and the massive post-war immigration of capable entrepreneurs from the mainland also enhanced Hong Kong's expertise in global trading. Unlike the case of starting export-oriented growth from a quasi-hermitage state like Korea, there seems to have been no substantial extra learning effects imparting a lot of externalities that could be associated with the commencement of export activities based on the "domestically" produced manufactures in Hong Kong. That is, there did not exist any substantial dynamic

external economies that had to be internalized by the time Hong Kong started its export-oriented growth. This may at least partly explain why Hong Kong could adopt a laissez-faire system while Korea required extensive government intervention in market mechanisms in order to generate an outward-looking mentality among the people and to undertake the export-oriented growth strategy. This may also partly explain why the exports from Hong Kong have failed to include those manufactured products whose production activities involve substantial external economies. The export patterns of Korea and Hong Kong reveal similarities in massive exports of labor-intensive goods but also reveal dissimilarities by the conspicuous absence of heavy industrial products in Hong Kong's exports. To the extent that they are similar to each other, one may invoke the Heckscher-Ohlin theorem and cheap labor costs in both countries. The dissimilarities may only be explained, however, in terms of the differences in size and externalities. The size factor represents the extraordinary bias in the factor endowment of the "city-state" Hong Kong that has magnified its comparative advantages in labor-intensive production activities.

3. Advantages of Export-Oriented Growth

It is believed that under the export-promotion (EP) regime, international competition forces domestic entrepreneurs to pay close attention to the possibilities of innovations and speeding up learning processes (Keesing 1967 and Bhagwati & Krueger 1973). Exporting firms must face price and quality competition in interna-

tional markets and consequently the survival and success of each exporter depend on active absorption of up-to-date production techniques and adaptive innovations based on imported technologies. Furthermore, the EP strategy naturally enables an economy to take full advantage of scale economies. Even when the initial markets are found at home, the physical layout of manufacturing activities is designed to permit ready exploitation of scale economies and an easy transition into export markets.

On the other hand, it is believed that (Keesing 1967) under the import-substitution (IS) regime, protectionism is accepted as a legitimate major instrument to promote industrialization, every industry is spurred to demonstrate its need to be sheltered from the cruelties of foreign competition, and eventually the country ends up with a system allowing each industry protection according to its inefficiency.

Both the EP and IS regimes may be characterized by a mistrust of laissez-faire and free trade. International trade conventions, however, do not tolerate an extreme abuse of export subsidies, and hence the freedom for arbitrary government intervention is more restricted in the EP regime. Apart from realistic exchange rates, EP can be sustained mostly by subsidies. Since the costs of excess export promotion are more visible, there are built-in forces against excessive EP. The costs of IS are borne by firms and consumers and, hence, no obvious pressures emerge as rapidly when incentives are biased

excessively toward IS. In an IS regime, government officials have powers to remove or enhance domestic monopoly positions of firms and hence the firms can be subject to intolerable intervention in their decisions. But in an EP regime officials simply do not have the same degree of power over firms that are engaged primarily in the export markets.

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, and hence, even with an ample supply of domestic savings, the ability to pay for needed imports may severely limit economic growth. Then an EP regime is believed to relieve the foreign exchange constraint on growth more readily than an IS regime. Furthermore, any industry which is promoted to become an export sector can automatically substitute imports, but the reverse sequence does not readily follow. Most importantly, the innovative entrepreneurial class produced under the internationally competing EP regime is believed to be more conducive to generating sustained high economic growth in the longrun than the lackadaisical entrepreneurial class produced under the IS regime based on monopolistic rents.

According to Corden (1971), the opening-up of an economy to trade generates "static" efficiency gains which are very similar to "once-and-for-all" technical progress in raising the absorption-possibility frontier of a country at the given factor supplies.

Furthermore, with a given 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, which might be described as the "induced growth gains" from trade. If investment goods were mostly imported, then this induced growth gains will also include the effect of reduced prices of investment goods. On the other hand, the opening-up to free trade may raise the "rate" of growth of an economy not only through static efficiency gains and the associated "induced growth gains," but also by directly raising the country's propensity to save.

Should we postulate instantaneous structural adjustment, the static efficiency gains would materialize instantaneously. The opening-up of a semi-autarkic economy to semi-free-trade, however, may occur over an extended period of time. Then the static efficiency gains from the openings-up to free trade may materialize year after year over a long period of time. Furthermore, the so-called "static" efficiency gains may be broadly interpreted as to include the Keesing-Bhagwati-Krueger (1967, 1973 & 1981) type of positive effects of intensifying international competition upon the quality of domestic entrepreneurship, the realization of internal scale economies and the exploitation of external economies that arise from the "infant" export-production activities.

In a macroeconomic framework of analysis, a country's trade deficit may be interpreted as reflecting the country's aggregate overspending, i.e., an aggregate spending level exceeding the value of

production in the country. Then one may well expect to cure the trade deficit by cutting back spending in relation to income. However, if the quality of the country's products are very poor and their production costs are very high so that the country can not sell all the surplus products (which is generated by a cut in spending) at international markets, then the unconsumed portion of national products will simply result in a pileup of unsold commodities. That is, even with an increased rate of domestic savings, the failure in selling unconsumed products abroad would still result in a trade deficit that matches the unexpected lack of sales (or unrealized sales) abroad. If we take, following the tradition of National Income Accounting, the unintended inventory accumulation as spending (i.e., investment in the form of inventory), the country will (by definition) keep spending more on all tradables than it produces regardless of the actual cut in spending (i.e., an increase in real savings). The excess of spending on importables in the case is reflected in the pileup of unsold products accepted only by domestic consumers. That is, the newly created savings simply generate unintended inventories and a nationwide Keynesian recession characterized with unemployment and unutilized capacities.

When the aggregate spending falls short of the value of production, one may expect a trade surplus. In an import-substitution-oriented (IS) regime, however, we may simply have a trade deficit and a huge unintended inventory accumulation or a recession with a prolific nationwide excess capacity. The extra savings are not translated into a trade surplus but simply take the form of a deficient effective demand for domestic products. One may now argue that exchange-rate

changes would cure the problem. Such a view relies on the assumption that domestic prices are stuck at too high a level (i.e, resisting downward pressure) vis-a-vis foreign prices in the sense that exports are not selling as well as expected and markets are out of line. Exchange-rate changes, however, can in general only change prices of broad classes of importables in relation to exportables, i.e. one cannot rely on an exchange-rate change to sell specific commodities in foreign markets. Furthermore, the exchange-rate change may be offset by an equi-proportionate inflation. That is, a devaluation may only serve to raise the prices of all importables and exportables by the same relative amount. On the other hand, an EP regime can liberate the country's economy from Keynesian unemployment because, unlike an IS regime it can enjoy a virtually infinite effective demand for its products at the international markets, and hence it can always enjoy nearly full employment, unless there is a world-wide recession. A small export-oriented country will be able to sell any amount of commodities it produces; that is, supply capacity of the country will be the only constraint.

4. Development Mechanisms: A Possible Path to Advanced Economy

(1) A Transformation through Export-Oriented Growth Strategy

The five-hundred year old Yi dynasty was annexed by Japan in 1910, and Korea was subjected to the Japanese colonial rule until 1945. In its early phase of the colonial rule, Japan concentrated on exploiting Korea's traditional primary resources. Japan was content with taking

rice and other primary products from Korea and exporting all kinds of manufactured products, including various textile products, to Korea. In the latter years of the colonial period, Japan had attempted to convert the Korean peninsula into a logistical base for the creation of the so-called Greater East Asia Coprosperity Sphere. As a result, there emerged a few light and heavy industries as well as some social overhead capital facilities in Korea.

The handful heavy industries and electrical power plants that emerged during the colonial period and the important mineral deposits were mostly located in the northern part of Korea. The southern part of Korea was dominated by agriculture and the manufacturing activities of a few light consumption goods. The Korean economy, which was initially designed as a colonial economy dependent on Japan and then further crippled by the separation of the North from the South in 1945, found itself fully engaged in the reconstruction work in the wake of the Korean War (1950-53).

Korea in the 1950s, with less than \$500 of per capita GNP (in 1985 dollar prices) and more than two-thirds of the entire population engaged in the primary sector, possessed all the familiar characteristics of an extremely underdeveloped economy. With the energetic execution of the export-oriented growth strategy since the early 1960s, however, the annual commodity exports expanded from less than \$30 million (of mostly primary products) in the 1950s to \$30 billion (of mostly manufactured products) by 1985, and the growth rate of Korean economy jumped from about 4 percent per annum on average in 1953-61 to about 8 percent in 1962-66 and to about 10 percent in

1967-79.^{1/} Due to a negative growth in 1980, the average annual GNP growth rate fell to about 5 percent in 1980-85. The per capita GNP exceeded \$2,000 in 1985 and is projected to reach \$3,500 by 1991 in current dollar prices.^{2/} The proportion of persons employed in the primary sector declined from about 64 percent of total employed persons in 1963 to about 26 percent in 1985, while that in the manufacturing sector expanded from about 8 percent to 23 percent. During 1963-85, the "gross" unemployment rate declined from 16.2 percent to 4.5 percent.^{3/}

Within a quarter century of time span, Korea transformed itself from a typical backward economy to what is now called a "NIC economy". One more thrust and another quarter century, Korea might find itself transformed into a new advanced economy [See Hong (1988)].

(2) Concentration of National Energies: Export First

The ideology of "Export First" Policy was established in the later part of the First Five-Year Economic Development Plan (FYEDP) period (1962-66) and was clearly recorded in the Second FYEDP document

^{1/} Since raw materials imported for direct use in export production activities amounted to about \$12 billion in 1985, the gross value added of Korea's commodity exports in 1985 amounted to less than \$18 billion.

^{2/} The average annual real wage rate in manufacturing declined from about \$1.3 thousand (that could purchase about 1.5 ton of milled rice) in 1957 to about \$1.2 thousand (that could purchase about 1.7 ton of milled rice) in 1966 in 1985 dollar prices, but then started to rise rapidly thereafter to become about \$3.7 thousand (that could purchase about 4.6 tons of milled rice) in 1985.

^{3/} The "gross" unemployment includes those who are employed for less than 18 hours a week.

(p.118). It was understood to imply that, apart from the investments for a few key import-substituting industries and SOC facilities, all the efforts of the government would concentrate on the promotion of export expansion. The three major policy tools at the disposal of government -- preferential tax system, preferential credit rationing system and administrative support system -- were to be fully mobilized to reward those who contributed to export expansion. The export production activities were to be set free from the traditional allpervasive protectionist import regime, and the restrictive import system was to be applied only to the materials imported for those production activities that were oriented to domestic consumption. Furthermore, those who contributed to export expansion were assured to be honored publicly, and the export activities were elevated to the rank of patriotic activities.

The military government that was established in 1961 fully committed itself to the cause of industrialization and to break the vicious circle of poverty that prevailed in the country for hundreds of years. Economic development was to be the principal outlet for the national energies and became the *raison d'etre* of the authoritarian regime of Park [1961-79]. Economic development was to be achieved through the promotion of key import-substituting industries, promotion of agriculture, investments for SOC facilities and, above all, the promotion of export expansion. For the first three objectives, the government had to acquire investment funds and distribute them to selected projects. For the sustained expansion of exports, however, the government had to develop an outward-looking mentality and a

promotion system and incorporate them into the national economy.^{4/} The merits of the new system that was developed by the Korean government lay in the clarity of performance measurements and the reward system. The private ownership of the returns from export activities was assured, and furthermore the entrepreneurial profits were generously exempted from taxation.

By the mid-1960s, the government leaders and the associated technocrats apparently became fully convinced that the expansion of manufactured commodity exports was the only means available for Korea to achieve rapid industrialization and to convert the then only plentiful resource, labor, from a handicap to an advantage. Private entrepreneurs, however, were to be the vehicle for the actual execution of such industrialization efforts. As a result, it was decided that the only respectable entrepreneurs were those who contributed to export expansion, which would be the only way to contribute to the "fatherland."

Every body was encouraged to join the manufacturing activities for export which almost did not exist in Korea prior to the 1960s. It was an open-entry system, with a fairly objective measurable performance test and with various objective rewarding devices. Wealth accumulation through export expansion was to be admired and encouraged, while the

^{4/} It was recognized by the late 1960s that the development of the agricultural sector also needed more than investment funds, and as a result the so-called New Village Movement was introduced as an engine of rural development.

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- wealth accumulation through production activities aimed for only domestic consumption was to be despised. The small number of big businessmen who had already established themselves through the import-substituting activities of the 1950s were initially rather skeptical of the wisdom of export expansion efforts as a means of furthering their wealth accumulation and were apprehensive of the new rules of the game. However, there emerged a new group of entrepreneurs who could quickly establish themselves in the new system, fully taking advantage of the new rules of the game. Some of the old big businessmen kept hesitating and ultimately perished, while the remaining ones changed their mind and joined the bandwagon.

At the beginning of the 1960s, nearly two thirds of the entire labor force were employed in the traditional primary sector and more than half of them were believed to have constituted the Lewis-type disguised unemployment. Even the very small number of young people who could obtain college education did not have any definite idea about gainful employment opportunities at the time they left school. Then the rapid expansion of labor-intensive manufacture exports began to generate a tremendous number of new industrial employment opportunities, and most of the newly hired workers were simply happy to work with positive pecuniary remunerations.

The hitherto unemployed and underutilized human resources, i.e., the unskilled labor, the educated and talented labor and those with entrepreneurial potential, were channelled into the export activities and rewarded with employment at rapidly rising wage rates and with cumulating wealth and expanding business empires. It seems that, if

properly employed, properly paid and properly motivated, Koreans could become the hardest workers. Even nowadays, a typical Korean white-collar worker leaves home before 7 o'clock in the morning and leaves his office after 8 o'clock in the evening every day and, because of customer entertainment or self-entertainment, comes back home close to midnight several times a week. He usually works late on Saturday afternoons and, if something goes wrong, has to go to work on Sunday. A typical blue-collar worker works more than 50 hours a week with less than half of the wages the white-collar workers receive on average. Paid vacation usually does not exceed 10 days a year.^{5/}

The raw energies that were scattered all over the country were organized and channelled single mindedly into the outlet of export expansion, industrialization and modernization. The plans for investment and production were masterminded by the government but were ultimately executed by the individual entrepreneurs. The masses were receptive for the whole scheme. The Korean government could create an environment in which private incentives lead people toward productive directions.

(3) Administrative Support for Export Promotion

In many underdeveloped countries, the most insurmountable obstacle to productive economic activities is often the existence

^{5/} In 1970, the average weekly hours of work in the Korean manufacturing sector amounted to 53.4 hours. As of 1985, it had increased to 53.8 hours. (Data from Ministry of Labor, Report on Monthly Labor Survey.)

of despotic bureaucrats. In Korea, however, the bureaucrats were by and large far from parasitic but became rather enthusiastic helpers for export activities.

Regardless of the Constitution, the bureaucracy has traditionally reigned over the common people and businessmen in Korea. The bureaucrats were the actual links between what we call in abstract the government and the nation's labor force and businessmen. Although they have been criticized of corruption and superficial efficiency, the Korean bureaucracy has indeed been an effectively functioning institution, and the bureaucrats have energetically carried out the wishes of top decisionmakers. The core of bureaucrats consisted of those who were dedicated to get the recognition of distinction and promotion, and the less ambitious of the bureaucrats were driven by this core group to the direction set by the top decisionmakers.

Most Koreans would agree that the single most important factor which enabled Korea to achieve the successful export-oriented growth was the leadership, determinations, and the devotion of President Park to the cause of "nation-building by export". Since the president had been emphasizing export promotion with such intensity and zeal, the relevant ministers, especially the Minister of Trade and Industry (MTI), were expected to show no less enthusiasm for the cause. The MTI declared the annual export target at the beginning of each year. If there appeared any possibility that the target would not be fulfilled, the MTI officials as well as other officials related with export administration worked seven days a week and overtime to expedite the administrative process, to strengthen existing export support schemes,

to innovate new subsidy measures, and to exert irresistible pressures on businessmen to accelerate exports even though it might entail losses. If all such efforts failed to achieve the target amount, MTI officials had even tried to adulterate export statistics.^{6/} Such an over-enthusiasm for export expansion had apparently caused some losses, but it has kept fuelling the export-oriented growth process in Korea (See Hong 1979, pp. 58-59).

Officials in economics-related ministries supervised and helped private entrepreneurs acquire investment funds, import necessary plant facilities and inputs materials, and expand exports. After retirement, many of these officials found themselves serving one of those private entrepreneurs with whom they could develop a lasting relationship and blend into the managerial class of the economy. Since most economics-related government officials had to retire rather early in their age, it was often to their own interest to take good care of some prospective business employers while the officials were in a position to do so.

(4) Market Signals vs. Government Inspirations

One of the most conspicuous aspects of the Korean government was the relative youth of its top decisionmakers. On the positive side,

^{6/} This tradition had continued quite a while even after the Park era. For instance, the ship repairing business expanded rapidly since 1982, and the Korean government included all imports and exports of ships for repair in its (customs clearance) trade statistics. The repaired ships amounted to about \$0.4 billion in 1981, \$1.5 billion in 1983 and as much as \$3.2 billion in 1985. The government at last has decided to delete ship repairs in 1986 in order to restore public confidence in its trade figures.

the youthfulness enhanced the dynamism; once a desirable policy was conceived, it was immediately enforced, and once the newly enforced policy started to reveal serious problems, it was immediately abandoned. The negative side of such flexibility was the waste resulting from too frequent trial and errors. On balance, however, flexibility, hindsight and adaptability seem to have contributed positively to rapid economic growth. After all, the Park regime, which initiated the First Five-Year Economic Development Plan without having any idea about the merits of the outward-looking growth strategy, firmly established Export First strategy with only a few years of development experience and, once convinced of the merits of the new strategy, adhered to the strategy.

There always seems to have been a latent aspiration in the minds of government officials that was to assume a more active and direct role in promoting the specific "key," "basic" or "heavy and chemical" industries. Instead of passively following the market signals, the government officials wanted to select such industries with their own hands for the sake of their imagined merits in "strengthening the industrial foundation" of the Korean economy or for the sake of "levelling up" the commodity composition of outputs and exports, whatever they mean to the each individual user of such expressions. The projects to be selected by the government were imagined to be associated with substantial external economies, and hence market mechanisms were not supposed to realize the desirable allocation of investment funds for them. The government therefore intervened, without even any objective measures of performance and of optimum

magnitude of supports. Furthermore, the "right" entrepreneurs who were to undertake the selected projects had also to be chosen by the "infallible" government.

In the beginning of the 1970s, the government indeed started to enlarge its scope of selecting prospective industries beyond its traditional boundary (i.e., cement, fertilizer, oil refinery and steel mill). Furthermore, the government began to assign the selected projects at an increasing rate to hand-picked entrepreneurs who turned out to be largely the proven winners in the export contests of the 1960s and partly a small number of political favorites not proven in any objective fashion. The export-promotion regime began to move away from the open-entry system, and the objectivity of the system started to be eroded rapidly. It helped the consolidation of the first generation winners, the concentration of wealth accumulation, and the establishment of a small number of big business groups.

Since the investments were increasingly undertaken not on the basis of direct market signals but rather on the basis of the inspirations of top decisionmakers, the businessmen who were entrusted to undertake the actual investment activities could not be blamed for the possible poor performances in the assigned projects. Whenever a failure case arose, the government-operated banking system had to assume full responsibility, defraying the losses with the seigniorage and inflation taxes. The rent income for selected businessmen rapidly increased. The concentration of business activities in the hands of a small number of selected big business groups was justified in terms of the real or imagined scale economies.

The share of big firms (employing more than 500 workers) in manufacturing value added increased from 37 percent in 1966 to 56 percent in 1977-81, and their share in total manufacturing employment increased from 26 percent in 1966 to 44 percent in 1977-78.^{7/} By the mid-1980s, the share of small firms (employing less than 300 workers) in total commodity exports of Korea amounted to only about 22 percent while that of Taiwan amounted to about 65 percent.^{8/}

Since the GNP and real wages kept increasing rapidly in the 1970s, the undesirable distributional effect arising from such a concentration of economic powers could have been ignored. Ever since 1967, the unskilled labor force was rewarded with semi-full-employment and rapidly rising real wages.^{9/} By the 1970s, there was no more massive

^{7/} Due to the rapid rates of capital deepening in big firms, their share in employment started to decline since 1978 reaching 37 percent level by 1983.

^{8/} Ministry of Trade and Industry, Plan for Trade Sector, in Korean, p. 34, March 1986.

^{9/} According to the Korean manufacturing census data, although the total number of workers employed in the manufacturing establishments with 5 or more workers increased from about 0.26 million persons in 1958 to about 0.57 million persons in 1966, there was no increase in the real wage rate during 1958-66. This period may correspond to what Lewis calls the stage of infinite supply of labor at subsistence wage rate. During 1968-79, however, the number of workers employed in the manufacturing sector expanded by 9.5 percent per annum and the real wage rate (applying the GNP deflator) increased by about 6 percent per annum on average. In 1963, the unemployment rate amounted to 8.1 percent and the semi-unemployment rate (ratio of those employed less than 18 hours a week in total economically active population) amounted to 8.0 percent. By 1979, however, the unemployment rate was reduced to 3.8 percent and the semi-unemployment rate amounted to only 1.2 percent. That is the gross unemployment rate was reduced from 18 percent to 5 percent during 1963-79.

disguised unemployment in the traditional sectors which could be transferred to the expanding industrial and service sectors. The talented and educated workers were rewarded with rapidly rising efficiency rents and enhanced power in private business organizations. The chosen entrepreneurs were generously rewarded with the snowballing business empires and rapid wealth accumulation. The fresh entry into the club of big business groups became very much restricted.

Until the early 1970s, the export-oriented growth strategy implied the promotion of various labor-intensive commodity exports. In the last 1970s, the "Export First" policy became to imply the vigorous promotion of "heavy & chemical industries" as well as "shipping" and "overseas construction" sectors. With bitter experiences in many of these adventures, however, the export-oriented growth strategy of the Korean government in the 1980s changed its emphasis, at least in terms of the slogans flooding the mass media, toward the promotion of "small & medium-sized firms", "skill-and technology-intensive industries", "machinery & parts industries", and "R & D and technical progress".

With the steady rises in real wage rates, the intensifying protection policies of advanced countries, and the expected competition from the cheap labor less developed countries such as China, the Korean government recognized, as early as the beginning of the 1970s, the need to transform its industrial structure from the simple labor-intensive consumption-good sectors towards more skill-and capital-intensive sectors. However, the selection of new "winners" was largely made by the top decisionmakers of the government while the actual execution of investments was delegated to the small number of

chosen entrepreneurs. In the late 1970s, the mobilization of the labor force and investment funds has largely been carried out through the chosen big business groups, which have been extremely active and energetic in enlarging the scope of their business activities by fulfilling the wishes of the top decisionmakers. By the beginning of the 1980s, however, such an investment decision-making system started to result in an alarmingly large number of failure cases and even encouraged many businessmen to feint failures. The reaction of the government was to divorce itself from the investment decision-making and let the established big business groups decide the allocation of available investment funds among the prospective projects. The most

recent professed policy is to restrain the excessive concentration of production activities in the hands of a small number of big business groups and to "dig out" prospective winners among the small and medium-size firms.

(5) Abundance of Daring Entrepreneurs

After the 1960s, Korean entrepreneurs had learned that generous subsidies and other promotional schemes would be provided for the production activities which the government wished to support, while various disincentives would be applied on non-favored activities. As a result, most of the big businessmen who could successfully accumulate wealth from the production and export of light industrial products willingly started to invest in the heavy and chemical industries in the 1970s, because they knew that the government wished to promote them as the new generation of major export industries. Unlike in some advanced countries such as the present-day U.S., the shifts from the old

declining sectors to the newly emerging ones seems to have caused relatively less friction and resistance in Korea. This was because in most cases the initiatives for such shifts were undertaken by the very entrepreneurs who had been engaged in the so-called declining sectors.^{10/}

In Korea, a successful entrepreneur usually owns, possibly as a result of scale economies in financial operations (or due to a snowballing effect of wealth accumulation), a group of firms involved in various activities extending from exclusively import-substituting production for domestic market to exclusively export-oriented production. As the emphasis of the government shifts from, say, the simple labor-intensive manufactures to the skill-intensive and more capital-intensive manufactures, the entrepreneur begins to adapt to this shift by investing in a new set of projects, reducing the relative scale of existing production activities and reshuffling workers accordingly. If such an adjustment does not happen, the chances are good that he will soon no longer be a successful entrepreneur in the Korean economy. Indeed, the ability of Korean entrepreneurs to adapt in response to changing economic variables and to venture into a new

^{10/} In a country where the entrepreneurs of declining industries and those of rising industries are more or less separated by the lack of mobility, imagination, tradition or habits, a structural adjustment causes much more friction and resistance on the part of the declining industries whose survival is at stake. If the leading entrepreneurs of a country remain rigidly entrenched in a particular set of industries regardless of the changes in comparative advantage and government policies, the shifts in industrial structure and resource allocation become more difficult than in a country where the same group of entrepreneurs are involved in both declining and rising industries.

field of activities seems to have constituted the necessary ingredient for Korea's rapid economic growth.

The paucity or rather a complete absence of capable indigenous entrepreneurs is often believed to be one of the most important causes of economic backwardness of a country. In Korea, there appeared a surprisingly plentiful supply of people with daring entrepreneurship, almost from nowhere, as soon as there appeared the somewhat exaggerated profit signals in export activities. Even more surprising was that many of these daring ones turned out to be really capable entrepreneurs. It would take a host of sociologists to correctly figure out where, among the traditional Confucian social group, these people came from. The business achievements of those successful entrepreneurs that appeared in Korea in the 1960s and 1970s are comparable to or might even excel any other group of successful entrepreneurs that appeared during a comparable short span of time in modern capitalist economies. The personal history of some of the present-day business leaders in Korea might be comparable to the feats of Andrew Carnegie, Henry Ford, Alfred Krupp, Mitsui, etc.

During 1967-83, the export expansion of Korea did not accompany any extensive import liberalization. The government rather instituted a half-open economy by allowing monopolistic market structures in domestic markets for the sectors that enjoy scale economies. However, the government did not allow those entrepreneurs to enjoy a lackadaisical life with monopolistic rents. The threat to allow imports if the domestic prices of the protected industrial products went too far out of line had frequently been used to hold down domestic

prices to near international levels and also to give less distorted profit signals to the entrepreneurs. Since 1983, the government has turned the random threats into a more systematic timetable for import liberalization.

until the mid-1970s, Korea's industrial production and exports were dominated by final consumption goods whose production depended heavily on the imported intermediate and investment goods. Hence the protection mostly implies the import restrictions of consumption goods at the expense of final consumers which apparently was not fatal to the growth performance of the economy. Since the mid-1970s, however, a host of very capital-intensive heavy & chemical industries began to be, as a promising new generation of infant industries, protected by severe import restrictions, and at the same time promoted as export sectors. Since Korea was not expected to gain comparative advantage in the production of many of these intermediate and investment goods for some time, there arose pressures for import liberalization and pressures for the Korean government to search for better measures to promote infant (intermediate and investment goods) industries other than import restrictions, not so much to enhance consumer welfare, but to enhance the production efficiency and the international competitive power of Korean industries in general [See Hong (1987b)].

The evolution of Korea's import-restriction regime suggests that an EP regime is much more conducive to early import liberalization than an IS regime. Due to the enhanced foreign exchange earning ability, once domestic savings cease to impose a severe constraint on growth, the EP regime can afford to reduce or eliminate its import-restriction

system much more rapidly than an IS regime.

(6) People and Materialism

One might now rather argue that the fundamental source of Korea's rapid growth has to be traced to the strong material desires of the present-day Korean people. Through the domestic and international mass communication media and through the various forms of direct contacts, first the urban and then the rural people of Korea became aware of the material affluence of advanced countries. The traditional Confucian or Buddhist value system was rapidly destroyed. Conspicuous consumption became a fashion. The materialistic illusion of people seems to have reached its zenith now: happiness is identified with material affluence, or at least material deficiency is equated with misery. One may then conclude that, with the vast majority of people being intoxicated by such strong material desires, it would be rather strange if Korea did not achieve rapid economic growth, unless the government intentionally or unintentionally designs and institutes a frustrating economic system such that the energy of every person offsets each other (say, a selfcontained counteracting system).

Another very basic source of Korea's rapid economic growth seems to be the intense enthusiasm of Korean people for education. Throughout the five-hundred year Confucianist Yi dynasty, "learning" symbolized the ruling class. Hence, with the introduction of the mass education system and freedom to learn, anyone could emulate the members of the old-time nobility. There has been an outpouring of zeal for formal education in Korea ever since the end of the Second World War, which apparently was conducive to generating a vast pool of literate

workers by the 1960s and to fostering a higher-level human capital formation in the following periods.

One remarkable character of present-day Korean society is the extreme social mobility. The ruling noble class of the Yi dynasty was uprooted during the Japanese colonial period (1910-45). The traditional landlord class virtually disappeared after the land reform that was enforced immediately after the Second World War. Furthermore, the entire society was shattered and reshuffled by the Korean War (1950-53). The period 1953-60 is often identified as the import-substitution-oriented period for Korean economy, but it was too short a period to generate powerful vested interest groups entrenched in import-competing industries.

On the other hand, the most openly heard self-criticisms against the present-day Koreans are the excessive individualism, and the lack of professionalism, craftsmanship and a lifelong devotion for any object. If there is any grain of truth in these self-criticisms, it may have to be regarded as a temporary phenomenon of 20th-century Korea reflecting the lasting mental effects of the humiliation inflicted by the Japanese colonial rule, the separation of the northern part of Korea from the southern part since 1945, the devastating Korean War, and the haunting fear of another invasion from the North. However, the other side of the coin may present the strength of the contemporary Koreans: aggressiveness, an inclination to (even the all-or-nothing type of) risk-takings, freedom from the self-imposed restraints of convention, a frontier spirit, and so on. Apparently these types of "animal spirits" cannot prevail indefinitely. As time passes, the scars that were inflicted on Koreans during the first half of the

20th century will be healed and the Korean people will recover their more conventional mentality. In the meantime, such an aggressive mentality together with the high social mobility can be conducive to rapid economic development, more than offsetting the real or imagined shortcomings pointed out in the self-criticisms.

In a sense all the necessary ingredients for an economic "take-off" were present in Korea by the time President Park took authoritarian power. He then ruthlessly applied the "carrot and stick" method: generous rewards for export-oriented production activities coupled with a heavy-handed suppression of every other imagined or real distracting activity such as the pursuit of political democracy. The political outlet was blocked by the stick, and the only major outlet left for the people was the pursuit of material affluence within the sphere of government-promoted economic activities. However, for a people heavily infected by materialism, it was not extremely difficult to comply with the system.

(7) The Balancing Forces

What the businessmen want might be all the same anywhere in this world: less taxes, absence of labor union problems, lower and less rapidly rising wages, low financial costs and protected domestic markets.^{11/} The leading businessmen in Korea as a group do exercise

^{11/} For the influential big business groups in Korea which used to receive preferential treatments in credit rationing, there may be another dream: continuous preferential treatment, but in the name of "market principle", without any further government interference in their investment and other decision-making. However, as far as the exchange rate policy is concerned, the big businessmen seem to have been divided into two different groups: a group which have heavily financed their production activities with foreign loan funds wishing to have an overvalued domestic currency and the other group engaged in export production activities without heavy foreign borrowings wishing to have an undervalued domestic currency.

significant influence on the government and it is only natural that they should always try to influence the government to get more of what they want.

Other than the group of leading businessmen, there has always been a very vocal group of (quite heterogeneous) intellectuals which also seems to have exerted some influence, though quite erratically, on government decision-making. This group has maintained extremely critical attitudes toward almost every government policy. The intellectuals do not seem to have fixed ideas but changing ones over time: arguing the virtue of self-sufficiency when the government was pursuing international specialization, preaching the minimization of dependence on foreign factors à la dependence theories while the government has been promoting export expansion and foreign capital inflow, proposing a more equal distribution of income and wealth while the government has turned a blind eye to equity problems, arguing for more expensive agricultural price support policies while the government wants to reduce the agricultural price supports, arguing the needs to promote capital goods sectors as early as the mid-1960s when Korea was experiencing a euphoric expansion of labor-intensive consumer goods exports, arguing the need for a balanced growth between agriculture and industry while the government had been emphasizing industrialization, arguing for the promotion of Western-style labor union movements and minimum wage legislation while the government wanted to have only a nominal presence of labor unions and to let wages be determined by supply and demand, arguing the need for more protectionist policies and import-restriction-cum-domestic-price-control instead of import

liberalization, and so on. The Korean government could not really ignore all these critical opinions. Instead, many, if not all, of these ideas became consciously or unconsciously to be reflected in policymaking. After all, what we call "the Korean government" in abstract is far from a group of people with homogeneous opinions and beliefs.

Whenever the government tried to compliment itself for a "successful" economic growth, this vocal group insisted that life in rural and urban slum areas had become much more miserable than before and that the rich had become filthy rich in the midst of mass poverty. This group seldom seems to believe in any kind of published statistics and seem to rely mostly on their own personal experiences, intuition, inspirations and beliefs. Not infrequently their ideological background appears to be the Latin American dependence theory, theology of liberation and the belief in the superiority of import-substitution-oriented semi-self-sufficient economy. Pushed to the extreme, the influence of this group could have been destructive, but in Korea they seem to have served for the government leaders as a source of reflection, humility, and relentless dynamism.

5. Undesirable Consequences

(1) Underutilized National Savings Potential

Since the early 1960s, the government has recognized the need to mobilize domestic savings as much as possible. As a result, the government enforced an interest rates reform in 1965 which was designed

to mobilize the household savings through the formal monetary financial institution. Indeed there arose tremendous increases in bank savings as well as in the money/GDP ratio itself, implying an increased supply of loanable funds through the formal financial institutions. The 1965-72 period is called the high interest rate era for Korean economy.

However, the government soon came under heavy pressures for the privileged entrepreneurs who were using large amount of bank loans to reduce financial costs by lowering the real interest rates. The government eventually yielded to those pressures on August 3rd, 1972 and resumed the negative real interest rate regime. Perhaps this August 3rd Decree constituted the point of departure for Korean economy from what they call the Taiwan model. The idea of mobilizing household savings and absorbing the curb market funds through formal monetary financial institutions was abandoned. Except a limited amount of captive bank savings, most household savings stayed away from the banking institutions and the curb loan markets have flourished. There were enormous disparities between the negative bank interest rates and the curb market rates. Loanable funds in banks stopped growing rapidly. The limited loanable funds were strictly rationed to selected business group at negative real interest rates. Maximizing domestic savings came to imply maximizing business profits and their savings. Until the early 1980s, there was no serious effort to increase household savings. As a result, household savings potentials have been very much underutilized in Korea.

The most conspicuous results were the chronic and selfdefeating inflationary development financing and the accumulating foreign debts.

Furthermore, the extreme disparities between the private rates of return on investment and the real interest rates on bank loans have generated a built-in incentive mechanism for the privileged entrepreneurs to maximize debt-equity ratios, critically weakening the financial status of the so-called leading business groups in the longrun and amplifying out of proportion their dependence on government credit rationing policy.

(2) Subsidized Credit Rationing and Backward Financial System

Although the Korean government has reached far down into the activities of individual entrepreneurs with its manipulation of incentive schemes, the Korean economy in general has been far from a command economy. The only exception was the financial sector. The banking activities were those of a command economy.

The government of a developing country and perhaps for that matter any government on the earth would, if allowed, like to enjoy such powers as the power to implement credit rationing, even if the associated repressed financial regime would result in a lower aggregate propensity to save and allocative inefficiency. The government can always have ready-made excuses to justify credit rationing, though second-best, as the only feasible and practical means to promote the infant industries in developing economies. The government can further justify its intervention in financial market on the basis of the internal economies of scale (possibly associated with the internalized learning-by-own-doing) combined with a capital market failure, without addressing to the cause of the latter phenomenon [see Hong (1986)].

In Korea, the influential entrepreneurs seem to have been willing

to surrender their decision-making power in the financial market without active resistance and rather willingly accepted the government as the ultimate unit of control in the financial market. This acquiescence came because the chosen few, who turned out to be the existing group of influential big entrepreneurs, enjoyed access to very low-cost capital. Apparently, this low interest rate regime helped generating such vigorous animal spirit for the privileged businessmen to expand their sphere of investment activities. On the other hand, the unprivileged small entrepreneurs had to depend on self-financing and informal curb market loans, and the non-entrepreneurial households had to accept amplified risk-taking in their wealth accumulation activities.

There has been a fairly systematic underpricing of capital in Korea in the form of low interest rate bank loans, low rates of tariffs on imported capital goods, tax holidays on new investments and accelerated depreciation allowances. Among these measures, the interest rate subsidized credit rationing has been the most distorting one, because this measure has been very much sector- and firm-specific compared to other measures.

In terms of mobilizing domestic savings potential and enforcing an efficient resource allocation among prospective investment projects, the formal monetary financial sector should be regarded as one of the most backward areas in Korea. Since the late 1970s, there has been a rapid expansion of the non-monetary financial institutions in the form of investment and financial companies, mutual savings and finance companies, security finance corporations, etc. In order to reduce the

risk element, curb market lenders actively utilized these new institutions to cover their informal lending activities. Thus it has become extremely difficult to ascertain to what extent the activities of these institutions represent the curb lending activities in disguise.

One may argue that the only significant development that has occurred in Korea's financial sector since the 1970s is the tremendously reduced risk element in curb lending activities and more efficient intermediation of the curb markets through their alliance with the non-monetary financial institutions. However, the interest income generated in the curb markets has largely escaped taxation. Taxing the interest income of large-scale curb market lenders and exposing their identities are believed by many people to disrupt the operation of the entire curb markets and hence greatly jeopardize the whole economy. As a result, the government has had no choice but to turn a blind eye to the equity aspects of the Korean tax system. Government revenue has been raised mostly through regressive indirect taxes and through direct taxes on wage income. In Korea, interest income has not been subject to progressive rate taxation, capital gains have been almost free from formal taxation, and profit income has enjoyed extensive tax exemption privileges.

(3) Distorted Labor Relations

The Korean government wanted to prevent labor disputes that would hinder economic growth and export expansion. However, it seems to have adopted a rather short-sighted approach by directly intervening and preventing the actual and potential labor disputes on behalf of the

entrepreneurs. As a result, the Korean entrepreneurs have developed a habit of delegating intra-firm labor-relations problems to the government and of devoting minimal efforts to reduce the potential sources of labor disputes by themselves. Consequently, one often hears the arguments that it is rather rare to find workers in Korean firms who really identify their personal welfare with the prosperity of the firm to which they belong. Most of the workers do not seem to be convinced that a higher rate of return to the firm is by any means directly related with the improved welfare of the workers themselves. The fact that Korean products still suffer from the cursory handling at the final finishing process might reflect the absence of such an identification effect, which may be a crucial ingredient to generate devotion from the workers.

(4) Fairness of the Rules of the Games

If people believe in the fairness of the economic rules of the game, wealth accumulation can be seen as the result of the free market mechanism and an unequal distribution can be tolerated as a by-product. However, many of the policy measures for export promotion in Korea, especially the subsidized credit rationing and investment licensing, have been implemented by the government in such a way as to give the general public an impression of wanton favoritism. As a result, the wealth accumulated by successful entrepreneurs is often regarded as political rewards rather than as the rewards for Schumpeterian entrepreneurship. Consequently, the export-oriented growth strategy and even the market mechanism itself have become suspect for many

Korean people.^{12/} Unfortunately, most of the big businessmen themselves do not seem to recognize that the private property system can prosper without intermittent violations only if the general public believes in the objectivity and fairness of the economic system and hence that it is in their long-term interest to help maintain a competitive market mechanism without any stink of crony capitalism.

(5) Extreme Dependence on the U.S. and Japanese Economies

As of 1985, about 70 percent of Korea's commodity exports went to the advanced countries, the U.S. and Japan taking about 36 percent and about 15 percent, respectively. As a result, the Korean economy is extremely susceptible to business fluctuations in the U.S. and is at the mercy of the protectionist threats of the U.S. Government and Congress.^{13/} On the other hand, about 64 percent of Korea's commodity imports came from the advanced countries, the U.S. and Japan taking about 21 percent and about 24 percent respectively. About 50 percent of Korea's total manufactured imports came from Japan and about 20 percent of them from the U.S. Since Korea imports very small amount of finished consumption goods, this implies that Korea's import demand for intermediate and capital goods are satisfied mostly by the Japanese and partly by the Americans.

^{12/} According to Krueger (1974), government interventions in market mechanism lead people to compete for rents and: "the existence of rent seeking surely affects people's perception of the economic system. If income distribution is viewed as the outcome of a lottery where wealthy individuals are successful (or lucky) rent seekers ... the market mechanism is bound to be suspect."

^{13/} Korea has maintained trade deficits with respect to Japan which has been offset by the surplus in the U.S. market. This has aggravated the protectionist sentiment of the U.S. Congress against Korean exports.

6. Concluding Remarks

In Korea, the efficiency gains associated with the long process of opening up a semi-autarkic economy to semi-free-trade have materialized not only in the form of rapidly rising real wages but also in the form of high rates of return on investment. These enhanced rates of return in turn seem to have amplified the "animal spirit" of Korean entrepreneurs and generated such vigorous investment activities in Korea over the past twenty years. By the beginning of the 1980s, however, the exports/GNP ratio had already exceeded the 30 percent level. As of 1984, the raw materials and intermediate inputs imported for "direct" use in export production amounted to about 40 percent of total commodity imports. Hence there is still a substantial room to increase the net value-added content of exports.

However, the big efficiency gains associated with the initial phase of the opening-up to trade must have been more or less exhausted. In this sense Korea might have to worry about the sagging animal spirit of entrepreneurs and the weakening vigor of their investment activities in the 1980s. One may argue that, with the vast amount of positive experience and kinetic energy accumulated during the past two decades, the gains from "marginal" structural adjustment can continuously be amplified. For this purpose, however, Korea may have to pay more attention to "marginal" efficiency and the more active role of the competitive market mechanism in general.

Ever since 1962, the planning in Korea entailed essentially the setting up of aggregate as well as sectoral targets of outputs and

exports and the setting up of construction targets for various SOC facilities. The execution of planning implied mostly the actual execution of investments for the planned (or supposed to have been planned) projects "by all possible means" and, in the 1970s, through handpicked entrepreneurs. Indeed, the Korean government promoted the expansion of domestic production and exports of selected industries by applying various short-sighted policy measures that damaged the competitive market mechanism and the long-term allocative efficiency of the economy. Any yet one may say that Korea was extremely fortunate to make all kinds of policy mistakes in the name of export promotion, and not in the name import-substitution and self sufficiency. Should the Korean government have instead pursued the Latin American style import-substitution oriented growth strategy, Korea might never have been able to escape the Lewis-type economy of massive disguised unemployment even by the 1980s, and the limited supply of physical and human capital must have exerted a critical constraint on rapid growth.

However, it is now about time to change the essential mode of planning and its execution. The highlights of planning should become a set of concrete time-phased schedules to implement various efficiency-enhancing and equity-improving systems such as an equitable government revenue and expenditure system, a financial system based on market mechanism, a more competitive domestic market structures, a system conducive to harmonious labor relations in the longrun, and so on. Any system that is to enhance the equity and the efficiency of resource allocations can seldom be enforced overnight. One can not

ignore the past history and its legacy to the present. It takes time to really implement a lasting effective system. Therefore, the five-year planning process is the ideal framework to carry out such schemes.

Perhaps due to the snowballing effect of wealth accumulation, there has been an extreme concentration of economic activities in the hand of a small number of big business groups that goes well beyond the limit justifiable by scale economies. Extreme over-extension of a given entrepreneurial talent implies a poor management of the extended group's business activities and frequent gigantic-scale cases of failure. In Korea, the entrepreneurial ability of the chosen few businessmen has been unreasonably exaggerated, and there has occurred a tremendous waste of resources in the hands of these chosen few.

Of course the need for a government subsidy activities to offset static or dynamic external economies will never disappear, but such cases for direct government intervention should never be exaggerated to the magnitude that we observed in the late 1970s. The prime objective of the government five-year planning should become the development of self-sustaining market systems that can select the correct industries and penalize inefficient entrepreneurs more efficiently and that can maximize the mobilization of potential savings, workers devotion, entrepreneurial energies, etc.

As of 1985, one may readily say that from now on Korea will increasingly have comparative advantages in more physical-and human-capital-intensive goods and in more technology-(or knowledge-) intensive goods than before [See Hong (1987a)]. As of 1990, or even in

later years, we will be saying more or less the same thing. It should be clearly recognized that, armed with only such vague and catch-all concepts, the government can not continue selecting specific industries and the "right" entrepreneurs (to carry out the selected production activities) without repeating the late-1970s disaster.

With the beginning of the 1980s, the Korean government has really made a determined effort and made a surprising achievement, i.e., it has been able to eliminate the chronic inflationary phenomena out of the Korean economy. If the current efforts and trends can be sustained throughout the 1980s and 1990s (getting over any possible new round of international inflation that can attack the world economy at any time), it will be recorded as a monumental achievement of the Korean government by economic historians. The experience of successful control of inflation during the period 1982-86 may indicate that, once the seriousness of a problem is correctly recognized, the Korean government has the ability to undertake the necessary economic reforms.

The successful control of inflation since 1982 has eliminated the negative real interest rate regime, brought about a drastic increase in domestic savings propensity (exceeding 32 percent of GNP in 1986) and, with help of falling oil prices, has generated a surplus in trade balance in 1986 (amounting to \$4.2 billion) for the first time since 1945.

Many people expected serious adverse impacts on domestic (import-competing) production activities that would result, at least temporarily, from the rapid progress in the Long-Term Import

Liberalization Scheme that is to raise the import liberalization ratio to 95.4 percent (for the manufacturing sector, to about 99 percent) and to reduce the average tariff rate to 16.9 percent by 1988. By pure accident, however, the Japanese yen has appreciated by more than 40 percent since 1984 and the New Taiwan dollar has appreciated by nearly 20 percent since January 1986. As a result, Korea's exports has been expanding at an unprecedented rate since early 1986, and the export-led boom is generating double-digit growth rates. At the very moment when the Korean economy must achieve the transformation of its output and export pattern from the traditional simple labor-intensive consumption goods toward more capital-intensive and more technology-intensive intermediate and investment goods (as well as high-quality durable consumption goods), waging fierce battles against the established Japanese manufacturers all over the international markets, Korea has found Japan in disarray. One may take it as a stroke of good luck for the Korean economy. However, should the Korean government get carried away with this unexpected fortune and ignore the need to undertake the basic structural adjustment, it will turn out instead to have been a misfortune for the long-term growth prospects of the Korean economy.

Appendix Table 1. Growth, Trade, Savings and Tariff

	Growth Rate (%)		Ratio to GNP (%)					Actual Tariff Rate 3/ tion Ratio 4/ Nominal Import Liberaliza-
	GNP	Manufac- turing	Commodity Exports	Commodity Imports	Gross Investment	Foreign Saving	Gov't Saving2/	
1953-61	4.0	10.5	1.1	10.6	12.4	8.0	-2.6	..
1962-66	7.9	15.1	4.4	15.3	16.3	8.6	0.6	9.9%
1967-71	9.7	21.8	9.5	22.8	25.7	10.1	5.6 (36.0)	8.6% 57%
1972-76	9.7	19.2	23.7	31.0	27.0	6.7	3.9 (45.4)	5.5%
1977-79	9.6	15.9	25.9	30.0	31.5	3.6	6.1 (38.9)	7.9% 61%
1980	-4.8	-1.1	28.3	38.7	32.2	11.5	5.4 (38.5)	5.4% 69%
1981	6.6	7.5	30.8	38.7	30.3	9.8	5.6 (35.2)	5.1% 75%
1982	5.4	4.1	29.1	35.3	28.6	7.0	6.1 (32.5)	5.7% 77%
1983	11.9	12.2	30.5	34.9	29.9	2.6	7.6 (32.5)	7.1% 80%
1984	8.4	14.8	32.0	35.5	31.9	2.4	9.9 (24.3)	6.8% 85%
1985	5.4	3.8	31.8	33.9	31.2	2.1		6.4% 88%
1986	12.5	17.4						92%

Source: The Bank of Korea, National Income Accounts and New National Accounts, National Tax Administration, Statistical Yearbook of National Tax, and Ministry of Trade and Industry, Semi-Annual Export-Import Notice.

- Notes: 1. CIF values
2. Figures in the parentheses represents the proportion of government savings financed by tariff revenue.
3. Tariff revenue actually collected divided by the CIF value of commodity imports
4. The share of freely imported items (AA items) in total importables. AA classification is based on MTI semi-annual notice as of the latter half of each year.

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