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Volume Title: Foreign Trade Regimes and Economic Development: South Korea

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Volume Publisher: NBER

Volume ISBN: 0-87014-507-X

Volume URL: <http://www.nber.org/books/fran75-1>

Publication Date: 1975

Chapter Title: Chapter 2: Economic Growth in South Korea since World War II

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Chapter URL: <http://www.nber.org/chapters/c4063>

Chapter pages in book: (p. 6 - 24)

Chapter 2

Economic Growth in South Korea since World War II

ECONOMIC DISORGANIZATION FOLLOWING LIBERATION

The Japanese occupation of Korea ended on August 15, 1945 and was supplanted in part by a U.S. military government. The immediate postwar period was characterized by extreme economic disorganization and stagnation caused by the sudden separation of the Korean economy from the Japanese economic bloc, and by the partition of the country along the 38th parallel.

Under colonial rule from 1910 to 1945, the Korean economy became highly dependent upon Japan for capital, technology, and management. Of the total authorized capital of business establishments in Korea, the Japanese owned approximately 94 percent, as of 1940.¹ Japanese engineers and technicians employed in manufacturing, construction, and public utilities in 1944 constituted about 80 percent of the total technical manpower in Korea. The proportion of Korean engineers and technicians was particularly small in the metal and chemical industries (11 to 12 percent).² The relative number of Korean business establishments was very small in high-technology industries—about 10 percent in the metal and chemical industries and 25 percent in the machinery industry. Most Korean establishments were small and used simpler technology than the Japanese. Furthermore, establishments in Korea were mainly subsidiaries of Japanese companies. Therefore, the sudden retreat of the Japanese and the separation of the economy from the Japanese economic bloc brought about a suspension of many production activities in Korea.

Partition also had deleterious effects on the South Korean economy. In 1940, Korea's total population was 23.5 million people, 15.6 million in the South and 7.9 million in the North. Approximately 92 percent of average annual power generation, however, had come from plants in the North and most

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of the country's mineral resources were located there too. In 1940, the North produced about 90 percent of Korea's output of metal products and 83 percent of its chemical products (Table 2-1). By contrast, the South accounted for 72 percent of machinery production, 85 percent of textile production, 64 percent of processed food output, and 89 percent of printing and publishing output in the same year. Thus, metals, electric power, and chemical industries were located mainly in North Korea at the time of liberation, while light industries and machinery production tended to be located in the South.

The number of industrial establishments and employment in South Korea declined sharply after 1945 when the Japanese left and when firms closed for lack of electricity. The industrial survey of November 1946 showed that the number of manufacturing establishments had dropped by 43.7 percent since

TABLE 2-1
Manufacturing Output and Employment, 1940 and 1948
(output in millions of 1948 constant won)

	Manufacturing Output in 1940 ^a		South Korea's Share	South Korea's Manufacturing Output, 1948	Manufacturing Workers, 1948 (000)
	All Korea	South Korea			
Metal	49.2(9.3)	4.9(2.0)	(10.0)	2.2(4.2)	4.9(3.7)
Machinery	19.3(3.6)	13.9(5.6)	(72.0)	3.4(6.4)	14.4(11.0)
Chemicals	181.5(34.2)	30.7(12.4)	(16.9)	15.2(28.8)	32.6(24.9)
Textiles	72.8(13.7)	61.5(24.8)	(84.5)	21.6(41.0)	60.4(46.1)
Foods	118.8(22.4)	76.0(30.6)	(64.0)	6.6(12.5)	9.0(6.9)
Ceramics	15.7(3.0)	4.3(1.7)	(27.4)	1.4(2.7)	5.6(4.3)
Printing	7.0(1.3)	6.2(2.5)	(88.6)	1.6(3.1)	2.4(1.8)
Handicrafts	7.6(1.4)	4.9(2.0)	(64.5)	0.7(1.3)	1.8(1.4)
Other	59.0(11.1)	45.7(18.4)	(77.5)	0.0	0.0
Total	530.9(100.0)	248.1(100.0)	(46.8)	52.6(100.0)	131.1(100.0)
Central government operated				11.6(22.1) ^b	37.8(28.8) ^b
Local government operated				6.8(12.9) ^b	25.6(19.5) ^b
Private				34.2(65.0)	67.8(51.7)
Total				52.6(100.0)	131.1(100.0)

NOTE: Figures in parentheses are percentages.

SOURCE: Bank of Korea, *Economic Statistics Yearbook, 1949*, pp. 1-47-1-48.

a. Data for 1940 were recompiled by Bank of Korea to obtain manufacturing output for South Korea.

b. These shares were large because the government took over Japanese firms after August 1945. Most of those firms were later sold to private interests.

1944. Manufacturing employment was 59.4 percent lower. In 1948 total manufacturing output in South Korea was only about one-fifth of the 1940 level (Table 2-1) and had declined sharply in every major sector. (Manufacturing output is likely to have been much lower in 1946, but data are not available.)

In addition to the drastic decline in domestic manufacturing, severe food shortages developed after the war. Population increased rapidly because of the immigration of refugees from the North and the repatriation of Koreans from Japan and other countries. Since domestic grain output was not enough to feed the increased population, the U.S. military government imported about 670 thousand metric tons of food (including wheat, barley, rice, and powdered milk) from May 1946 to January 1948.

Uncontrolled expansion of the money supply before and after liberation set off a hyper-inflation. Currency in circulation expanded by about 6.7 times between the end of 1941 and August 15, 1945.³ After the liberation, it expanded 77 percent between August 15 and November 1, 1945 and by about 15 times in the four years and four months from August 15, 1945 to the end of 1949. Prices rose very rapidly. The Seoul retail price index increased about 123 times from June 1945 to June 1949.

The U.S. military government attempted to control inflation by announcing maximum prices on essential goods and by rationing. These measures were not successful and were accompanied by increased black market activities. When this became apparent, the government relaxed the controls.

ECONOMIC GROWTH AND TRADE, 1946 TO 1953

Neither national income data nor an overall industrial production index is available for the period 1946 to 1953. Production indexes are available, however, for major commodities as shown in Table 2-2.

Although the average production index for the major commodities is an unweighted, simple average, it gives a rough indication of the growth rate of production. Starting from a very low base in 1946, the postwar recovery of production was fairly rapid. The average production index shown in Table 2-2 increased about two and a half times from 1946 to 1949. Electric power generation and tungsten production for export increased sharply. Heavy industry, however, recovered much more slowly, especially iron and chemicals.

The Korean War again brought a sharp drop in industrial production in 1950 and 1951. By 1952 industrial production began to pick up again as the fighting gradually stalemated along the present demilitarized zone. Although hostilities did not cease until 1953, by that time the average production index (excluding tungsten) had slightly surpassed the 1949 level. The recovery, however, was uneven. Tungsten production increased spectacularly, but production

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TABLE 2-2
Production Indexes of Major Commodities, 1946 to 1953
 (1946 = 100)

Commodity	1947	1948	1949	1950	1951	1952	1953
Rice	115	123	122	121	94	77	117
Wheat and barley	90	95	123	127	74	106	125
Anthracite coal	169	281	347	222	44	175	269
Tungsten ore	353	394	413	112	327	1,106	2,347
Salt	87	113	225	208	99	241	238
Processed marine products	72	61	118	52	61	61	78
Cigarettes and tobacco	237	296	367	280	316	480	433
Raw silk	100	91	92	46	66	70	112
Cotton yarn	109	115	247	191	111	188	257
Cotton cloth	119	79	230	198	116	154	216
Paper and paper products	83	84	213	150	62	266	261
Laundry soap	7	141	197	164	268	316	310
Cement	172	212	225	108	68	339	390
Chinaware	107	150	419	303	274	356	330
Nails	598	595	865	716	225	569	1,114
Transformers	93	74	41	14	53	51	57
Light bulbs	163	162	127	49	35	30	68
Electric power	109	217	291	182	140	282	327
Average index (unweighted)	155	184	259	180	135	270	392
Average index (unweighted) excluding tungsten	143	171	250	184	124	221	277

SOURCE: Various indexes, Bank of Korea, *Annual Economic Review*, 1955; various annual output figures, *ibid.*

of a number of commodities, such as coal and cotton cloth, did not reattain the 1949 level.

From 1946 to 1953, the average production index increased about 3.9 times (2.8 times if tungsten is excluded). Despite its rapid growth, however, industrial production in South Korea by 1953 was still far below the level achieved in 1940. We can infer from the data presented above that by 1953 total industrial production was probably not much more than one-third of the 1940 level.

Table 2-3 gives merchandise exports and imports (excluding aid imports) from 1946 to 1953. Since all export and import data for that period were tabulated in won, we can show the trend in Korea's trade in real terms only by deflating the export and import current price figures, using for this purpose the Seoul wholesale price index.

South Korea's exports and imports in 1946 were negligible since the country was only beginning to recover from World War II. By 1949 exports

TABLE 2-3
 Merchandise Exports and Imports, 1945 to 1953
 (millions of won)

	Current Prices ^a		Seoul Wholesale Price Index (1947 = 100)	1947 Constant Prices	
	Exports	Imports		Exports	Imports
1946	0.05	0.16	55.0	0.09	0.29
1947	1.11	2.09	100.0	1.11	2.09
1948	7.20	8.86	162.9	4.42	5.44
1949	11.27	14.74	222.8	5.06	6.62
1950 ^b	32.57	5.21	348.0 ^c	9.36	1.50
1951	45.91	121.83	2,194.1 ^d	2.09	5.55
1952	194.96	704.42	4,570.8	4.27	15.41
1953	398.72	2,237.01	5,951.0	6.70	37.59

NOTE: Table includes recorded private and government trade only. Aid-financed imports, transactions with North Korea, and smuggling are excluded.

SOURCE: Bank of Korea, *Annual Economic Review*, 1955.

a. Exports and imports were valued in won according to f.o.b. export or c.i.f. import prices until March 1951; thereafter, according to domestic market prices (tariffs, domestic taxes, and trade margins were subtracted from domestic prices to estimate the price of imports).

b. Imports and exports through Incheon and Seoul customs offices were not included because records were lost during the war.

c. Average index for June 1950.

d. Average index for April-December in Pusan.

and imports were still quite small, about \$17 million and \$22 million, respectively.⁴ Although the Korean War severely disrupted trade patterns, exports by 1953 exceeded the 1949 level by more than 32 percent and imports were almost six times greater than in 1949.⁵

Nearly all of South Korea's exports during this period were primary products. Agricultural and fishery products generally declined from about 80 percent of total annual exports in 1946 to only some 10 to 15 percent during 1951-1953 because fishing was limited during the Korean War. On the other hand, exports of mineral products, mainly tungsten but also graphite, copper, kaolin, and talc, expanded sharply from about 10 percent of the total in 1946 to about 80 percent from 1951 to 1953.

Major imports in this period were food grains and manufactured goods. In 1946, 1952, and 1953, food grain imports accounted for 34 to 44 percent of total nonaid imports. In other years, when grain imports were not as high, manufactured goods imports accounted for 39 to 59 percent of total imports.

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POST-KOREAN WAR RECONSTRUCTION

The Korean Armistice took effect on July 27, 1953. According to government estimates, war damages to industrial offices, plant and equipment, public facilities, private dwellings, and transport equipment (exclusive of military installations) in South Korea were approximately \$3.0 billion. This amount was almost equal to estimated GNP for 1952 and 1953 combined.⁶ In addition, about one million civilians were killed during the war.

After the Korean War, real GNP grew rapidly from 1953 to 1957, averaging about 5 percent per annum. The only relatively bad year was 1956 when agricultural production declined almost 6 percent (Table 2-4). Mining

TABLE 2-4
Annual Percentage Growth of GNP and Major Sectors,
1954 to 1972
(1970 constant prices)

Year	GNP	Agriculture, Forestry, & Fishery	Mining & Mfg.	Social Overhead & Services
1954	5.5	7.6	11.2	2.5
1955	5.4	2.6	21.6	5.7
1956	0.4	-5.9	16.2	4.0
1957	7.7	9.1	9.7	5.8
1958	5.2	6.2	8.2	3.5
1959	3.9	-1.2	9.7	7.5
1960	1.9	-1.3	10.4	2.8
1961	4.8	11.9	3.6	-1.1
1962	3.1	-5.8	14.1	8.9
1963	8.8	8.1	15.7	7.4
1964	8.6	15.5	6.9	3.0
1965	6.1	-1.9	18.7	9.9
1966	12.4	10.8	15.6	12.6
1967	7.8	-5.0	21.6	13.8
1968	12.6	2.4	24.8	15.4
1969	15.0	12.5	19.9	14.6
1970	7.9	-0.9	18.2	8.9
1971	9.2	3.3	16.9	8.9
1972	7.0	1.7	15.0	5.8

SOURCE: Bank of Korea, *Economic Statistics Yearbook, 1973*, pp. 298-299.

and manufacturing output grew by about 15 percent per annum. By contrast, the period 1958 to 1960 was one of declining GNP growth, averaging less than 4 percent. Since population increased about 2.9 percent per annum, per capita income barely changed. The growth of mining and manufacturing averaged only about 9 percent per annum from 1958 to 1960, less than two-thirds of the rate in the preceding four-year period. One of the causes of the slowdown from 1958 to 1960 was a financial stabilization program that had been forcefully applied in 1957 and 1958.

Most of South Korea's imports from 1953 to 1960 were financed by foreign aid grants from two sources: the United Nations Korea Reconstruction Agency (UNKRA), which had been providing relief through the United Nations Civil Assistance Command in Korea (UNCACK) during the war, and the United States bilateral assistance program. UNKRA assistance from 1953 to 1960 totaled approximately \$120 million, and official U.S. aid during the same period amounted to \$1,745 million, including \$158 million of PL 480 goods. Foreign aid from both UNKRA and the United States was used for importing food and essential industrial raw materials as well as capital goods. Between 1954 and 1960, foreign assistance, excluding donations by foreign voluntary organizations, financed more than 70 percent of total imports. From 1956 to 1958 imports financed by U.S. aid exceeded 80 percent of total imports. About 74 percent of South Korean investment was financed by foreign aid from 1953 to 1960.

Rapid economic growth from 1953 to 1957, largely induced by substantial injections of foreign assistance, was accompanied by rapid inflation (Table 2-5). The wholesale price index increased more than three and one-half times between 1953 and 1957, an average annual rate of inflation of almost 40 percent. Concern with inflation led to an agreement between the South Korean government and the Office of the Economic Coordinator (the U.S. ICA Mission to Korea) on a financial stabilization program which was implemented from 1957. The annual rate of domestic inflation started to decline from that year. Price stability was achieved in 1958-1959 (wholesale prices even declined slightly in 1958). After the student revolution in April 1960, the new government abandoned the stabilization program in its first months in office. Wholesale prices rose by about 11 percent in 1960.

Commodity exports declined substantially during the period of rapid economic growth in the 1950s. By 1957 they were less than one-half the 1953 level in dollar terms (Table 2-6). During the stabilization period, exports began a recovery, but did not reach the 1953 level until 1961. In any case, during the whole period 1953 to 1960, exports of goods and services were negligible, ranging from 1.1 to 2.4 percent of GNP (Table 2-7 and Figure 2-1). Exports continued to be primarily mining, agricultural, and fishing products. Imports of goods and services were substantial, ranging from 8.8 to 14.3 per-

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TABLE 2-5
Major Price Indexes at Midyear, 1953 to 1972
(1970 = 100)

Year	GNP Deflator	Wholesale Price Index	Wholesale Price of Foods	Wholesale Price Index Excluding Foods	Seoul Consumer Price Index
1953	5.7	8.2	8.1	8.3	7.5
1954	7.5	10.5	6.5	13.9	10.2
1955	12.4	19.1	15.4	21.5	17.3
1956	16.2	25.1	24.7	26.2	21.2
1957	19.5	29.2	28.4	30.6	26.1
1958	19.4	27.3	23.3	30.3	25.3
1959	19.9	28.0	20.4	32.5	26.4
1960	21.8	31.0	24.4	35.2	28.6
1961	25.1	35.1	28.9	39.0	30.9
1962	28.6	38.4	32.6	41.9	32.9
1963	36.8	46.3	44.8	46.3	39.7
1964	48.6	62.3	61.4	61.5	51.4
1965	52.6	68.5	60.4	73.0	58.4
1966	60.1	74.6	65.3	79.8	65.4
1967	68.5	79.4	70.9	84.1	72.5
1968	76.6	85.8	79.7	89.3	80.6
1969	86.7	91.6	89.3	93.0	88.7
1970	100.0	100.0	100.0	100.0	100.0
1971	111.5	108.6	115.0	105.7	112.3
1972	127.7	123.8	137.5	117.5	125.6

SOURCE: Bank of Korea, *Economic Statistics Yearbook*, pp. 4 and 262-265 in 1973; pp. 328-329 in 1970.

a. From 1953 to 1959 these figures are the wholesale price indexes of grains and the wholesale price indexes excluding grains converted from a 1965 to a 1970 base.

cent of GNP or, on the average, almost seven times export earnings. Food grains and manufactured goods were the most important imports.

MILITARY GOVERNMENT, 1961 TO 1963

A military coup in May 1961 overthrew the Chang Myon government that had come to power following the student revolution of April 1960. The military government controlled the economy from May 1961 to the end of 1963. Stagnation developed in the South Korean economy from the spring of 1960

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TABLE 2-6
Balance of Payments, 1953 to 1972
(millions of U.S. dollars)

Year	Com- modity ^a Exports	Com- modity Imports	Services Net	Net Goods & Services	Official Grant Aid	Net Capital Inflows	Gold & Foreign Exchange Holdings ^b
1953	40	347	28	-279	193	112	109
1954	24	241	37	-180	139	28	108
1955	18	327	43	-266	240	-3	96
1956	25	380	24	-331	298	14	99
1957	19	390	-17	-388	355	18	116
1958	17	344	16	-311	319	-7	146
1959	20	273	25	-228	229	-17	147
1960	33	305	10	-262	256	-1	157
1961	41	283	44	-198	207	19	207
1962	55	390	43	-292	200	19	169
1963	87	497	7	-403	208	108	131
1964	119	365	25	-221	141	27	136
1965	175	420	46	-199	135	-17	146
1966	250	680	107	-323	122	196	245
1967	335	909	157	-417	135	293	356
1968	486	1,322	170	-666	121	476	391
1969	658	1,650	198	-794	98	717	553
1970	882	1,804	119	-803	82	626	610
1971	1,132	2,178	28	-1,018	64	834	568
1972	1,676	2,250	33	-541	52	330	740

SOURCE: Bank of Korea, *Economic Statistics Yearbook*, pp. 266-267 and p. 271 in 1971; pp. 222-223 and p. 219 in 1973.

a. Customs clearance data f.o.b. includes exports to Viet Nam through U.S. procurement.

b. End of year figures.

to the early part of 1962, mainly because of the political and social instability that followed two upheavals in a little over a year's time. The military government, anxious to revitalize the economy, adopted a very expansionary set of fiscal and monetary policies. These policies brought back inflation in 1962 which accelerated in 1963 (Table 2-5). From 1960 to 1963 the average rate of inflation was about 15 percent per annum. These same policies, however, stimulated growth. Although 1962 was a bad year for agriculture, mining and manufacturing output increased by 14.1 percent. In the next year, which was good for both agriculture and industry, GNP increased by 8.8 percent.

TABLE 2-7
GNP, Exports, and Imports, 1953 to 1972
 (billions of 1970 constant won)

Year	GNP	Exports ^a	Exports ^a as Percent of GNP	Imports ^a	Imports ^a as Percent of GNP	Exports Less Imports
1953	844	17.0	2.0	109.4	12.9	-92.4
1954	890	10.3	1.1	78.1	8.8	-67.8
1955	938	12.9	1.4	104.8	11.2	-91.9
1956	942	11.5	1.2	122.4	13.0	-110.9
1957	1,014	15.6	1.5	144.8	14.3	-129.2
1958	1,067	19.7	1.9	125.3	11.7	-105.6
1959	1,108	22.9	2.1	102.6	9.3	-79.7
1960	1,130	27.4	2.4	117.5	10.4	-90.1
1961	1,184	38.2	3.2	106.6	9.0	-68.4
1962	1,221	43.0	3.5	141.2	11.6	-98.2
1963	1,328	46.2	3.5	179.2	13.5	-133.0
1964	1,442	57.1	4.0	133.3	9.2	-76.2
1965	1,530	80.3	5.2	149.6	9.8	-69.3
1966	1,719	122.3	7.1	237.9	13.8	-115.6
1967	1,853	166.0	8.9	320.7	17.3	-154.7
1968	2,087	235.0	11.3	468.0	22.4	-233.0
1969	2,400	310.1	12.9	583.8	24.3	-273.7
1970	2,589	381.2	14.7	642.4	24.8	-261.2
1971	2,827	459.4	16.3	773.6	27.4	-314.2
1972	3,024	643.3	21.3	801.2	26.5	-157.9

SOURCE: Bank of Korea, *Economic Statistics Yearbook, 1973*, pp. 260-261.

a. Export and import figures are taken from Korea's national income accounts data in 1970 constant prices. Both exports and imports include services and goods.

During 1961 and 1962, the military government enacted many economic reforms including budget and tax reforms, a reform of the foreign exchange control system, and in June 1962 a currency reform.⁷ A new budget and accounting law was enacted, and various tax laws were revised to increase domestic tax revenues and, at the same time, to promote business internal saving.

The military government became increasingly concerned about earning foreign exchange and raising domestic savings since U.S. grant aid was reduced after 1960. South Korea's foreign exchange holdings, which had been increasing through 1960, gradually declined from 1961 to 1963 owing to the reduction in U.S. aid and the expansionary policies of the military government (Table 2-6). The government increased controls on imports and imple-

mented export incentive schemes such as tax exemptions. Measures were also taken to encourage the inflow of foreign loans and foreign direct investment. Since domestic savings averaged only 4.3 percent of GNP from 1961 to 1963 (Table 2-8 and Figure 2-1), foreign capital imports and grant aid financed the bulk of investment which was 12 percent of GNP during the period.⁸

Commodity imports declined in 1961, but increased sharply between 1961 and 1963 as the result of the expansionary policies. Export growth was substantial over the period 1961 to 1963; the average annual rate of growth from 1960 to 1963 was about 38 percent. The trade deficit, however, was still very large and grew rapidly from 1961 to 1963. Imports increased from \$283

TABLE 2-8
GNP, Domestic Savings, and Gross Investment, 1953 to 1973

Year	GNP (1970 constant billion won)	Domestic Savings ^a		Gross Investment ^b	
		(1970 constant billion won)	(percent of GNP)	(1970 constant billion won)	(percent of GNP)
1953	843.5	-32.3	-3.8	49.1	5.8
1954	890.2	24.2	2.7	83.2	9.3
1955	938.2	9.1	1.0	91.9	9.8
1956	942.2	-3.9	-0.4	98.4	10.4
1957	1,014.4	-16.5	-1.6	103.9	10.2
1958	1,067.2	4.4	0.4	101.1	9.5
1959	1,108.3	26.3	2.4	97.0	8.8
1960	1,129.7	19.4	1.7	100.9	8.9
1961	1,184.5	46.9	4.0	108.5	9.2
1962	1,221.0	58.5	4.8	149.2	12.2
1963	1,328.3	55.9	4.2	181.0	13.6
1964	1,442.0	82.6	5.7	151.2	10.5
1965	1,529.7	139.2	9.1	199.5	13.0
1966	1,719.2	201.8	11.7	302.1	17.6
1967	1,853.0	257.5	13.9	387.1	20.9
1968	2,087.1	326.2	15.6	533.2	25.5
1969	2,400.5	408.9	17.0	655.6	27.3
1970	2,589.3	427.9	16.5	677.2	26.2
1971	2,826.8	405.4	14.3	721.6	25.5
1972	3,023.6	467.4	15.5	637.4	21.1
1973	3,522.7	813.5	23.1	893.6	25.4

SOURCE: Bank of Korea.

a. Domestic savings exclude transfers from abroad, and changes in grain inventories which are more a function of the level of the fall harvest than of desired savings in the form of inventories, but include statistical discrepancy.

b. Excludes grain inventory changes.

million to \$497 million and the trade deficit from \$242 million to \$410 million or 15.6 percent of GNP.

Although commodity exports had been growing rapidly since 1959, they started from a very low base and did not become significant until 1963, totaling more than \$87 million or about 3.3 percent of GNP. The same year also saw a phenomenal rise in the importance of manufactured exports to more than 50 percent of the total; the major items being plywood, woven cotton fabrics, clothing, and iron and steel.

The First Five-Year Plan announced in 1961 reflected the basic economic policies of the military government. The annual growth target was 7.1 percent for 1962 to 1966. It listed priorities in the following order:

- (1) an increase in energy supply, including electric power and coal;
- (2) an increase in agricultural production and in farmers' incomes;
- (3) expansion of key industries and social overhead capital;
- (4) national land conservation and development through utilization of idle resources, particularly manpower;
- (5) an improvement in the balance of payments through the expansion of exports;
- (6) promotion of technology.

CIVILIAN GOVERNMENT AND ECONOMIC REFORM, 1964 TO 1966

A nominally civilian government emerged from the general election in early 1964 after three years of military government. South Korean GNP continued to grow rapidly from 1964 to 1966, averaging about 9 percent. The rate of inflation in wholesale prices increased to almost 35 percent in 1964, the steepest rise since 1956, but declined to 10 percent in 1965 and to 9 percent in 1966. Rapid economic growth and a reduced rate of inflation in this period were brought about by reforms in 1964 and 1965 and by a stabilization program introduced in late 1963. The main feature of the program was a strict limit on expansion of the money supply, which imposed ceilings on the annual and quarterly increases in the four major sources of "high-powered money," namely, central bank finance of government deficits, bank reserves, fertilizer loans, and foreign sector deposits. Since government deficit financing through central bank channels had been the major factor underlying the monetary expansion in 1961-1963, the government eliminated all deficits from its general budget beginning in 1964 and engaged only in periodic short-term borrowing.

As Chapter 4 explains, the government reformed the exchange rate in 1964 in order to increase incentives for export and to restrain demand for im-

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ports. In September 1965, the government announced an interest rate reform that substantially raised interest rates on both bank time deposits and loans. As a result, bank time and savings deposits increased very rapidly, thus enlarging the supply of loanable funds. The interest rate reform, however, created a large interest differential between domestic bank and foreign loans, making the latter particularly attractive.

The government made a serious effort beginning in 1965 to increase tax collections through administrative improvements and minor changes in rates. It also worked out a comprehensive tax reform program in 1966 for implementation in 1967. Government tax revenues gradually expanded from 7.3 percent of GNP in 1964 to 10.8 percent in 1966. Domestic revenues, which had been less than half of total central government revenues until 1958 and about 65 percent in 1964, financed about 75 percent of total central government expenditures in 1966 while counterpart funds originating in U.S. assistance financed the balance.

The ratio of domestic savings to GNP also increased rapidly from 4.2 percent in 1964 to 11.7 percent in 1966. Both private and government savings expanded, the one because of the interest rate reform of 1965 and the other because of the tax drive in 1965 and 1966. The proportion of gross domestic investment financed by domestic saving expanded from 31 percent in 1963 to 66 percent in 1966. The trade balance was also greatly improved, since exports increased continuously by more than 40 percent a year while the rate of increase in imports substantially declined after the devaluation in 1964.

The improvement in the trade balance together with the enlarged inflow of foreign capital brought about a gradual increase in foreign exchange holdings over the period. For this reason, the government gradually loosened import controls.

CONTINUATION OF RAPID GROWTH, 1967 TO 1971

Rapid growth of the economy continued from 1967 to 1971 with considerably more price stability than there had been throughout most of the period since World War II. Basic economic policy was generally guided by the Second Five-Year Plan and the Overall Resources Budget for annual implementation of the plan. For this reason, it is important to present the basic targets and directions of the second plan, announced in mid-1966.

The plan set an annual growth target of 7 percent from 1967 to 1971. The basic objective was "to promote the modernization of the industrial structure and to build the foundations for a self-supporting economy." The plan described the major targets as follows:

- (1) The emphasis will be placed on attainment of food self-sufficiency, reforestation, and development of marine resources;
- (2) The basis for accelerated and diversified industrialization will be broadened by giving emphasis to investment in such industries as chemicals, machinery, and iron and steel;
- (3) Further improvement in the balance of payments situation will be made by achieving a \$700 million level of exports (including \$550 million commodity exports) in 1971 on the one hand and by promoting import substitution on the other hand;
- (4) Population increases will be restricted as much as possible by promoting family planning, while at the same time maximum efforts will be made to increase employment;
- (5) A further sharp focus will be placed on increasing farm productivity and income through diversification of farming; and
- (6) The level of technology and productivity will be raised by the promotion of scientific and management skills and by improvement of manpower resources.

The actual performance of the economy from 1967 to 1971 far exceeded the original targets in almost all major sectors. The government revised them almost every year through the annual Overall Resources Budget according to actual performance in earlier years and new forecasts.

South Korean real GNP attained an average annual growth rate of more than 10 percent from 1967 to 1971, exceeding the planned figure by a wide margin. Exports of goods and services overshot the original goal by 1968, since both commodity and service exports expanded rapidly owing to an intensified government export drive and an increase in service earnings from construction workers and troops in Viet Nam. The commodity export target which had been set at \$550 million for 1971 was actually exceeded by 1969. Commodity exports in 1971 reached \$1,132 million and exports of commodities and services exceeded 16 percent of GNP. By 1971, exports of manufactures reached 86.0 percent of total commodity exports. Plywood, woven cotton fabrics, iron and steel, and clothing continued to be major exports. Electrical machinery, footwear, and wigs also became important.

Despite the rapid increase in commodity exports, the trade balance was not significantly improved during this period because of a concomitant increase in imports. The growth of imports reflected gradual over-valuation of the won as domestic prices rose, enlarged inflows of foreign loans, trade liberalization, and increased imports of raw materials for exports. However, South Korea's foreign exchange holdings continued to accumulate rapidly after 1966, mainly because of inflows of both short-term and long-term foreign loans including cash loans beginning in 1965. The rapid accumulation of foreign exchange

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holdings generated a large expansion in the money supply. Consequently, a major problem in the annual stabilization programs during this period was the neutralization of the additions in bank reserves brought about by the inflow of foreign exchange. The major instruments used to sterilize reserves were increases in bank reserve requirements, compulsory deposits into the Bank of Korea Stabilization Account, and sales of Bank of Korea stabilization bonds.

SLOWDOWN, 1971 TO 1972, NEW REFORMS, AND RECOVERY, 1973

From late 1971 through the first half of 1972, industrial production and construction slowed considerably. Growth of GNP in 1972 fell to 7.0 percent from 9.2 percent in 1971, despite a recovery toward the end of the year. Gross domestic investment, which declined from 25.5 percent of GNP in 1971 to 21.1 percent in 1972, dropped absolutely by about 12 percent. This slowdown was caused to some extent by a slackening in the growth of Korea's major export markets, the United States and Japan. Korean export firms were also hurt by a 10 percent surcharge imposed by the United States on most manufactured imports.

A financial squeeze on a number of South Korean firms was another cause of the slowdown. Many firms that produced primarily for domestic markets had borrowed heavily abroad to finance the import of capital goods for expansion of capacity. As the official rate for the won went from 317 to the dollar in December 1970 to about 400 won by June 1972 and as the Japanese yen and other key currencies appreciated in relation to the dollar in late 1971 and early 1972, the won value of foreign debts held by domestic firms increased by much more between the end of 1970 and mid-1972 than any inflation in profits. Also, many domestic firms had borrowed heavily and on a very short-term basis in the unorganized money markets where rates of interest approached 50 to 60 percent per annum.

The government responded to the problems caused by retarded economic expansion with an Emergency Presidential Decree for Economic Stabilization and Growth dated August 3, 1972. The decree promulgated a set of economic reforms, predicated, for the most part, on the assumption that resumption of rapid economic growth required financial relief for ailing industrial firms. The changes included the following:

(1) Most outstanding unorganized money-market loans to the business sector were converted into medium-term and long-term loans at relatively low interest rates. To enforce this measure, the government required both unofficial moneylenders and debtor firms to report all outstanding loans and debts. All unorganized money-market loans, except small ones of less than 300,000 won,

were frozen for terms ranging from six months to three years, with extended repayment periods after that. During the freeze, debtor firms were to pay only 1.35 percent monthly interest, regardless of the interest rate originally contracted, which generally ranged from 3 to 5 percent per month.

(2) Both bank deposit and loan rates were reduced as of August 3, 1972, the rate on one-year time deposits from 16.8 to 12 percent per annum and the ordinary bank loan rate from 19 to 15.5 percent. In addition, the government granted approximately 200 billion won to the banking system for the replacement of high-interest, short-term loans to the business sector with low-interest, long-term bank loans, and for special long-term loans for specified major industries.

(3) The government authorized special accelerated depreciation rules, allowing 40 to 80 percent more depreciation for specified major industries. In addition, a 10 percent investment credit was granted for new investment in the utilization of domestic resources.

(4) The government announced that the foreign exchange rate would be stabilized at 400 won to the dollar.

The August 1972 reforms marked the beginning of a radically different approach to economic policy in South Korea. From 1964 until 1972, wholesale price inflation had averaged more than 10 percent a year. In the face of this inflation, a number of measures were taken to stimulate savings and use of the banking system and to maintain the international competitiveness of the economy. Most significant of these measures was the maintenance of very high bank deposit rates and frequent devaluations. The new policy stressed price stabilization, low interest rates, and a stable exchange rate. It was recognized, however, that to switch from a regime of rapid inflation, high interest rates, and frequent devaluations to a more stable regime could only be accomplished at the cost of financial disaster for most industrial firms in South Korea, which were heavily indebted, unless special measures were taken. Thus the government sponsored a massive debt roll over, not only of loans in the nationalized banking sector but of private, unorganized money-market loans as well.

The basic plan was to concentrate much of foreseen price increases in 1972 and pursue a rigid stabilization program in 1973. In 1972 utility and fuel prices were raised so that these government monopolies would not require future subsidy. As of August 1972, however, the government announced that utility prices would be frozen indefinitely. The money supply increased sharply in the last half of 1972 as credit was expanded to accommodate the internal debt roll over, but the government announced a price stabilization plan for 1973 which included limited increases in the money supply and a reduction in the rate of growth of government expenditures. The government pledged its efforts to hold the rate of inflation of wholesale prices to 3 percent or less.

Many of the government pronouncements were aimed at cutting expectations of future price increases which, if successful, was expected to help stabilization.

Although GNP grew slowly in 1972, exports increased sharply, by 48 percent, from \$1,132 million in 1971 to \$1,676 million. Imports, however, grew only 3.5 percent in 1972, compared with a 21 percent increase in the previous year. Since service receipts also expanded rapidly because of increased tourism, the overall balance of payments deficit on current account (net goods and services) was reduced from \$1,018 million in 1971 to \$541 million in 1972. Gold and foreign exchange reserves reached \$740 million at the end of the year, an increase of about \$170 million over 1971.

This improvement in the balance of payments was made possible by the combination of two factors: (1) Enhanced international competitiveness of Korean industries due to gradual devaluation of the won from 317 to about 400 to the dollar between December 1970 and June 1972, and the relative appreciation of the Japanese yen and other key currencies based on the Smithsonian Agreement; and (2) the slowdown in domestic economic activities which not only reduced the demand for imports but also induced domestic industries to expand into foreign markets.

In 1973, the growth of real GNP increased to 16.5 percent. The mining and manufacturing sectors grew about 30 percent while exports exceeded the previous year's total by nearly 100 percent. The price stabilization plan, however, was endangered by very high prices for imported fuels, grains, and industrial raw materials.

The continued growth of the economy of South Korea and its export potential seem to be assumed among South Korean government officials and businessmen. They often talk of GNP of \$1,000 per capita and exports exceeding \$10 billion by the early 1980s. If the performance over the last decade continues unabated, these optimistic expectations are certain to be fulfilled.

NOTES

1. Only the manufacturing establishments whose capital exceeded one million won are included in this estimate. The total authorized capital of such companies in Korea at the end of 1940 amounted to approximately 1,725 million won. See the Bank of Korea, *Annual Economic Review of Korea*, 1948, pp. 1-100.

2. Ibid.

3. Money supply figures for this period, including bank deposits, are not available. But according to the end-of-year money supply estimated by the Bank of Korea in 1955, currency in circulation gradually declined from 74 percent of the money supply in 1945 to 58 percent in 1949.

4. These dollar values of exports and imports were estimated by applying the average official exchange rate of 0.68 won to one U.S. dollar in 1949 to the current price won values of exports and imports in Table 2-3.

5. Exports for 1950 were inflated because of large exports by consignment from Pusan to Japan just after the outbreak of war. Thus the decline between 1950 and 1951 is somewhat overstated.

6. Nathan and Associates (1954) estimated South Korea's GNP for 1952 and 1953 at \$1,384 million and \$1,721 million.

7. The currency denomination was changed from hwan to won at 10:1.

8. Both domestic savings and gross investment discussed in this chapter are exclusive of grain inventory changes.

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