CONFIDENTIAL
41B/GS/E

The Economy

South Korea

October 1973

NATIONAL INTELLIGENCE SURVEY

CONFIDENTIAL

32

APPROVED FOR RELEASE: 2009/06/16: CIA-RDP01-00707R000200080006-1

WARNING

The NIS is National Intelligence and may not be released or shown to representatives of any foreign government or international body except by specific authorization of the Director of Central Intelligence in accordance with the provisions of National Security Council Intelligence Directive No. 1.

For NIS containing unclassified material, however, the portions so marked may be made available for official purposes to foreign nationals and nongovernment personnel provided no attribution is made to National Intelligence or the National Intelligence Survey.

Subsections and graphics are individually classified according to content. Classification/control designations are:

(U/OU) . . Unclassified/For Official Use Only
(C) . . . . . Confidential
(S) . . . . . Secret

South Korea

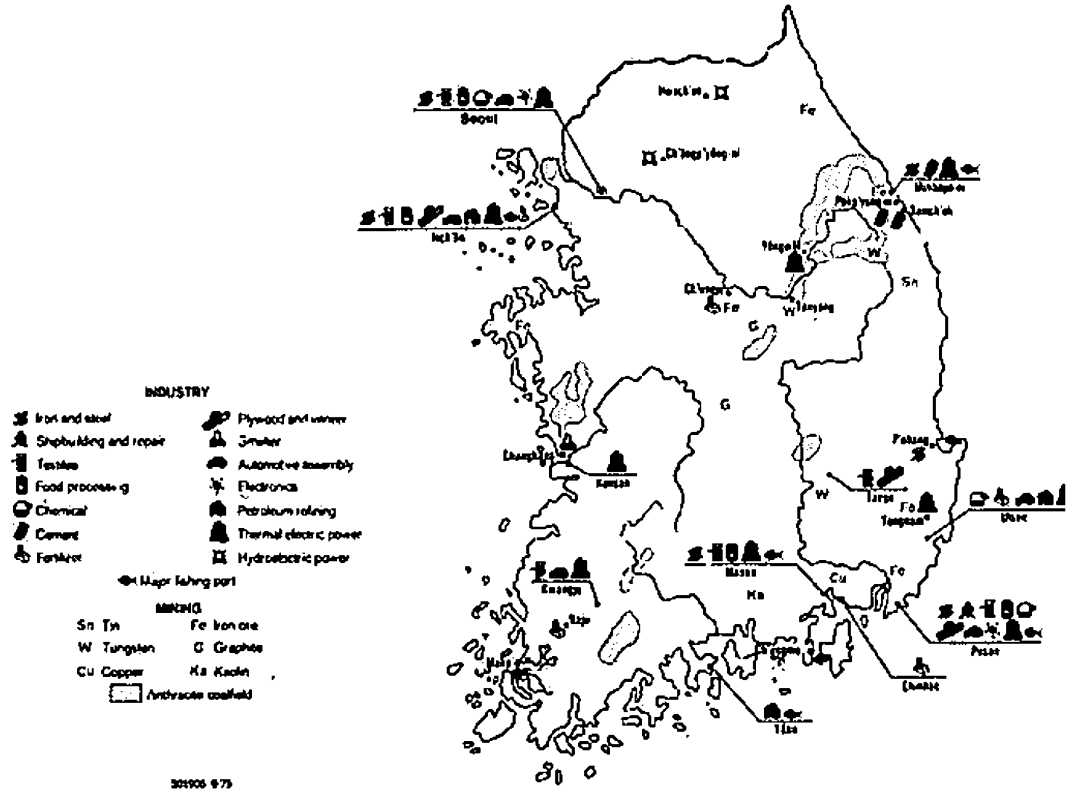
CONTENTS

This chapter supersedes the economic coverage in the General Survey dated February 1970.

CONFIDENTIAL

APPROVED FOR RELEASE: 2009/06/16: CIA-RDP01-00707R000200080006-1

FIGURES



Economic activity (U/OU)

The Economy

A. Economic appraisal (U/OU)

Over the last decade, South Korea achieved one of the world's highest rates of economic growth. During 1962-71, real gross national product (GNP) rose at an average rate of 10% per year (Figure 1). In terms of current prices, per capita GNP increased from about US$100 in 1962 to over $285 in 1971. By 1972, the GNP (in current prices) reached $9.7 billion and the per capita GNP, about $300. The extraordinary economic growth of the past decade was led by export expansion. South Korea has become one of the largest exporters of manufactured goods among the less developed countries; overseas sales, the bulk of which are manufactures, increased at an average annual rate of 40% during 1962-71. By 1972, exports exceeded $1.6 billion, compared to only $55 million in 1962.

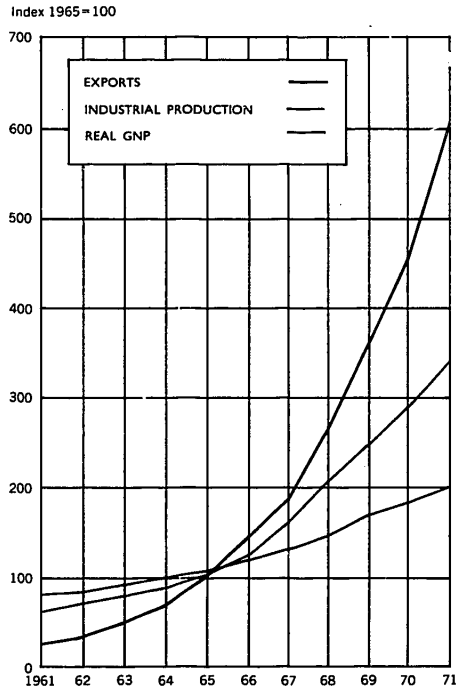


FIGURE 1. Economic indicators (U/OU)

Economic progress was achieved despite a paucity of natural resources. South Korea has a limited mineral base; anthracite coal is the major exploited mineral. South Korea ranks among the world's leading producers of tungsten and graphite, but it has only limited deposits of high-grade iron ore and no deposits of bituminous or coking coal. The country has no known deposits of petroleum, although offshore exploration is in progress. Hydroelectric power resources are limited and almost fully exploited. Only 23% of the land is arable, nearly all of which is under cultivation. Hence, the moderate progress achieved in increasing agricultural output has been due largely to the adoption of improved techniques and the use of modern inputs such as chemical fertilizers.

A booming manufacturing sector accounted for most of the recent economic progress. Manufacturing output increased at an average annual rate of 16% during 1962-66 and 25% during 1967-71. Manufacturing employment increased from 10% of total employment in 1966 to 13% in 1971. Labor productivity in manufacturing increased more rapidly, however, and in 1971 manufacturing accounted for 21% of GNP, second to agriculture, forestry, and fisheries. (Preliminary data for 1972 attribute 25% of GNP to the manufacturing sector.) The textile and clothing industries are the most important of the manufacturing industries, but the most significant expansion occurred in the chemical, petroleum, and machinery and transport equipment industries.

The dynamic manufacturing sector has been aided by large inflows of foreign capital, mostly from the United States and Japan. The flow of public and private foreign equity and loan funds into South Korea between 1959 and June 1972 exceeded US$4.3 billion. During the first half of 1972, the influx of direct foreign investment funds reached a record level

of $80 million, compared to $31 million during the same period in 1971. Investment is attracted by an industrious, well-disciplined, highly literate, and relatively cheap labor force. The government encourages the inflow of foreign capital by means of tax concessions, but investors are also attracted by the country's high degree of political stability.

Inflation has been one of the most serious problems of the South Korean economy. The wholesale price index rose to an average annual rate of 12.3% during 1962-71, and in the first 6 months of 1972, it rose another 7.2%. In August 1972, the government implemented a monetary stabilization program designed to hold price increases to a maximum of 3% annually, and between June and November of 1972, the price index rose only 0.5%. Despite the inflation, South Korea has maintained its competitive position in overseas markets by allowing its currency to depreciate gradually since 1965, when the rate was 270 won per U.S. dollar. In December 1971, the exchange rate was 373 won per dollar, and in December 1972 it was 400 won per dollar. This rate was maintained after the U.S. devaluation of February 1973.

The composition of foreign trade changed considerably as the economy expanded. The share of manufactured goods in total exports rose from 67% in 1967 to 82% in 1971, and although exports of foodstuffs and crude materials increased in value, their shares of total exports declined. Exports of textiles and clothing and electrical products rose rapidly, and South Korea has become one of the leading textile exporters among the less-developed countries. In 1971 exports of textiles and clothing accounted for about 41% of total exports. Major changes among imports included a decline in the share of manufactured goods from 63% of the total in 1967 to 55% in 1971, and an increase in the share of foodstuffs from 10% of total imports in 1967 to 17% of the total in 1971. Imports of petroleum also have increased sharply since 1967. South Korea perennially experiences a deficit on its trade account on a customs clearance basis; the deficit in 1971 amounted to US$1.3 billion, and in 1972 it declined to $898 million. In 1971, the deficit was partly offset by a $219 million surplus on government military transactions, private capital inflows of $427 million, and foreign aid inflows of about $300 million. Foreign exchange reserves amounted to $694 million at the end of 1972.

Economically, South Korea is heavily dependent on the United States and Japan. In 1972, those two countries together accounted for nearly three-fourths of South Korean exports, two-thirds of its imports, about 90% of the foreign private investment, and the bulk of the official economic aid. The United States alone bought about 47% of South Korea's exports (chiefly textiles, clothing, and plywood) and supplied 26% of its imports (largely wheat, cotton, rice, and machinery). Japan that year took 25% of South Korean exports and supplied 41% of its imports. Foreign aid commitments from the United States in U.S. FY1946-72 totaled US$5.6 billion, including $1.5 billion in Food for Peace (P.L.480) assistance.

South Korea's economic expansion has been guided by government-sponsored 5-year plans. The First (1962-66) and Second (1967-71) Plans were highly successful, and targets were frequently revised upward. Under the Third Plan (1972-76), the economy is scheduled to grow at an average annual rate of 8.6%, and exports are to increase at an average annual rate of 24.3%. Increased emphasis will be placed on agriculture during the plan period, and large investments are to be made in an effort to attain self-sufficiency in the production of foodgrains by 1976 and to raise the incomes of farmers. Heavy industries, however, will continue to receive top priority, and the government will develop more import substitution industries as a means of achieving a balance in its trade account. Long-range goals for 1980 call for exports of US$10 billion and a per capita GNP of $1,000.

Prospects for South Korea are bright. With rapid export expansion and further development of heavy and chemical industries, the country appears capable of continued economic success. It has a stable government which maintains a favorable climate for investment and actively participates in the economy. Efforts are being made to improve an already excellent labor force by expanding training facilities and programs. Continued large inflows of foreign investment and aid will be required, but there should be little trouble attracting foreign funds as long as the political situation remains stable. South Korea's future economic performance will also depend to a large extent on continued access to the U.S. market for its exports.

B. Structure of the economy

The structure of the South Korean economy has shifted significantly during the past decade (Figure 2). The most dramatic change has been the growth of manufacturing output from 13% of GNP in 1961 to 21% in 1971. This growth coincided with a decline in the contribution to GNP by agriculture, forestry, and fisheries, from 40% to 29%. Construction increased

FIGURE 2. Composition of gross national product, by sector (U/OU)
*(Percent)**

	1961	1971
Agriculture, forestry, and fishing	40.1	29.1
Mining and quarrying	1.9	1.1
Manufacturing	13.4	21.1
Construction	3.2	5.1
Public utilities	1.2	1.7
Transportation, storage, and communication	4.6	5.9
Wholesale and retail trade	11.3	16.6
Banking, insurance, and real estate	1.4	2.4
Public administration and defense	6.9	5.4
Other	16.0	11.6
Total	100.0	100.0
Value at current prices (billion won)	296.8	3,085.8
Value in 1965 prices (billion won)	613.6	1,561.9

*Based on current-price data.

from 3% of GNP to 5% during the same period. Domestic trade increased in importance, and its share in total output rose from 11% in 1961 to almost 17% in 1971. (U/OU)

1. Agriculture, fisheries, and forestry (U/OU)

a. Agriculture

Agriculture output rose an average of 4.1% per year in 1963-72, substantially higher than the population growth rate of 2.1%. Because of the more rapid growth in other sectors of the economy, however, agriculture, forestry, and fisheries declined in relative importance; their share of GNP declined from 40% in 1961 to 29% in 1971, and their share of total employment declined from 60% in 1964 to 49% in 1971. In spite of the growth in agriculture, South Korea is still a net importer of foods. In 1971, foodgrain imports amounted to 2.7 million tons, including more than a million tons of rice and 1.7 million tons of wheat Under its Third Five Year Development Plan, the country plans to become self-sufficient in rice by 1976.

About 23% of the total land area is arable, and virtually all the arable area is cultivated (Figure 3); cultivable land is located mainly on the coastal plains and along the inland valleys, and an increasing amount of hilly land has been cultivated by terracing. Paddies constitute 36% of the cultivated area, and the remainder consists of dry fields along the valleys and upland slopes. The Koreans practice intensive farming; double-cropping occupies about half of the total cultivated area. On the paddies, the summer crop is rice, and in the winter the soil is drained and planted

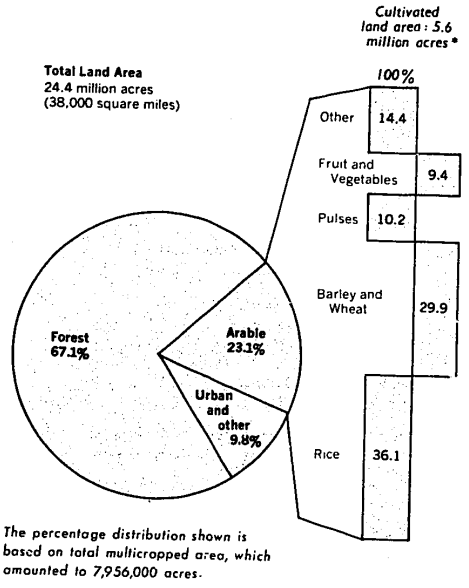


FIGURE 3. Land use, 1971 (U/OU)

to barley, wheat, or vegetables. On the dry fields, potatoes, beans, and industrial crops are grown in the summer, and wheat, barley, and rye in the winter. Other food crops include millet, sorghum, buckwheat, corn, soybeans, green beans, kidney beans, and peanuts.

The soils of South Korea are generally shallow and poor and require heavy fertilization. Greater knowledge of the benefits of proper fertilization and increased supplies of fertilizers in recent years have led to the use of a more balanced ratio of nitrogen, prosphorus, potash, and lime by many Korean farmers. On the other hand, a large number of farmers continue to use less efficient and less expensive natural fertilizers. Consumption of chemical fertilizers reached 1.3 million tons (product basis) in 1972.

The country is nearly self-sufficient in fertilizer production, except for potassic fertilizers. It has eight producing plants. Fertilizers are distributed by the National Agricultural Cooperatives Federation (NACF), the sole agency authorized by the government to procure fertilizers and pesticides and supply them to farmers. Most villages throughout the country have NACF-operated cooperatives that also

assist the farmers in marketing their goods and extend them credit. In addition to the central NACF organization, there are nine branches, 140 county cooperatives, and 6,714 village cooperatives. There are also special cooperatives for marketing products such as livestock, eggs, fruit, vegetables, and silk cocoons.

The NACF is the only modern agricultural credit institution and the biggest single source of credit for South Korean farmers. It has the authority to rediscount and borrow from the Bank of Korea and to issue debentures. Korean farmers require credit, and because institutional credit has been unavailable, they have borrowed from private moneylenders, who charge interest rates ranging from 3% to 10% per month. At present, the NACF provides less than one-half of total rural credit, and farmers still must borrow heavily from private moneylenders.

Since 1945, when the South Korean Government was established, a number of land reform programs have been undertaken. Tenancy has been officially abolished, and farmers have been forbidden to mortgage their land to anyone but the government. Because of the shortage of low-interest credit, however, farmers sometimes must mortgage over half their crops to private moneylenders. Land reform created a proliferation of small, irregular, and noncontiguous plots, but a revision of the Farm Land Improvement Act in 1967 provided for the consolidation and rearrangement of holdings to improve efficiency and raise production. During the Second Five Year Plan (1967-71) about 370,000 acres of land were consolidated. Farmers' response has been good, but bottlenecks developed in the bureaucratic process because of a shortage of trained personnel. In spite of land-reform efforts, the average size of a farm in South Korea remains very small—about 2½ acres.

In the Third Five Year Plan (1972-76), the government has emphasized the development of the agricultural sector. Under the Plan, agriculture's share of total investment will rise to 11.8% from the 6.3% called for in the Second Five Year Plan. The major emphasis will be placed on distribution of improved seeds, farm mechanization, consolidation of fragmented holdings, and improved irrigation, drainage, and road systems. Furthermore, a long-range plan covering the 1971-81 period was formulated to develop the four major river basin areas (Kum-gang, Yongsan-gang, Naktong-gang, and Han-gang[1]), which account for over half the farmland under cultivation.

[1]For diacritics on place names see the list of names on the apron of the Summary Map in the Country Profile chapter and the map itself.

(1) *Crops*—Rice is South Korea's most important food crop; it has a high calorie content and a high yield rate. Rice is planted on about one-half of the total area sown to grain (including double-cropped areas) (Figure 4). Production of milled rice varied between 3.2 million tons and 4.1 million tons, averaging 3.75 million tons in 1965-71 (Figure 5). Prolonged drought conditions caused a decline in rice production in 1967 and 1968, and again in 1972, when output was slightly below the previous year's level of 4.0 million tons. About 81% of the irrigable paddy area—2.6 million acres—is fully or partially irrigated, and the remainder is rainfed. Rice yields averaged about 1.3 tons per acre in 1962-71.

Barley, the second most important food crop, is planted as a second crop on about one-half of the rice paddies. South Korea's barley output reached a high of 2,083,620 tons in 1968, but declined since then, with output totaling 1,965,000 tons in 1972. Wheat competes with barley to some extent as a second crop on ricefields, but the longer growing season required for wheat pushes the harvest time into the rainy season—the most advantageous time for transplanting rice. As a result, the area sown to wheat is only about one-sixth of the area sown to barley. South Korea's wheat consumption has increased 250% since 1967, and in 1972 it totaled about 1.9 million tons, the bulk of which was imported under P.L. 480. In 1972, wheat production was only 241,000 tons, a significant decline from 1970 and 1971.

The production of sweet potatoes varied slightly in 1968-71, although the planted area has declined since the mid-1960's, as land has been shifted to barley and rice production. Most of the output of sweet potatoes is consumed directly, although some is processed into starch, alcohol, and glucose. The government encourages the production of sweet potatoes because of the high yield and high calorie content. The production of fruits and vegetables increased considerably over the past several years, along with the growth of food processing industries in general. The output of vegetables has increased especially fast, growing by 16% in 1971, when it amounted to 2.9 million tons. Other food crops raised in significant quantities include rye, millet, corn, and white potatoes.

Industrial crops are of less importance in South Korea's agricultural sector. The government, however, is promoting the production of cash crops such as mulberry leaves (for sericulture), tobacco, cotton, sesame, hemp, rapeseed, ramie, and black rush. Tobacco production and exports are actively promoted by the government, which has a monopoly

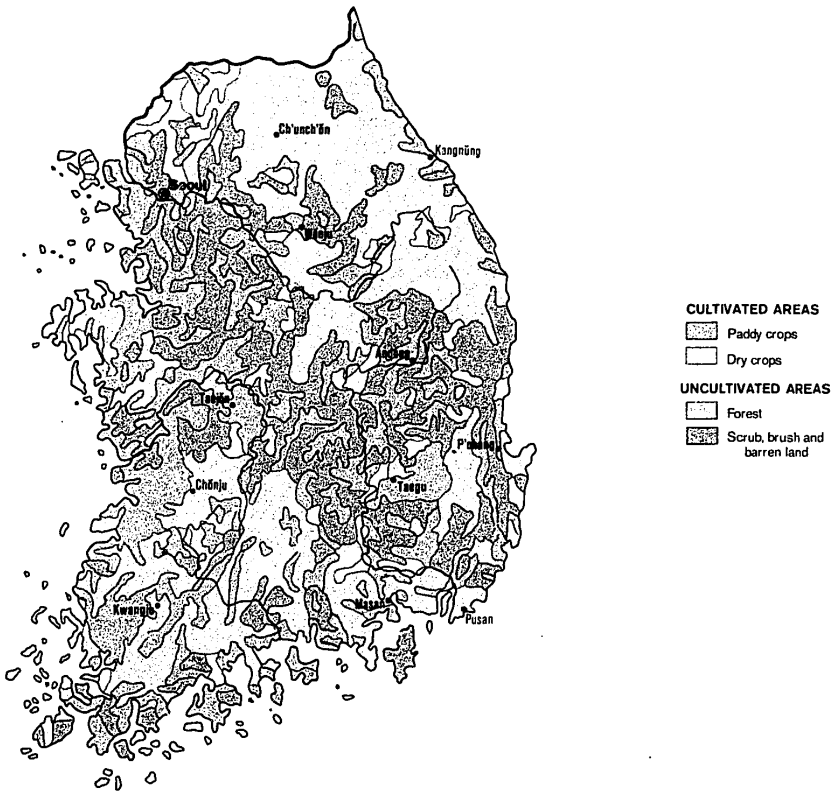


FIGURE 4. Vegetation and land utilization (U/OU)

on the manufacture and distribution of tobacco products. Exports of tobacco and tobacco products rose in value from US$7.8 million in 1968 to 12.6 million in 1972. Cotton acreage and production have remained at a relatively low level due to the availability of U.S. cotton under the P.L. 480 program. In 1961, there were 120,000 acres planted to cotton, producing 123,000 bales; by 1971, the cotton area had declined to 34,000 acres, with a total output of 53,000 bales.

Sericulture has grown rapidly, and South Korea now is the world's leading exporter of raw silk. Raw silk production almost tripled between 1966 and 1971, when it surpassed 2,300 tons.

(2) *Livestock*—Farm animals have been valued primarily as a source of draft power and manure; however, their use as a source of food is rapidly increasing. The government continues to stress livestock development to increase the supply of animal protein. In 1969, a 4-year livestock development plan was announced proposing the establishment of a cooperative Korean cattle development complex, livestock demonstration farms, and the distribution of improved breeding animals to farmers. The number of draft cattle rose from 1,190,156 in 1968 to 1,244,135 in 1971, still well below the count of nearly 1.4 million in 1964 (Figure 6). The beef cattle population, on the other hand, rose from 907 head in 1964 to a high of 3,948 head in 1969, then fell to 2,865 head in 1971. The number of milk cows has followed a long-term upward trend, rising from 14,000 head in 1968 to 30,000 head in 1971. The increase in number of dairy cattle, beef cattle, and chickens during the past decade was a response to the growing urban demand for milk, eggs, and meat—a result of rising incomes. Expansion of the domestic feed industry has facilitated the raising of beef cattle and poultry. The number of hogs averaged nearly 1,323,000 in 1964-71. Other farm animals raised in South Korea include sheep, goats, rabbits, ducks, geese, and turkeys. Livestock exports are small, averaging less than US$4 million per year in 1969-71; exports of meat and meat

FIGURE 5. Production of selected crops (U/OU)
(Thousands of metric tons)

	1965	1966	1967	1968	1969	1970	1971
Milled rice*	3,501.1	3,919.3	3,603.1	3,195.3	4,090.4	3,939.3	3,997.6
Barley*	1,807.0	2,018.1	1,916.0	2,083.6	2,066.5	1,973.9	1,857.5
Wheat*	299.9	315.3	309.8	345.0	365.6	356.8	322.0
Rye*	29.2	41.2	27.5	24.8	27.3	21.6	17.3
Millet*	62.6	58.8	42.4	78.8	61.4	44.7	35.1
Corn*	39.9	33.7	59.6	33.1	62.6	67.8	64.1
White potatoes	435.6	688.3	566.1	617.0	599.3	605.2	589.1
Sweet potatoes	1,678.5	2,690.2	1,670.7	2,049.3	2,122.7	2,136.1	1,901.4
Cotton	11.8	13.7	11.9	12.7	13.5	13.3	12.1
Vegetables	1,576.0	1,717.2	1,869.4	2,150.2	2,427.5	2,520.3	2,917.9
Fruit	310.0	331.1	358.9	392.4	416.8	423.3	404.3
Tobacco	56.1	72.1	66.0	69.7	59.2	56 3	63.4

*Polished weight of grains.

preparations averaged about $1,833,000 annually in those years.

b. Fisheries

At least half of the animal protein in the South Korean diet is supplied by fish. Because of the convergence of cold and warm sea currents, the waters off the coast of South Korea are ideal for many varieties of marine life. In addition to coastal fishing, deep-sea fishing is being developed on a large scale. Some of the more important species caught are oysters, clams, tuna, saury, hairtail, Alaska pollack, mackerel, anchovies, squid, and seaweed. The overall fish catch (including seaweed) reached 1,343,569 tons in 1972, compared to 600,000 tons in 1964. Exports of fish and fishery products increased from less than US$24 million in value in 1964 to $153 million in 1972, accounting for about 9% of total exports in the latter year. The government fisheries program calls for an expansion of the catch to 1,457,000 tons and exports of $183 million by 1976.

A large segment of the South Korean catch comes from coastal fishing, although the cultured and deep-sea fishing catch is expanding. The output of cultured fish increased from 97,000 tons in 1967 to 160,400 tons in 1972, and the deep-sea catch rose from less than 1,000 tons in 1960 to 50,000 tons in 1968 and 224,000 tons in 1971. The deep-sea fishing fleet has expanded from 63 ships in 1963 to 455 in 1972 as a result of government encouragement. The fleet fishes for tuna in the Atlantic, Pacific, and Indian oceans and operates out of 14 bases scattered throughout the world. At present, over 50% of the deep-sea operations consists of trawl fishing, whereas a few years ago operations were chiefly longline fishing.

Efforts are being made to overcome the problems of low income and lack of modern facilities and techniques in South Korea's fisheries. In 1972, South Korea began a number of joint ventures, including those with the New England Fisheries Company for shrimp and tuna fishing, with the Del Monte Company for skipjack tuna fishing, with El Salvador for tuna fishing and processing, with U.S. and Japanese interests for Alaska pollack fishing, and with Uruguay for trawl fishing. The industry also benefits from substantial foreign aid. Under terms of the Fishery Agreement with Japan, that country will provide US$130 million to the industry.

c. Forestry

About 67% of the land area of South Korea is classified as forest area, but this includes 13% that is

FIGURE 6. Number of livestock (U/OU)
(Thousands of head)

	1965	1966	1967	1968	1969	1970	1971
Draft cattle	1,312.7	1,288.6	1,240.5	1,190.2	1,198.4	1,267.8	1,244.1
Milk cows	6.6	8.5	10.4	13.8	18.8	22.8	30.0
Beef cattle	0.8	1.1	2.1	3.3	3.9	3.0	2.9
Chickens	11,892.6	14,007.7	17,079.2	25,967.8	22,651.4	22,476.9	25,122.0
Hogs	1,381.9	1,457.3	1,296.1	1,395.7	1,338.5	1,121.4	1,332.5

denuded; much of the remainder is poorly stocked. After 1945, forests suffered from extensive overcutting because of a general shortage of fuel. This resulted in widespread erosion and flash flooding that damaged areas under cultivation. To overcome this condition, the government is pursuing a forestry rehabilitation program, both to preserve existing timber resources and to increase future stocks. During the period 1965-71, almost 3.1 million acres were reforested and about 3.7 billion tree seedlings were planted. The government's soil conservation program covered about 180,000 acres during 1967-70 in addition to 1.2 million acres covered during 1962-66. While timber production has increased over the past few years, demand greatly exceeds domestic supply. In 1970, lumber output reached 833,000 cubic meters, compared to domestic consumption of 4,656,000 cubic meters. The shortfall necessitated imports of wood, lumber, cork, pulp, and waste paper valued at about US$178 million in 1972, compared to $191 million in 1971. Part of the imports is processed domestically into plywood and then exported. Plywood exports amounted to $127 million in 1971, mostly to the United States.

2. Fuels and power (C)

South Korea is deficient in energy-producing resources and require considerable imports to meet its domestic needs. Low-quality anthracite coal is the only mineral fuel available in sufficient quantities to satisfy requirements. Fuelwood reserves are inadequate, and there are no known bituminous coal or petroleum deposits. As a result, South Korea must import all of its petroleum and coking coal.

Over the past decade, there has been a major shift toward increased consumption of petroleum, at the expense of coal and wood; the government has encouraged the shift, but recent increases in world prices of crude oil have revived interest in domestic coal as a source of fuel. In 1961, petroleum supplied only 8% of the nation's energy needs; by 1971, its share had risen to 45%, and by 1976, it is expected to reach 62%. Crude oil imports in 1971 were valued at US$174 million, about triple the 1968 level. In the late 1960's, South Korea's petroleum consumption grew at an average rate of 35% a year. The government estimates that in 1976 petroleum demand will reach 26.5 million kiloliters, or 2.5 times the annual consumption in 1970.

South Korea's oil refineries have a combined capacity of 455,000 barrels per day (b.p.d.). The country's first refinery, owned by the government-controlled Korea Oil Corporation (KOCO), in which Gulf Oil Co. of the United States has a 50% equity, began operations in 1961 at Ulsan and in 1972 had a capacity of 235,000 b.p.d. A second plant, the $55 million Yosu refinery, owned jointly by a Korean Oil company and Caltex Oil Co. of the United States, began operations in 1969 with a capacity of 100,000 b.p.d., which it subsequently increased to 160,000 b.p.d. In late 1971, the Kyung-In Energy Co., a joint venture involving Union Oil Co. of the United States, set up South Korea's third oil refinery at Inch'on, with a capacity of 60,000 b.p.d. Royal Dutch Shell's joint venture, Kukong-Shell, has a small topping plant (5,000 b.p.d.) and lube oil blending operation. Kuwait, Saudi Arabia, and Iran were the major suppliers of crude petroleum in 1971 providing 81% of South Korea's imports.

Although no crude oil is produced domestically, exploration is under way in the East China Sea, Sea of Japan, and Yellow Sea, which are believed to have considerable petroleum potential. In 1969, the Gulf Oil Company signed a contract with the government to prospect for offshore oil resources in the East China Sea and the Yellow Sea; Royal Dutch Shell Oil Co. was granted an offshore concession a year later, and shortly thereafter Texaco was given a similar concession. In late 1972, Gulf Oil and Shell initiated drilling in their respective zones, while Texaco initiated drilling in the spring of 1973. Wendell Phillips of the United States also has an agreement for the exploration of Korea's offshore waters. Phillips' assignee, the Korean-American Oil Co., was set up by four U.S. oil companies specifically for petroleum exploration. Drilling operations were not scheduled to start before the conclusion of bilateral negotiations between Japan and South Korea concerning the joint exploration and exploitation of petroleum resources in disputed areas.

Coal is still a significant source of energy for electric power generation and rail transport. It has also become important for heating in rural areas, since farmers have been encouraged to preserve timber resources. Anthracite coal production declined in 1968-69 as a result of the government-encouraged shift to petroleum. However, beginning in 1970, steps were taken to stimulate coal production, and output increased to 12.4 million tons in 1972, compared to an average of 10.2 million tons in 1968-69.

The government-owned Korean Mining Promotion Corporation (KMPC) was established in June 1967 to assist the coal industry in modernizing its facilities and consolidating some of the smaller and less economical private coal companies. As a result, production reached a record high in 1971 (Figure 7).

FIGURE 7. Mineral production (U/OU)
(Tons, unless noted otherwise)

	1966	1967	1968	1969	1970	1971
Anthracite (*thousand tons*)	11,613	12,436	10,242	10,273	12,394	12,785
Iron ore (*thousand tons*) (50% Fe.)	807	694	842	734	636	442
Tungsten (70% WO_3)	3,322	3,639	3,898	3,487	3,657	3,644
Manganese ore (40% mn.)	*na*	*na*	3,437	2,315	2,397	2,134
Gold, refined (*kilograms*)	1,882	1,968	1,708	1,465	1,366	947
Silver, refined (*kilograms*)	15,554	18,285	19,016	19,584	52,700	46,841
Copper ore (6% cw.)	21,073	15,561	18,616	19,285	18,772	14,638
Lead ore (40% pb.)	13,890	17,607	23,812	24,020	26,379	26,453
Zinc ore (50% Zn.)	23,386	27,299	36,353	40,278	46,809	60,169
Bismuth (99% Bi.)	97	110	105	111	106	97
Molybdenum ore (90% Mo.)	552	516	256	401	279	237
Crystalline graphite (80%)	2,164	2,426	643	593	795	1,172
Amorphous graphite (75%)	128,780	364,323	358,538	309,753	337,152	374,164
Kaolin	112,234	102,679	60,513	52,983	84,608	124,445
Talc	53,649	56,370	65,161	130,915	135,338	104,374
Fluorite (90% Ca F_2)	31,208	56,968	32,562	24,177	29,978	50,815
Pyrophyllite	54,690	66,592	91,147	69,923	93,995	91,014
Limestone (*thousand tons*)	*na*	*na*	7,021	7,530	9,936	11,213

na Data not available.

Approximately one-third of the output comes from the government-owned mines operated by the Daihan Coal Corporation. South Korea's coal reserves were estimated at about 1.3 billion tons in 1969, of which 540 million tons were considered to be recoverable with present technology.

Electric power output expanded rapidly in recent years to meet the growing demand for electricity. By the end of 1972, the national installed capacity was about 3,871,000 kilowatts (kw.), about 35% of which was surplus. Production of electricity during 1972 amounted to 11.8 billion kilowatt-hours (kw.-hr.), a 141% increase over 1967. Per capita output was 370 kw.-hr., which compares favorably with that of most other Asian countries. The bulk of production was generated by the government-controlled Korea Electric Company, which owns and operates most of the country's generating base and all of the transmission and distribution facilities. Private ownership is restricted to industrial power plants and three public utilities. The government approved private participation in 1967-68, when demand for electricity substantially exceeded the supply.

Thermal plants account for about 90% of the electric power output. The bulk of thermal power production is derived from plants fueled by petroleum. Hydroelectric power potential is restricted by the short rainy season (during the summer) and a small annual river flow, which reduce the economic feasibility of water power development. In addition, few sites are suitable for building reservoirs to provide adequate water storage.

Both capacity and production are concentrated in the two principal industrial, commercial, and urban centers of Seoul-Inch'on in the northwest and Pusan-Ulsan in the southeast. The Seoul-Inch'on area includes two large thermal plants, a 387,000-kw. facility at Seoul and a 250,000-kw. plant at Inch'on, the latter of which is being expanded by an additional 550,000 kw. The country's largest hydroelectric installation, the 108,000-kw. Hwach'on plant (Figure 8) at the P'aro-ho Reservoir, also provides power to the Inch'on area. The principal thermal plants in the Pusan-Ulsan area are a 342,000-kw. plant at Pusan; a 200,000-kw. plant at Yongnam (north of Ulsan), the capacity of which is being doubled; and two plants with a combined capacity of 150,000 kw. at Ulsan. Other fairly large thermal plants include the A and B stations at Yongwol in the northeast—each with a capacity of 100,000 kw.—and the 200,000-kw. Donghae plant, near P'ohang.

Electricity is consumed primarily in the vicinity of the two generating centers of Seoul-Inch'on and Pusan-Ulsan. Nearly four-fifths of all available electricity is consumed by industrial users, principally chemical, textile, ceramics, food, and metal and machinery producing installations. Most of the residential power is consumed in urban areas, but rural electrification is increasing steadily, and about one-third of the rural communities had electricity in 1971.

According to the 10-year electric power development plan, the national capacity is expected to reach 7,720,000 kw. by 1976, about three times the 1971 capacity. Major projects already under construction

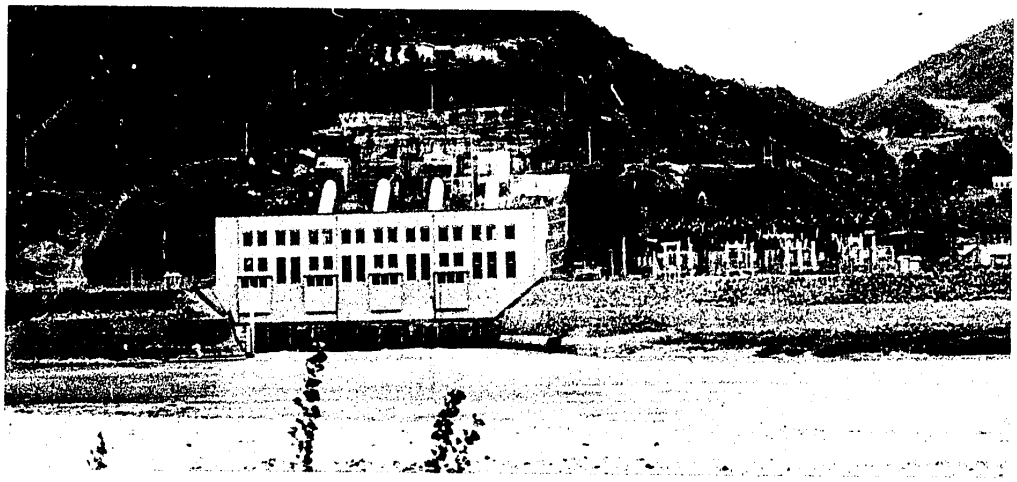


FIGURE 8. Hwachon hydroelectric powerplant. This 108,000-kw. plant is the largest hydroelectric plant in the country and is a major source of power for Seoul. (U/OU)

by the Korea Electric Company could provide an additional 2 million kilowatts of capacity by 1976. One of the plants under construction, the 600,000-kw. Kori station near Pusan, will be the country's first nuclear power facility and will be powered by a pressurized light-water reactor of U.S. manufacture. Other important government-owned facilities currently under construction include a 500,000-kw. plant at Yosu and the 125,000-kw. Yongdong plant north of Samch'ok. In addition, the Inch'on plant is being expanded by 550,000 kw. and Yongnam is being increased by 200,000 kw. Work is also underway on three important privately-owned public utility thermal projects, which include the expansion of the Donghae plant by 440,000 kw. and construction of the 600,000-kw. plant at Yosu and the 316,000-kw. Kyongin plant at Inch'on.

3. Metals and minerals (U/OU)

South Korea has only modest mineral resources. Anthracite coal accounts for roughly one-half of the value of mining output, and iron ore, graphite, copper, limestone, tungsten, and lead account for most of the remainder. Other metals and minerals produced in small amounts include gold, silver, kaolin, talc, fluorite, pyrophyllite, bismuth, and manganese, molybdenum, and zinc ores. Salt is obtained by evaporation from salt pans. Mineral deposits are generally located in the mountains and foothills. Tungsten and associated minerals, such as bismuth, and lode gold are found in all parts of the mountain ranges, which extend the entire length of the east coast and branch to the west and southwest. Placer gold and mineral sands are found in the foothills. Anthracite coal, graphite, iron ore, manganese ore, talc, and fluorite are located mainly in the northern mountains, while nonferrous ores and pyrites are concentrated in southern mountain areas. Some nonmetallic minerals such as salt, pyrophyllite, and kaolin are found in lowland areas.

In 1971, South Korea's mining industry (including quarrying) accounted for slightly less than 1% of the employed labor force and 1.1% of the GNP. In 1968-72, mining production rose at an average annual rate of 2.1%, compared to an annual average of 10% during 1962-67. The slower rate of growth in 1968-72 was largely due to lower coal production in 1968-69 and the reduced level of production of metallic and nonmetallic minerals (other than coal) in 1970-71. Although the bulk of the mineral output is consumed domestically, South Korea exports a major portion of its iron ore, kaolin, pyrophyllite, lead, zinc, and tungsten; total mineral exports (including coal) reached US$38 million in 1971. Tungsten ore, sold mainly to Japan and West Germany, was the leading mineral export, amounting to about $11 million in 1971. Practically all of the remaining important mineral exports are sold to Japan. Mineral imports include sulfur and asbestos (primarily from Canada), coke and small amounts of bituminous coal (from Japan), and copper (from the Philippines).

The government owns many of the larger mining corporations but encourages the growth of private companies by providing financial and technical assistance.

South Korea's iron ore reserves were estimated in 1972 at 112 million tons, of which only 15.7% was high grade. Iron ore output declined 30% in 1971 to 442,000 tons, most of which was exported to Japan. South Korea is the second largest producer of tungsten among the non-Communist countries, behind the United States. Output declined slightly in 1971, however, totaling 3,644 tons; output has been declining in recent years because of declining accessibility and quality of deposits. The Sangdong mine (37°09'N., 128°50'E.) of the government-owned Korea Tungsten Mining Co. and the Talsong mine (35°47'N., 128°40'E.) account for over 90% of the total tungsten production. South Korea's tungsten ore reserves were estimated at 300,000 tons in 1972. The scheelite beneficiation plant at Sangdong is capable of using low-grade ore that could not otherwise be mined profitably.

South Korea has large reserves and is a major producer of low-grade amorphous graphite, accounting for 16% of world output in 1970. It also has much smaller reserves of higher-quality crystalline graphite. In 1971, the country produced 374,164 tons of amorphous graphite, which included considerable amounts of metaanthracite. Exports of amorphous graphite totaled 30,145 tons in 1971, mainly to Japan. South Korea is richly endowed with kaolin, with an estimated reserve of 30 million tons. Exports of kaolin—mainly to Japan—totaled 77,522 tons (out of a total output of 124,445 tons) in 1971. Limestone production has increased rapidly with the expansion of the cement industry, reaching 11,213,000 tons in 1971, an increase of 13% over 1970.

The base metals production index rose 264 points between 1965 and 1971 (1965=100). Hankuk Aluminum Co. erected the first aluminum smelter near Ulsan in 1969, producing aluminum from imported alumina. Aluminum ingot production rose from 6,309 tons in 1969 to 16,600 tons in 1970, thereby significantly reducing the country's dependence on imported aluminum. At present, South Korea produces a full line of aluminum products, taking advantage of low labor costs. Production of electrolytic copper rose 60% between 1968 and 1971.

The government has promoted the development of a domestic steel industry to reduce its dependence on imports; in 1971, imports of iron, steel, and ferrous scrap were valued at US$196 million. Although South Korea's steel production capacity in 1970 was 853,000 tons, output of steel ingots in 1971 was only 471,000 tons, slightly lower than the 481,000 tons produced in 1970. The producing units include a mill at Masan with a capacity of 160,000 tons of steel ingots and slabs and 120,000 tons of steel plate; two cold-rolling mills built at Seoul and Pusan in 1967, with a combined annual output of 180,000 tons of cold-rolled steel and galvanized iron sheets; and the privately-owned Inch'on Heavy Industries (Steel) Co. steel plant at Inch'on with a capacity of 140,000 tons of crude steel. The rolling capacity of the Yunhap Steel Mill Co. was doubled in 1970. The Third Five Year Plan (1972-76) calls for the building of a foundry pig iron plant with a capacity of 200,000 tons per year and a special steel plant with a capacity of more than 60,000 tons of round bars annually.

South Korea has placed a high priority on establishing its first integrated iron and steel mill, and in July 1973 all ten plants involved in the first stage of the integrated mill became operational. The mill is located at P'ohang; it has an initial annual capacity of over 1 million tons of ingots and 850,000 tons of finished steel products. In July 1972 a small steel plate factory was opened as the first part of the project; it has an annual capacity of 336,000 tons, using imported slab. Initially, the Korea International Steel Association (KISA)—a consortium consisting of U.S., British, German, French, and Italian firms—was formed to finance the construction of the mill. However, in early 1969 the U.S. Export-Import Bank refused a KISA request for financial support because of reservations about the project's economic feasibility. South Korea terminated its contract with KISA and in turn received financing from Japan. The entire project was constructed under a supply and technical service contract with Voest of Austria, and the total cost amounted to an estimated US$210 million, of which Voest provided $24.3 million, and Japan supplied about $164 million. The P'ohang mill will not meet domestic steel requirements, which amounted to 1.5 million tons in 1970 and are expected to grow to 4 million tons by 1976. In December 1973, the second stage of the project will begin, designed to raise the capacity to 2.6 million tons by 1967-68. The country hopes to receive a US$60 million World Bank loan to help finance the $300 million, 3-year second stage development project. Preliminary studies are now under way on a second integrated mill.

South Korea's nonferrous smelting facilities are to be enlarged in the Third Five Year Plan with the expansion or construction of facilities for copper, lead, and zinc. The Changhang complex, built in 1964, includes a lead smelter and refinery, a copper smelter

and electrolytic refinery, a flotation mill, and a plant for extracting silver and gold using the cyanide process. Production of refined gold declined from nearly two tons per year in 1967-69 to just under one ton in 1971. However, it is probable that South Korea's actual gold output is higher than officially reported, since not all mining companies are required to report gold production to the government.

4. Manufacturing and construction (U/OU)

a. Manufacturing

Manufacturing is the most dynamic sector of the South Korean economy, accounting for over 25% of the real GNP in 1972, compared to only 15% in 1966. The share of the employed labor force engaged in manufacturing rose from 10% in 1966 to over 13% in 1971. The rate of growth of manufacturing output increased from an average annual rate of 15.8% in 1962-66 to 23.2% in 1967-72. This growth was based largely on the development of export-oriented industries such as textiles, plywood, and electrical machinery. As a result, manufactured goods comprised 88% of total exports in 1972 in contrast to only 22% in 1961.

The trend in South Korea is toward larger plants and more capital-intensive methods of production, but labor-intensive industries producing such items as straw products and textiles are still important. In 1960 about one-third of manufacturing output was produced in large enterprises (200 or more employees), whereas in 1970 the share was about two-thirds. Large modern plants are most conspicuous in the fast-growing producer goods industries such as chemicals and petrochemicals, base metals, cement, and electrical machinery, as well as in the important export-oriented plywood industry. Small firms (less than 50 employees) dominate the furniture and fixtures, clothing, footwear, leather goods, metal products, and nonelectrical machinery industries.

The textile industry (including footwear and clothing) is the oldest and largest manufacturing industry in South Korea, accounting for about 25% of the manufacturing labor force and roughly 20% of the gross value added in manufacturing in 1970. Most of the industry's production is consumed domestically, although exports of textiles and clothing have increased dramatically, reaching US$619 million in 1972, compared to only $3 million in 1962. Textiles and clothing accounted for 38% of total exports in 1972, compared with 6% in 1962, and South Korea now ranks third—behind Hong Kong and Taiwan—among less-developed countries as an exporter of textiles. Clothing exports alone in 1972 totaled $442 million, a 45% increase over 1971. Textile production increased 36% and clothing and footwear, 46% in 1972.

With the rapid growth of the manmade fiber textile industry, output of most natural fiber textiles has been declining in recent years; however, natural fibers (cotton, wool, and silk) still account for a large portion of textile output. The number of spindles available for cotton textile production has been steadily increasing, totaling about 1 million in 1971. Production of cotton fabrics in 1971 was about 24% above that of 1970, but it was still 8% below the 1967 level. The lower production levels since 1968 reflect strong competition from synthetics. Only about 58% of the total fabric output in 1971 consisted of pure cotton fabrics, compared to 74% in 1965. South Korea depends on imports for most of its raw cotton requirements—currently over 125,000 tons annually. Raw cotton imports in 1972, valued at US$80 million, were supplied mostly by the United States under the P.L. 480 program. In contrast to the production of other natural fiber fabrics, silk fabric production has boomed. The output of silk fabric increased 130% between 1966 and 1971, and reached 8.2 million square meters in 1971.

Manmade fiber fabric production includes products of nylon, acrylic, polyvinyl acetate, viscose and acetate rayon, polyester, and polypropylene fibers. South Korea imports intermediate manmade textile products, and concentrates on the production of clothing. Imports of synthetic fibers, yarns, and fabrics totaled about US$95 million in 1971. When the Ulsan petrochemical complex is completed, however, the need for imports of intermediate synthetic textile goods will be substantially reduced. There are plans to boost production of synthetic fibers fourfold by 1976. Knitwear has shown the fastest growth of all the rapidly-rising synthetic textile exports—increasing from less than $6 million in 1965 to $133 million in 1971. Sweaters made of synthetic fiber comprise a large portion of knitwear exports; sweater output in 1971 was almost six times the level of 1966.

Food processing (including beverages and tobacco) is the second largest industry within the manufacturing sector, but its relative importance is declining. Its share of gross value added in manufacturing fell from 42% in 1961 to 29% in 1970. Food processing, beverage production, and tobacco processing grew at average annual rates of about 26%, 21%, and 15%, respectively, during 1967-71. The principal activities of these industries are rice cleaning, sugar refining, wheat milling, beer brewing, canning of agricultural

and fishery products, and production of distilled spirits and cigarettes. With the exception of canned and frozen seafoods and dried seaweed, processed food output is primarily for domestic consumption.

Plywood production is one of South Korea's fastest growing and most modern industries; several producers are among the largest in the non-Communist world. Plywood output increased almost fivefold between 1966 and 1972, and exports during this period rose from US$30 million to $163 million. The output of paper and paper products rose 62% between 1968 and 1972, and further sharp increases are expected. An $11 million paper mill near Seoul is expected to begin production in 1973. This 37,000 ton-per-year mill is an integrated pulp de-inking and processing mill that will utilize waste paper to produce newsprint, writing paper, and printing paper. Under the Third Five Year Plan, construction of a $40 million pulp mill with an annual capacity of 130,000 tons is contemplated.

The chemical industry has received a high priority under both the Second and Third Five Year Plans. The industry's output of consumer-oriented products such as soap, paint, cosmetics, and pharmaceuticals increased considerably, but the major growth occurred in fertilizers and petrochemicals. South Korea has become largely self-sufficient in fertilizers other than potassic fertilizer, with eight fertilizer plants having been completed in recent years. Imports of chemical fertilizer declined since 1970, when three large-scale plants—two at Ulsan and one at Chinhae—were brought on stream. In 1971 fertilizer imports fell to 8% of the value of 1966 fertilizer imports; in 1969 South Korea began to export small amounts of fertilizer. In 1971 the country produced about 891,000 tons, a slight decline from the 940,000 tons produced in 1970; output consisted mainly of urea. The Korean Fertilizer Co. plant at Ulsan, with an annual capacity of 330,000 tons of urea (Figure 9) and 195,000 tons of ammonia, is one of the largest fertilizer plants in the

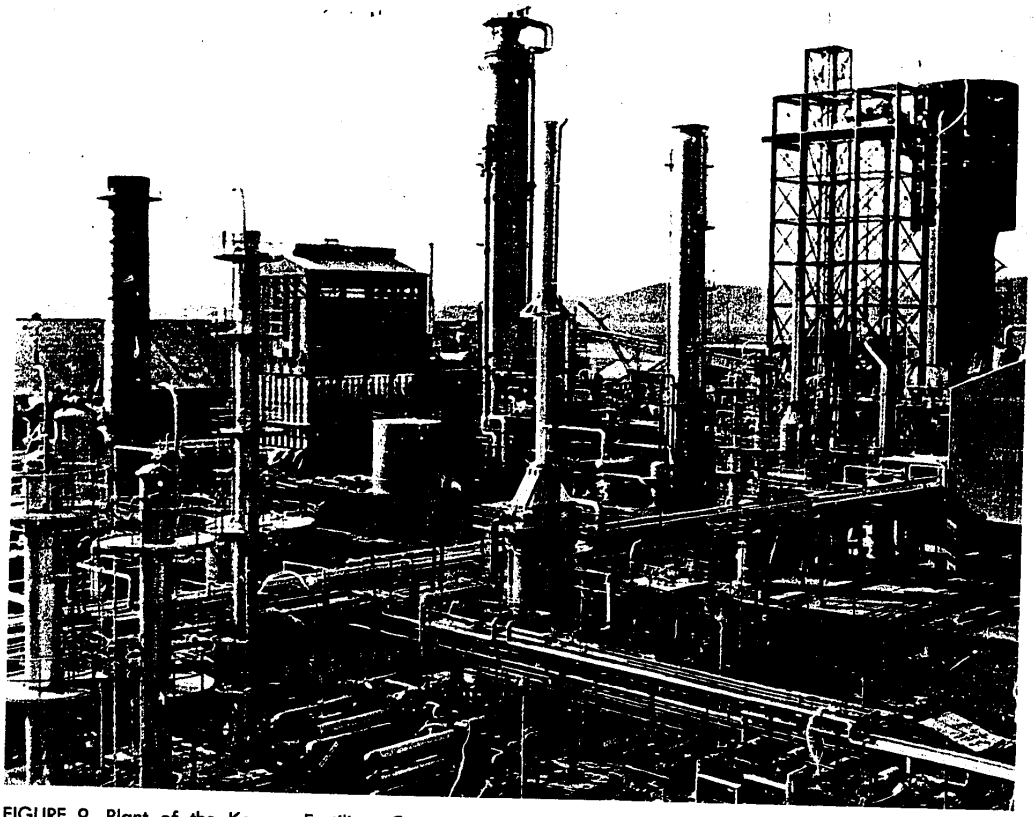


FIGURE 9. Plant of the Korean Fertilizer Company, Ulsan, the largest such plant in South Korea (U/OU)

world. This plant was financed with a US$46.9 million commercial loan from Japan. To meet the expected increase in fertilizer demand, construction of an ammonia center was begun in 1971 at Ulsan by the state-run Chungju Fertilizer Co.; it will be capable of producing 300,000 tons of ammonia and 230,000 tons of urea annually.

The Ulsan petrochemical complex, requiring investments estimated at US$233 million, will be completed during the Third Five Year Plan. The project is designed to meet the needs of the growing synthetic textiles and plastics industries. The first major plant in the complex was the petroleum refinery, opened in 1964 by the Korea Oil Corp., a joint venture of the Korean Government and the Gulf Oil Co. The Ulsan complex is adding a naphtha cracking unit that will produce 100,000 tons of ethylene annually, as well as propylene, butadiene, benzene, and cyclohexane, all for use in the production of intermediate petrochemicals by eight plants to be built at Ulsan.

Although the growth of machinery production generally has been sluggish, the output of electrical machinery has grown rapidly with the establishment of export-oriented firms and the increasing domestic demand. The principal electrical equipment produced includes household appliances, dry-cell and storage batteries, transformers, motors, and electronic equipment, such as radios, telephones, and computer components. Low labor costs have attracted foreign capital and technology into the electrical equipment industry, mainly from the United States and Japan; production of the industry is aimed largely at markets in developed countries. Output of electrical equipment rose in value by a modest 15% in 1972, compared with an average of 27% annually during 1962-71. Exports jumped from US$19 million in 1968 to $125 million in 1972.

The production of transport equipment has grown as a result of the steady expansion of shipbuilding, rolling stock assembly, automobile assembly, and a developing automotive parts industry. Output grew by about 19% annually during 1967-71, and in 1972 output was 11% above that of 1971. Several foreign automobile companies ssemble vehicles in Korea, including Honda and Toyo Kogyo of Japan, the Fiat Co. of Italy, and the Ford Motor Co. of the United States. General Motors (United States) and Shinjin Motor Co. of South Korea signed an agreement in 1972 to establish a US$48 million plant that will have a capacity of 35,000 automobiles and 50,000 engines annually by 1974.

b. Construction

Construction activity in South Korea has been expanding rapidly in response to rising industrial and housing needs. In 1972, construction accounted for 5% of GNP. During the period 1966-71, the number of building permits issued increased at an average rate of about 19% annually, and the floorspace authorized by these permits increased by about 16% annually. The number of permits issued in 1971, however, was 11%, and in 1972, 19% below the 1970 level because of the slowdown in the overall economy. Although housing construction has been rising (in 1971 there was a 5% increase in new units built), the demand for housing apparently is outrunning the supply. The housing shortage in 1971 was estimated at almost 1.3 million units. The continuing migration from the farms to urban areas has increased the need for both housing and schools, especially in major cities such as Seoul and Pusan. Consequently, construction of housing and schools, as well as highways, railroads, airports, sewage and water systems, dams, and electric power facilities is receiving high priority. The growth of construction has stimulated the production of construction materials such as bricks, glass, tiles, and cement.

Cement is the most widely used construction material, and the building boom has encouraged a rapid expansion of the cement industry. Prior to 1964, the output of cement was less than 800,000 tons annually. During 1964-72, output grew at an average annual rate of about 28%, and production reached nearly 6,500,000 tons in 1971. In 1967 the Tongyang Cement Co. expanded the annual capacity of its Samch'ok plant to 900,000 tons, and in late 1968 the Ssangyong Cement Industrial Co. completed a plant north of Samch'ok with a capacity of 1,700,000 tons annually. In 1969, the Hanil Cement Co. doubled its capacity, from 500,000 tons to 1,000,000 tons. Ssangyong completed an additional cement plant in Yongwol in 1972, which raised South Korea's domestic cement production capacity by 1,000,000 tons annually. By the end of 1972, South Korea's cement capacity stood at 8.3 million tons per year. Cement production now is not only sufficient for domestic demand, but also provides a surplus for export, much of which has been going to Vietnam.

5. Domestic trade (U/OU)

South Korea's wholesale and retail trade in 1972 accounted for over 18% of the GNP. A substantial amount of retail trade is conducted by small family units with a minimum of capital and inventory. Market-like concentrations of shops, where the

original producers—farmers, craftsmen, and others—sell their products directly to the public, are common. Most cities have large retail stores, but their share of total domestic trade is relatively small. They generally operate with small inventories and a minimum of sales promotion and advertising. The extension of credit by manufacturing plants to wholesalers and distributors is limited, and high interest rates are charged; most transactions are on a cash basis. South Korean wholesalers have developed a limited countrywide distribution system through agents in the various provinces who dispose of goods through local traders, but the lack of ready credit hampers the flow and reduces the volume of goods that can be handled.

Extensive government control over domestic trade began in 1948, when the South Korean Government obtained ownership of properties that the Japanese had acquired or created during their almost 50-year rule over Korea. Although the government has encouraged the growth of the private sector, extensive government control of enterprises and marketing still exists. The bulk of agricultural trade is handled through the government-owned National Agricultural Cooperatives Federation (NACF). The local cooperatives assist farmers in marketing crops, distribute consumer goods, and supply agricultural inputs such as fertilizer. The government controls the pricing and distribution of aid-financed imports, chiefly foodstuffs and raw materials, but such imports are rather small.

Domestic trade has been inhibited somewhat by inadequate transport facilities, although this is being corrected. National highways connect the major industrial and trading centers, large urban areas, and major ports. Other highways provide feeder services to the railroads. Provincial and local roads provide farm-to-market transportation into remote areas not served by the rail system. The government, with foreign assistance, is modernizing the highway system and is expanding and improving the railroad system. In late 1972, South Korea received a US$40 million loan from the World Bank for a fourth railroad project that is to cost $265 million. New expressways have been built (such as the recently-completed Seoul to Pusan superhighway) or are under construction (the Honam, Yongdang, and South Coast expressways are due for completion during the Third Five Year Plan). Coastal shipping has increased considerably since 1967, due partly to the diversion of fuel and cement cargoes from the overburdened railroad system. Efforts have been made to expand the shipping fleet, especially by building and importing petroleum tankers and coastal bulk carriers. The Hyundai Shipyard, a $75 million installation, is nearing completion near Ulsan. This supertanker shipyard, which is being built with British technical assistance to handle ships of up to 700,000 deadweight tons, is expected to become one of the world's major shipbuilding facilities.

Air transportation has become increasingly important. The privately-owned Korean Air Lines (KAL) is the major airline and the principal scheduled air carrier, although several smaller airlines also serve major trading centers. Kimpo airport in Seoul is served by six other international airlines. The volume of air cargo has expanded substantially in recent years, but it remains relatively small.

C. Economic policy and development (U/OU)

1. Policy

The South Korean Government is directly involved in the nation's economy, but it actively encourages the growth of the private sector. In addition to its usual participation through monetary and fiscal policy, the government owns many large enterprises. The greatest degree of government control is in the banking sector; the government owns and operates all major financial institutions except the Korean Development Finance Corporation (KDFC), and it holds a majority of shares in all but one of the national commercial banks. The special banks are government-owned. Through the Korean Development Bank (KDB)—formerly the Korean Reconstruction Bank—the government has invested in numerous industrial and commercial firms created in conformity with economic development plans. About 25 large-scale industrial firms are directly owned and operated by the government, including enterprises engaged in mining, fertilizer production, and petroleum refining. In addition, the government owns power and transportation facilities and has a monopoly in the manufacture of tobacco products.

The government's stated policy has been to reduce its direct control over nonfinancial activities. Many of the largest former Japanese-dominated enterprises acquired by the government after World War II were turned over to private ownership during the early reconstruction and development period. However, the government has invested in large-scale ventures in basic industries where it felt the private sector could not mobilize sufficient capital. The Inch'on Heavy Industry (Steel) Co., the Hanguk Heavy Machinery Co., and the integrated steelmill at P'ohang are government-owned. In the past, once a venture was firmly established, it was either turned over to private

ownership and operation, or its future expansion was left to private interests. For example, the country's first oil refinery was government-owned and operated, but additional refineries have been established by private interests. The policy is still to dispose of government holdings in industrial firms to private interests whenever feasible.

The government has enacted a variety of measures, many of them under the Foreign Capital Inducement Law (FCIL), to attract foreign investment. The government has pledged to protect foreign investors from expropriation of their property and guarantees unlimited repatriation of profits and repayment of approved foreign loans. There is no legal limitation on the percentage of stock a non-Korean may hold in a Korean firm. Generous tax exemptions and reductions of various forms are granted and, as of 1970, foreign nationals employed by foreign companies based in Korea under the FCIL were exempted from income taxes. In the Masan Free Export Zone, which was established in 1970, foreign firms can manufacture, assemble, or process products for exports, using tax-free raw materials and semifinished goods, most or all of which may be imported. Foreign investment also has been stimulated by educational policies that have produced a high literacy rate, by political stability, and by an improved monetary situation. Total private foreign equity investment approved under the FCIL during the first half of 1972 reached a record level of US$80.2 million compared to $30.6 million during the same period of 1971. Total public and private foreign equity and loan funds authorized under the FCIL between 1959 and June 1972 amounted to $4,321.6 million. The United States and Japan are the leading sources of investment. Of the total equity investments approved under the FCIL from 1962 through June 1972, the United States' share was 52.2%, and Japan's share was 37.5%.

a. Government budget

South Korea's fiscal position has improved dramatically since 1964 because of monetary and fiscal reforms enacted in that year and because of subsequent rapid economic growth. In 1961 domestic revenues covered only about half of the central government outlays; in 1972 they covered nearly 77%. In 1966, domestic revenues exceeded current government expenditures for the first time; since then, a current account surplus has been available for investment. The balance on current account shifted from a deficit of about 5 billion won in 1965 to a record surplus of about 109 billion won in 1971 (Figure 10). This resulted from a nearly 40% annual increase in revenues during that period, while current outlays rose by only about 31% annually. In 1972 the current account surplus declined to 39 billion won. The current account surpluses have helped finance the rapidly growing capital expenditures. The overall deficit—combined current and capital budgets—increased from an annual average of 32 billion won during the 1966-68 period to 71 billion won in 1971 and to a record level of 153 billion won in 1972. The deficit was financed mainly by the sale of commodities made available through foreign aid programs, primarily U.S. assistance, and through net borrowing; borrowing has been gradually displacing aid as a means of finance. The 1973 budget forecasts a 13% increase in domestic revenues over the revised 1972 level, while total expenditures are to be unchanged from 1972.

FIGURE 10. Central government budgets (U/OU)
(Billions of won)

	1966	1967	1968	1969	1970	1971	1972*	1973**
Current budget:								
Domestic revenues	106	152	229	307	387	484	506	572
Expenditures, current	100	135	182	239	293	375	467	484
Current balance	6	17	47	68	94	109	39	88
Capital expenditures	41	46	80	132	149	180	192	175
Overall balance	−35	−29	−33	−64	−55	−71	−153	−87
Financing of deficit:								
Foreign aid	31	27	33	23	20	21	*est* 9	.....
Net borrowing	12	16	−3	50	30	36	*est* 85	.....
Net change in cash balance	8	14	−3	9	−5	−14	*est* −59	.....

*Final budget.
**As passed by cabinet.

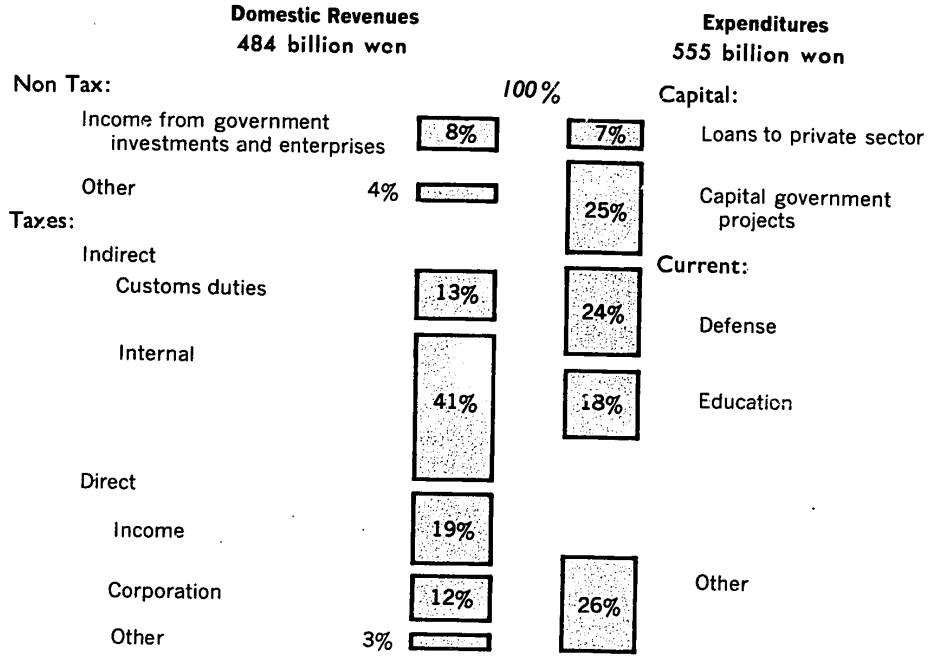


FIGURE 11. Composition of central government domestic revenues and expenditures, 1971 (U/OU)

Central government expenditures have risen rapidly over the past half-decade mainly due to increases in salaries of both civilian and military personnel. From 1967 to 1972, government workers received annual pay raises of between 15% and 30%. Defense expenditures—the most important budgetary item—accounted for about 36% of current expenditures, and as a share of total spending, they have remained about the same since 1968. Education is the second most important current budgetary category, accounting for roughly 18% of total expenditures (Figure 11). The share of central government outlays devoted to capital projects, including loans to the private sector, increased from 22% in 1964 to 32.5% in 1971, when capital expenditures reached 180 billion won. Major areas of capital spending have been transportation, communications, education, agriculture, and electric power. Government capital spending accounts for over two-fifths of total gross investment in South Korea and is a powerful instrument for implementing the government's development strategy.

Taxes accounted for roughly 88% of central government domestic revenues in 1971; the remainder was mainly income from the tobacco monopoly and other investments and enterprises. Most tax revenues come from indirect taxes, which accounted for about 54% of all domestic revenues in 1971; internal indirect taxes alone accounted for 41%. The latter include excise taxes on numerous goods and certain charges against business operations. A tax on personal income is the prime direct tax and is the single most important source of revenue, accounting for 19% of total domestic revenue in 1971. In 1972, under revised laws, a personal income tax was levied on most wage and salary incomes at progressive rates ranging from 7% to 48%. The only other significant direct tax is a corporation tax, which contributed 12% of domestic revenue in 1971.

Taxation policy in South Korea underwent a reorientation during 1971 when 16 tax laws were revised. The revisions, which became effective 1 January 1972, were aimed at promoting a more equal distribution of income and greater capital investment. Corporate tax rates were reduced from a range of 27.5% to 49.5% to a range of 20% to 40%. Under the revised laws, the overall tax burden was lowered slightly. Tax collection enforcement has been improved in recent years, with enforcement being

concentrated in areas of highest tax yields—high-income individuals and businesses; the effect on private savings has been substantial, since those groups have the highest propensity to save.

The Economic Planning Board, headed by the Deputy Prime Minister, is responsible for drafting the national budget. The Board, however, must obtain approval from the cabinet, which has the power to make changes in the budget. The President submits the budget to the National Assembly for final approval; one or more supplementary budgets usually are added during the course of the year.

Provincial and local government spending, both current and capital, totaled about 257 billion won in 1971. Most of this—about two-thirds—was financed by transfers (in the form of grants and loans) from the central government budget, but central government support is to be reduced and plans call for measures to increase the provincial and local governments' own revenues from taxes and other sources. In 1971, provincial and local tax revenues accounted for about 9% of the total taxes collected. The greater portion of local government expenditures is for education.

b. Money and banking

The monetary unit of South Korea is the won. No par value for the won has been established with the International Monetary Fund (IMF), but according to a 1972 agreement with the IMF, the South Korean Government will conduct its transactions with the IMF at a rate of 380 won per US$1. A flexible exchange rate was established, to be determined by the supply of and demand for foreign exchange. Prior to 1972, the won was allowed to depreciate gradually during intermittent periods, was fixed at other times, and was devalued by 4.5% in November 1960 and 12.9% in June 1971. The won depreciated gradually from 373 won per U.S. dollar in December 1971 to 400 won per U.S. dollar in June 1972. The latter rate was maintained when the U.S. dollar was devalued in February 1973.

The Bank of Korea functions as the central bank and is the bank of issue. It supervises commercial banks, provides loans to the government and to other banks, and implements the government's monetary policy. That policy is determined by the Monetary Board, whose decisions are subject to government approval. The Korea Exchange Bank (KEB), whose capital is wholly subscribed by the Bank of Korea, specializes in international banking and foreign exchange activities.

The government is the principal shareholder in all but one of South Korea's 15 commercial banks, of which five—the Chohcung Bank, the Commercial Bank of Korea, the First City Bank of Korea, the Hanil Bank, and the Bank of Seoul—are nationwide and ten are local. In 1971 the government owned 40% of the combined total shares of the five nationwide commercial banks. In 1967 foreign banks were allowed to establish branches in South Korea for the first time since the end of World War II. By the end of 1972, eight foreign banks had branches in South Korea, including three from the United States—Chase Manhattan Bank, First National City Bank of New York, and Bank of America—four Japanese banks, and one from the United Kingdom.

The banking system includes a number of specialized banks. The Korean Reconstruction Bank—now the Korea Development Bank (KDB)—was established in 1954 to supply and administer funds for financing industrial projects. Its main source of capital has been central government funds, although it can borrow elsewhere, accept deposits from the general public, and issue debentures. The Medium Industry Bank, owned jointly by the government and private subscribers, provides credit to high-risk, small- and medium-size businesses that otherwise would be unable to obtain bank loans. The Citizens National Bank caters to small depositors, and its volume of business is small, although it has over 30 branches. The National Agricultural Cooperatives Federation is South Korea's major agricultural credit institution, providing loans to farmers through local cooperatives throughout the country. Other specialized banks include the Korea Housing Bank, established in 1967 to finance the construction and purchase of houses; and the Federation of Fisheries Cooperatives, which makes loans to the fishing industry. All of these specialized banks are government owned and financed. The first privately owned specialized financial institution, the Korea Development Finance Corporation (KDFC), was formed in 1967. The shareholders include members of South Korean banks, insurance companies, the Federation of Korean Industries, the International Bank for Reconstruction and Development (IBRD), and several foreign banks.

In late 1963 the country initiated reforms to correct a deteriorating monetary and financial condition in which wholesale prices were increasing at an annual rate of 44%. Stabilization measures were taken, including sharp cuts in the government's current and capital outlays and a devaluation of the won. Annual stabilization programs, which set ceilings on the financial operations of both the public and private sectors and broadly outlined the necessary supporting policies, have governed the anti-inflationary effort

since 1963. The stabilization program was partly successful. During 1967-71, wholesale prices increased by an average of 7.8% annually. The wholesale price index in June 1972 was 16% higher than in the corresponding month in 1971, and in August 1972 a new economic stabilization program was initiated to hold the annual wholesale price increases to 3%. Between June and November 1972, the wholesale price index had risen only 0.5%.

2. Development

The government that came to power in 1961 during a period of economic stagnation immediately formulated measures to revive economic growth. Four 5-year economic development plans were envisaged that would more than double per capita income to over US$200 by 1981 and would enable the country to earn sufficient foreign exchange to meet its import needs. Thus far, the plans have served more as guides than as detailed blueprints, and pragmatic planners have made adjustments as necessary, especially in view of more rapid growth than was expected. Although the plans are formulated for 5-year periods, the development budget is prepared on an annual basis at the start of each fiscal year.

The First Five Year Plan (1962-66) generally achieved the stated goals of laying the foundations for economic development, despite a stabilization program that temporarily slowed economic growth. The Second Five Year Plan (1967-71) was very successful, achieving an average annual growth rate of 11.4%, compared to the original goal of 7%. Most of the major goals, except those of the agricultural sector, were surpassed, as shown in the following tabulation of annual average real growth rates, planned and actual (based on 1965 constant prices):

	ACTUAL GROWTH RATE 1967-71 (*in percent*)	ORIGINAL PLAN GROWTH RATE 1967-71 (*in percent*)
Gross national product	*11.4*	*7.0*
Agriculture, forestry, and fisheries	*1.9*	*5.0*
Mining and manufacturing	*21.1*	*10.7*
Tertiary activities	*13.3*	*6.6*
Exports of goods and services (including factor income from abroad)	*29.2*	*12.8*

Even though the targets were revised upward substantially during the course of the Second Five Year Plan, they were met satisfactorily.

Following the successful implementation of the Second Plan, the Third Five Year Plan (1972-76) was launched, projecting an average annual growth rate of 8.6%. Major emphasis was placed on expansion of agricultural production. The government now is studying a possible upward revision of growth targets in the Third Five Year Plan to bring them into line with the more ambitious goals already set for 1980, which include an export goal of US$10 billion and a per capita GNP goal of $1,000.

3. Manpower

South Korea's labor force in 1971 was approximately 10,265,000, equivalent to about 31% of the total estimated population of and about 55% of the working age population (persons 14 years of age and older). The average annual growth rate of the labor force during 1967-71 was 1.7%, compared to 2.1% for the total population.

The unemployment problem, although somewhat improved, remains serious, especially for high school and university students. The unemployment rate declined continuously from 8.1% in 1963 to 4.5% in 1971, when 457,000 people were recorded as unemployed. The unemployment rate rose to 6.5% in the first quarter of 1972, when economic activity temporarily slowed, but dropped 3.4% in June. The more serious and persistent problem is underemployment, especially in the agricultural sector. About 473,000 people, or almost 5% of those employed, worked less than 18 hours a week in 1971. In any event, total employment increased at an average annual rate of about 2.2% in 1967-71 and totaled 9,708,000 persons in 1971. This increase primarily reflects the growth of employment in manufacturing, construction, transportation, and communication.

There is no official estimate of the potential labor reserve. During the Korean war (1950-53), about 2 million economically inactive persons, including housewives and students, were drawn into the labor force from a population of about 21 million. Since the normal retirement age for employees in medium and large firms is 55 years, a number of able and experienced men could undoubtedly reenter the labor force in case of national emergency. However, the greatest reserve is within the existing labor force and includes the unemployed, underemployed, and persons working part time. In particular, there are many well-trained women who are not fully utilized in the South Korean economy. College-educated women in professional fields find it difficult to secure jobs, although female employment has risen faster than male employment since 1967. There are still relatively few female doctors, lawyers, or scientists. Women comprise 36% of the labor force, compared to about 40% in the United States and in Japan.

In 1971, about 49% of the employed labor force was engaged in agriculture, forestry, hunting, and fishing,

FIGURE 12. Employment, by industry (U/OU)
(Thousands)

	1965		1971	
	Number	Percent of total	Number	Percent of total
Agriculture and forestry	4,785	*56.2*	4,597	*47.3*
Fishing and hunting	215	*2.5*	112	*1.2*
Mining	79	*0.9*	88	*0.9*
Manufacturing	800	*9.4*	1,287	*13.3*
Construction	264	*3.1*	333	*3.4*
Public utilities	19	*0.2*	24	*0.3*
Transportation, storage, and communication	204	*2.4*	354	*3.6*
Commerce and other services	2,156	*25.3*	2,913	*30.0*
Total	8,522	*100.0*	9,708	*100.0*

14% in mining and manufacturing, and 37% in government, construction, commerce, and other services (Figure 12). This represents a significant shift from 1965, when almost 59% of the employed labor force was in agriculture, forestry, hunting, and fishing, and only 31% was in the service sector. In 1971, manufacturing accounted for over 13% of the employed labor force, compared to about 9% in 1965; the civil service employed about 437,000 people, or about 4.5% of the employed labor force.

The labor force is largely unskilled, and workers trained in modern techniques still comprise only a small proportion of the total (Figure 13). The government is placing considerable emphasis on upgrading manual, technical, and higher-level managerial and professional skills. Since the promulgation of the Vocational Training Law of 1967, vocational training has been expanded and improved. In 1970, 30,558 people were trained, compared to only 10,738 in 1967.

There are 14 legal holidays in South Korea, and employees receive 8 days of annual leave a year or 18 days after ten years of service. In addition, leave is granted for sickness until recovery, and maternity leave amounting to 60 days with pay is guaranteed by law. Strikes, although outlawed since December 1971, do occur, but they are relatively uncommon and unpublicized. During the 1-year period ending 31 August 1971, there were 236 labor disputes, of which only 23 developed into strikes, which involved less than 2,500 people. The chief labor organization is the Federation of Korean Trade Unions (FKTU), which, in 1972, embraced 17 unions with a membership of 504,624. Among the largest affiliates are the textile, mine, and transportation workers' unions. The FKTU has been more or less openly under government control or influence since its inception in 1946.

D. International economic relations (U/OU)

1. Trade

South Korea's exports (f.o.b.) increased from US$32.8 million in 1960 to $1,067.5 million in 1971 and to $1,624 million in 1972 (Figure 14). Imports (c.i.f.) also increased rapidly from $343.5 million in 1960 to $2,394.3 million in 1971. In 1972, however, imports rose only to $2,522 million, as domestic demand became sluggish and import substitution continued to increase.

The composition of South Korea's exports changed considerably between 1967 and 1971, although all

FIGURE 13. Employed labor force, by occupation (U/OU)
(Thousands)

	1967		1971	
	Number	Percent of total	Number	Percent of total
Professional, technical, and related workers	247	*2.8*	411	*4.2*
Administrative and managerial workers	76	*0.8*	64	*0.7*
Clerical and related workers	412	*4.6*	661	*6.8*
Salesworkers	1,124	*12.6*	1,240	*12.8*
Farmers, forestry, and related workers	4,686	*52.6*	4,557	*46.9*
Fishermen and hunters	222	*2.5*	133	*1.4*
Production workers and other laborers	2,147	*24.1*	2,642	*27.2*
Total	8,914	*100.0*	9,708	*100.0*

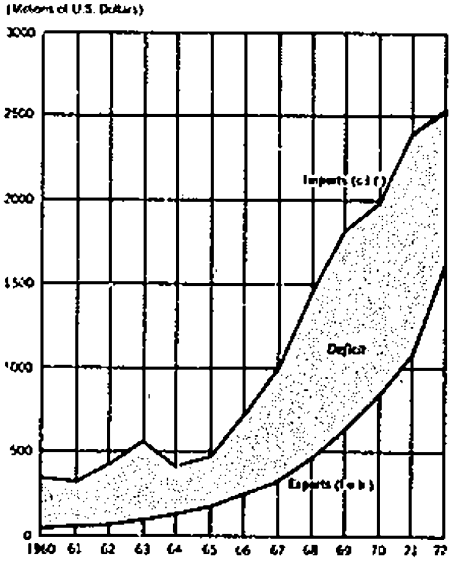


FIGURE 14. Balance of trade (U/OU)

major groups of exports rose in value. Manufactured goods, of which about half consisted of textiles and clothing, rose from 67% of total exports in 1967 to 82% of total exports in 1971, while exports of foodstuffs, beverages, tobacco, and crude materials fell from 33% to 18% (Figure 15).

The composition of imports also changed noticeably between 1967 and 1971. Foodstuffs, beverages, and tobacco increased as a share of total imports from 10% to 17%, while manufactured goods decreased from 63% to 57% (Figure 16). Imports of raw materials for the manufacturing sector showed almost no change as a share of total imports.

The United States and Japan are South Korea's major trading partners. In 1972, exports to the United States and Japan accounted for over 71% of total exports, and imports from those countries amounted to 67% of total imports (Figure 17). The U.S. share of Korean exports rose from 30% in 1964 to 52% in 1968, but it dropped to 47% in 1972 as a result of an active policy of South Korea to diversify its export markets. The major exports to the United States were clothing, textiles, veneer and plywood, wigs, and electrical machinery. Imports from the United States accounted for 26% of South Korea's imports in 1972, down from 50% in 1964. Wheat, rice, cotton, and machinery made up over 65% of the imports from the United States in 1972. South Korea recorded its first surplus in trade with the United States in 1972.

Japan has long been a major South Korean trading partner. After Japan's domination of Korea ended in 1945, the South Korean Government attempted to restrict trade with Japan, but by the 1950's trade had reached a substantial level. South Korea's imports from Japan increased from US$140.1 million in 1964 to $953.8 million in 1971. In 1972 Japan accounted for

FIGURE 15. Composition of exports (U/OU)
(Value in millions of U.S. dollars)

	1967		1971		1972	
	Value	Percent of total	Value	Percent of total	Value	Percent of total
Fish and fish preparations	26.9	8.4	42.2	4.0	70.4	4.3
Fruits and vegetables	9.0	2.8	20.7	1.9	na	na
Other food, beverages, and tobacco	9.0	2.8	22.0	2.1	na	na
Silk	16.6	5.2	42.7	4.0	53.9	3.3
Minerals, including coal	29.1	9.1	37.8	3.5	na	na
Other crude materials	14.2	4.4	25.7	2.4	na	na
Textiles and clothing	108.2	33.8	442.1	41.4	618.8	38.1
Plywood	36.4	11.4	126.8	11.9	163.4	10.1
Wigs and eyebrows	22.7	7.1	69.0	6.5	73.8	4.5
Electrical equipment	7.4	2.3	68.5	6.4	125.2	7.7
Iron and steel	1.9	0.6	24.4	2.3	na	na
Footwear	8.1	2.5	37.4	3.5	55.4	3.4
Other manufactures	30.7	9.6	107.4	10.1	na	na
Total exports	320.2	100.0	1,067.5	100.0	1,624	100.0

na Data not available.

FIGURE 16. Composition of imports (U/OU)
(Value in millions of U.S. dollars)

	1967		1971		1972	
	Value	Percent of total	Value	Percent of total	Value	Percent of total
Cereals	70.6	7.7	301.0	12.7	na	na
Sugar and sugar preparations	9.7	1.0	38.4	1.6	na	na
Animal feeds	3.7	0.4	33.0	1.4	6.9	0.2
Other food, beverages, and tobacco	4.9	0.5	27.0	1.1	na	na
Wood, pulp, and paper	73.1	7.5	191.0	8.0	178.4	7.1
Crude petroleum	38.0	3.8	174.0	7.3	217.7	8.6
Raw cotton	39.3	4.2	81.2	3.5	na	na
Iron and steel scrap	18.9	1.9	53.5	2.2	27.7	1.1
Manmade fibers	16.8	1.7	37.2	1.6	na	na
Other crude materials	78.9	7.9	133.5	5.6	na	na
Chemicals	113.0	11.3	201.0	8.4	111.2	4.4
Textiles	69.6	7.0	*137.0	5.7	*268.3	11.4
Iron and steel	56.1	5.6	167.2	7.0	167.8	6.7
Textile machinery	27.9	2.8	85.2	3.6	31.2	1.4
Electrical equipment	47.6	4.8	167.2	7.0	223.3	8.9
Other machinery	113.3	11.4	265.5	11.1	326.0	12.9
Transport equipment	121.4	12.2	167.5	7.0	178.2	7.0
Other manufactures	75.4	7.6	165.5	6.9	na	na
Total imports	996.2	100.0	2,394.3	100.0	2,522	100.0

na Data not available.
*Includes all yarns, fibers, and fabrics.

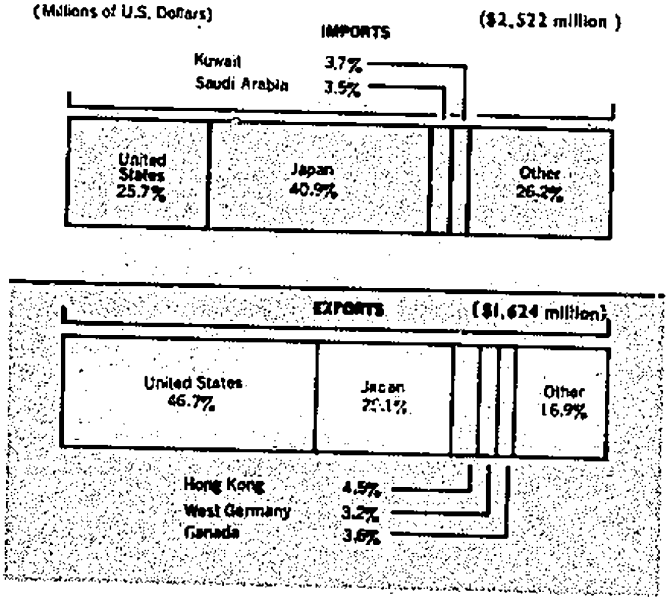


FIGURE 17. Major trading partners, 1972 (U/OU)

about 41% of Korea's total imports. Although South Korean exports to Japan increased from $38.2 million in 1964 to $262 million in 1971, they decreased as a percentage of total exports, from 32% to 24.5%, but rose slightly to 25.1% in 1972. South Korea's trade deficit with Japan rose from $228 million in 1966 to $692 million in 1971. Japan is a major customer for South Korean clothing, raw silk, and marine products. The most important imports from Japan are machinery, textile yarn and fabrics, iron and steel, and transport equipment.

Among South Korea's other trading partners, Singapore and Canada are important markets for textile products, and the Philippines, Indonesia, and Malaysia are South Korea's major sources of hardwood. Imports from the petroleum-producing countries of Kuwait and Saudi Arabia have picked up noticeably, accounting for 7.2% of South Korea's total imports in 1972, compared to 2.6% in 1968 and none in 1966. In 1971, exports to Europe amounted to US$87.8 million, and imports from that continent reached $261.3 million. West Germany and France supplied about 56% of the imports from Western Europe, mainly machinery and transport equipment. In the first nine months of 1972, there was an increase of about 90% in Korean exports to Western Europe that was largely accounted for by textiles. South Korea has recently begun limited trade with Eastern European countries, most of which is conducted through the Netherlands. This trade reportedly amounted to $2 million in 1971, and efforts are currently being made to expand it.

South Korea gradually reduced its import restrictions after 1964, but it tightened them in 1968 and again in 1971 because of alarm at the rapid expansion of imports. South Korea uses a "negative-list" system that prohibits or restricts the import of listed commodities. Items are "listed" if they are nonessential goods or if restricting their importation would aid domestic industries. In 1971 the government took measures to curb imports of certain nonessential items and revised regulations governing imports from Japan and other countries with which South Korea had large trade deficits. From November 1970 to November 1971 the number of restricted imports increased from 529 to 570; the number of prohibited items rose from 24 to 73; and the number of items automatically approved for import declined from 710 to 669.

2. Balance of payments

Until 1972, South Korea's balance of payments was characterized by a growing deficit on the current account, which was offset to a large extent by private capital inflows. Between 1967 and 1971, the current account deficit rose from US$192 million to $848 million, largely as a result of rapidly expanding imports (Figure 18). During this period, the trade deficit grew from $574 million to $1,046 million, and the nonmilitary service deficit rose from $14 million to $191 million, mainly because of greater freight and insurance costs and investment income payments. Receipts from U.S. forces in Korea, the presence of South Korean troops in Vietnam, and Vietnam-related services, which together earned $219 million in 1971, have partially offset the other service deficits. These receipts, however, have declined since 1969 and were expected to fall further because of the U.S. withdrawal of troops from Vietnam and reductions in South Korea. South Korea also has withdrawn its troops from Vietnam. In addition, the net receipts in private transfers declined from $142 million in 1969 to $107 million in 1971, and the net receipts in government transfers, mainly aid and grants, declined from $194 million in 1969 to $64 million in 1971. In 1972, the rapid increase in exports resulted in a reduction of the trade deficit to $578 million and a decline in the current account deficit to $350 million.

On the capital account, the net inflow of private long-term capital increased from less than US$10 million in 1964 to $243 million in 1967 and to $293 million in 1971. Net foreign lending to monetary institutions and net private short-term capital inflows have increased significantly in recent years. Net private short-term capital inflows rose from $45 million in 1967 to almost $135 million in 1971, but declined in 1972. Net government foreign loans increased substantially, totaling $235 million in 1971, compared to $13 million in 1967. The overall surplus on the nonmonetary capital account grew from $292 million in 1967 to $662 million in 1971. Net nonmonetary capital inflows during 1971 fell short of the current account deficit by $62 million, and the difference was financed by net monetary sector receipts and net changes in reserves. The Bank of Korea's gold and foreign exchange reserves increased from $357 million at the end of 1967 to $610 million at the end of 1970, then fell to $768 million at the end of 1971. At the end of 1972, the reserves had reached $694 million.

The South Korean economy gradually is becoming less dependent on foreign aid, particularly grant-type assistance, and is relying more on private loans and aid from international financial institutions. South Korea's export earnings have been financing an increasing portion of its imports—67% in 1971 compared to 54% in 1965. Foreign commercial loans financed 23% of total imports in 1971, compared to

FIGURE 18. Balance of payments, selected years (U/OU)
(Millions of U.S. dollars)

	1967	1969	1971
Goods and services:			
Merchandise:			
Exports (f.o.b.)	334.7	658.3	1,132.2
Imports (f.o.b.)	−908.9	−1,650.0	−2,178.2
Trade balance	−574.2	−991.7	−1,046.0
Services, net:			
Freight and insurance	−52.3	−85.2	−122.1
Other transportation	−2.2	−3.7	−2.8
Travel	7.9	5.2	16.4
Investment income	−1.8	−4.6	−90.6
Military expenditures	171.4	249.4	219.3
Other government expenditures	18.3	24.9	−8.4
Other private expenditures	15.8	11.3	16.1
Total services	157.1	197.3	27.9
Total goods and services	−417.1	−794.4	−1,018.1
Unrequited transfers, net:			
Private	90.7	141.9	106.6
Government	134.5	103.9	64.0
Total transfers	225.2	245.8	170.6
Total current account	−191.9	−548.6	−847.5
Capital account, net:			
Nonmonetary:			
Private long-term	233.4	372.1	292.7
Private short-term	45.2	56.5	134.6
Local and central government	13.1	202.8	235.1
Monetary sector:			
Bank deposit money	0.9	88.4	134.1
Central institutions	0.0	−3.1	26.3
Total capital account	292.6	716.7	822.8
Changes in reserves:			
Reserve position with IMF	0.0	0.0	−37.3
Foreign exchange	−111.8	−161.8	48.9
Total changes in reserves	−111.8	−161.8	11.6
Net errors and omissions	11.1	−6.3	13.1

7% in 1965. Aid-financed, relief, and other goods were less than 10% of imports in 1971, compared to 40% in 1965 and over 70% in 1960.

The surge in foreign commercial borrowing resulted in an outstanding external debt of over US$3 billion on 1 January 1972, and the debt service in 1971 on loans of over 1 year maturity was estimated to equal about 20% of total foreign exchange earnings—up from only 11% in 1969.

South Korea is affiliated with several international institutions, notably the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Monetary Fund (IMF), and the regionally-oriented Asian Development Bank (ADB).

3. Foreign aid

Since World War II, South Korea has received large sums of foreign economic aid, mainly from the United States. U.S. economic aid commitment during U.S. fiscal years 1946-72 totaled US$5.6 billion. Between 1948 and 1954, U.S. assistance was concentrated on providing food, clothing, and shelter to the populace. From 1955 into the early 1960's, the emphasis was on development of infrastructure and on technical training. In 1962, the U.S. aid program began to concentrate on the establishment of import-substitution industries such as fertilizer, cement, and food processing, and export-oriented industries such as synthetic textiles. At the same time, however, infrastructure projects continued to be important,

notably thermal power and telecommunications facilities. The shift from grants to long-term loans also began in 1962. During U.S. FY1946-61, American loan commitments to South Korea totaled only $52 million, while grant commitments reached $3.2 billion. In contrast, loan commitments during U.S. FY1962-72 rose to $1.1 billion and grant commitments were about $1.4 billion. The phase-down of development loans on concessionary terms began in U.S. FY68, as loans from the U.S. Export-Import Bank on commercial or quasi-commercial terms increased. Long-term economic loans exceeded $212 million in 1971, compared to less than $4 million in 1967. Food for Peace (P.L. 480) aid, which fluctuated inversely with South Korean harvests, totaled $1.5 billion during FY1946-72. Following average or good harvests, it ranged from $60 million to $70 million annually, but it has been much higher during times of drought, hitting a high of $212 million in FY72.

Japanese official economic aid began in 1966 under the terms of the 1965 Normalization Treaty, in which Japan pledged US$300 million in grants and $200 million in loans over a 10-year period. West Germany also is a significant source of foreign aid, pledging about $64 million in loans and technical assistance grants in 1964-71, of which $36 million had been disbursed by the end of 1971. International financial institutions have also markedly increased their loan commitments to South Korea. From 1959 to 1971, the country received loans totaling $387 million from the Asian Development Bank (ADB), the International Development Association, the International Finance Corporation, and IBRD. Most of this aid was committed in the last 3 years and was used for development projects such as highway construction, irrigation projects, cold storage facilities, school construction, and sericulture development.