

Korea's Rapid Export Expansion in the 1960s: How It Began

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Korea's rapid export expansion suddenly began in the early 1960s and boosted the economy. This paper's investigation finds that it began in 1961, as new export items appeared, export of which increased incomparably faster than that of the current export items at the time. How and why of this highly unusual phenomenon can best be explained by a major reform of foreign exchange system in February 1961. This goes against the widely held view that the switch in development policy from import substitution to export promotion in the mid-1960s was the reason for Korea's export success. Rather, the evidence indicates that the rapid export expansion led to the policy switch. The government's export promotion since the policy switch helped the rapid export expansion continue into the 1970s, despite the protectionist import policy.

Key Word: Exchange Rate Policy, Trade Policy, Export Promotion,
Comparative Advantage, Import Substitution
JEL Code: O24, O25, O53

I. Introduction

Korea's exports suddenly began to grow very rapidly in the 1960s, and the rapid growth continued into the 1970s. In real terms the annual export growth rate was 35.3 percent on average for 1963~69 and 25.4 percent in the 1970s. It was undoubtedly one of the most important reasons why the Korean economy grew nearly 10 percent per year on average in the two decades. However, when, how, and why the rapid export expansion began has not been clearly accounted for. Early studies of Korea's economic growth tend to attribute the beginning to the switch in development strategy from import substitution to export promotion in the mid-1960s and the trade policy that subsequently moved in the direction of less intervention and more liberalization.¹ On the other hand, later studies that

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¹One of the earliest studies was Cole and Lyman (1971), especially, Ch. 8, "The Patterns of Economic

appeared since the late 1980s tend to place much greater an emphasis on governmental intervention for the export success. For example, one author claims that the industrial policy that provided credit subsidies, tax incentives, administrative guidance, etc. remedied the coordination failure that had been blocking Korea's economic growth and led to investment boom and rise in import, which in turn led to export expansion.² This paper investigates the beginning of the export expansion and finds evidence that a major reform of foreign exchange system in February 1961, which has so far received little attention in the existing literature, started it.

This paper develops no new set of data. Factual information about the policy measures that the Korean government took is mostly drawn from the early studies mentioned above. This paper also draws upon statistics, writings, and other information that have been in the public domain and looks into the details. Section II dates the beginning of the rapid export expansion. Section III reviews the exchange rate and trade policies in the 1950s. Section IV discusses the reform of foreign exchange system in 1961 and explains how it started the rapid export expansion. Section V shows that the beginning of rapid export expansion led to the policy switch from import substitution to export promotion. It also discusses how export promotion since the policy switch helped the rapid export expansion continue into the 1970s, despite the export depressing effect of protectionist import policy that the government was simultaneously pursuing. In light of this paper's findings, Section VI in its concluding remarks disputes the conventional characterization of Korea's export success as "government-made" or "government-led".

II. Beginning of the Rapid Export Expansion

In investigating how and why the rapid export expansion began, the first thing to do is to date its beginning. Then, it will become clear where to look for the cause, which, be it a change in policy or in circumstances, is to be found before the beginning, not after. It may sound nonsensical to date the beginning of a country's export expansion, for trade must have been going on since time immemorial between regions and across borders. What this section intends to do is to date the beginning of "rapid" export expansion, and it makes eminent sense to do so in Korean experience, as will become clear in the following. For the purpose, this section examines Korea's export trends in detail.

The first trend to look at is that of total export for 1957-1970, shown in Table 1. The total is broken into two groups, manufactures and others, and the last column shows the total as a percentage of GNP. The importance of exports to the economy dramatically increased in the 1960s: total export was less than one percent of GNP in the late 1950s but rose to 10.2 percent by 1970.

Policy". Others include Frank, Kim, and Westphal (1975), Kim (1975), Hong and Krueger (1975), Kim and Westphal (1976), and Krueger (1979) among others.

²See for example, Rodrik (1995).

TABLE 1—KOREA'S EXPORTS, 1957-1970 (MILLION CURRENT DOLLARS)

	Total Export	Export/GNP (%)	
		Manufactures	Non-manufactures
1957	22.2 (-9.7)	4.1 (66.6)	18.1 (-18.2)
1958	16.5 (-25.9)	2.6 (-37.3)	13.9 (-23.3)
1959	19.8 (20.4)	2.4 (-7.1)	17.4 (25.5)
1960	32.8 (65.7)	4.5 (89.2)	28.3 (62.5)
1961	40.9 (24.5)	6.2 (37.8)	34.6 (22.4)
1962	54.8 (34.1)	10.6 (69.6)	44.2 (27.5)
1963	86.8 (58.4)	39.5 (273.7)	47.3 (6.6)
1964	119.1 (37.2)	58.3 (47.7)	60.7 (28.9)
1965	175.1 (47.1)	106.8 (83.1)	68.3 (12.5)
1966	250.3 (43.0)	153.6 (43.9)	96.7 (41.6)
1967	320.2 (27.9)	215.2 (40.0)	105.1 (8.7)
1968	455.4 (42.2)	338.2 (57.2)	117.2 (11.6)
1969	622.5 (36.7)	479.1 (41.7)	143.4 (22.3)
1970	835.2 (34.2)	646.3 (34.9)	188.9 (31.8)

Note: The numbers in the parentheses are annual growth rates in current dollars.

Source: KOSIS, on-line information service, National Statistical Office, the Korean government.

From a quick glance at the table it appears as if 1959 should be considered the beginning year of rapid export expansion, for in that year total export began to grow at double-digit rates. However, the growth in the year was by chance, led by a 25.5 percent increase in non-manufactures exports, which was not to be repeated in the following years. The unmistakable characteristic Korea's export expansion exhibited in the subsequent years was that it was led by export of manufactures. For this reason it is not appropriate to consider 1959 as the beginning year. As the table shows, since 1960 manufactures exports always grew much faster than non-manufactures.

Then, should 1960 be considered the beginning year of the rapid export expansion? Yes, if export of all manufactures should serve as the guide in dating the beginning. However, not all kinds of manufactured goods increased equally rapidly but a particular kind did. This can be seen in Fig. 1, which decomposes manufactures into two subgroups: one comprising SITC (Standard International Trade Classification) 5 "chemicals" and SITC 7 "machinery and transport equipment"; the other comprising SITC 6 "manufactured goods chiefly classified by materials" and SITC 8 "miscellaneous manufactured articles". The subgroup "SITC6+8" consists mostly of labor intensive goods, while "SITC5+7" mostly capital intensive goods, which also tend to be of more sophisticated production technology. Figure 1 shows that the share of SITC6+8 in total exports increased rapidly since 1962, rising from around 10 percent to 70 percent by 1968. It is beyond any doubt that labor-intensive manufactures led the sudden and rapid expansion of Korea's exports in the 1960s. On this ground, 1962 may be called the beginning year of the rapid export expansion.

Yet, there remains still another peculiar feature that deserves attention: new export items suddenly appeared within subgroup SITC6+8 and led the expansion, as can be seen in Appendix Table 1. Striking is the fact that the export products at the two-digit SITC or lower level belonging to the subgroup were almost non-

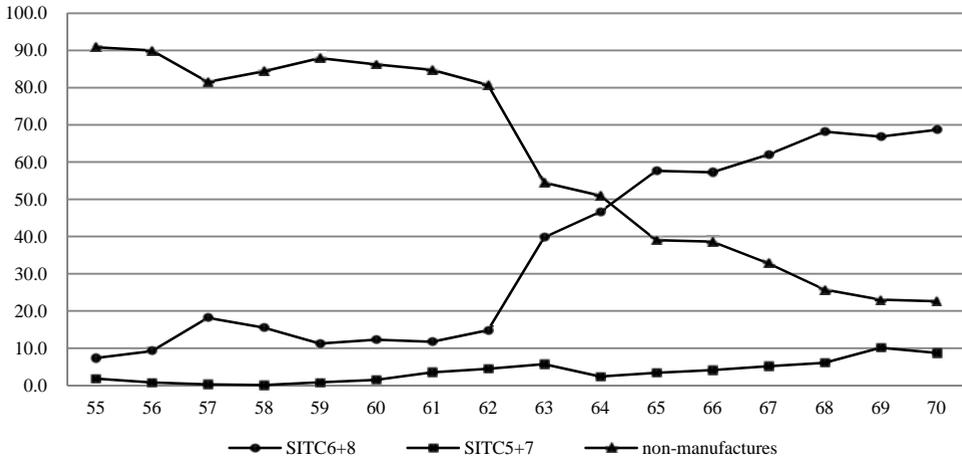


FIGURE 1. EXPORT COMPOSITION, 1957~70

Source: Appendix Table 1.

TABLE 2—EXPORT OF NEW ITEMS, 1960-1970 (THOUSAND CURRENT DOLLARS)

	New Items				Share in SITC 6+8 (%)	All Others
	(in 1961)	(in 1962)	(in 1963)	sum		
1960	-	-	-	-	-	32,827 (65.7)
1961	36	-	-	36 (-)	0.8	40,878 (24.5)
1962	1,358	40	-	1,398 (3783.3)	17.2	53,415 (30.8)
1963	5,384	578	23	5,985 (328.1)	17.3	80,815 (51.3)
1964	7,499	1,431	749	9,679 (61.7)	17.4	109,378 (35.3)
1965	24,914	3,104	4,572	32,590 (236.7)	32.3	142,491 (30.3)
1966	39,269	4,851	14,175	58,295 (78.9)	40.7	191,242 (34.2)
1967	68,556	10,300	26,687	105,543 (81.0)	53.1	214,684 (12.3)
1968	124,103	17,583	39,611	181,297 (71.8)	58.4	274,100 (27.7)
1969	172,474	13,676	63,543	249,693 (37.7)	60.0	372,820 (36.0)
1970	233,313	11,642	104,250	349,205 (39.9)	60.9	485,977 (30.4)

Note: 1) "New items" are footwear, travel goods, and clothing, which began to appear in 1961; synthetic fabrics, umbrellas, and artificial flowers in 1962; woolen fabrics and wigs in 1963. "All others" denotes total export less export of new items. 2) The numbers in the parentheses are percentage growth rates in current prices.

Source: Appendix Table 1.

existent up to 1960, the exceptions being cotton fabrics and veneer sheets. This suddenly changed. Starting in 1961, new items began to appear in the subgroup, including footwear, travel goods, and clothing that year and then, artificial flowers, synthetic fabrics, and umbrellas in 1962, and woolen fabrics and wigs in 1963. Table 2 below shows that, once begun, export expansion of these new items was explosive, incomparably faster than the growth of then-existing export items. Albeit from small bases, in five years the exports of the new items that appeared in 1961 multiplied 1091 times in current dollar terms; those in 1962 multiplied 257 times while those in 1963 multiplied 1722 times. The most incredible example was clothing (SITC84), export of which grew from 2 thousand dollars in 1961 to 213.6 million dollars in 1970, a multiplication of more than 100,000 times in nine years

(Appendix Table 1). In contrast, all other items, that is, total export less the exports of these new items, multiplied 4.7 times in current dollars in five years from 1961 to 1966, very rapid growth but growth at “snail’s pace” in comparison. This bifurcation of export goods with very different export behaviors is a highly unusual phenomenon, hardly expected to occur in the same economy. However, it has thus far received no attention in the literature.

The explosive export growth of these new items, of course, could not continue indefinitely. Their growth rate as a whole gradually slowed and approached that of all other items by the end of the decade. It was these new items that led the sudden and rapid export expansion of labor-intensive manufactures of SITC6+8. As shown in Table 2, these new export items accounted for less than 1.0 percent of SITC6+8 in 1961 and more than 60 percent by 1970. Their share in the total export similarly rose from 0.09 percent to 41.8 percent during the same period (not shown in the table). It is little exaggeration to say that Korea’s rapid export expansion in the 1960s was the expansion of these new items. For this reason, it seems appropriate to consider 1961 as the year that marks the beginning of the rapid export expansion.

III. Exchange Rate and Trade Policies in the 1950s

Now that the beginning of rapid export expansion is dated, this section briefly reviews the exchange rate and trade policies in the 1950s, which preceded the beginning. In those years immediately following the Liberation in 1945 from under the Japanese rule, commercially financed foreign trade was almost nonexistent. In 1950 the Korean War broke out and ended in 1953, devastating the economy. In the second half of the 1950s the trade account was always in big deficit. Annual export on average was 20 million dollars and annual import 370 million, roughly 80 percent of which were financed by foreign aid. The economy was suffering from a severe foreign exchange shortage.

A. *The Foreign Exchange Rate Policy in the 1950s*³

The most important factor that determined the direction of foreign exchange rate policy in the 1950s was the “won advance agreement” between Korea and U.S. The agreement was made in July 1950, shortly after the outbreak of Korean War, to help the UN forces dispatched to Korean peninsula to carry out the mission. Under the agreement, the Korean government would advance won, the Korean currency, to United Nations Command (UNC) for its expenditures in Korea, to be paid back in dollars.⁴ Since the agreement, the Korean government kept the official won-dollar exchange rate low throughout the 1950s, apparently to maximize the amount of dollars receivable from won advance, and devaluation was delayed as long as

³This subsection heavily draws upon Bank of Korea (1960) for factual information.

⁴The official name of the agreement was “Agreement between the Government of U.S.A. and the Republic of Korea Government Regarding Expenditures by Forces under Command of the Commanding General, Armed Forces of Member States of the United Nations” See Frank, Kim, and Westphal (1975), p.28.

possible despite rampant inflation. The won advance was an important source of foreign exchanges in the decade.⁵ This low exchange rate policy inevitably led to an overvaluation of won and the rise of a complex foreign exchange system in the 1950s, which was brought to an end by a major reform of the system in February 1961, as discussed in the next section. This subsection briefly reviews a few episodes of devaluation preceding the reform and the rise of multiple exchange rates.

All devaluations in the 1950s since the won advance agreement were decided upon by negotiation between the two governments, and each time a kind of tug-of-war went on between them. For the low exchange rate policy of the Korean government led to conflicts with U.S., as it must have been in U.S. interest to have the exchange rate high and to delay the dollar payments. One such negotiation resulted in the devaluation in August 1955, which set the official exchange rate to 50 won to the dollar. At this time it was agreed that the exchange rate be determined in the future by referring to the wholesale price index of Seoul with September 1955 as the base period; the official rate was going to rise or fall, as the price index rose or fell by more than 25 percent than the base period.

In late 1959, after a relatively long period of price stability, the wholesale price index reached 130.2. The U.S. government requested a consultation in January 1960, but the Korean government wanted to delay the consultation. Then, on January 29 the U.S. embassy in Seoul unilaterally decided to use the exchange rate of 65 won to the dollar as an internal administrative measure, which was 30 percent higher than the ongoing rate. The Korean government, following a consultation with the IMF, announced in February 1960 a new exchange rate of 65 won to the dollar.

In less than two months, in April 1960 the Student Revolution ousted Syngman Rhee government, and the official relation of aid and economic cooperation between the Korean and U.S. governments, except for the military aid, was temporarily discontinued. In October 1960 on the occasion of resuming the relation, the U.S. government suggested an increase in the exchange rate. Unlike the previous government, the then-newly elected Chang Myon government readily accepted the suggestion and announced a new exchange rate of 100 won to the dollar, effective January 1, 1961. The next month, February 1961, the new government on its own initiative once again devalued won by raising the exchange rate to 130 won to the dollar, as part of a major reform of the foreign exchange system that abolished the multiple exchange rates and adopted a uniform rate.

Thus, three consecutive devaluations in a span of one year from February 1960 to February 1961 raised the exchange rate from 50 won to 130 won to the dollar. Of the three devaluations, the first was the result of a tug-of-war between the Korean and U.S. governments, while the other two were decisions reflecting the exchange rate policy of the newly elected Korean government.

Under the foreign exchange control system in the 1950s a complicated structure of multiple exchange rates arose. The low exchange rate policy made the official exchange rate largely irrelevant to international trade, as far as private traders were

⁵“Foreign exchange from this source amounted to \$62 million in 1952 and \$122 million in 1953, or about 62 and 70 percent of total foreign exchange receipts in those years.” Frank, Kim, and Westphal (1975), p.28.

concerned. For exporters “transfer rates” mattered most. The foreign exchange deposit system, part of the control system, required all privately held foreign exchanges be deposited with the Bank of Korea. Accordingly, exporters had accounts denominated in foreign currencies with Bank of Korea, and sold their foreign exchange earnings by transferring the balances in their accounts to the other traders’. This gave rise to “transfer rates”, which were much higher than the official exchange rate (The rates are labelled “market rates” in Appendix Table 2). However, the rates differed, depending on where the foreign exchanges were earned: the transfer rates on “Japan export dollars,” the dollars earned from exports to Japan, were higher than the rates on “Other export dollars” earned from exports to other regions. For imports from Japan were more restricted, hence more profitable, and only the dollars earned in Japan were allowed to be used for importing goods from Japan, which was a policy measure to contain the large bilateral trade deficit with Japan. For importers “auction rates” were important, which arose, when the aid dollars and KFX (the dollars held by the Korean government), to be used to finance private imports, were auctioned off to the highest bidder. These rates differed, depending on the ratios of domestic price over foreign price of the items that were going to be imported with the auctioned dollars.

B. *Import Policy*

Throughout the 1950s the government policy on imports was protectionist. It was an integral part of the government’s development policy, which aimed at industrialization through import substitution.⁶ It also was in part a response to the severe foreign exchange shortage at the time. The import policy is graphically summarized in Fig. 2, which shows from 1955 to the mid-1980s the average legal tariff rate and the percentage of automatic approval (AA) items among all importable items, which could be imported without prior government approval.

Until the mid-1960s the AA items accounted for less than 10 percent of all. Since 1967, when Korea joined GATT, the percentage rose but remained under 60 percent until the end of the 1970s. The average legal tariff rate was consistently around 50 percent for most of the 1960s and 1970s. The policy intention of industrialization through import substitution was apparent in the tariff escalation of the tariff system introduced in 1950. The tariffs were ranging from zero to more than 100 percent: low rates for “essential goods” such as food grains, raw materials and non-competing capital goods; higher rates on imports that were likely to compete with domestically produced goods when imported and also on “finished” goods that would need no further processing in the domestic economy. “Luxury goods” carried tariff rates of 100 percent or higher. Later, tariff exemptions were introduced in 1952 on some imports of capital goods, and individual tariff rates were revised, but the tariff structure remained basically the same in the 1960s until the early 1970s.

⁶Import substitution under protection was the standard policy for industrialization recommended by the economics profession in the 1950s and 1960s. It was only after the East Asian experience that the benefits of open trade regime began to be recognized by the profession. See Krueger (1997).

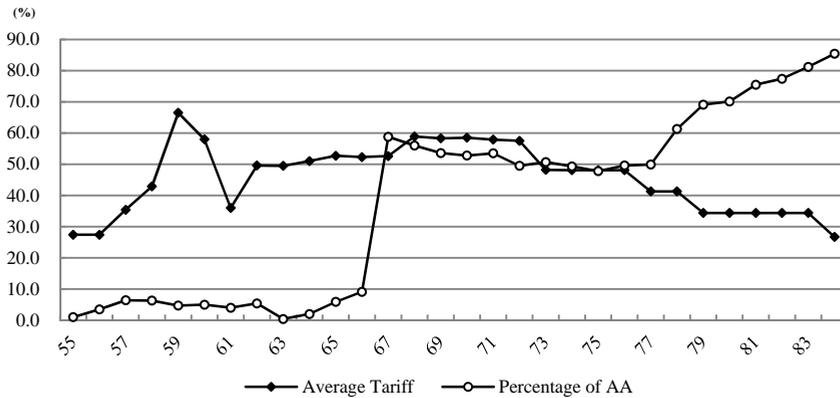


FIGURE 2. GRAPHIC SUMMARY OF IMPORT POLICY

Note: AA stands for “automatic approval”. AA items could be imported without prior government approval.

Source: Appendix Table 3: “Overall Index of Trade Liberalization, 1955-1984”.

The protectionist import policy in the 1950s could hardly have been the reason for the beginning of the rapid export expansion. As Lerner’s Symmetry Theorem demonstrates, imposition of tariff on import goods has an export depressing effect, as it raises the price of import goods relative to export goods, thereby making it more profitable to produce import competing goods for domestic market than to produce export goods for foreign markets.⁷ In addition, import restriction has depressing effect on export through another channel, namely, its effect on foreign exchange rate. For import restriction reduces the import demands and, therefore, the demand for foreign exchanges, thus lowering the exchange rate, i.e. the won-dollar rate in Korea.

C. Export Promotion

In the 1950s, although import substitution industrialization was the main pillar of development policy, the government adopted some export promotion measures to deal with the severe shortage of foreign exchange. This section briefly reviews those measures in the 1950s and the early 1960s, which to some extent must have had the effect of encouraging export. One of the earliest measures was “trade credit system” (“export credit system” later) that was in place since 1950, under which exporters enjoyed priority in allocation of domestic credits, and the loans to them were not bound by quarterly loan ceilings, an anti-inflationary monetary measure at the time.⁸ This policy favor continued in the 1960s and 1970s, and the interest rates on loans to exporters were drastically lowered since the mid-1960s. Also, export goods were not subject to commodity tax. The “preferential export system”, also known as “export-import link system”, was adopted in 1951, under which the

⁷Lerner, A. P., “The Symmetry between Import and Export Taxes,” *Economica*, Vol. III, No.11 (August, 1936).

⁸Kim and Westphal (1976), p.43.

exporters of so-called nonessential domestic products enjoyed the right to use some parts of foreign exchange earnings for importing popular items, which otherwise could not be imported. This system was discontinued in August 1955 at the time of devaluation.⁹ From 1952 to 1954 exporters enjoyed preferential access to foreign exchange loans in a scheme that allocated the government-held foreign exchanges (KFX) to domestic users.¹⁰ In 1955 direct subsidies were provided for exporters. The next year the subsidy was discontinued, as the government failed to provide for it in the budget.¹¹ “Tariff exemption” was introduced in 1959 on imports of raw materials and intermediate goods for exports (changed to “tariff rebate” in 1974).¹² Lastly in the 1950s, the trader registration system, which required a certain minimum export performance, had a more lenient requirement for exporters than for importers, an implicit encouragement of export.¹³

Thus, the export promotion measures adopted in the 1950s and still in effect in the early 1960s were: export credit system, exemption from commodity tax, tariff exemption on imported inputs for exports, and encouragement of exports implicit in trader registration system. In the following years some additional measures were newly introduced or reinstated. In 1961 income tax reduction of 30 percent was newly introduced for export earnings, which was raised to 50 percent the next year. A system of direct subsidies was reinstated in 1961, when the provision was again made in the budget, but it was discontinued in 1964 at the time of large devaluation.¹⁴ Also, Korea Trade Promotion Corporation (KOTRA) was founded in 1962 to assist exporters gather information on and enter new foreign markets.

To see if these export promotion measures were the reason why the rapid export expansion suddenly began, one would naturally turn to exporters' earnings that must have been affected by those measures. Fortunately, the exporters' earnings are estimated for 1958-1970 by Frank, Kim, and Westphal (1975), which is reproduced in Appendix Table 4 “purchasing-power-parity effective exchange rate on exports”.¹⁵ The authors first estimated “effective exchange rate on exports”, which was the sum of official exchange rate, export dollar premium, and estimated subsidies per dollar exports. “Export dollar premium” was simply the excess of “transfer rate” explained in Subsection III.A (“certificate rate” after the exchange reform in February 1961) over and above the official exchange rate. “Subsidies” refers to the benefits that exporters derived from various export promotion measures. In estimating the “subsidies” the authors took into account the effects on exporters' earnings of such export promotion measures as direct subsidy, internal tax exemptions, custom duties exemptions, and interest rate subsidy on export credit. Thus, some export promotion measures were left unaccounted for: priority in credit allocation that exporters enjoyed under the export credit system,

⁹Frank, Kim, and Westphal (1975), p.38 and 41. The nonessential domestic products refer to some 57 items, including such ones as starfish, dolls, lacquerwares, and nuts.

¹⁰Frank, Kim, and Westphal (1975), p.39.

¹¹Hong (1979), p.49. See also Frank, Kim, and Westphal (1975), p.38 and Kim and Westphal (1976), p.60.

¹²Kim and Westphal (1976), p.64 and p.70.

¹³The registration system required a certain minimum export performance for anyone to be registered as importer as well as exporter, the minimum requirement being greater for importers than for exporters. See Frank, Kim, and Westphal (1975), p.39.

¹⁴Hong (1979), p.49. See also Frank, Kim, and Westphal (1975), p.38 and Kim and Westphal (1976), p.60.

¹⁵Frank, Kim, and Westphal (1975), Table 5-8, “Price-Level-Deflated and Purchasing-Power-Parity Effective Exchange Rates on Exports, 1958 to 1970, pp.70-71

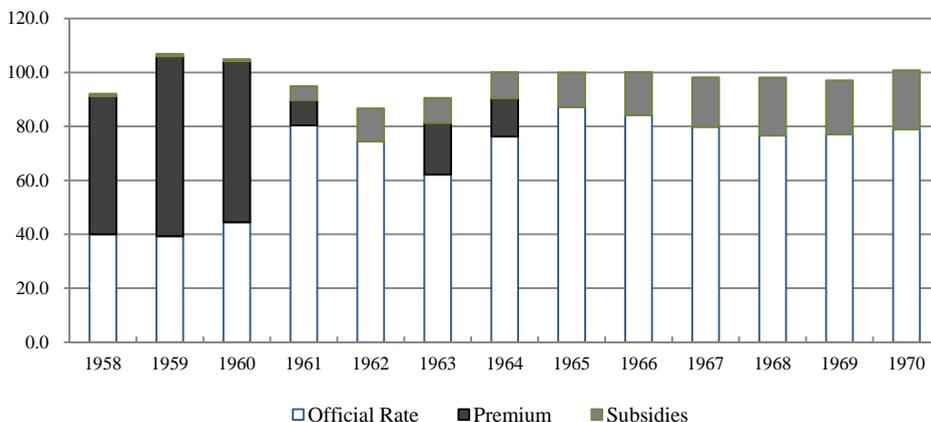


FIGURE 3. EARNINGS PER DOLLAR EXPORTS, INDEX, 1965=100

Source: Appendix Table 4.

implicit encouragement of export in the trader registration system, and the assistance provided by KOTRA. However, these measures did not directly affect exporters' earnings, and their impact on export must have been indirect.

Thus, the "effective exchange rate on exports" represents exporters' earnings in current won for a current dollar's worth of export. Then, the authors turned it into real terms by dividing it by Korea's wholesale price index and multiplying it by major trader partners'. Therefore, the "purchasing-power-parity effective exchange rate on exports" represents exporters' earnings in constant Korean won for a constant dollar's exports. Fig. 3 shows these estimated earnings in indices with 1965 as the base year.

Anyone who expects to find the reason for the beginning of rapid export expansion in the changes in exporters' earnings would be disappointed. As Fig. 3 plainly shows, there was no big jump in exporters' earnings in real terms that might have had triggered the beginning of the export 'explosion'. On the contrary, the earnings were declining in 1961, when the rapid export expansion suddenly began. Moreover, "subsidies", namely, the benefits exporters received from promotion measures, were less than five percent of exporters' earnings before and in 1961. Surely, the changes in exporters' earnings, hence, the government's export promotion measures could not have been the reason why the rapid export expansion started.

IV. Foreign Exchange Reform in February 1961

The reform of foreign exchange system in February 1961 has two main parts to it: one, abolition of multiple exchange rates for uniform rate; the other, devaluation that brought the official exchange rate close to the transfer rate discussed in Subsection III.A. This section considers the effects of the reform. In particular, it takes a close look at the near elimination of won overvaluation and the effect on export behavior of the abolition of complicated exchange rate structure.

A. Near Elimination of Won-Overvaluation

As mentioned in Subsection III.A, the exchange rate policy in the 1950s entailed serious overvaluation of won. “Market/Official” ratio in Table 3 shows the extent. For 1955-1961 it is the ratio of transfer rates to official exchange rate; for 1963-64 it is the ratio of “certificate rates” to official rate (see footnote 16 for the certificate rate). In the table the market/official ratios are shown for the second half of the 1950s and for 1961, 1963 and 1964 but not for other years in the 1960s owing to changes in government policy.¹⁶ As a supplement, an alternative indicator of won overvaluation for all years in 1955-1970 is shown in the table, namely, “Curb Market/Official” ratio, which is the ratio of curb market exchange rate of U.S. greenbacks to the official exchange rate. Both ratios, when equal to one, indicate no overvaluation of won; the further greater than one, the more overvalued was won. Interestingly, both ratios show a remarkably similar trend.

The foreign exchange reform in February 1961 nearly eliminated won overvaluation, as Table 3 shows. In the second half of the 1950s the market/official ratios were at times around 2.6 and were always greater than 2.0. Then, the three devaluations between February 1960 and February 1961, the last of which was part of the foreign exchange reform, raised the exchange rate from 50 won to 130 won to the dollar and brought down the market/official ratio close to one. As the result, the market rate was slightly higher than the official rate by around 15 percent, nearly eliminating the won overvaluation, which had been the rule throughout the 1950s. The official exchange rate overvalued won again temporarily in 1963 and 1964, as the import right gave rise to a premium on export dollar, because the government re-instituted a full scale export-import link system. However, the won overvaluation lessened in the subsequent years, as the curb-market/official ratio indicates.¹⁷

¹⁶The ‘Market Rate’ for 1955-61 shown in Table 3 is a weighted average of the transfer rate on ‘Japan export dollars’ and that on ‘Other export dollars’, the weights being the proportions of the respective exports to two destinations in total exports. The annual average of the market rate was estimated by taking into account the number of days the market rates were in effect, information obtained from Appendix Table 2. This method of obtaining annual rates means that the rate is an average of two observations in 1954; an average of five observations for 1955, an average of two observations for 1960 and 1961. The ‘Curb Market Rate’ in Table 3 is similarly estimated.

The reform in February 1961 replaced the “foreign exchange deposit system” mentioned in the Subsection III.A with “foreign exchange buying system”, under which exporters had to surrender their dollar earnings at official exchange rate to Bank of Korea and were issued certificates valid for 90 days. The certificates, which entitled the holder to buy back the foreign exchanges, were traded in the curb market. This system was in effect until June 1961, when the military government that came into power in May began to crack down the curb market. For this reason, the market/official ratio is not available for 1962. But the ratio reappears in 1963 and 1964, as the new government re-instituted a full scale export-import link system, under which import rights gave rise to a premium on the export dollars. Reinstitution of the system was a response to worsening trade deficit and sharply declining foreign exchange holdings in those years.

¹⁷The rise in premium was in part because the government nearly eliminated all items from the list of automatic approval (AA) imports in response to the worsening trade deficit. Frank, Kim and Westphal (1975), p.47. In May 1964 the government carried out another foreign exchange reform, which included a major devaluation of won.

TABLE 3—EXTENT OF WON OVERVALUATION

	Exchange Rates			Ratio	Ratio
	Market	Official	Curb Market	(Market /Official)	(Curb-Market/Official)
	(1)	(2)	(3)	(4)=(1)/(2)	(5)=(3)/(2)
1955	79.0	30.3	77.6	2.61	2.56
1956	102.8	50.0	96.6	2.06	1.93
1957	109.0	50.0	103.3	2.18	2.07
1958	114.6	50.0	118.1	2.29	2.36
1959	134.6	50.0	125.5	2.69	2.51
1960	158.1	62.8	143.7	2.52	2.29
1961	147.0	127.4	148.3	1.15	1.16
1962	NT	130.0	134.0	n.a.	1.03
1963	169.8	130.0	174.5	1.31	1.34
1964	254.0	214.3	285.6	1.19	1.33
1965	NT	265.4	316.0	n.a.	n.a.
1966	NT	271.5	302.7	n.a.	1.11
1967	NT	270.7	301.8	n.a.	1.11
1968	NT	274.6	304.1	n.a.	1.11
1969	NT	285.3	323.6	n.a.	1.13
1970	NT	304.5	342.8	n.a.	1.13

Note: 1) The annual averages of all exchange rates are estimates made by and available in Frank, Kim, and Westphal (1975) except for those for Greenback (curb market rate) for 1955, 1960, 1961, 1964, and 1965. For these years the annual averages of the curb market rate are estimated by taking into account the number of days the rate was in effect, based on the information in Appendix Table 2. 2) The averages of official exchange rate for 1964 and 1965 and the premium on export dollar in 1965 are taken from Table 8-10D, Appendix to Ch. 8, Frank, Kim, and Westphal (1975). 3) 'NT' stands for 'no transaction'; 'n.a.' is 'not available'.

Source: Appendix Table 2.

B. Abolition of Multiple Exchange Rates

The other important part of the reform in February 1961 was abolition of the complicated structure of multiple exchange rates, which was briefly explained in Subsection III.A. A consultation report by IMF provides the following snapshot of the complex exchange rate structure in January, 1961, one month before the reform:¹⁸

“Prior to the exchange reform in February 1961 Korea operated a complicated multiple-rate system which comprised principally an official rate, auction rates for ICA (International Cooperation Administration) financed commodities and for exchange sold by the government for imports, and various kinds of transfer rates in the free market depending on the original sources of exchange, i.e., bilateral account dollars (from exports to Japan), other areas’ export dollars (from exports to other areas), military supply dollars (supply of goods to UN forces), military service dollars (supply of services to UN forces), missionary dollars (remittances received by missionaries). Aid-financed imports were programmed by commodity. Imports eligible to be financed with auctioned government exchange were announced by the government for each auction.”

¹⁸IMF, “Korea-1960 Consultations”, June 1961, p.14.

The complexity of the system was greater than this quote indicates: all other rates besides the official rate were fluctuating. The auction rates for the aid dollars averaged 99.74 won per dollar in 1960 and 128.9 won in January 1961, while the other auction rates for the dollars held by the Korean government averaged 105.84 won per dollar in 1960 and 125.5 won in January 1961. The average transfer rate in 1960 was 142.0 won per dollar for "Japan export dollars" and 128.0 won for "Other export dollars".¹⁹

C. How the Rapid Export Expansion Began

The reform of foreign exchange system in February 1961 made the system very simple: now only one exchange rate existed, which involved little overvaluation of won. Then, immediately followed the most unusual beginning of rapid export expansion, discussed in Section II. New export items began to appear and their exports expanded very rapidly, incomparably faster than the exports of then-existing items. This phenomenon would be readily explained, if the reform suddenly and greatly boosted the export profitability for the new items, while leaving it little changed for the then-existing export items. However, the same, new exchange rate applied to all export items, of course. Nevertheless, the reform apparently represented different things to different persons.

To those who had already been in export business, the reform must have meant no change in terms of their export earnings. Before the reform, under the foreign exchange deposit system they kept their export earnings in the foreign-exchange denominated accounts they held with Bank of Korea, as discussed earlier, and all along they had been selling the dollars at the transfer rates, which the new, uniform exchange rate approximated after the reform. Also, they must have been enjoying the benefits derivable from various export promotion measures that were in effect. Thus, their export earnings in won were little affected by the reform, and it is reasonable to assume that the exporters had been maximizing profit as hard before the reform as they were after the reform. Therefore, there was nothing that would have them drastically change their export behaviors. The increase in their exports, which the 1960s saw, must have been the exporters' response to changes in policies and circumstances other than the reform, but not the reform itself.

On the other hand, for others who had not been in export business at the time, the reform could have been an eye-opener to profitable export opportunities. In the late 1950s the total export amounted to less than 1.0 percent of GNP, and export sales accounted for around 2.5 percent of the manufacturing sector's gross output. To most businesspersons in manufacturing industries it may have not even occurred that they could export their products. Even if one were interested in exporting, it would not have been simple to find out if a profitable export opportunity existed because of the complicated and distorted foreign exchange system. It would require expertise to know which one among many exchange rates to use for price comparison between domestic and foreign markets, which obviously is necessary to see the opportunity. Under the circumstances before the reform, it is hardly surprising, if someone, who would soon export his or her own

¹⁹*Ibid*, Part II, p.30

products in a year or two, had not recognized the export opportunity that he or she had been sitting on.

Then, the reform, by doing away with the multiple exchange rates and adopting a new and realistic exchange rate, made international price comparison simple. It became plain for them, and also for foreign buyers, to see whether or not and how much profit could be made by exporting an item at the existing exchange rate. In addition, a change in banking practice that began the next year must have helped. Bank of Korea, the central bank, used to be the only bank that could legally handle transactions involving foreign exchanges; since April 1962 all commercial banks began handling foreign exchange transactions. This must also have made the exchange rate, now uniform and realistic, a readily available piece of information to anyone who was interested.

In short, it is highly likely that the reform made it possible for those who had not been in the export business to see for the first time the profitable export opportunities, which had been hidden behind the veil of complex and distorted foreign exchange system. Moreover, the export potential of the labor-intensive, new items must have been “unlimited” in the early 1960s. Korea undoubtedly had comparative advantage in labor-intensive manufactures, for labor was the only factor of production it abundantly had. But export of labor-intensive manufactures had been almost absent until 1961, that is, the country’s comparative advantage had been virtually unexploited.²⁰ For these reasons, once begun, the export of the new items expanded explosively.

The foregoing analysis may be regarded as a hypothesis that needs be supported by evidence, statistical or otherwise. The hypothesis explains why the reform of foreign exchange system in 1961 started the highly unusual beginning of the rapid export expansion in 1961. Direct evidence would be the witness of the exporters of new items to the effect that they had not recognized the profitable export opportunities before the reform but did after the reform. Unfortunately, it is hard to obtain direct evidence of this sort today, some fifty six years after the event. At one level, a piece of circumstantial evidence exists: for all eight new export items mentioned in Section II, belonging to SITC6+8, the appearance date was 1961 or later. Other than the foregoing analysis, no alternative hypothesis could be found in the preceding decade’s policies regarding exchange rate, import restriction or export promotion, which might explain why the unusual and rapid export expansion suddenly began.

V. Reinterpretation of the reason for Korea’s Export Success

The finding in the previous section goes against the widely held view, also shared by the early studies mentioned at the outset, that the policy switch from

²⁰According to Frank, Kim, and Westphal (1975), pp.96-98, the norm for exports share in GDP across countries of comparable population and per capita income in 1955 was 9.8 percent of GDP for large countries and 8.1 percent for large manufacturing countries, while the actual share for Korea in 1955 was 1.7 percent. ‘Exports’ here seems to include services as well as goods. According to Hong (1979), exports were as large as 31 percent of GNP in 1940, although it is debatable whether all of them should be regarded as international trade, as most of them went to Japan.

import substitution to export promotion in the mid-1960s started the rapid export expansion. Nor does it support the claims made by later studies that the heavy intervention by the government eventually led to the export surge. Thus, the finding calls for a re-statement of the relation between Korea's export success and the government policies.

First of all, the relation needs be clarified between the switch in development policy from import substitution to export promotion on the one hand and the beginning of rapid export expansion on the other. The policy switch took place in the mid-1960s and could not have started the rapid export expansion that began in 1961. Rather, evidence suggests that the policy switch was inspired by the beginning of the rapid export expansion. An example of this evidence can be found in the Korean government's First Five-Year Economic Development Plan, original version of which was published in 1961 and revised in 1964. While the original Plan mentions the desirability of and policy measures for export expansion, it explicitly states that the policy priority was on import substitution.²¹ Obviously, the Plan considered export promotion as a remedial measure to deal with the severe foreign exchange shortage at the time. Neither did the Plan anticipate the dramatic increase in manufactures exports. Instead, it envisaged exports of 'food products' and 'inedible raw materials', Korea's major export items until 1960, to remain so and account for roughly two thirds of total exports in 1966, the end year of the Plan. Simply, the government did not consider export promotion as a development strategy in 1961.

In the revised Plan announced in February 1964 the export targets of 'food products' and 'inedible raw materials' were adjusted downward. In its place, adjusted upward was the target of combined share of 'manufactured goods chiefly classified by materials' (SITC 6) and 'miscellaneous manufactured articles' (SITC 8) from 16 percent to 38.3 percent in total export for the last year of the Plan. Obviously, this adjustment was made in response to the rapid export expansion of SITC6+8 from 1961 to the first half of 1963, the period which is known to have had been taken into consideration in the revision. More to the point, the revised Plan emphasizes promotion of export industries. The section titled "Export Plan" states that export promotion was necessary not just to provide exporters with incentives but to promote the development of export industries. Indeed, the new policy of the revised Plan was to promote labor-intensive manufacturing and handicrafts as export industries and redirect investments away from import substitution industries to export industries.²² This revision of the First Five-Year Economic Development Plan is clear evidence that the policy switch to export promotion was inspired by the rapid export expansion that had begun earlier.

With hindsight, once the rapid export expansion had begun, the policy switch was bound to happen. In the early 1960s Korea was in dire need for new sources of foreign exchanges, as the U.S. aid that used to finance as much as 80 percent of imports in 1950s was declining since 1957. The need could be met at least in part by the rapid export expansion, albeit from a small base. Also, because it was led by

²¹Economic Planning Board (1961), p.43, states in the section on trade policy that the priority was on increasing production of the import substitution industries before it mentions various export promotion measures.

²²Economic Planning Board (1964), pp.44-47.

manufactures, the export expansion was going to enable Korea to realize the aspiration for industrialization and economic development. Moreover, because it was creating new jobs, export expansion could help the new power elites to fulfill the revolutionary pledge they made at the time of the military coup that they would save the people from under the poverty line. In more than one way the export expansion was a tailor-made answer to a number of problems the government had to tackle at the time. It is not surprising at all that the new government grabbed the opportunity and, with such catchphrases as “nation building through export” and “export first”, launched all-out efforts for export promotion. For example, among others, it announced in 1964 “Comprehensive Export Promotion Program” and substantially increased the number of types and the volumes of preferential loans for export. The next year “Monthly Expanded Meeting for Export Promotion” began, which was presided by President Park himself.²³

Then, what role did the government’s export promotion play in Korea’s experience of rapid export expansion? No doubt, as shown in Fig. 3, the benefits to exporters became much bigger in the second half of the 1960s, thanks to more and stronger export promotion measures. To answer the question properly, it needs be recalled that the import policy was protectionist throughout the 1960s and 1970s, as it was only in the early 1980s that import liberalization began in earnest. Also, it needs be recalled that protectionist policy has export-depressing effect, as was briefly discussed in Subsection III.B. Thus, in the second half of the 1960s and in the 1970s the government in effect was simultaneously pursuing two policies that had opposite effects on export. Export promotion provided incentives for export; protectionist import policy incentives for domestic sales, discouraging exports. To find out what the net effect on export was, it is necessary to quantify the incentives of the two policies, which is beyond the scope of this paper. It suffices to note that Westphal and Kim (1982) estimates the incentives for 1968 and finds that almost equal incentives were provided to production for domestic sales and for export.²⁴ The estimate is for a single year in the late 1960s. However, it seems certain that, the net effect did not become much more favorable for export in the following years. For export promotion did not strengthen much since 1968, while the import policy became a little more protectionist in the 1970s under the Heavy and Chemical Industry policy. Therefore, if anything, the net effect of the two different policies may have turned somewhat against export in the 1970s. In short, export promotion helped rapid export expansion by neutralizing the negative effects that protectionist import policy had on export. Had there been no protectionist import policy, the export promotion may not have been necessary.

An interesting question from a policy point of view concerns the motivation behind the reform of foreign exchange system in February 1961. Certainly, the reform was a turnabout from a low exchange rate policy to a realistic exchange rate policy. Was it also meant to be a switch in development policy in 1961 from import

²³Also, “Wastage Allowance” and “System of Local Letter of Credit” were introduced. In addition, public utility and transportation rates were reduced for exporters and accelerated depreciation was introduced as a measure of tax incentive. See Frank, Kim, and Westphal (1975), pp. 49-51.

²⁴“In short, although outward looking, the government’s strategy has not been purely one of free trade. . . . the government has provided, on the average, almost equal incentives to production for domestic sale and for export.” Westphal and Kim (1982), p.270.

substitution to export promotion? Most likely, the answer is “No.”. The reform was a campaign pledge of the Democratic Party, of which Chang Myon was the head, in the election that was held in July 1960 to replace the ousted Rhee government. The Democratic Party for years had labeled the unrealistically low official exchange rate a “disguised subsidy” to their cronies by those in power. For instance, if a politician, by exercising some influence on the relevant ministry, had a certain amount of government-held dollars be allocated to his political supporter(s) at the official exchange rate, far below the on-going market rate, it certainly would be an egregious example of corruption. The Democratic Party had promised to eradicate this source of wide-spread corruption, if it seized the power. Apparently, it was not even dreamed that the reform would start the rapid export expansion that eventually led to the great economic transformation called “East Asian Miracle”. Daily newspapers of those days carried no report to the effect that Democratic Party anticipated or promised an increase in export, creation of new jobs, progress in industrialization, and so on as the economic effects of the reform.²⁵ It seems certain that the reform of foreign exchange system was meant to be, more than anything else, an anti-corruption measure. This motivation also seems to explain why the newly elected Chang Myon government readily agreed to the U.S. demand for devaluation in October 1960, which it carried out in January 1, 1961, and once again devalued the currency on its own initiative only one month later as part of the reform in February 1961.

VI. Conclusion

This paper's investigation into the details of the experience finds that Korea's rapid export expansion began in 1961 with the appearance of new items, the export of which increased incomparably faster than that of then-existing export items. When, how and why of the highly unusual beginning can only be explained by the reform of foreign exchange system in February 1961, as discussed in Section IV. Evidence suggests that the sudden beginning of rapid export expansion led to the switch in the Korean government's development policy from import substitution to export promotion in the mid-1960s. The export promotion since then helped the rapid export expansion continue into the 1970s, largely because it neutralized the negative effect on export of the protectionist import policy that the government was simultaneously pursuing. It is misleading to say that the government's export promotion led to the export success in the 1960s and 1970s and to then stop without mentioning the neutralizing effect.

Put differently, the reform of foreign exchange system in 1961 removed the impediment to export, namely, the distorted system of overvalued Korean won and multiple exchange rate structure. Once the impediment was removed, requiring no further governmental assistance, the economy on its own began to realize the export potential it had in labor-intensive manufactures, which had been virtually unexploited until then. In this experience foreign exchange rate was much more

²⁵Reports on this and related story can be found in the daily newspapers at the time. See, for example, Dong-a Ibo, May 31, 1960; Oct. 1, 1960; Kyung-Hyang Shinmun, May 3, 1957.

important as an information-transmitting price variable than as an export incentive. The government's export promotion since the mid-1960s neutralized another impediment to export, i.e. the export-depressing effect of the protectionist import policy. This appears to be the main story of Korea's export success. In this paper's recount of the beginning of the rapid export expansion in 1961 and its continuation into the next decade, there is little evidence that supports the contention that Korea's export success was "government-made" or "government-led".

APPENDIX

APPENDIX TABLE 1—EXPORTS, 1957~70 (THOUSAND DOLLARS)

SITC		1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
0	Food, live animals	3,114	2,456	4,118	9,701	8,948	21,847	16,506	26,350	28,190	40,478	37,928	44,491	50,279	65,537
1	Beverage, tobacco	53	-	106	451	184	14	250	184	897	6,892	7,019	8,621	14,850	14,231
2	Crude materials, inedible	14,591	10,583	11,713	15,816	20,598	19,372	27,742	31,441	37,033	46,679	58,005	61,506	73,042	99,973
3	Mineral fuels, etc.	6	297	657	1,147	2,209	2,760	2,579	2,488	1,899	1,505	1,772	2,298	4,837	8,761
4	Animal, vegetable oils	35	162	177	199	118	69	92	88	71	137	119	113	68	59
5	Chemicals	6	10	115	401	550	990	904	630	380	714	2,359	3,115	9,753	11,413
6	Manufactured goods, classified by materials	3,394	2,408	2,139	3,937	4,004	6,177	28,115	42,309	66,414	84,175	101,382	143,598	173,826	220,886
631211	Veneer sheets	-	-	11	21	1,217	2,060	5,833	11,395	18,030	29,880	36,418	65,590	79,162	91,746
652	Cotton fabrics	276	899	1,425	2,443	857	1,834	4,289	11,119	10,522	10,121	12,591	13,314	18,645	26,355
6532	Woolen fabrics	-	-	-	-	-	-	10	580	2,228	2,153	3,963	4,519	3,344	3,382
6535	Synthetic fabrics	-	-	-	-	-	2	471	1,040	2,507	4,402	9,853	16,653	12,646	9,962
7	Machinery, transport equipment	56	4	48	88	884	446	4,066	2,204	5,501	9,556	14,185	24,464	53,219	61,469
8	Miscellaneous manufactured articles	640	148	86	93	791	1,954	6,400	13,198	34,487	59,197	97,238	167,005	242,344	352,496
83	Travel goods, handbags	-	-	-	-	4	1	2	6	50	417	1,209	827	1,228	2,479
84	Clothing	-	-	-	-	2	1,119	4,644	6,614	20,713	33,385	59,208	112,232	160,770	213,566
85	Footwear	-	-	-	-	30	238	738	879	4,151	5,467	8,139	11,044	10,476	17,268
89941	Umbrellas	-	-	-	-	-	1	-	72	86	26	50	203	431	799
89993	Artificial flowers	-	-	-	-	-	37	107	319	511	423	397	727	599	881
89995	Wigs, false beards	-	-	-	-	-	-	13	169	2,344	12,022	22,724	35,092	60,199	100,868
	Total Exports	22,202	16,451	19,812	32,827	40,878	54,813	86,800	119,057	175,081	249,537	320,227	455,397	622,513	835,182

Source: Bank of Korea, *Economics Statistics Yearbook*, 1960, 1964, 1966; Ministry of Commerce, *Trade Statistics Yearbook*, 1964.

APPENDIX TABLE 2—NOMINAL EXCHANGE RATE OF WON TO THE U.S. DOLLAR, 1955-70

	Official Rate	“Market Rates”		
		Japan Export Dollars	Other Export Dollars	U.S. Greenbacks
Jan. 10, 1955	18.0	92.3	83.5	77.2
Apr. 18, 1955	18.0	75.6	46.6	74.8
Jun. 27, 1955	18.0	80.2	56.3	75.3
Aug. 8, 1955	18.0	95.0	82.0	80.2
Aug. 15, 1955	50.0	95.0	82.0	80.2
Avg. 1956	50.0	107.0	100.8	96.6
Avg. 1957	50.0	112.3	105.7	103.3
Avg. 1958	50.0	122.5	101.5	118.1
Avg. 1959	50.0	139.9	124.7	125.5
Jan. 20, 1960	50.0	164.1	132.0	132.0
Feb. 23, 1960	65.0	171.8	138.7	144.9
Jan. 1, 1961	100.0	156.3	141.6	139.8
Feb. 2, 1961	130.0	147.9	145.4	148.3
Avg. 1962	130.0	NT	NT	134.0
Avg. 1963	130.0		169.8	174.5
May. 3, 1964	256.5		314.0	285.6
Mar. 22, 1965	256.5		279.0	316.0
Avg. 1966	271.3		NT	302.7
Avg. 1967	270.7		NT	301.8
Avg. 1968	276.6		NT	304.1
Avg. 1969	288.2		NT	323.6
Avg. 1970	310.7		NT	342.8

Note: 1) This table is adapted from Table 3-1, “Nominal Exchange Rates of Won to U.S. Dollar in South Korea, 1945 to 1970,” in Frank, Kim, and Westphal (1975), pp.30-31. 2) “Market rates” refer to the transfer rates that resulted from transfers of foreign exchanges between the deposit accounts traders held with the Bank of Korea until February 1961. For later years, they refer to the rates at which the foreign exchange certificates were traded. 3) “Japan Export Dollars” refers to the transfer rate at which dollar earnings from the exports to Japan were traded, and “Other Export Dollars” the transfer rate at which the earnings from exports to the rest of the world were traded. 4) ‘NT’ stands for ‘no transaction’.

APPENDIX TABLE 3—OVERALL INDEX OF TRADE LIBERALIZATION, 1955-84 (%)

Year	Average Tariffs	Automatic Approval	Year	Average Tariffs	Automatic Approval
1955	27.4	1.0	1970	58.5	52.8
1956	27.4	3.5	1971	57.9	53.5
1957	35.4	6.4	1972	57.5	49.5
1958	42.9	6.3	1973	48.2	50.7
1959	66.5	4.7	1974	48.1	49.3
1960	58.0	5.0	1975	48.1	47.8
1961	36.0	4.0	1976	48.1	49.6
1962	49.6	5.4	1977	41.3	49.9
1963	49.5	0.4	1978	41.3	61.3
1964	51.0	2.0	1979	34.4	69.1
1965	52.7	5.9	1980	34.4	70.1
1966	52.3	9.1	1981	34.4	75.5
1967	52.6	58.8	1982	34.4	77.4
1968	58.9	56.0	1983	34.4	81.2
1969	58.3	53.6	1984	26.7	85.4

Note: Automatic approval (AA) items are shown as a percentage of all importable items.

Source: Kim, Kwang Suk (1991), p.43, Table 3.6.

APPENDIX TABLE 4—PURCHASING POWER PARITY EFFECTIVE EXCHANGE RATES ON EXPORTS, 1958~70

	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
A. Official exchange rate	50.0	50.0	62.5	127.5	130.0	130.0	214.3	265.4	271.3	270.7	276.6	288.2	310.7
B. Average export dollar premium	64.0	84.7	83.9	14.6	-	39.8	39.7	-	-	-	-	-	-
C. Subsidies per dollar exports	1.2	1.3	1.2	8.5	21.5	19.6	27.4	39.2	51.6	62.4	77.7	75.1	86.5
D. Effective exchange rate on exports	115.2	136.0	147.6	150.6	151.5	189.4	281.4	304.6	322.9	333.1	354.3	363.3	397.2
E. WPI, Korea, 1965=100	39.9	40.8	45.2	51.2	56.0	67.5	90.9	100.0	108.8	115.8	125.2	133.7	145.9
F. WPI, major trade partners, 1965=100	97.2	97.7	97.9	98.3	97.6	98.3	98.5	100.0	102.8	104.0	105.6	108.8	112.8
G. Effective exchange rate on exports (D/E)	288.6	333.2	326.5	294.1	270.5	280.6	309.5	304.6	296.8	287.6	283.0	271.7	272.2
H. Purchasing Power Parity Exchange Rate on Exports (FxG)	280.5	325.6	319.6	289.1	264.0	275.8	304.9	304.6	305.1	299.1	298.8	295.7	307.1
I. Index of H, 1965=100	92.1	106.9	104.9	94.9	86.7	90.6	100.1	100.0	100.2	98.2	98.1	97.1	100.8

Note: D (Effective exchange rate on exports) = A + B + C

Source: Frank, Kim, and Westphal (1975), pp.70-71, Table 5-8.

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