

Some Characteristics of the Postwar Korean Economic Growth

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I. Introduction

The Korean economy today needs its new growth model. Although the feudalistic dregs and colonial legacies have not yet been completely eliminated, the potential for continued economic development in Korea under the high pressured capitalistic system is very positive. The Korean economy has overcome the severe economic problems which it faced after world war II and the Korean war, and is expected to sustain its current rapid rate of economic growth.

Evidence of Korea's growth and development has appeared throughout the country since 1962. In recent years this growth can be especially seen in the appearance of skyscrapers, more automobiles, construction of expressways and dams, rural community development, an improved standard of living, the introduction of large scale industries, development of industrial estates, and increased exports of commodities, manpower, technology and plants.

Those are the noticeable picture of modernization of Korea ever seen in

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the Korean history, and it may be important, therefore, to understand how these changes took place. We would like, thus, to pose the following questions:

- (1) How does the growth pattern since 1962 differ from that prior to 1962?
- (2) What are the characteristics of Korea's current growth and what kind of growth model has been developed?
- (3) What are the necessary conditions for future growth and what problems do we face in attempting to reach a self-sustained level of economic growth?

Among the three questions, our discussion will be focused mainly on the second, and in order to clarify the characteristics of growth in the Korean economy, macro-statistical figures covering necessary economic variables will be first explained.

II. Economic Growth Statistics

As shown in the Appendix, the economic situation in Korea is different before and after 1962. Between 1945 and 1962, Korea's rate of growth was quite slow as the nation tried to eliminate its colonial structure and war damage. Since 1962, however, the rate of economic growth has been continually accelerating.

Korea was under Japanese domination for thirty six years until the end World War II, when the peninsula was divided into North and South Korea. The total area of South Korea is 38,022 square miles and less than 20 percent of this is arable land. The country has a poor natural resource endowment and at the time of separation agriculture was primary industry. There were some manufacturing industries in Korea under the Japanese rule, but most of them were destroyed during the Korean War from 1950 to 1953. Since the cease-fire Korea has had to carry the burden of intensive military expenditures which were required in the light of the constant threat of aggression by the North Korean Communists. In addition, after the conflict there was a large influx of refugees from the North to the metropolitan area which resulted in an increased total population as well as population congestion in urban areas. Because of the shortage of

production capacity, imports of manufactured goods and food grains increased, resulting in a huge deficit in the merchandise trade-balance. United States' assistance played a leading role in this context in improving the basic living condition as well as maintaining economic stabilization in Korea. The nation experienced growth in the late fifties, but the overall economic picture was very weak, characterized by disequilibrium, non-modernization, social irregularities and social unrest. In April 19, 1960 The Student Revolution occurred, which was followed by The Military Revolution on May 19, 1961. These revolutions brought about the administrative changes which allowed Korea to embark on a turning point and achieve the current rapid rate of growth.

What has Korea's growth pattern been like since 1962? The annual increase in GNP at constant market prices averaged 9.2 percent from 1962 to 1976 and rose to 10 percent recently despite the unstable international economic situation since the oil crisis of October, 1973. Per capita income at 1976 current market prices reached US \$627, which represents an increase of about 7.2 times over US \$87 for 1962. The magnitude of GNP increased from US \$2,271 million in 1962 to US \$22,485 million while the population also increased to 35.9 million persons in 1976. The sharp increase in GNP resulted in greater employment opportunities, and by 1976 the unemployment rate had dropped to 2.8 percent.

The economic growth was accompanied by a rapid structural change in the national economy. In the Korean economy prior to 1962 the share of agriculture in total GNP was large. However, in recent years agriculture's share of GNP has declined while the manufacturing sector's share has increased. Of manufacturing sector it was projected to promote heavy and chemical industries which had been materialized one by one up to 1976. Prices have increased continually since 1962. During 1974-75 wholesale prices increased more than 40 percent due to the oil crisis, but declined to 10 percent in 1976.

Korea's exports dramatically increased at an annual average rate of more than 40 percent during 1962-76, and the magnitude of export performance, equalling US \$55 million in 1962, increased to more than US \$8 billion in 1976. Of the total exports, the share of manufactured exports increased from around 20 percent in 1962 to more than 85 percent in 1976, and

specifically the proportion of heavy and chemical industrial products accounted for more than 35 percent of exports in 1976. While Korea's principal export markets have been the U.S.A. and Japan, the combined share of these two countries to Korea's total exports decreased from 64.7 percent in 1962 to 55 percent in 1976. To counteract this, Korea's exports to the Middle East and other regions have expanded significantly.

Economic growth and expansion has necessitated an increased foreign capital inflow and, at the same time, imports have expanded. The ratio of foreign capital to gross domestic capital formation decreased in relative terms in 1976, as compared with the ratios in 1945 and 1962, but its absolute value increased remarkably. Concomitantly, the transfer of technology from abroad which is largely embodied in foreign capital was expanded.

On the basis of Korea's recent economic growth and the success of the previous economic development plans, a Fourth Five-Year Economic Development plan was formulated for the period from 1977 to 1981.

The GNP is projected to increase at 9 percent per annum during the plan period and per capita income is expected to increase to US \$1,284. To achieve this, every effort will be made to develop heavy and chemical industries, including machinery, electronics, ship-building, iron and steel, petrochemical, and nonferrous metal industries. The ratio to total exports of manufactured exports of these industries is projected to increase to 47.8 percent by 1981, thereby attaining the export target of US \$17.5 billion. As a result, Korea's economic structure will be greatly improved and social welfare areas such as health care, housing, water supply and sewerage systems will be substantially developed.

Prices are expected to increase at about 10 percent per annum during the plan period. The objective is to pursue both stability and growth at the same time.

In response to the anticipated expansion of gross investment the foreign capital inflow will equal US \$10 billion during the plan period. The plan calls for the share of foreign capital in total gross investment to be zero by 1981.

The Fourth Five-Year Plan has the ultimate aim of achieving greater self-sufficiency in terms of balance between saving and investment, balance between exports and imports, balance between agricultural and manufactur-

ing sectors, and the balance between indigeneous and foreign technology.

III. Mechanism of Economic Growth

As previously mentioned, the Korean economy before 1962 was characterized by economic stagnation and heavy dependence on U.S. aid with no growth potential apparent. This period is therefore excluded from our analysis, and the discussion will concentrate on the impressive GNP and export growth in the Korean economy after 1962.

In a word, the Korean economy during this period can be best explained by an export-led growth model or more broadly by an outward-looking industrialization model. It can be said that the economic characteristics of such a growth process rest in the fact that overseas demand was primarily met by exports and that the production factors of capital, technology and resources were sought externally, while human capital, land and management was obtained internally.

There are varying theories on the export-led growth model which have so far been known, but among these the representative ones include those which were developed by Kindleberger, Lamfalussy, and Beckerman respectively.⁽¹⁾

The focuses of these models may be summarized as follows in terms of favourable conditions for export-led development:

- (1) Increasing overseas demands for exports,
- (2) Strengthening the international price competitiveness of exports,
- (3) Increasing both the domestic savings ratio and the investment ratio,
- (4) Increasing total factor productivity and technology,
- (5) Productivity increases greater than money wage rate increases,
- (6) Relative stability of domestic prices by controlling production costs,
and
- (7) Maintaining the balance of external transactions by increasing exports.

(1) C.P. Kindleberger, *Economic Growth in France and Britain, 1851-1950*, Cambridge, Harvard University, 1964, *Foreign Trade and the National Economy*, New Haven, Yale University Press, 1962. A. Lamfalussy, *The United Kingdom and the Six: An Essay on Economic Growth in Western Europe*, Homewood, Richard D. Irwin, Inc., for the Yale University Economic Growth Center, 1963. W. Beckerman, "Projecting Europe's Growth," *Economic Journal*, Vol. LXXII, December, 1962.

To put it differently, as external demand increases, if production cost can be decreased to achieve relative competitiveness in domestic prices through increased productivity and expanded domestic investment, it can be observed that virtuous circle may be formed, thus income and exports are expanded simultaneously.

The existing export-led growth models are, however, basically only applicable to industrialized countries. In those countries which bear economic properties like Korea it is unavoidable to correct various aspects thereof.

The general characteristics of the Korean economy in the light of the basic mechanisms of the three models are as follows:

- (1) Dividing the economy into two sectors, at least the process how the domestic sector supports export sector should be explained. Particularly, when labour in which technology is embodied is redundant in the domestic sector and shifted to the export sector, the degree of contribution to production assumed by A. Lewis has to be clarified.
- (2) Inasmuch as the shortage of domestic saving makes it impossible to increase the rate of investment self-financing, the introduction of a foreign savings variable and the insertion of an external debt servicing variable are necessary.
- (3) The increase in productivity and technological improvements are not generated internally, though investment increases and, therefore, the importance of the overseas technological variable should be borne in mind.
- (4) Domestic market prices are not relatively lower than foreign market prices due to the inability of management to satisfactorily curtail production costs and, as a result, it is difficult for entrepreneurs to strengthen their international competitive position unless the government supports them.
- (5) Formation of infant industries and sacrificing mechanism.
- (6) Economic and non-economic leakages.

Meanwhile, the international structure of division of labour has dramatically changed since the sixties and world demand has greatly expanded. As far as the Korean economy is concerned, the Government has undertaken to satisfy its dynamic comparative advantage utilizing cumulative causation between Korea, the United States and Japan. Facing this new

framework of the world economy, Korea should find out her future source of potential growth mainly from productive human capital among others. Industrialized countries are achieving growth by monopolizing the existing capital and technology, while Middle Eastern oil producing countries are monopolizing natural resources for the same reason. In Korea, labour embodying intermediate technology will become the most important source of growth and wealth until such time as a comparative advantage can be obtained in capital and technology.

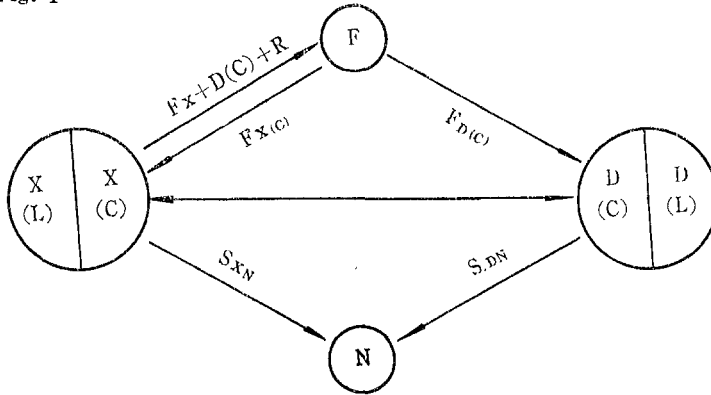
When the First Five-Year Economic Development Plan was implemented in 1962, marginal productivity of labour was around zero. Since then, its international value increased as Korean labour was combined with foreign capital which embodied highly advanced technology. From this, surplus value accumulated, thereby embarking economic development in real sense. The combination of accumulated surplus value and an inflow of foreign savings to Korea supported export industries.

It can be expected that during the process of economic development the character of labour will be slightly changed with the development of heavy and petro-chemical industries in the years ahead, but the content of surplus value will not cause any particular change until capital and technology can get internationally monopolistic power. The mechanism of accumulating surplus value hitherto characterizes that the remainder after principal and interest of foreign capital borrowed from abroad were repaid from the value of gross output based on international market prices returned to labourers and producers in the form of wages and profits, and such accumulation enabled the nation to generate Korean national capital.

The following schematic diagram symbolizes the characteristics of the Korean economic mechanism noted above:

Assuming domestic capital was zero when economic development began in the early sixties, both $X(C)$ and $D(C)$ would have been put into export and domestic sectors and combined with $X(L)$ and $D(L)$ respectively, thus starting production. As a result, the surplus value could be generated from X and D sectors. Prior to combining with foreign capital, the marginal productivity of L was zero. Since then, marginal productivity grew sharply in terms of world market prices and $F(C)+R$ were reimbursed from the value

Fig. 1



Where F =Overseas economy or market
 $F(C)$ =Foreign capital
 R =Interest on foreign capital or remittance of profit.
 X =Export sector
 D =Domestic sector
 $X(C)$ =Foreign capital induced into export sector
 $X(L)$ =Domestic labour employed in export sector
 N =Economic and non-economic leakages
 S =Surplus value

of gross output resulting from this increased marginal productivity. The remainder was found to be wages + surplus value.

Surplus value is theoretically the source of profit of capitalists. What is called Gross National Income is the combination of wages ($W_x + W_d$) and surplus value ($S_x + S_d$). Considering the above reproduction formula, constant capital is expressed in $F(C)$ and variable capital in W . In addition, of surplus value four parts are expressed in S_{co} , S_c , S_L and S_N respectively. S_{co} is the portion to be appropriated for the consumption of capitalist, S_c is for variable capital from accumulating capital, S_L is for labour, and S_N is the portion leaking out of the process of reproduction. Then, if Gross National product is expressed in G and the distinction between export and domestic sector in subscripts of X and D respectively, the following equations can be eventually obtained:

$$(1) \dots\dots G_x = F_x(C) + W_x + S_{xco} + S_{xc} + S_{xL} + S_{xw} - R_x$$

$$(2) \dots\dots G_d = F_d(C) + W_d + S_{dco} + S_{dc} + S_{dL} + S_{dw} - R_d$$

Consolidating the two sectors we get:

$$(3) \dots G = F(C) + W + S_{co} + S_c + S_L + S_w - R$$

In equation (3) because $F(C)$ and R should be paid to foreign countries, S_{co} and S_w have to be curtailed as much as possible and the consumption sector has to be reduced in order to increase savings and to augment S_c and S_L , thereby making the endogenous reinvestment coefficient large.

In the case of the Korean economy in 1962, a study of human capital was of no particular significance in the light of the simplicity of the labour force, but, entering the 1970s when human capital in which technology is embodied and intermediate goods are to be domestically produced, the model has to be sophisticated further. During the seventies $X(C_1 + C_2)$ can be differentiated from $D(C_1 + C_2)$, dividing $X(C)$ or $D(C)$ into intermediate goods and producer goods, and at the end of seventies or in the early eighties $X(C_2)$ and $D(C_2)$ will be induced only from foreign countries while $X(C_1)$ and $D(C_1)$ can be developed as human capital accumulates domestically.

The aforementioned mechanism of the Korean economic growth should be formulated in kind at first and then interwoven with money, the exchange rate, customs duties and interest rates in conjunction with agricultural sector. Throughout these processes a larger, more realistic model which includes natural resources can be developed. Based on such a projected model comparative analyses of the Korean economy with the North Korean economy are feasible and, at the same time, outward-looking economic development v.s. closed economic development can be compared.

In fact, the continued growth of the Korean economy during 1962-1976 was similar to the contents of the amended model described above, but the economy still remains in its self-generating stage and therefore virtuous circular development automatically led by exports has not yet been achieved. Export of the Korean labour force has been at world market prices resulting in the creation of surplus value. However, overseas leakage of this value was large due to the unfavourable terms and conditions of international contracts. In addition, at home leakages have been appearing politically and socially. Domestic demand, which has expanded greatly as a result of consumption liberation, contributed to the growth of GNP, but at the same time domestic savings declined. It is doubtful how this dual

function of consumption can be exercised without colliding with the formation of the heavy and chemical industrial structure. In particular, as a result of the shortage of domestic capital and technology Korea will inevitably attract foreign savings and appropriate technology on a continuous basis and the increasing trends in both investment and technology ratios are also unavoidable if the nation depends on foreign economies. The potential is good for technological advancement in heavy and chemical industries including machinery, but the rate of technological advancement is not yet satisfactorily. For this reasons, it is not certain whether the technology oriented-labour force will result in surplus value within the Fourth Five-year Economic Development Plan period or even the following five years so that a sufficient surplus value can be accumulated in the Korean economy. In addition, though exports have dramatically expanded, imports are still larger. Thus, equilibrium in Korea's balance of payment position is difficult to achieve, as long as imports surge far ahead of exports.

IV. Characteristics of Economic Growth

In the preceding chapter we have explained a variety of characteristics relating to the growth mechanism of the Korean economy. A further explanation of the characteristics follows from the standpoint of economic growth itself.

First of all, it can be pointed out that the Korean economy since 1962 has continued to pursue its rapid growth artificially.⁽²⁾

As mentioned in the discussion on the growth mechanism, the Korean government has created a large and unavoidable sacrificing mechanism at home and permitted large enterprises to play a leading role in meeting greatly expanded overseas demand. Large enterprises have been established and protected by overloan policy, monopoly prices, overvalued foreign exchange rate, high customs duty, lower interest rates, and tax reductions.

(2) W.H. Park, "Towards a Theory of 'Artificial' Comparative Advantage", *Asian Economies*, December 1975, Research Institute of Asian Economics, Korea. Ideas on artificiality in the formation of comparative advantages have been originated from the tulip belt in Netherland, shoemaking in Italy, diamond cutting in Israel and export-first policy in Korea.

Under these circumstances given emphasis on the so called "Growth First" catch-phrase, the prevailing theory of investment criteria was frequently ignored and infant industries were artificially protected. In fact, the most salient features of the Korean economy at that time were found in both $X(L)$, $X(C)$ and $D(L)$, $D(C)$ as shown previously in Figure 1. $X(L)$ and $X(C)$ required the continuing support of F as well as of $D(L)$ and $D(C)$ and, at the same time, $D(L)$ and $D(C)$ also needed the support of F . As long as big infant industry groups might not be shifted to competitive industries, productivity could not be automatically enhanced, even though the investment rate might increase and concomitantly it could not help expediting export oriented-development artificially. Assuming from the result of the computation of static and dynamic effective protective tariff rates,⁽³⁾ among other, productivity increase expressed in the input-output ratio must have been the kernel of overall aspects of the economy in a country where economic efficiency in terms of input versus output was very unsatisfactorily.

During the 1960s, from the build-up of large infant industries through output, circulation and marketing it was inevitable that the Korean economy would deepen the artificiality of the Government further and as a consequence the sacrificing mechanism based on lower wages, lower agricultural prices, high domestic prices in favour of export industries was sustained for a long period. In addition, because of an excessively ambitious policy pursued for expanded growth and employment, equilibrium in the economy could be overlooked, thus inviting price increases, widening the balance of payment deficit, reducing domestic savings and spreading inevitably the ideology governing unbalanced income, consumption liberation and irregularities.

In the artificial government intervention there occurred some other distortions too in the sequences of economic reform. One of the noticeable characteristics of the growth in the Korean economy was the fact that the inducement of foreign capital and technology focussed on economic activities and, following the trend of an internationalized scale of enterprises, offices rather than machinery, houses rather than plants, and commerce

(3) W.H. Park, "Exports and Economic Development in Korea," *The Seoul National University Economic Review*, December 1974.

rather than industry were frequently more weighted. Since the Government constructed expressways the automobile industry has developed. Again, large industrial estates were artificially established and afterward a number of private enterprises were pushed into these areas.

But, thanks to the benefits revealed appreciably when the Government intervened artificially in the management of outward-looking industrialization strategy, the Korean economy has started to show various developmental signs, especially after overcoming the difficulties arisen by the oil crisis in 1974. Of the benefits outnumbering the costs both of which were created through an outward-looking industrialization scheme, the most important one was the destruction of the economy's vicious circle, which initiated the international scale of Korean enterprises and entrepreneurs. In addition, prices, quality, and specification in connection with commodities were internationalized so as to meet foreign standards. With Korea's exports totalling more than US \$8 billion in 1976, marketing was more diversified and further Korean capital, technology and managerial skill are being exported to the Middle East, Africa, and Latin America as well. General trading firms are expected to be primarily responsible for these exports, thus the internationalization of enterprises having been accelerated.

The export substitution for light manufactured goods which took place during the sixties has gradually been replaced by new exports of heavy and chemical manufactured goods in the seventies and the share of the latter in total exports is ambitiously projected to account for 47.8 percent by 1981.

A major characteristics of economic growth based on outward-looking development strategy is, as mentioned earlier, the assumption that capital is limitlessly available. Since foreign capital can always be utilized in the form of loans on direct and joint investment, as long as the economy grows, the distinction between domestic and foreign capital is only in the interest rates and remittances. There is no real difference in the creation of production capacity and the function in the process of output. In many situation, foreign capital is preferable to domestic capital, because advanced technology is embodied in the former.

It is assumed in the small country like Korea that demand would also be

limitless, if marketing, prices, and quality were guaranteed and if labour, management and land, needed for growth of the Korean economy, could largely be met domestically.

As long as demand, capital and technology exist, it is not difficult to stimulate the activities of entrepreneurs or to create a good working environment where wage-earners can be indulged in their works with the extension of working hour. On the part of entrepreneurs also, morale has been raised. Facing the management and control of business enterprises for the first time the initiatives of entrepreneurs were considerably exercised: they have succeeded in removing a number of economic and non-economic management disturbances by linearizing the process where input of production factor ends in output. Korean entrepreneurs have also faithfully followed a capitalistic pattern sacrificing all in the interest of capital accumulation. In such a capitalistic system monetary response was extremely stimulated without facing obstacles such as religions and social hierarchical discriminations as can be seen in India, Pakistan, the Middle East, and Africa.

The assimilation and diffusion of imported industrial technology has also been satisfactorily realized at a faster rate than ever. As far as craftman and engineers are concerned, they were absorbed into business enterprises to a greater extent. Qualitative and quantitative advancement in human capital which is the combination of labour, management, and technology was a unique factor which enabled the Korean economy to grow in the process of promoting an outward-looking development strategy towards the Middle East, South America or Africa. Whether this factor can be successfully exercised or not will be the key point in the future development of heavy and chemical industries.

The government's artificiality from the affirmative viewpoint was revealed again in the removal of the various irregularities in political, social and cultural fields and in economization of resources. The beautification of urban areas, elimination of costly weddings and funeral rituals have also been gradually achieved. The good effects of artificial intervention of the Government in the Korean economy have been particularly reflected in rural community, increased farm income, and ideological and spiritual

innovation. The Saemaul movement has been very successful. The reform of the rural community, even though assisted by the industrial sector in the form of providing cheap cement, plastic goods, and electricity as well as allowing the prices of rice and land highly, can be pointed out as one of the advantages created by the government artificiality. The movement has now spreads to urban areas and covers the country as a whole. If the movement is successful in urban areas, varying vices which are deeply ingrained in human relationship in Korean context could be cleaned up and at the same time it would be gathering momentum capable of revolutionizing appreciably even productivity energing from enterprises.

It should be noted that the aforementioned advantages were sprung out especially in 1973. While enjoying an extraordinary up-turn in both internal and external economies for one year prior to October 1973, there have been substantial increases in efficiency and declines in dependence on foreign countries as a result of the development of infant industries. Korea was able to transfer these infant industries to sound competitive ones and the said portion of surplus value of the nation began to accumulate to a greater extent.

After the oil crisis in 1973, the Korean economy encountered a very difficult time, but the favourable turn in the business cycle in 1976 again gradually reduced the unfavourable balance of trade, the sustained inflationary pressure on the economy, social unrest of the low income bracket and economic efficiency relatively. This return to a better economic position has improved the nation's development outlook.

Lastly, characteristics of the Korean economic growth can also be identified in the aspects of self-sufficiency.

Because the growth in the Korean economy in the sixties stressed the creation of production capacity and expansion of light industrial exports, the economy inevitably became dependent on a large amount of capital and advanced foreign technology. Accordingly, self-sufficiency was not seriously considered, rather these two variables were regarded as opposed to each other. With the structural changes in Korean industry and the promotion of heavy and chemical industries beginning in the seventies, simple producer's goods and intermediate goods used for light manufactured goods

were produced domestically and subsequently the degree of precision in technology of producing such goods raised further from the second half of seventies. It is noticeable that equilibrium between savings and investment, balance of payments position, balanced industrial structure, assimilation and diffusion of imported technology at home and price stabilization, which have been given high priority by the Government in order to achieve rapid growth, are expected to be materialized in an attempt to achieve the self-sufficiency in the Korean economy eventually. Measured on the basis of economic growth to date the targets for both growth and employment appeared to be feasible and it is likely that these targets including equilibrium in the balance of payments and price stabilization will be attained. Because there is no sign of achieving self-sufficiency in capital and technology yet, it is unclear whether these two targets can be attainable in the process of rapid growth. The conditions for future growth in the Korean economy lie in this point and, in fact, this is closely related to the substance of the Korean economy.

V. Conditions of 'Real' Economic Growth

In the previous discussion the positive and negative effects of the rapid growth led by export expansion were analysed in detail. Next we will examine the necessary conditions for creation of a virtuous circle through such a policy.

Current government policies focus on the realization of self-sufficiency in a stable economy through the following measures: (1) increasing income, domestic savings, and exports, (2) creating a surplus in the trade balance through import substitution, and (3) stabilizing policies by increasing the supply of commodities while sustaining rapid growth led by exports. However, as described earlier, in the second stage of growth where infant industries still exist in the light manufacturing sector, and where the heavy and petro-chemical manufacturing sector in particular is still being developed, growth and employment may continue to increase but import restrictions, price restraints and increased domestic savings will be beyond the capability of the Korean economy, unless total factor productivity expands rapidly using advanced technology. Regarding domestic savings, it is difficult

to predict its movement, since the propensity to consume will increase because of the outward-looking demonstration effects and of the present policy aiming at expanding gross domestic demand. The export performance will be sizable, but relevant prices and marketing conditions will be hardening abroad, compared with light manufactured goods. For the production of heavy and chemical manufactured goods, imports of producer's goods and intermediate goods are difficult to reduce and huge funds are required for the production and export of such heavy and chemical manufactured goods. In addition, there will be a fear of augmenting the inflationary effect rather than the productive effect, because both the gestation period of capital and the period for such non-production factors as investment insurance will be lengthened.

If domestic absorption and dissemination of introduced foreign technology occur quickly and, as a result, technological development is achieved domestically, the balance of payments will be improved by curbing imports and expanding exports. Furthermore, domestic saving will be increased by the accumulation of surplus value, maintaining price stability by low production costs. Again, if heavy and chemical industrialization is achieved successfully by raising the technological standard, 'real' growth of self-sufficiency in the Korean economy appears feasible. In this regard, if social development and the resulting equitable distribution of income were realized, it goes without saying that 'real' economic growth would result.

However, since the present Korean economy has not yet turned the corner in terms of growth, say, still goes on the stage of knife edge rather than that of turnpike, it is now time to exercise considerable caution in the management of the nation's economy. At this turning point, we must continuously follow an outward-looking development strategy by deepening dependence on other countries in order to attain the targets for the Korean economy. Unless economic efficiency and productivity especially in the heavy and chemical industries are increased, making it possible to secure technological growth and self-sufficiency, to increase domestic savings and expand exports to a satisfiable extent, however, the economy cannot reach its desired level without difficulties.

VI. Concluding Remark

The Korean economy at present is at a very significant turning point, moving towards self-sufficiency through growth. The mainstays of the Fourth Five-Year Economic Development Plan during 1977—1981 imply the promotion of heavy and chemical industries, the enhancement in productivity and efficiency, the build-up of an endogenous reproduction structure, direct combination of money supply and production, a reduction in economic and non-economic leakages, and domestic absorption and quickened dissemination of foreign technology.

Meanwhile, it is true that a number of harmful effects on the activities of the nation which had been overshadowed before the oil crisis in October 1973 by the rapid growth in the Korean economy were largely eliminated after 1976, when Korea recovered from recession. However, from the beginning of 1977 it can be said that this country stands on a crossroad whether or not the Korean economy can be settled self-sufficiently by the effects of growth to come.

Concerning the growth in the Korean economy, growth and employment were successfully corroborated in the recent past, following a modified export oriented-growth model and the possibility of price stability and of the improvement in the balance of payments can be gradually identified, but it appears that the Korean economy is still far away from its self-reliance. In contrast to the process of growth in Japan and Taiwan, it can be argued that these aspects are characteristics of the Korean economy today and how to overcome difficulties being implied in the Korean economy in the next five years is the greatest task to be tackled in the process of economic growth in Korea.

Appendix

Table 1. Korea : Basic Statistics of the Korean Economy (1976 and 1981 compared with 1962)

Economy Scale	Unit	1962	1976	1981
GNP	US \$ million at Current Market Prices	2,871	22,485	49,878

Economy Scale	Unit	1962	1976	1981
Per Capita GNP	US \$ million at Current Market Prices	87	627	1,284
Growth Rate of GNP	For 1962—76 at 1970 Constant Market Prices (%) For 1981 at 1975 Constant Market Prices(%)	3.1	8.0	9.0
Agriculture, Forestry, and Fishery		-5.8	4.0	4.0
Mining and Manufacturing		14.1	13.5	12.8
Social Overhead Capital and Other Services		8.9	5.6	8.2
Industrial Structure	For 1962 at Current Market Prices (%)			
The Entire Industries	For 1976—1981 at 1975 Constant Market Prices (%)	100	100	100
Agriculture, Forestry, and Fishery		36.6	25.8	18.6
Mining and Manufacturing		16.5	29.5	37.5
Social Overhead Capital and Other Services		46.0	44.3	42.9
Investment and Savings Rates	For 1962 at Current Market Prices (%) For 1976—1981 at 1975 Constant Market Prices (%)			
Investment Rate		13.0	26.9	25.4
Domestic Saving Rate		1.6	18.9	24.0
Foreign Saving Rate		10.9	8.0	0.5
Statistical Discrepancy		0.5	—	—
External Transactions				
Merchandise Exports	US \$ million at Current Market Prices	55	6,500	17,420
Merchandise Imports	"	390	7,414	16,639
Invisible Receipts	"	108	1,051	3,885
Invisible Payments	"	65	1,762	4,850
Foreign Saving	"	292	1,625	190

Notes : GNP for 1962 is the amount in which an implicit price deflator 22.04 of 1975 GNP was applied in gross value of GNP at 1970 constant market prices.

Sources : Derived from *the Statistical Yearbook*, UN, 1976.

Balance of Payments Yearbook, IMF, 1976.

Economic Statistics Yearbook, Bank of Korea, 1976

The Fourth Five-Year Economic Development Plan, Economic Planning Board, 1976,