The Comparison of Trade Policies and Patterns between Japan and Korea

Sungsup Rhee
Soongsil University

During the period of rapid growth (1955-73), Japan's industries entered into the new stage of development, while trade structure reflected the enhanced structural pattern and made a successful achievement of technology imports or innovations. Such a rapid advancement was made possible by facility investments, technological enhancement, extension into new markets, and development of new products. The stabilization of price and efficient allocation of resources, which contributed to the eradication of economic inefficiency, may be prime factors which deserve credit for such superb economic performance.

I. Introduction

The Japanese economy, after the boom of Korean War in the early 1950s, continued to experience economic booms, i.e. the record-high (10.8%) growth in 1955, Jinmoo Boom in the years of 1956-57 and Iwado Boom in the years of 1959-61 and gained momentum to open the Era of High Growth, which had been sustained through the 1960s. The Era of High Growth, which commonly believed to have begun in 1955, is acknowledged to have made qualitative as well as quantitative changes in the economic features of Japan, while Japan recovered from the war up to the level of pre-War standard before the advancement of the Era.

This paper purports to illuminate the role of international trade in economic growth and interactive relations between trade and growth in Japan with poor natural endowments. Moreover, this paper attempts to investigate the administrative mode of economic policies to lead such patterns of economic growth.

The configuration of similarities and differences in economic conditions between Japan and Korea bears significance on economic

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policy managements in Korea, since Korea's growth pattern often considered to resemble that of Japan and keen attentions were paid on the history of Japan's economic policy manipulations to learn lessons for policy developments in Korea.

Section II of this paper investigates distinctive features of the Japanese economy in terms of macro-economic indicators, while section III gives a review on trends of Japan's trade pattern. Section IV attempts to detect contributing factors which enhanced the international competitiveness of Japan's industries. Section V discusses measures of efficient resource movements among sectors which made speedy industrial restructuring possible during the period of rapid economic growth. Section VI describes the implementation process of trade liberalization and discusses accompanying complementary industrial policies which were introduced to make up for side-effects of import liberalization. Section VII introduces export promotion policies of Japan and discusses their explains effects. Attempts were undertaken to measure the biasedness of trade policies to determine if they have the outward-looking or inward-looking feature. Each section of the paper compares Japan's statistics with Korea's to understand growth patterns of Japan's economy from the Korean viewpoint.

II. Macro-Economic Indicators of Japan during the Era of Rapid Growth

Economic changes, during the period of High Growth from 1955 to the Oil Shock of 1973, seemed to bear several distinctive features, some of which are revealed in trends of macro-economic indicators of the Japanese economy. Table 1 shows that the national income of Japan had grown annually at two-digit level rates on average during this period. Such trend of high growth had been sustained until 1973 when the First Oil Shock hit the normal progress.

A. Low Dependence upon External Trade

During the same period, Japan's exports achieved the excellent record of growth, which outperformed the growth of real national income in terms of growth rate in most years. It reflects vigorous activities of exports in this period enough to serve as a source of economic growth in Japan. Nevertheless, trade dependence ratio of

TABLE 1

MACRO-ECONOMIC INDICATORS OF THE HIGH GROWTH PERIOD

(Unit : %)

Year	Growth rate of exports	Growth rate of imports	Growth rate of GNP (real)	Current account balance (mill. $)	Trade balance (mill. $)	Trade dependency ratio[1)]	Inflation rate[2)]	Unemployment rate
1950	60.9	7.7	—	—	—	—	—	1.2
1951	65.2	104.8	—	—	—	—	16.1	1.1
1952	−6.1	1.7	—	—	—	19.1	4.0	1.2
1953	0.16	18.8	8.1	—	—	18.1	7.5	1.1
1954	27.8	−0.5	2.7	—	—	18.6	5.6	1.5
1955	23.4	3.0	10.8	—	—	18.2	−1.5	1.6
1956	24.4	30.7	7.8	—	—	20.8	0.9	1.5
1957	14.3	32.6	8.8	−384	−553	22.9	3.0	1.2
1958	0.7	−29.2	3.4	511	372	18.1	1.0	1.3
1959	20.1	18.7	11.7	339	271	18.7	1.4	1,.5
1960	17.3	24.8	13.2	143	268	19.0	3.6	1.1
1961	4.5	29.4	12.2	−982	−558	18.3	5.3	1.0
1962	16.1	−3.0	5.1	−48	401	17.5	6.5	0.9
1963	10.9	19.5	10.7	−780	−166	17.3	8.7	1.3
1964	22.4	17.8	10.0	−480	377	17.7	3.9	1.16
1965	26.7	2.9	3.8	932	1,901	17.9	6.7	1.19

TABLE 1
(CONTINUED)

(Unit : %)

Year	Growth rate of exports	Growth rate of imports	Growth rate of GNP (real)	Current account balance (mill. $)	Trade balance (mill. $)	Trade dependency ratio[1]	Inflation rate[2]	Unemployment rate
1966	15.7	16.6	11.4	1,254	2,275	17.8	5.1	1.33
1967	6.8	22.5	11.1	−190	1,160	17.3	4.0	1.26
1968	24.2	11.4	13.0	1,048	2,529	17.0	5.3	1.16
1969	23.3	15.7	12.1	2,119	3,699	17.1	5.3	1.11
1970	20.8	25.7	8.3	1,970	3,963	18.2	7.6	1.14
1971	24.3	4.4	5.3	5,797	7,787	16.7	6.1	1.23
1972	19.0	10.1	9.7	6,624	8,971	16.3	4.5	1.4
1973	29.2	63.2	5.3	−136	3,688	18.1	11.7	1.3
1974	50.4	62.1	−0.2	−4,693	1,438	25.7	24.5	1.4
1975	0.4	−6.8	3.6	−682	5,028	22.8	11.8	1.9
1976	20.5	11.4	5.1	3,680	9,887	22.7	—	2.0
1977	19.7	9.3	5.3	10,918	17,311	19.2	—	2.0
1978	21.2	12.1	5.1	3,680	9,887	22.7	—	2.2
1979	5.6	39.5	5.3	−8,754	1,845	23.1	—	2.1
1980	26.0	27.0	4.1	−10,746	2,125	—	—	2.0

Source : Nihonginko (Bank of Japan), *Annual Reports on Economic Statistics*, each year.
Note : 1. (Exports + imports)/nominal GNP
2. Growth rates of Consumer Price Index

Japan, measured by the formula, (imports + exports)/nominal GNP, remained within 17 to 18 percent level.

Such level of trade dependence may look high in comparison to the level of big country such as U.S. which remains at about 10 percent, whereas it is significantly small in comparison to Korea's average level of around 70 percent. Such a low trade dependence ratio of Japan implies that, unlike the case of Korea where the source of economic growth came mostly from foreign markets, Japan relied upon domestic market as the driving force of economic growth along with foreign trade which played a minor role.

An important difference in growth patterns between Japan and Korea stems from the difference in sizes of domestic market. In the early years of economic development, the domestic market of Korea was insufficient to take the role of driving force in economic growth. On the other hand, the domestic market of Japan remained sufficiently large for development. Hence, even before the expansion into export markets, the economies of scale could be sufficiently reaped in Japan. Driving forces of economic growth arising from improvements of productivity, technology development, invention of new products, and rationalization in business managements were obtained through competition among domestic firms to increase domestic market shares.

B. Low Inflation Rates

Another feature distinguishing Japan's growth model from Korea's is the rate of inflation. A rapid economic growth of Japan was carried out on the basis of price stabilization, whereas the Korean development accompanied inflation.

Table 1 reveals that inflation rates of Japan were controlled below 10 percent in terms of consumer price index from the 1950s until the first oil shock and had remained around 5-6 percent in most of period. In Korea, inflation rates remained in two digit level during the high growth period from the 1960s to the 1980s.

From the early stage of growth, Korea had to take outward-looking approach to successfully initiate development process, so that compensatory measures should be provided in order to lessen the risks of firms engaged in overseas businesses. Such a compensation was offerred to exporting firms in the form of credit availability in the financial market where inflation generated forced saving and demands for bank loans always outrun the supply of funds.

Consequently, the high level of inflation was an instrument in relocating resources to exporting industries. However, the distortions in resource allocation due to inflation was an unavoidable side-effect of inflation-driven export promotion strategy.

Japan is different from Korea in this light. Japan could successfully sustain price stability all through the High Growth Period, so that market mechanism could efficiently function to facilitate resource allocation without being impaired by high growth promotion policies.

C. Defence of Balance-of-Payment Account

As is revealed in Table 1, the balance-of-payment account in Japan could achieve a stable surplus position in as late as the late 1960s. By that time the defence of balance-of-payment account had been one important objective of trade policy. Such a defensive position in trade policies gradually changed as Japan began to enjoy surplus in balance-of-payment account. Japan's transfer to the status of IMF Article 8 as well as its acquisition of OECD membership in 1964 marked the milestone for Japan's unswerving progression into the full-fledged import liberalization.

III. Trade Pattern of Japan

A. Changes in Industrial Composition of Japan's Exports

Table 2 shows transitional changes in industrial composition of Japan's exports since the 1950s up to the year previous to the first oil-shock in 1973. A distinctive feature in trends of industrial composition of Japan's exports since the 1950s is that industrial composition got oriented strongly toward heavy-chemical domination or technological intensification.

The share of food products in total exports decreased from 7-8 percent in early 1950s to less than 3 percent in early 1970s. It is textile products that experienced the most conspicuous decline in their share during this period, from 30-40 percent in the 1950s to 10 percent level in the 1970s. Considering that clothing and textile belong to the typical light industry, the sizable decline of clothing and textile products seems to typify the shift in industrial composition of Japan's exports.

During this period, machine products demonstrated the most siz-

TABLE 2

CHANGING TREND IN INDUSTRIAL COMPOSITION OF JAPAN'S EXPORTS

(Unit : %)

Year	Total	Agricultural products	Clothing & textiles	Chemical products	Nonmetallic products	Metallic products	Machine products	Others
1950	100	6.3	48.6	1.9	3.7	18.5	9.9	11.0
1951	100	5.1	46.5	2.7	4.4	22.1	8.1	11.1
1952	100	7.8	35.5	3.1	4.5	26.8	8.6	13.6
1953	100	10.3	36.1	4.9	4.6	14.6	14.8	14.7
1954	100	8.3	40.3	4.8	4.2	15.3	12.4	14.6
1955	100	6.8	37.3	4.7	4.2	19.2	12.3	15.6
1956	100	7.2	34.8	4.3	4.6	13.6	19.3	16.2
1957	100	6.4	35.5	4.4	4.1	11.3	22.0	16.8
1958	100	7.9	31.0	5.1	4.1	11.8	23.6	16.9
1959	100	7.3	29.8	5.1	4.1	13.0	22.0	18.3
1960	100	6.3	30.2	4.5	4.2	14.0	22.9	18.0
1961	100	5.9	27.3	4.8	4.0	13.4	26.1	18.5
1962	100	6.9	25.6	5.3	3.8	15.1	25.1	18.2
1963	100	5.3	22.9	5.8	3.9	17.3	27.0	17.8
1964	100	4.8	21.4	5.7	3.6	18.0	29.3	17.0
1965	100	4.1	18.7	6.5	3.1	20.3	35.2	12.1
1966	100	3.9	18.0	6.8	2.9	18.3	33.4	11.7
1967	100	3.6	16.3	9.6	2.8	17.0	41.2	11.6
1968	100	3.3	15.2	6.2	2.5	18.1	43.6	11.0
1969	100	3.6	14.2	6.4	2.4	18.4	44.5	10.5
1970	100	3.4	12.5	6.4	1.9	19.7	46.3	9.9
1971	100	2.8	11.5	6.2	1.6	19.0	49.4	9.5
1972	100	2.3	10.2	6.2	1.7	17.0	53.8	8.7

Source : Tsushoangyosho (MITI), *White Papers of Trade and Commerce,* each year.

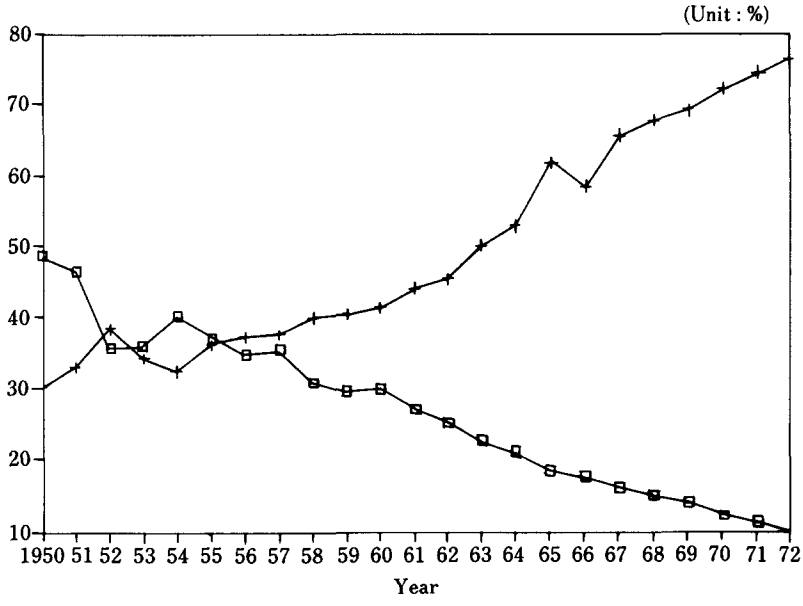

FIGURE 1
THE COMPOSITION OF LIGHT AND HEAVY-CHEMICAL INDUSTRIAL EXPORTS

able increase in export composition. Machine products are of typical heavy-chemical class and would be considered to be combined products by capital intensive and high-tech intensive production technology. In the early 1950s, exports of machine products did not exceed the range of more or less 10 percent in their share. However, their share continued to increase reaching about 50 percent of total exports by the early 1970s.

Exports of metal products, which also belong to heavy-chemical industry continued to lose their share all through the 1950s after the peak arising from the Korean War, but began to increase their share in the 1960s reaching about 20 percent of total exports by the early 1970s. The share of chemical products continued to rise from less than 3 percent in the early 1950s and came to exceed 6 percent by the late 1960s. Exports of other nonmetallic mining products had remained insignificant from the beginning and even further reduced their share afterwards to reach less than 2 percent by the early 1970s.

Figure 2 depicts the trend of share of heavy-chemical products

TABLE 3
INTERNATIONAL COMPARISON OF ELASTICITY MEASURES OF EXPORT-DEMAND FUNCTIONS

Authors	Countries	Estimation period	Income elasticity	Price elasticity	*Information sources*
Sasaba[1]	Japan	1965~77	1.736	−1.144	Sasaba (1980, p. 129, Table 4-8)
	Japan	1974~77	1.403	−0.814	
	U.S.	1961~77	0.859	−0.314	
	U.K.	1961~77	0.733	−0.477	
	Germany	1961~77	1.124	0.196	
Houth-akker and Magee	Japan	1951~66	3.55		Ito and Seino (1984, p. 135)
	U.S.	1951~66	0.99		
	U.K.	1951~66	0.86		
	Germany	1951~66	2.08		
Yamazawa[2]	Japan	1953~70	1.4996[3]	−2.1252	Yamazawa (1983, p. 46, Table 2-1)
	Japan	1970~80	1.49[3]	−0.35	
Yang	Korea	1970~84	3.166	−1.729	Yang (1985)
Yoo	Korea	1972~82	4.97	−2.68	Yoo (1984)

Note: 1. Regression results on export volume indexes.
2. Regression results on export volume of manufacturing products.
3. Regression results using the world trade volume as an independent variable.

which are composed of chemical products, metal products, and machine products. In Figure 2 this trend is compared with the trend of share of clothing and textile products, which are major light industrial products. In fact, these four industries account for more than 80 percent of total manufacturing exports.

By 1972, the combined share of three heavy-chemical products reached 75 percent of total exports, while the share of clothing and textile reduced to about 10 percent. This implies that the structural composition of Japan's exports had been highly industrialized.

B. International Comparison of Export Demand Functions

The Comparison of elasticity coefficients of export and import functions of Japan with those of other countries is one effective method to investigate the trade pattern. Table 3 shows elasticity coefficients of several countries including Japan and Korea which

were obtained from regression estimations of their export demand functions.

A) Price Elasticity of Japan's Exports

The price elasticity of Japan's export demand, as was discovered from Sasaba's estimations, turned out to be elastic, i.e. 1.144, which would be significantly high in comparison to the cases of other advanced countries. Price elasticities of Japan's export demand functions seem to be declining in the 1980s.

The high price elasticities of Japan's export demand functions reflect the high sensitivity of Japan's exports to change of their relative prices. Among possible explanations which justify such elasticity coefficients, the high composition of manufactured goods in Japan's exports, compared to the cases of other advanced countries, is considerably plausible. For instance, in the United States, the composition of agricultural products in total exports is large, which tends to lower price elasticities of overall exports.

Moreover, Japan initiated industrialization in the later stage than other advanced countries. That is, Japan had to stay in competitive relations, particularly in terms of product prices, with other advanced countries, because Japan had to imitate product designs and other product qualities of forerunner countries and penetrate into their domestic markets. Therefore Japan had to rely more on exports of manufacturing products, particularly machine tools, electric and electronic products, and metal products whose advantageous position in price competitiveness could be fully made use of.

B) Income Elasticity of Japan's Exports

The demand for Japan's exports is known to be income-elastic, as is confirmed by Sasaba's estimation of Japan's export demand functions (see Table 3). According to Sasaba's estimation, the income elasticity of Japan's export demand turned out to be considerably elastic (1.736).

The high income elasticity of Japan's export demand implies that Japan's exports rely heavily on commodities with high income elasticity, which in turn means that Japan's export industries reveal structural pattern heavily reliant on industries with high income elasticity. Such mode of industry composition would be a typical feature often found in the industrial structure of late starters among industrial countries. On the other hand, it may be the outcome of Japan's industrial policies which adopted the magnitude of

income elasticities as the criteria of selecting industries for fostering.[1]

C. Comparison of Export Demand Functions of Korea and Japan

A) Price Elasticity of Export Function

Korea's export demand functions have higher price elasticities than Japan's. For instance, according to the estimations of Yang (1985) and Yoo (1984), the elasticities of Korea's export demand functions which are 1.729 and 2.68 respectively outnumber those of Japan's export demand functions. Such results may reflect that Korea, like Japan, is a late starter in the industrialization launch. Most of all, however, the export industry of Korea depends heavily on manufacturing based on processing and economies of scale, while export products are bound to be sold in the markets of advanced countries on the basis of price competitiveness due to low wage. All of these make Korea more reliant on industrial subsectors with high price-elastic demands.

B) Income Elasticity of Export Function

The income elasticity of Korea's export function is higher than that of Japan's export function. For instance, the estimations of Yang and Yoo indicate higher elasticity coefficients of Korea's export demand functions, for 3.166 and 4.97 respectively. Such results indicate that the export products of Korea consist mainly of *products demand pattern* of which increase rapidly with the growth of national income. Because Korea has to seek economic growth from export expansion, it is unavoidable to persistently rebuild export industries by industrial subsectors with the high income elasticity of demand.

D. Changes in Industrial Composition of Japan's Imports

Table 4 shows the changes of industrial composition of Japan's imports from the 1950s to the 1970s. The most distinctive feature in the industrial structure of Japan's imports is that most of Japan's imports consist of manufacturing raw materials, mineral fuels, and food materials. As major items of manufacturing raw materials, raw materials for textile manufacturing had rapidly lost their share from 30–40 percent of total imports in the 1950s to 4–5 percent in

[1]Ito and Seino (1984, p. 135).

TABLE 4

CHANGING TREND OF INDUSTRIAL COMPOSITION IN JAPAN'S IMPORTS

(Unit : %)

Year	Total	Agricultural products	Intermediate inputs of textile manufacturing	Intermediate inputs of metal production	Non-metallic products	Mineral fuels	Chemical products	Machine tools	Others
1950	100	31.9	37.9	1.8	14.8	5.5	4.1	0.8	3.1
1951	100	25.2	39.2	4.7	16.2	8.0	2.5	2.9	1.2
1952	100	30.4	30.2	7.2	9.8	11.5	2.7	4.5	3.7
1953	100	25.9	28.3	7.2	9.8	11.5	2.7	4.5	3.7
1954	100	27.2	26.6	7.1	12.0	11.1	3.9	7.4	4.6
1955	100	25.3	24.3	7.5	16.4	11.7	4.6	5.4	4.8
1956	100	17.3	24.7	14.1	14.1	12.8	5.1	5.0	6.9
1957	100	13.4	19.3	16.2	11.4	15.9	4.3	6.7	12.8
1958	100	17.5	20.0	8.5	15.3	17.0	5.5	11.3	5.0
1959	100	13.8	17.7	13.8	17.7	15.5	6.1	9.8	5.6
1960	100	12.2	17.0	15.0	17.2	16.5	5.9	9.0	7.2
1961	100	11.5	16.4	16.5	15.1	16.0	5.8	10.3	8.4
1962	100	13.1	13.2	12.6	16.7	18.5	5.3	13.6	7.0
1963	100	16.1	13.1	11.4	16.9	18.0	5.5	11.9	7.1
1964	100	17.5	11.0	12.2	15.8	17.8	5.8	10.4	9.6
1965	100	18.0	10.4	12.5	16.6	19.9	5.0	9.3	8.4
1966	100	17.6	9.7	12.7	18.3	18.9	5.2	8.6	9.0
1967	100	15.5	7.7	13.7	17.1	19.2	5.2	9.0	12.5
1968	100	14.5	7.3	12.7	17.4	20.6	5.3	10.2	11.9
1969	100	14.2	6.2	13.1	16.7	20.3	5.2	10.9	13.4
1970	100	13.6	5.1	14.2	16.0	20.7	5.3	12.2	12.9
1971	100	14.8	4.9	12.8	14.8	24.1	5.1	12.2	11.3
1972	100	15.4	5.7	10.6	14.3	24.4	4.9	11.0	13.7

Source : Tsushoangyosho (MITI), *White Papers of Trade and Commerce,* each year.

the early 1970s. However, the share of raw materials for metal products increased from 2-4 percent in the early 1950s to 16.5 percent in 1961, but it decreased again to 10 percent level in the early 1970s.

The share of mineral fuels from about 10 percent in the 1950s to more than 20 percent in the early 1970s. As the consequence of economic growth and import expansion, the share of agricultural imports had lost its relative significance, namely from 25-30% in the 1950s to 15% in the early 1970s.

The share of manufacturing product importation consistently increased, though its relative share still remains small. Looking more detailed data, we find that the share of chemical products remained stable around 5 percent of total imports, while the import share of machine products increased from 5 percent in the early 1950s to 10-12 percent in the early 1970s.

E. International Comparison of Japan's Import Demand Function

A) Price Elasticity of Japan's Import Demand

Table 5 contains the list of price elasticities estimated from the import demand functions of selected countries. The price elasticity of Japan's import demand is 0.78 according to Stern and Schumacher's estimations of total imports, and 1.42 when the estimation was conducted for statistics of manufacturing imports. According to Yamazawa's estimations, the price elasticity was 0.4801 for the period of 1953-70 and 0.2802 for the period of 1970-80.

Such elasticities of Japan's import demand are considered to be relatively low in comparison to those of import demands of other industrial countries. The low elasticity of Japan's import demands stems from the fact that Japan's imports are limited to essential necessities. As was noted earlier, Japan's imports consist mostly of natural resources, mineral fuels, manufacturing raw materials, and agricultural products, so that there is little room for changing import in response to price variations. On the other hand, in other advanced countries, the significant proportion of imports is composed of manufacturing products for end-users, so that there is larger room for adjusting import demand in response to price fluctuations.

B) Income Elasticity of Japan's Imports

Like the price elasticity, the income elasticities of Japan's im-

TABLE 5
INTERNATIONAL COMPARISON OF ELASTICITY MEASURES OF IMPORT-DEMAND FUNCTIONS

Authors	Countries	Estimation period	Income elasticity	Price elasticity	Information sources
Stern and Schumacher	Japan	Commercial tariff data in 1974		-0.78^1 -1.42^2	Stern, Francis and Schumacher (1976, p. 20)
	U.S.	〃		-1.66^1 -1.84^2	
	U.K.	〃		-0.65^1 -1.22^2	
	Germany	〃		-0.88^1 -2.53^2	
Houthakker and Magee	Japan	1951~66	1.23		Ito and Seino (1984, p. 135, Table 2-1)
	U.S.	1951~66	1.51		
	U.K.	1951~66	1.66		
	Germany	1951~66	1.8		
Yamazawa[3]	Japan	1953~70	1.7012	−0.4801	Yamazawa (1983, p. 46, Table 2-1)
	〃	1970~80	1.8421	0.2802	
Yang	Korea	1970~84	1.307	−0.16	Yang (1985)
Yoo	Korea	1972~82	1.6	−0.68	Yoo (1984)

Note: 1. Elasticities of the aggregate import.
2. Elasticities of manufacturing output.
3. Regression results on manufacturing output.

ports are low in comparison to those of other advanced industrial countries. According to Houthakker and Magee, the income elasticity of Japan's import demand (i.e. 1.23) was lower than those of the United States, Britain, and West Germany while it was 1.7012 for the years of 1953-70 or 1.8421 for the years of 1970-80, according to Yamazawa's estimations.

The income elasticities of Japan's import demand were higher in the post-1970 period than in the pre-1970 period, which seems to be affected by the upsurge of imports of manufacturing products due to Japan's departure from balance-of-payment deficit as well as the full-fledged implementation of import liberalization.

F. Comparison of Import Demand Functions of Korea and Japan

A) Price Elasticity of Import Demand Function

Korea's import demand function has low price elasticities, like those of Japan. Table 5 shows the estimations of Yang and Yoo, which are 0.16 and 0.68 respectively. Estimated numbers do not provide sufficient information to find a clear distinction between the elasticity coefficients of two countries. However, common feature of two countries is that the price elasticities of import demands remain relatively low in both countries.

Such results stem from the fact that in Korea as well as in Japan, the large share of import commodities are composed of commodities, such as manufacturing raw materials and mineral fuels, import demands of which are not sensitive to price fluctuations. Moreover, in Korea, most of imports, though they are classified as manufacturing products, are intermediate inputs or parts and investment facilities, which are essentially required for domestic manufacturing production. All these factors account for low price elasticities.

B) Income Elasticity of Import Demand Function

The income elasticities of Korea's import demand were measured by Yang and Yoo as 1.307 and 1.60. The low values of income elasticities of import demand, in comparison to those of other countries, are similar to Japan's case. Such outcome is due to the fact that imports are composed of intermediate parts for manufacturing production and investment facilities etc., which deters the flexible response of import demand to income changes, unlike the case of imports with a large composition of consumer durables.

IV. Conditions of International Competitiveness

This section intends to investigate the factors of international competitiveness of Japan's exports which made rapid export growth possible. At first, the investigation will be made to understand the trend of commodity terms of trade in international commodity markets. Then, the changes in real exchange rate, real wage of manufacturing sector, and labor productivity will be examined as determining factors of Japan's export competitiveness. Figure 2 depicts the changes of these four variables measured in indexified numbers.

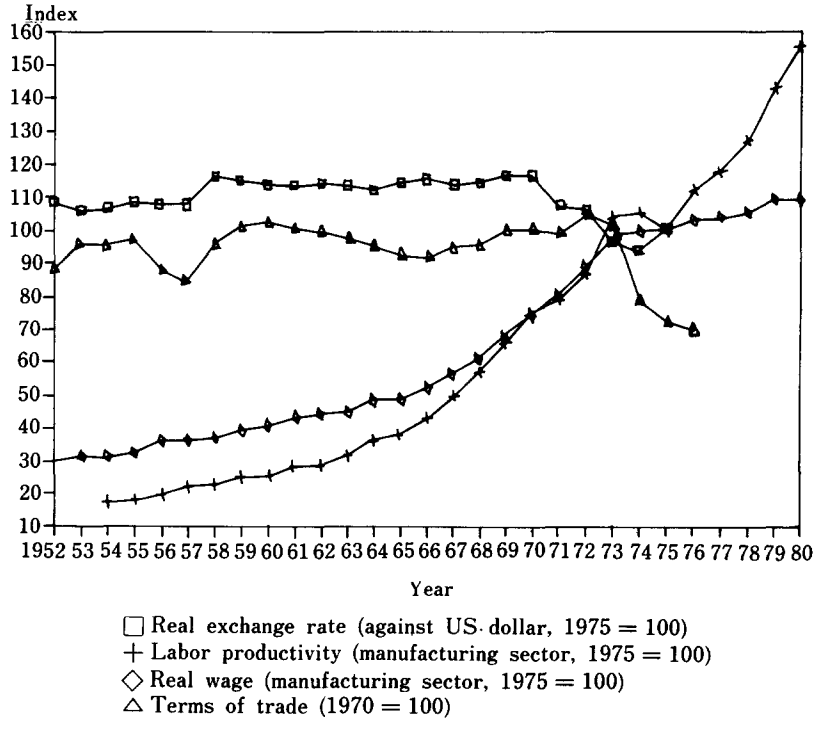

FIGURE 2
REAL EXCHANGE RATE, LABOR PRODUCTIVITY, REAL WAGE, AND TERMS OF TRADE

A. Changes in the Terms of Trade

The commodity terms of trade, which is determined by dividing export unit value index by import unit value index, remains relatively stable during the period from 1951 to the First Oil Shock. In other words, its variations are very limited to the narrow confines without any uni-directional indication. The lack of any uni-directional changes in commodity terms of trade implies that the decline of relative prices of Japan's exports can hardly be regarded as a determinant factor to promote rapid export growth of Japan.

B. Changes of Real Exchange Rates

In this paper, the computation of real exchange rates was conducted by comparing Dollar of the U.S. with Yen of Japan, without considering other currencies. Besides computational expediency, the real exchange rate trend thus computed carries a lot of significance,

when we consider the weight of Japan–U.S. trade.

The trend of real exchange rates in Figure 2 seems to indicate the realization of gradual any yet slow depreciation of Yen during the years between 1950 and 1970. Such a slow depreciation of Yen in real exchange rate terms is considered to have unambiguously made favorable impacts on the export expansion up to 1970, although such Yen depreciation trend reversed drastically after 1970.

C. Changes in Real Wages and Labor Productivity

Figure 2 depicts the trend of consistent and fast increase of real wages in manufacturing sector since the 1950s, which no doubt hurt the export competitiveness. However, labor productivity outgrew real wage increase in manufacturing sector. In other words, despite the rapid growth of real wage rates, export competitiveness could be enhanced during this period due to faster growth of labor productivity.

Such a pattern of industrial development may be desirable. A rapid growth of real wage rates, which enhanced welfare standard of individual workers, had been compensated by even faster growth of labor productivity. Thus, the industrial competitiveness was strengthened, though the international terms of trade fluctuated within the stable range, without any definite sign of directions. In addition, the meager and yet consistent depreciation of the real exchange rate occurred throughout this period.

The credit for such desirable results should be given to the ability of the Japanese economy to maintain price stabilization in the course of economic development in the High Growth Period. For only price stabilization could secure economic foundation to pursue such positive outcome at the same time. Besides the Japanese government could effectively take initiatives to drive industrial policies to promote a smooth transformation of industrial structure and improve labor productivity.

V. Efficiency of Factor Movement across Industries

In an economy where the market force functions to conduct interindustrial resource allocation, the interindustrial difference of profit rates would not exceed the range of deviations stemming from either institutional differences or inherent risk structure. Even if interindustrial resource allocation is dictated by the price mechan-

ism in a capitalistic society, the effectiveness of market force as the arbitrator of interindustrial resource allocation differs in each country according to its institutional or societal structures.

The sizable deviations of profitability between industries cannot be sustained in an economy with well-developed markets of production factors and well-functioning market mechanism. The development of factor market and efficient functioning of market mechanism tend to facilitate outflow of resources from industries with low profit rates of investments. Resources thus mobilized tend to move into industries with prospects of high profitability, and the leveling-off process of interindustrial differences in profit rates would proceed.

Institutional and social features are different in each country, so that countrywise differences in the profitability of industrial investments are prevalent. Moreover, the range of interindustrial distributions in profit rates differs in each country, with low variance parameters of interindustrial distribution of profit rates in a country with well-developed factor marekts and efficient price mechanism.[2]

In Table 6 the intersectoral profit rates in manufacturing industry between Korea and Japan are compared. Manufacturing industry in Japan was classified into 13 sectors, whose variance parameters and means were computed annually for the intersectoral distribution of profit rate. On the other hand, manufacturing industry in Korea was classified into 30 sectors, whose means and variance parameters were computed annually for the ratios of profit rates to total assets. Although due to the disparity in the concept of investment profitability it is almost impossible to compare the mean values of profit rates across countries, the countrywise comparison of variance values for the ratios of profit rates to investments is valid.

In Japan, the variance estimates of the ratio of profit rates to sales in manufacturing sector seem to have remained stable at low values since 1963. Such a stable trend of intersectoral variations of profit rates, particularly since 1963, may be accounted for by the same factors that had contributed to the stability of macro-economic performance, as well as by the improved functioning of resource allocation mechanism due to the import liberalization and capital movements after 1964.

[2]In the Korean case, the interindustrial distribution of profit rates tends to yield lower parameter coefficients according as the economy stabilizes and price mechanism functions more effectively in production factor markets. See Rhee (1988) for details.

TABLE 6
INTERSUBSECTORAL DISTRIBUTION OF PROFIT RATES TO INVESTMENTS IN THE MANUFACTURING

(Unit : %)

Year	Japan[1]		Years	Korea[2]	
	Profit rates to sales	Variance		Profit rates of total assets	Variance
1956	7.5	3.7	1975	3.9	19.4
1957	8.1	3.9	1976	4.6	29.8
1958	6.9	6.8	1977	4.5	31.9
1959	7.5	5.7	1978	5.0	18.1
1960	8.6	5.3	1979	3.4	14.7
1961	8.7	4.4	1980	−0.2	22.8
1962	7.1	8.6	1981	0.0	21.8
1963	7.8	2.8	1982	1.0	12.0
1964	7.0	3.0	1983	3.3	11.4
1965	6.5	1.9	1984	3.4	10.1
1966	7.2	3.2			
1967	7.9	3.2			
1968	7.8	3.3			
1969	7.9	3.2			
1970	7.3	2.4			
1971	6.1	1.7			
1972	6.6	2.4			
1973	8.4	3.5			
1974	6.6	3.9			
1975	3.8	1.6			

Source : 1. Okurasho, *The Financial Monthly Report,* each issue of years concerned.
2. Rhee (1988).

Note : 1. Data on profit rates to sales were collected from 13 subsectors of manufacturing industry in case of Japan.
2. Data on profit rates to total assets were collected from 30 subsectors of manufacturing industry in case of Korea.

In Korea, the variance estimates of the ratio of profit rates to total assets in manufacturing sector are apparently low in the period after 1982, in comparison to those in the 1970s. Such results seem to have been affected mainly by the stabilization of price in the 1980s.[3]

The comparison of variance estimates of two countries shows lower values of Japan than those of Korea, though a reservation on the differences in industrial classification between two countries

[3]For detailed discussions on this feature, see Rhee (1988) again.

has to be considered. This implies the efficiency of interindustrial resource allocation in Japan in comparison to Korea's record, which owes much to the price stability successfully sustained in Japan during the High Growth Period.

VI. Import Liberalization and Complementary Industrial Policies

Due to foreign pressures calling for import liberalization, the Japanese people commonly recognized that the import liberalization is not merely beneficial to national interests of Japan but also unavoidable for harmonious trade relations with other countries in 1961. However, the Japanese government took a cautious position. The liberalization was carried out in industrial sectors where domestic firms have the competitive edge over foreign competitors, and the liberalization was stubbornly avoided when domestic firms are not ready to compete with foreign counterparts with respect to price or quality of products, until the Japanese firms gain competitiveness.

While industrial policies in the 1960s were conservatively implemented and trade and capital market liberalization was cautiously introduced to prevent damages of domestic industries, the significant attention was given to the establishment of new industrial structure which could cope with the liberalization. One major aim of Japan's industrial policies in the High Growth Period was to enhance the competitiveness of Japan's industries for the adjustment to the liberalized system and to establish new industrial structure to cope with difficulties arising from the liberalization.

A. Stepwise Approach to Import Liberalization

The import liberalization ratio was no more than 40 percent before 1961. In 1960, Japan announced "the Liberalization Plan for Commodity and Foreign Exchange Management" and publicized the blueprint for import liberalization. In April of 1962, Japan changed Annual Schedule for Liberalized Commodity Items from the positive-list system to the negative-list system and Japan's import liberalization ratio became 73 percent. In 1964, Japan's import liberalization ratio reached 93 percent. In 1964, Japan's membership at the International Monetary Fund was transferred into Article 8 status and Japan acquired the full-membership at the OECD.

Table 7 reports the progress of import liberalization which had

TABLE 7

GRADUAL IMPLEMENTATION OF IMPORT LIBERALIZATION

(Number of items: 4 digit items in BTN classification)

Year	Import liberalization ratio (%)	Not-liberalized items	Items protected by residual quantitative restrictions	Remarks
1960	40			Announcements of the guidelines of liberalization plan in trade and financial policies
1961	65			Import being liberalized to 740 items
1962	88		254	Change in the publication mode of liberalized-item list from positive-list system to negative-list system
1963	92	192		
1964	93	174		Transfer into Article 8 member country of IMF code, Acquisition of OECD membership
1966	93	158	126	Sweeping revision of tariff rate table
1967	93	167	124	
1969		163	120	
1970	94	141	98	
1971	94	123		
1972	97	79	33	
1973	97	83	32	
1974	97	82	31	
1975	97	83	29	

Source: Tsushoangyosho (MITI), *White Papers of Trade and Commerce,* each year.

been implemented in Japan in the 1960s. In terms of the import liberalization ratio, Japan already reached the state of advanced country with the ratio at 93 percent in 1964. However, the real features of Japan's import system can hardly be understood merely by the import liberalization ratios.

An institutional procedure associated with import monitoring institution of Japan, which affects the practice of import, is a foreign exchange system which dictates collective managements of foreign exchanges under the control of the Ministry of Finance. Since importers are required to apply for the allocation of foreign exchange necessary for their imports, screening procedure of foreign exchange allocation could be used as the effective monitoring mechanism to discourage unnecessary imports.

Japan's foreign exchange collective management system is legally based on "Foreign Exchange and Foreign Trade Management Law" (effective from December 1949 to January 1982), according to which all foreign exchanges earned from private businesses should be deposited in MOF (Ministry of Finance) account of individual foreign exchange bank. Following the classification scheme of import commodities, there are three ways to obtain foreign exchange.

The allocation of foreign exchanges for imports of commodities of the first classification group is determined by import quota (IQ) scheme, which determines the maximum quota assigned to each item of imports. The foreign exchange allocation to the second group of imported commodities is made according to the automatic import quota (AIQ) scheme, which requires the perfunctory approval. However, the quota limit to individual item of imports is flexibly adjusted, so that the applications for the allocation of foreign exchanges are mostly approved unless it impairs Japan's prospective structure of foreign trade or progess of national economy. Automatic approval (AA) scheme is applied to the third group. The request for foreign exchanges to import items belonging to this group is automatically approved. The import liberalization ratio is the ratio of number of commodity items belonging to AIQ and AA categories to total number of import items.

According to "Liberalization Plan for Commodity and Foreign Exchange Management," tradable goods are classified into the following four categories: i) commodities to be liberalized immediately, ii) commodities to be liberalized in the near future, iii) commodities to be liberalized in due course, iv) commodities hard to be liberalized for the time being. Commodities belonging to category i) con-

tain basic raw materials such as raw cotton and raw wools, the import liberalization of which is considered to reduce the production costs of industries. Besides, commodities such as iron and steel, and miscelleneous manufacturing products, for which domestic industries have already gained a competitive edge or domestic industries are not in competing position, are classified into the category i) or ii).

Commodities classified into category iii) belong to industries where technological breakthrough is under way, or the development of which is desired either for the structural enhancement of industries or the development of machine-tool industries. Machine-tools, automobiles, heavy electrical equipments, and petro-chemical plants and equipments are commodities of this category. For commodities in this category, import liberalization was implemented only when industrial competitiveness was reaffirmed.[4] Commodities of category iv) include food processing products, such as rice, barley, potatos, dairy products, poultry, and meats.

It is worth noting that for the sake of import relief to domestic industries, various supplementary measures were utilized in industries where the liberalization of imports are already implemented. Elastic tariff rate schemes, variable rate of import security collateral required for foreign exchanges, import controls regulated by various special laws, operation of regulations on product standards and quality guarantee systems, and moral suasion on importers' associations are examples of such supplementary measures.

B. Administration of Tariff Policy

Tariff rates of Japan had remained low in 1899 when "Tariff Rate Act" was initially legislated, but had gradually taken upward adjustments through the repeated revisions of "Tariff Rate Act" up to the early 1930s. Tariff rate in the High Growth Period exhibited the highest level in 1962, but later declined to the level of other advanced countries, through successive tariff reduction processes as the result of Kennedy Round Negotiations (1967-71), GSP (Generalized System of Preferences) agreements to benefit developing countries, two consecutive unilateral declarations of tariff reduction

[4]See chapter 8 of Yamazawa (1983). Reference to chapters 1, 2, 5 and 9 of Komiya *et al.* (1984) is recommended for discussions on the implementation of import liberalization and complementary policy measures.

TABLE 8
KOREA-JAPAN COMPARISON OF EFFECTIVE PROTECTION RATES IN THE MANUFACTURING

Year	Japan[1]	Korea[2]	
		Balassa formula	Corden formula
1963	32.3		
1968	24.2	0.5	0.3
1973	14.4		
1975	25.3		
1978	22	31.5	20.4
1982		29.6	19.2

Source 1. Ito and Seino (1984, Ch. 5).
2. Young *et al.* (1982, p. 162, Supplementary Table 12)
Note : In case of Korea, manufacturing sector includes subsectors identified to be KSIC (Korean Standard Industry Classification) codes 3, 5-11.

(1980-87) to avoid Yen currency appreciation, and Tokyo Round Negotiations (1980-87).

Despite reductions of tariff rates, the effective rate of protection still remained high due to various import barriers. However, the effective rate of protection declines consistently through the 1960s. In case of manufacturing sector, it became 32.3 percent in 1963, 24.2 percent in 1968, and 14.4 percent in 1973. Such effective rates of protection in the manufacturing sector exhibited an upright hike after the First Oil Shock, reaching 25.3 percent in 1975, but stabilized at 22.0 percent in 1978.[5] Table 8 compares effective rates of protection in manufacturing sector between Korea and Japan.

Some remarks should be made on tariff deduction schemes and tariff rebate schemes. First, tariff deduction scheme mainly intends to support importers of specific items of materials to implement industrial policies, for instance, importers of important machine components or domestically unavailable raw materials. Particularly, the tariff deduction schemes on imports of important machine components, which was institutionalized in 1951 to promote domestic industries and enhance international competitiveness, significantly improved the industrial structure. Tariff rebate scheme on imports of raw materials or intermediate inputs for export manufacturing assisted export activities.

Such operation of tariff system is similar to the tariff system in Korea. In addition, elastic tariff schemes are another feature of

[5]Shouda (1982).

Japan's tariff system worthy of special remarks. For instance, import relief schemes were devised to give relief to domestic industries when threats arising from import are considered to incur injuries. Tariff quota schemes were devised to meet domestic demands in case of shortage in commodity supply.

C. Supplementary Industrial Policies

Japan's industrial policy had been changed over time. In the early stages, production and investment plans were implemented under the strong leadership of the government, and in the later stages private investment activities were indirectly induced by the government. Biased Production Plan (1950–61), which was designed to rehabilitate the economy destructed during the World War II, was initiated by the government and was implemented to recover the production of coal, iron and steel, and electricity. This plan aimed to produce target output, and brought out the side-effects of incurring economic inefficiency.

The Industrial Rationalization Plan (1950–61) was designed to enhance the production efficiency and international competitiveness in strategic industries. This plan attempted to reshape the industrial structure by supporting some selected industries with promising future prospects, such as iron and steel, machinery, electronics, and petro-chemical industry. This plan is usually regarded as a typical model of Japan's industrial policy, which has attracted public attention.

Income Doubling Plan in the 1960s (1960–70) gave rise to optimistic expectations of the public on the growth of national income, so that policy measures were implemented to boost investment in private sector to meet the expectation. The essence of industrial policies in the 1960s lay in devising countermeasures to avoid possible damages to domestic industries in the process of import liberalization and adjustment of industrial structure to cope with challenges from liberalization.[6]

Industrial policy of the 1960s included measures such as the establishment of new industrial organization, facility investments, specialization system of industrial production, and concerted policies for energy conservation. Among them, the making of new industrial order and the realignment plan of industrial structure play-

[6]Refer to introduction and chapters 1, 2, 5, 9, and 13 of Komiya (1984).

ed pivotal roles in preparing for trade and capital market liberalization, respectively. The new industrial organization had been formed, a saliant feature of which is newly grown government-business cooperation based upon "Tentative Treatment Act for Specific Industry Promotion." The realignment plan of industrial structure was carried out to promote the merging of big firms through government's intermediation. The restructuring of maritime transportation industry and the merging of automobile industry into three firms are also the result of such policy direction.

The initiative of the government as a promoter of industrial policy was rarely made by direct subsidy. Instead, credit for investment and operation were provided from either financial institutions, such as Bank of Japan, or commercial banks, in the form of special treatments such as tax deductions or payment deferments.

VII. Export Promotion and Import Substitution

It is important to examine whether the trade policies have incentive schemes for export promotion or import substitution. Due to the limited supply of resources, an assistance to import-substitution industry entails the disadvantage to export industry in resource allocation. To see if the Japanese economy had the scheme of inward-looking or outward-looking property, we will review some incentive measures.

A. Export Promotion Policies

As is shown in Table 9, export incentive measures in Japan consist of three main components, namely preferential treatments of export activities by offerring low-interest-rate loans through Bank of Japan or commercial banks, preferential tax for export industry, and export-promoting institutions which collect overseas market informations, support overseas activities of exporting firms and give prizes to exporting firms according to their export performances.

The structure and operation of these institutions are similar to those in Korea. Particularly the resemblance of export promotional tax incentives indicates the similarity of incentives between two countries. Although there exist differences in deduction rates or duration of reserve deposite for tax deferment treatment, such differences in the stage of practical application are too minor to affect the main effects of tax incentives of two countries.

TABLE 9
EXPORT PROMOTION SCHEMES

Export promotion measures	Period of effective duration
1. Preferential financial loans to exporting activities	
1) Advanced discount of exporters' notes	Nov. 1949~June 1960
1') Discount of exporters' notes	July 1960~June 1972
2) Loans for the allowance of foreign exchange requirements	Feb. 1953~Aug. 1961
2') Loans for the allowance of foreign exchange fund	Sep. 1961~March 1972
3) Loans for the purchase of foreign exchange notes	Dec. 1965~Nov. 1970
4) Limited-period discount of every Yen of export notes	May 1970~June 1972
5) Long-term export credit of Export-Import Bank	1954~1968
2. Export-promotional tax schemes	
1) Income deduction for exports	1953~63
1') Accelerated income deduction for exports	1957~61
2) Accelerated depreciation for exports	1964~71
3) Preferential deduction for overseas income	1959~
4) Preferential depreciation for facilities of overseas branches	1958~63
5) Reserve allowances for the penetration into overseas market	1964~72
6) Reserve allowances for loss financing from overseas investment	1964~74
7) Accelerated depreciation to exporting firms with distinguished contribution	1968~70
3. Insitutions devoted to export promotion	
1) Export insurance	1950~
2) Export-import bank (Exim bank of Japan)	1951~
3) Overseas Trade Promotion Organization (Japan Trade Promotion Organization)	1954~
4) Supreme Export Consultation Council (Supreme Trade Consultation Council)	1954~
5) Recognition of achievements for exporting firms with distinguished contribution	1963~72

Source : Yamazawa (1983, p. 177).

However, in case of export financing, namely preferential treatments in bank loans to export activities, the resemblance of institutional structure does not necessarily mean the same effects of in-

centives between countries, due to a difference in inflation rates between countries. Higher level of inflation rates in Korea tend to give larger benefits to exporters who could acquire credit from banks in a low and fixed rate of interest charge. Considering that export financing had been the most powerful incentive measure in Korea, crucial factors which distinguish incentive measures of two countries may be found in different effects of export financing arising from different inflation rates.

B. Outward Orientation of Trade Policy

Due to the limited data, the comparison of orientation in incentive schemes of trade policies in two countries is hard to make. Due to the insufficiency in data, 1963 and 1968 were chosen for Japan, while 1978 and 1982 were chosen for Korea. The different computation of statics also makes a direct comparison harder. In Japan, incentive benefits of export activities contain only tax deduction allowances. Tax incentive benefits in Table 10 is measured by reductions in tax revenues which was incurred by preferential treatments to export activities. For computational accuracy, the magnitude of tax incentive benefit should be computed in a different way according to forms of tax deductions.

For instance, the benefit of preferencial treatments in case of reserve deposits for tax deferment or preference depreciation schemes should be interest income incurred due to deferment of tax payments. While total tax deduction allowances are regarded as benefits of preferential tax treatments in Japan, such an imputation process was carried out to compute interest income incurred from deferment of tax payments in case of Korea. Despite the lack of proper computation for benefits of preferential tax treatments in Japan, the trend of tax deduction allowances would be appropriately considered to reflect a change of incentive effects of export promotion measures.

Moreover, statistics of incentive benefits of Japan do not include benefits of preferential credit availability from banking institutions to export activities. However, this exclusion does not seem to seriously affect the trend of preferential benefits of export promotion policies of Japan, because the stable price level had emasculated incentive effects of bank loans with low interest-rate obligation. Export financing contains a slight advantage in interest rate over ordinary loan in Japan, though such margin of preference is

significantly low in comparison to interest rate margin of Korea, namely the difference between interest rates of bank loans for export financing and interest rates in curb markets.

Table 10 shows the ratio of (1 + rate of export-promotion incentives to value-added production of exports) to (1 + rate of effective protection to value-added production in import-substitution sectors). According to Table 10, the bias coefficient of incentive structures increased from 0.77 in 1963 to 0.81 in 1968, which implies that the years from 1963 to 1968 was a period when overall structure of incentive measures was changed in favor of export activities. Such a change led to a decline in effective protection of import substitution sectors, due to the rigorous implementation of import liberalization policy in this period, rather than the consequences of new positive measures to encourage export promotion.

These estimates of Japan's bias coefficients are not comparable to estimates of Korea's coefficients because of already-mentioned differences in computational processes. Despite a failure to include incentive effects arising from credit availability to exporting firms in case of Japan, Japan's coefficient estimates look magnified considerably, because the amounts of tax uncollected inclusive of reserve deposits for deferred payment, instead of the beneficial effects, and total amounts of depreciation, instead of the margin of preferential treatment, are used to compute benefits of incentive schemes to exporting companies. We can guess that incentive benefits to exporting companies in Japan, if computed by the same methods as adopted in the Korean case, would be close to nil.

Taking all aspects of information into consideration, we can say that the bias to favor exporting companies vis-à-vis import-substitution companies, seems to be much larger in Korea than in Japan, particularly because incentive benefits stemming from financial availability to exporting companies are much larger in Korea than in Japan due to a difference in inflation rates. On the other hand, incentive benefits arising from tax incentives do not seem to differ in effectiveness between countries, since the structure of tax incentive measures is similar in both countries.

VIII. Summary and Conclusion

The Japanese economy could grow at a rate reaching as much as 10 percent per annum during the High Growth Period. Besides, such

TABLE 10
COMPARISON OF INVESTMENT INCENTIVE EFFECTS OF IMPORT PROTECTION AND EXPORT PROMOTION POLICIES BETWEEN KOREA AND JAPAN

			1963	1968	1978	1982
I. Average value-added ratio of production in export industry (%)	Japan		—	88.2*	—	—
	Korea		—	—	—	63.2†
II. Total incentive effects per US dollar of exports	Japan (Yen)		—	—	—	—
	Korea‡1 (Won)	Interest rate (bank)	—	—	7.62	4.14
		Interest rate (curb market)	—	—	23.77	29.55
III. Effects of export promotion per US dollar of value-added production[2]	Japan (Yen)		—	—	—	—
	Korea (Won)	Interest rate (bank)	—	—	12.06	6.55
		Interest rate (curb market)	—	—	37.61	46.77
IV. Exchange rate ($)	Japan (Yen)		362	357.7	253.5	259.2
	Korea (Won)		130	281	630.6	826
V. Effective rate of export-promotion (%)[3]	Japan		1.36	0.91	—	—
	Korea	Interest rate (bank)	—	—	1.91	0.79
		Interest rate (curb market)	—	—	5.96	5.66
VI. Effective rate of import-protection (%)	Japan		32.3	24.2	22	—
	Korea		—	0.5	31.5	29.6
VII. Coefficient of biasedness of incentive scheme[4]	Japan		0.77	0.81	—	—
	Korea	Interest rate (bank)	—	—	0.77	0.78
		Interest rate (curb market)	—	—	0.81	0.82

Source: *: *Sasaba* (1980, p. 146), ‡: Rhee and Kang (1985)
†: Korea Foreign Trade Association (1985, p. 33)

Note: 1. Computation of export promotion effects in case of making use of bank interest rate as standard measure was carried out by considering the difference between interest rate to bank loan and that in curb market as preferential benefits.
2. III = (II/I) × 100, 3. V = (III/IV) × 100
4. VII = ((V/100) + 1)/((VI/100) + 1)
5. Parenthesis implies incomparability of Japan's coefficients

an economic success was attained, without hurting price stabilization. Unlike the case of Korea, Japan did not need to rely heavily on overseas markets to obtain sources of driving force for economic growth, but rather fostered the productivity of domestic industries and developed domestic technologies which had already achieved the advanced level.

During the period of High Growth, Japan's industries demonstrated their advancement into the new stage of development, and the trend of trade structure revealed aspects of enhanced industrial structure and successful achievements of technology imports or innovations. Such a rapid advancement of industrial structure was made possible through the stabilization of an economy and was supported by unceasing efforts of industries to construct facilities, further technological enhancements, penetrate into new markets, and develop new products. The sustained stabilization of price and efficient allocation of resources, which got rid of economic inefficiency, may be prime factors which deserve a credit for the economic performance of industries.

The stabilization of movements in real exchange rates or terms of trade enhanced industrial competitiveness of Japan's industries during this period, though labor productivity which outgrew real wage was a prime contributor to the industrial competitiveness. It would be worthwhile to confirm that such favorable progress can be attributable to the attainment of price stabilization.

Price stabilization contained real exhange rates which remained within reasonable range and fostered technological development and developments of new products, which induced endeavors of companies to invest and enhance labor productivity.

Japan's strategy for economic development was designed to extend domestic market, and foster domestic infant industries, which can be regarded as "inward-looking" by Korea's standard. Although import liberalization appeared to be a leading guideline of trade policies throughout the High Growth Period, implementation of liberalization plan was retained in case that the liberalization could seriously injure on domestic industries. The primary aim of industrial policy in this period was to build up the industrial system to cope with external challenges from import liberalization.

In sum, the Japanese economy is distinguished from the Korean economy by its ability to earn sources to gear up high economic growth primarily through fostering of domestic industries and development of domestic market rather than overseas markets, though

they share common features that the poor endowment of resources rendered it unavoidable for both economies to expand exports for persistent economic growth. Such pattern of growth of Japanese economy was made possible by sufficient scale of domestic market size, which is conducive to the pursuit of scale economy and to the sustainability of competition among domestic firms enough to induce their endeavors toward the development of new technologies and management improvement.

Another distinctive feature in development pattern of the Japanese economy is price stabilization, which has improved the functioning of price mechanism for the efficiency of resource allocation, and boosted the competitiveness of industries through productivity improvement. The effects of price stabilization help firms to avoid wastes and inefficiencies in resource allocation and seek growth from technological enhancement and management rationalization. Hence, there were enhancement in industrial structure, consolidation of industrial basis, flourishments of small-medium businesses, and advanced industrial structure equipped with self-sustaining technologies, instead of industrial structure of import-processing mode.

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