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INTERNATIONAL MONETARY FUND

KOREA

Recent Economic Developments

Prepared by U. Baumgartner (ASD), C. Puckahtikom (ETR),  
M. Wattleworth (FAD), M. Fetherston (EP)

Approved by the Asian, Exchange and Trade Relations, and  
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Korea

Basic Data

<u>Area</u>	98,966 square kilometers
<u>Population</u> (1981)	38.7 million
<u>Annual rate of population increase</u> (1975-81)	1.6 per cent

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
<u>GNP per capita</u> (in current U.S. dollars)	1,281	1,600	1,482	1,636
<u>Real GNP</u> (changes in per cent)				
Real GNP	11.6	6.4	-6.2	7.1
Consumption	11.0	7.4	-1.0	4.2
Private	10.3	8.7	-1.4	4.4
Government	15.2	-0.6	1.9	2.8
Fixed investment	39.4	9.7	-12.0	-5.2
Exports of goods and nonfactor services	17.5	-3.6	9.9	17.5
Imports of goods and nonfactor services	29.1	8.6	-7.7	7.9
Agriculture and fisheries	-4.0	6.7	-22.0	23.0
Manufacturing	20.7	9.8	-1.1	6.8
Social overhead capital	21.3	8.8	2.0	3.1
<u>Prices and wages</u> (changes in per cent)				
Wholesale prices (December-December)	12.2	23.8	44.2	11.8
(annual average)	11.7	18.8	38.9	22.5
Consumer prices (December-December)	16.4	21.2	34.6	12.6
(annual average)	14.4	18.3	28.7	23.3
GNP deflator	20.6	19.3	25.9	17.4
Nominal manufacturing wages	34.3	30.7	23.2	19.0
Real wages	17.4	10.5	-4.3	-3.5
<u>Unemployment</u> (per cent of labor force)	3.2	3.8	5.2	4.5
<u>Money and credit</u> (changes in per cent)				
Money supply	25	21	16	5
Quasi-money	41	27	32	34
Broad money	35	25	27	24
Domestic credit <u>1/</u>	46	36	36	33
<u>Public finance</u> (in billions of won)				
Central Government				
Expenditure	4,408	5,990	7,682	10,127
Revenue	4,108	5,445	6,833	8,628
Deficit	-300	-545	-849	-1,499
Consolidated public sector				
Expenditure	5,001	6,210	8,455	11,481
Revenue	4,385	5,770	7,281	9,354
Deficit	-616	-440	-1,174	-2,127

Korea

Basic Data (concluded)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
<u>Balance of payments</u> (in millions of US\$)				
Exports, f.o.b.	12,711	14,705	17,214	20,850
Imports, f.o.b.	-14,491	-19,100	-21,598	-24,105
(Oil imports)	(-2,200)	(-3,360)	(-5,825)	(-6,638)
Trade deficit	-1,780	-4,395	-4,384	-3,254
Current account	-1,085	-4,151	-5,321	-4,741
Overall balance	-402	-973	-1,890	-2,309
External debt (US\$ bn.) <u>2/</u>	15.8	21.2	27.4	32.8
<u>International reserves</u> (in millions of U.S. dollars, end of period)				
Gross official reserves	4,938	5,710	6,571	6,897
As per cent of imports of goods and services	26.3	23.7	22.9	21.1
<u>Selected financial ratios</u> (in per cent)				
Current account deficit/GNP	2.3	6.9	9.4	7.5
Fixed investment/GNP	30.6	32.5	32.7	28.3
Domestic saving/GNP	26.4	26.6	19.9	20.0
Public sector deficit/GNP <u>3/</u>	2.7	1.5	3.2	4.4
Central Government deficit/GNP	1.3	1.9	2.5	3.5
Oil imports/total imports of goods and services	11.8	13.9	20.5	20.3
External debt/GNP	31.4	30.8	42.1	47.5
External debt service				
As per cent of GNP	4.8	4.9	7.3	8.6
As per cent of exports of goods and services	13.2	15.2	18.4	19.9
Interest payments on external debt/exports of goods and services	5.4	6.9	11.6	13.1
<u>IMF position</u>				
Quota	SDR 255.9 million			
Use of resources under program (in per cent of quota)	--	--	125	225
<u>Exchange rate</u>	US\$1 = W 712.0 (February 27, 1982)			

- 1/ Excluding valuation adjustment for foreign currency loans to domestic residents.  
2/ Private and public short- and long-term debt, including purchases from the Fund.  
3/ Excluding telecommunications.

## I. Introduction

Economic policies and developments during the last two years were dominated by the need to adjust to the effects of a prolonged period of overheating prior to 1979 and to the substantial deterioration in the terms of trade owing to the sharp rise in oil prices in 1979-80. In addition, economic activity in 1980 was seriously affected by political uncertainties and civil disturbances following the death of President Park in late 1979, and by a disastrous harvest, with 1980 rice production down by over 30 per cent due to inclement weather during the summer.

In early 1980, strong measures were taken to curb domestic inflation and to promote external adjustment in the face of the worsening terms of trade. The won was depreciated by 16.6 per cent in January, and by a total of 30 per cent on a nominal trade-weighted basis during the course of the year; in real terms, the depreciation was about 11 per cent. To support the exchange rate adjustment, monetary policy was tightened considerably and interest rates were raised. Furthermore, energy prices were sharply increased, accompanied by other strong conservation measures. To complement these stabilization efforts, the authorities initiated a number of structural reforms, including restructuring of key heavy industries, steps to reduce oil dependency, and measures to provide greater autonomy to financial institutions. Responding to the stabilization measures, the Korean economy achieved a substantial degree of external adjustment in 1980: even though the current account deficit of the balance of payments widened, from 6.9 per cent of GNP in 1979 to 9.4 per cent in 1980, the increase was equivalent to less than half of the price-induced rise in the oil import bill, in spite of a substantial rise in interest payments due in part to higher international interest rates. The adjustment was effected primarily through a fall in the volume of non-oil imports and by a resumption of export volume growth, as the improvement in Korea's competitiveness served to offset weaker external demand. The adjustment was borne by domestic consumption as well as investment, with the impact of contractionary financial policies reinforced by the political uncertainties and the effects of the poor harvest on rural output and incomes (agricultural output fell by 22 per cent); as a result, real GNP, which had grown at an average rate of 10 per cent per annum during the previous 15 years, contracted by 6.2 per cent in 1980. Reflecting the depreciation of the won, the oil price increases, and the poor harvest, inflation accelerated sharply, with the WPI rising by 44 per cent (December-December) compared with 24 per cent in 1979; however, the underlying domestic rate of inflation moderated.

The major economic objectives for 1981 were to promote further external adjustment while reducing inflation and securing a resumption of economic growth following the setback in 1980. To this end, the authorities continued to pursue restrained monetary policies and initiated a large-scale educational campaign to secure moderation in wage increases. Fiscal policy was moderately expansionary in 1981, as public construction projects were accelerated to provide a stimulus to activity in the first half of the year; when an expected upturn in private



investment in the second half did not materialize, the higher tempo of expenditure was maintained through the rest of the year. After depreciating further in the first quarter, the nominal effective exchange rate was allowed to appreciate; with inflation in Korea higher than in trading partners, the real effective exchange rate appreciated by about 10 per cent between the fourth quarter of 1980 and the fourth quarter of 1981.

Substantial external adjustment was again achieved in 1981, as the current account deficit was reduced by almost 2 percentage points of GNP, to 7.5 per cent, despite further increases in international interest rates and the need to import abnormally large quantities of rice in the wake of the 1980 harvest failure. The adjustment was almost entirely the result of a strong export performance, reinforced by increased receipts from overseas construction contracts; as the lagged effects of the 1980 improvements in competitiveness worked their way through, export volume growth reached nearly 20 per cent, though weakening significantly in the last quarter. Inflation decelerated sharply to less than 12 per cent, due mainly to weakening import prices, improved food supplies, and the absence of major exchange rate adjustments, though further progress was also accomplished in moderating domestic cost pressures. Real GNP grew by 7.1 per cent, of which more than half was attributable to the return of agricultural output to normal levels. Growth of nonagricultural GNP also recovered, sustained by the fiscal stimulus, the buoyancy of exports, and a strengthening of consumption demand, but private investment activity remained weak in the face of continuing high inventories, excess capacity, and weak profitability in the manufacturing sector.

During 1982 and subsequent years, the authorities aim to build on the progress made in 1981 by promoting further external adjustment, reducing inflation, and thereby laying the basis for a renewal of sustained economic growth which would raise living standards, improve social conditions, and provide employment for the growing labor force. Objectives and policies for the medium term are set out in Korea's Fifth Five-Year Economic and Social Development Plan, 1982-86, and are outlined in Supplement 1 to this report, which will be issued shortly. The principal external goal is to reduce the current account deficit to about 3 per cent of GNP by 1986, permitting a reduction of the debt service ratio to 14 per cent from 20 per cent in 1981 (Supplement 1 also contains a detailed review of the balance of payments projections of the Fifth Plan). To accommodate the reduction in foreign savings while providing sufficient finance for investment, the ratio of domestic savings to GNP is projected to rise sharply, from 20 per cent in 1981 to about 30 per cent by 1986, mainly on the basis of a recovery of household savings. Growth of real GNP is targeted at 7.6 per cent per annum so as to absorb the projected expansion of the labor force (2.8 per cent per annum), reduce the unemployment rate to 4 per cent (4.5 per cent in 1981), and raise real per capita incomes. Policies for the Plan period emphasize prudent demand management, reduction of direct government intervention in economic activity, and strengthening of the market mechanism; specific measures include reductions in the public sector deficit and rate of monetary expansion, together with structural reforms of the tax, financial, and industrial incentive systems, and further import liberalization.

## II. Domestic Economic Developments

### 1. Developments in aggregate demand during 1980 and 1981

Aggregate demand recovered in 1981 after a sharp decline in 1980 (Chart 1), when the contractionary impact of strong adjustment policies was reinforced by the effects of civil disturbances and a poor harvest. Domestic demand revived in 1981 on the basis of a recovery in private consumption and a stimulative fiscal policy centered on increased public construction activity, but private investment remained depressed in the face of persistent excess capacity, high inventories, and depressed profits. Export demand, which was strong in 1980, accelerated further through the third quarter of 1981, as the lagged effects of improved competitiveness following the depreciation of the won during 1980 worked their way through; export growth slackened in the last quarter of 1981, however. Overall, real GNP increased by 7.1 per cent in 1981 following a 6.2 per cent decline in 1980.

Consumption expenditure in real terms grew by over 4 per cent in 1981 after a 1 per cent decline in 1980 (Table 1 and Appendix Table I). Private consumption, which had declined in 1980 under the impact of restrictive financial policies and a sharp drop in rural incomes (rice output fell by over 30 per cent in 1980), picked up steadily during 1981 in response to a recovery of real household incomes.<sup>1/</sup> Although average real wages declined for the second successive year,<sup>2/</sup> employment increased by over 2 per cent, and nonwage incomes rose strongly on the basis of the recovery of farm incomes to normal levels (agricultural value-added rose by 23 per cent in real terms) and higher property income. The pickup in household consumption was concentrated on durable goods, with spending on household appliances and furniture up by 29 per cent in real terms in 1981 after a 23 per cent decline in 1980. In line with the shift to a less contractionary fiscal policy, government consumption expenditure grew strongly in the second half of 1980 and the first half of 1981, compared with a year earlier, before slowing in the latter part of the year; for 1981 as a whole, the growth of government consumption in real terms was somewhat higher than in the previous year.

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<sup>1/</sup> Using the CPI (which increased by 23.3 per cent over the average for 1980) as deflator, real household incomes are estimated to have risen by just over 1 per cent in 1981. Using instead the private consumption deflator from the national accounts (which rose by only 20.5 per cent), the increase in real incomes is over 3 per cent. For the analysis of changes in consumption expenditure, the latter price index is appropriate, since the same index is actually used to deflate total expenditure; in addition, the deflator covers the whole economy, whereas the CPI is an index of prices in cities.

<sup>2/</sup> Average real earnings in manufacturing are estimated to have declined by 3.5 per cent in 1981 on the basis of movements in the CPI, but by only 1.2 per cent in terms of the consumption deflator; see footnote <sup>1/</sup> above.

Table 1. Korea: Expenditure on Gross National Product at 1975  
Market Prices, 1977-81

(Percentage change over same period of previous year)

	1977	1978	1979	1980				1981 1/			
				1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.
Consumption	7.1	11.0	7.4	0.4	-1.8	-0.6	-1.7	-1.0	4.8	4.6	4.3
Private	(6.5)	(10.3)	(8.7)	(0.8)	(-1.8)	(-1.9)	(-2.4)	(-1.4)	(5.0)	(5.3)	(4.7)
Government	(11.3)	(15.2)	(-0.6)	(-2.2)	(-1.7)	(8.1)	(3.7)	(1.9)	(3.4)	(0.3)	(1.8)
Gross fixed capital formation	26.6	39.4	9.7	1.0	-19.9	-11.1	-13.0	-12.0	-7.2	-5.0	4.2
Exports of goods and nonfactor services	25.7	17.5	-3.6	8.2	5.1	7.4	18.2	9.9	23.7	18.8	9.8
Imports of goods and nonfactor services	23.8	29.1	8.6	-5.8	-14.4	-6.8	-3.2	-7.7	17.0	12.2	3.1
Gross national product	10.3	11.6	6.4	-1.1	-6.1	-2.1	-12.0	-6.2	4.1	6.3	14.0
											7.1

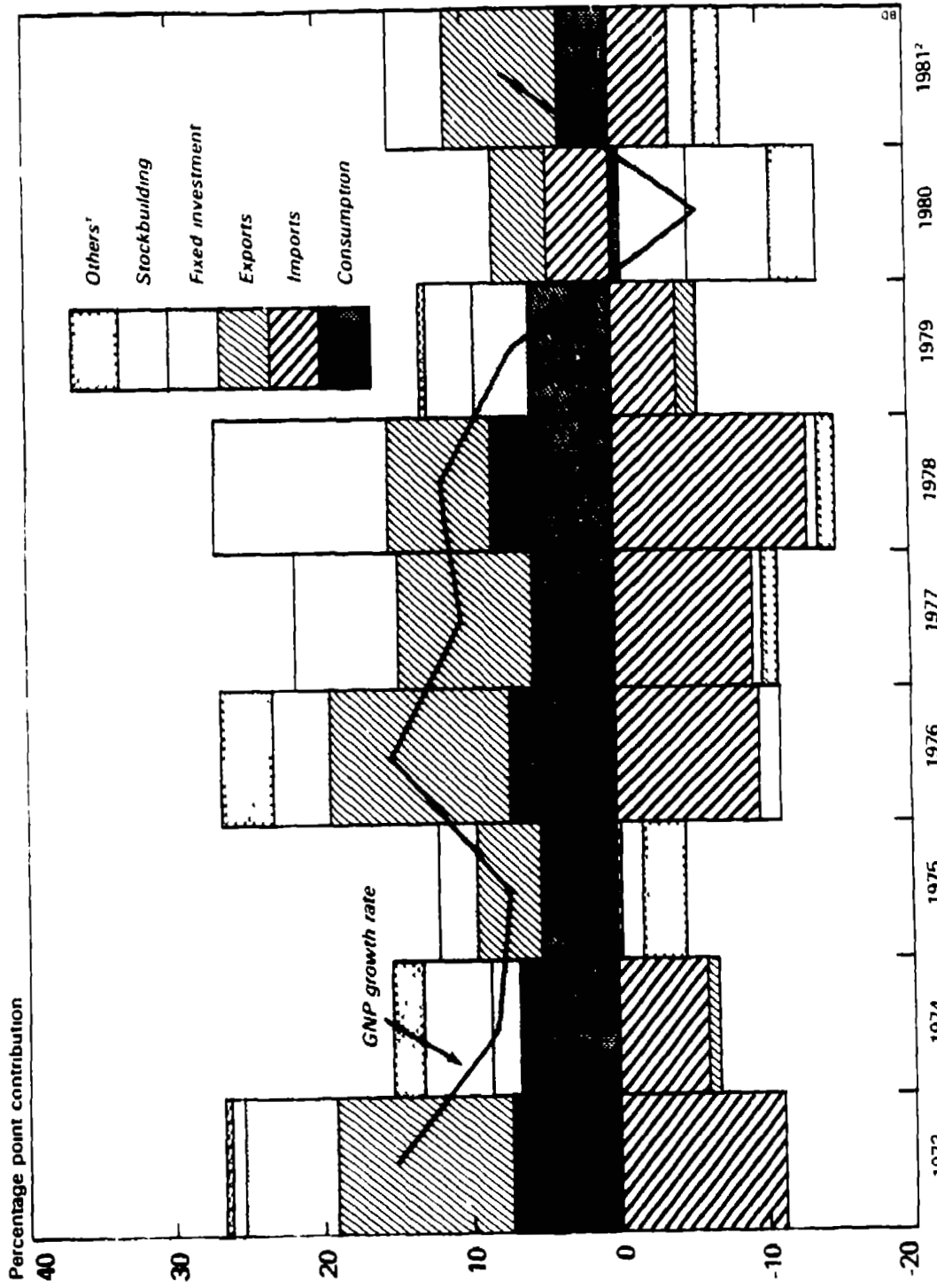
Source: Bank of Korea, Monthly Statistical Bulletin.

1/ Preliminary.

CHART 1

KOREA

## CONTRIBUTIONS TO GNP GROWTH BY EXPENDITURE CATEGORY, 1973-81



Source: Data provided by the Korean authorities.

<sup>1</sup>Includes net factor income from abroad and a statistical discrepancy term.<sup>2</sup>Preliminary.

Gross domestic saving as a ratio of GNP was virtually unchanged at 20 per cent in 1981 (Table 2) after a sharp decline in 1980, when household savings were drawn down in an effort to maintain spending in the face of recession, which also reduced business profits and, therefore, corporate savings; in 1981, the ratio of household savings to GNP is estimated to have shown a further slight decline, but reflecting this time a strengthening of consumer confidence, as indicated by the upsurge in spending on durable goods. With operating profitability still depressed, corporate saving as a ratio of GNP is estimated to have shown little change in 1981; however, government savings increased, mainly due to a reduction in grain subsidies.

After rapid expansion in earlier years, gross fixed investment in real terms contracted by 17 per cent during the two-year period 1980-81 (Table 3). In 1980, a 12 per cent drop was led by a fall in machinery and equipment investment of over 20 per cent in real terms in the face of weak demand, tight credit policies, the uncertain business climate, and over-investment in certain sectors in preceding years. Construction investment increased marginally, sustained by a pickup in government construction activity in the second half. In 1981, real fixed investment fell by a further 5 per cent. Though the decline in machinery and equipment investment was much reduced, private construction activity remained weak. Government construction was buoyant throughout as the authorities began the year by taking steps to stimulate economic activity through accelerating construction projects, and then maintained the higher tempo of spending when the expected recovery of private investment did not materialize in the second half. Other construction activity did eventually show signs of recovery toward the end of the year, though it was not broadly based, being mainly attributable to an ongoing power station construction program. Machinery and equipment investment remained weak in the second half, showing little response to the upturn in construction activity and the strong growth of exports through most of the year, despite specific stimulative measures announced in April. These included a preferential equipment loan scheme, with W 200 billion earmarked for export industries and W 150 billion for small and medium industries, and an extension into 1982 of the temporary investment tax credit, which had been due to expire in June.

The weakness of private investment in the face of these positive influences reflected not only the still fragile state of business confidence and the persistence of excess capacity in certain sectors, but also the continuing weak financial position of manufacturing companies. As a result of heavy reliance on borrowing as a source of finance, the debt-equity ratio of manufacturing companies in Korea is very high by international standards.<sup>1/</sup> In addition, a significant proportion of total liabilities are denominated in foreign currencies, for both

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<sup>1/</sup> The ratio of liabilities to net worth for manufacturing companies in Korea exceeded 300 per cent throughout 1974-79, and reached 488 per cent in 1980; comparable figures for U.S. and German companies in 1978 were 93 per cent and 209 per cent, respectively.

Table 2. Korea: Consumption, Capital Formation,  
and Savings, 1977-81

(In per cent of GNP)<sup>1/</sup>

	1977	1978	1979	1980	1981 <sup>2/</sup>
Consumption	74.9	73.6	73.4	80.1	80.0
Private	(63.2)	(62.1)	(62.3)	(67.1)	(67.2)
Government	(11.7)	(11.5)	(11.1)	(13.0)	(12.8)
Gross domestic capital formation	27.3	31.1	35.4	31.5	27.3
Gross fixed investment	(26.0)	(30.6)	(32.5)	(32.7)	(28.3)
Change in stocks	(1.3)	(0.5)	(2.9)	(-1.2)	(-1.1)
Gross domestic saving	25.1	26.4	26.6	19.9	20.0
Households	(8.6)	(10.0)	(9.7)	(5.5)	(4.9)
Companies	(11.5)	(10.5)	(10.2)	(9.0)	(9.0)
Government <sup>3/</sup>	(5.0)	(5.9)	(6.7)	(5.4)	(6.1)
Foreign saving (At constant prices)	0.6 (6.2)	3.3 (11.0)	7.6 (16.7)	10.2 (12.3)	8.3 (9.3)
Statistical discrepancy <sup>4/</sup>	1.6	1.5	1.2	1.4	-1.0
<u>Addendum:</u>					
Ratio of gross domestic saving to gross domestic capital formation	92.1	84.7	75.1	63.2	73.4

Source: Bank of Korea, Monthly Statistical Bulletin.

<sup>1/</sup> At current market prices unless otherwise stated.

<sup>2/</sup> Preliminary.

<sup>3/</sup> Excludes communications.

<sup>4/</sup> Difference between expenditure and output estimates of GNP.

Table 3. Korea: Composition of Gross Domestic Fixed  
Capital Formation, 1978-81

(At 1975 market prices; percentage change  
over same period of previous year)

	1978	1979	1980			1981 1/		
			1st Half	2nd Half	Year	1st Half	2nd Half	Year
Fixed capital formation	39.4	9.7	-11.9	-12.1	-12.0	-10.3	-0.4	-5.2
Private construc- tion 2/	<u>32.2</u>	<u>-1.4</u>	<u>11.8</u>	<u>-10.0</u>	<u>0.2</u>	<u>-24.2</u>	<u>1.5</u>	<u>-11.9</u>
Building con- struction	38.1	-9.5	17.3	-22.3	-4.8	-27.8	-4.1	-17.0
Dwelling	55.1	-16.9	-7.9	-21.4	-14.8	-27.4	-3.2	-15.9
Non-residential	21.1	--	50.4	-23.1	5.8	-28.1	-5.0	-17.9
Other construction	15.1	26.8	0.2	25.7	12.4	-15.6	11.5	-1.1
Government construction	12.3	14.3	-14.8	15.1	1.9	17.1	14.7	15.6
Machinery and equipment	53.3	16.3	-23.9	-20.0	-22.0	-5.2	-6.9	-6.1

Source: Bank of Korea.

1/ Preliminary.

2/ Includes public enterprises.

exporting firms and those producing for the domestic market.<sup>1/</sup> Consequently, major factors contributing to successive declines in pretax manufacturing profits as a ratio of sales during 1979-80 included increased debt servicing expenses and losses on foreign currency liabilities due to high interest rates and depreciation of the won (Table 4). These factors put a particularly heavy burden on those companies which produce essentially for the domestic market and which, therefore, did not benefit from as rapid a growth of demand as did the companies producing mainly for export. With the impact of the above influences moderating in 1981, profits are estimated to have recovered somewhat but, 1980 apart, they still remained at the lowest level in relation to sales since 1971.

Inventory changes played a significant role in the economic fluctuations of the past two years; the volume of stocks declined by the equivalent of 2.3 per cent of GNP in 1980, but rose by 1.4 per cent in 1981. These movements were more than accounted for by changes in stocks of agricultural commodities (especially rice), which normally accumulate in the fourth quarter of the year and are then drawn down during the first three quarters of the subsequent calendar year. As a result of the poor 1980 harvest, the buildup of stocks at the end of that year was much less than normal, but stocks then rose sharply in 1981 following a return to normal harvest conditions, as well as efforts by the Government earlier in the year to build up official rice stocks (held by the Grain Management Fund) to more comfortable levels. Manufacturing inventories followed a contrasting pattern, rising sharply in 1980 and declining somewhat in 1981 (see section 2).

Growth of exports of goods and services resumed in 1980, despite weaker external market conditions, as earlier losses of competitiveness were reversed by the depreciation of the won during the year. For the year as a whole, export growth reached 10 per cent in real terms; the rate of growth accelerated sharply in the last quarter as the improvement in competitiveness began to take effect. Strong performance persisted through the first three quarters of 1981, when the volume of exports was over 20 per cent higher than a year earlier; in the last quarter, however, export growth weakened significantly. For the year as a whole, exports of goods and services grew by 17.5 per cent in real terms. In line with movements in aggregate demand, the volume of imports of goods and services fell by nearly 8 per cent in 1980, before rising by a similar amount in 1981, though part of this increase was attributable to exceptional rice imports in the wake of the bad harvest. Reflecting the growth of exports and the decline in imports, foreign saving as a ratio of GNP fell substantially in real terms in 1980 (Table 2); in nominal terms, however, it

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<sup>1/</sup> In 1980, foreign loans comprised 16 per cent of liabilities for companies exporting more than 50 per cent of their output, and 9 per cent of liabilities for companies producing mainly for the domestic market.



Table 4. Korea: Indicators of Manufacturing Profitability, 1971-81

(In per cent)

	Ratios to Value of Sales				Current Profit/ Total Assets (5)
	Operating profit <u>1/</u> (1)	Financial expenses <u>2/</u> (2)	Other nonoperating income less expenses <u>3/</u> (3)	Current profit <u>4/</u> (4)	
1971	9.0	8.8	1.0	1.2	1.0
1972	9.6	7.1	1.4	3.9	3.8
1973	10.4	4.6	1.7	7.5	7.9
1974	7.7	4.4	1.5	4.8	5.7
1975	7.2	5.1	1.3	3.4	3.8
1976	7.5	4.9	1.3	3.9	4.6
1977	6.8	4.9	1.6	3.5	4.5
1978	7.7	4.8	1.1	4.0	5.0
1979	7.4	5.9	1.2	2.7	3.4
1980	7.3	7.3	-0.2	-0.2	-0.2
1981 <u>5/</u>	7.1	6.5	0.9	1.5	1.9

Sources: Bank of Korea, Financial Statements Analysis; and staff estimates.

1/ Sales revenue minus production costs minus selling, administrative, and general expenses.

2/ Interest, discounts, and premia.

3/ Interest, dividends, and other nonoperating income received minus losses on foreign loans and other nonoperating expenses.

4/ Column (1) - (2) + (3).

5/ Staff estimate.

increased considerably because of the sharp deterioration in the terms of trade in that year. In 1981, the foreign saving gap narrowed in both nominal and real terms, mainly on account of the strong growth of exports.

## 2. Developments in aggregate output during 1980 and 1981

Movements in aggregate output during 1980-81 were strongly influenced by the disastrous 1980 rice harvest and the subsequent return of agricultural output to normal levels. Of the 6.2 per cent decline in real GNP in 1980, more than 4 percentage points was contributed by a 22 per cent fall in agricultural value-added (Chart 2, Table 5, and Appendix Table II); recovering in 1981, agriculture contributed more than half of the 7.1 per cent growth of GNP. Value-added in nonagricultural sectors, which fell by 2.5 per cent in real terms in 1980 under the impact of adjustment policies, political uncertainties, and the fall in rural incomes, increased by 4 per cent in 1981 as manufacturing output responded to the strong growth of exports and the strengthening of domestic consumption demand.

The sharp drop in agricultural output in 1980 was largely due to an extremely poor rice crop; in normal years, rice production accounts for nearly half of value-added in agriculture, forestry, and fishing. The crop failure was caused by below-average sunshine and temperatures during the critical phases of crop development (July-August), so that rice output fell by more than 30 per cent, while output of barley and wheat also declined sharply (Table 6). In 1981, rice output recovered almost to the 1979 level, though average yields still remained more than 10 per cent below those achieved in 1977-78. In part, this was due to the reluctance of farmers to plant new high-yielding varieties of rice, as these had proved especially vulnerable to the adverse weather of the previous year; in addition, some damage to the crop was caused by a typhoon. Barley and wheat production showed little change from the previous year, while the performance of vegetable production was mixed. Other developments contributing to the recovery of agricultural output during the year were higher livestock production and improved offshore and deep-sea fish catches.

Value-added in manufacturing recovered firmly in 1981, increasing by almost 7 per cent in real terms after a 1 per cent decline in 1980 (Table 5); manufacturing growth was nevertheless still less than half the 15 per cent average recorded between 1976 and 1979, partly because of the persistence of high inventories. The average ratio of inventories to shipments, which jumped by nearly 40 per cent in 1980 as companies postponed production cutbacks to avoid laying off workers, declined by only about 4 per cent in 1981 and was thus still high by comparison with earlier years (Chart 3).

Output developments in manufacturing were closely related to the performance of exports; as exports grew strongly, manufacturing production rose by almost 16 per cent between the third quarter of 1980 and the third quarter of 1981 (Appendix Table III), but declined marginally in the fourth

# CONTRIBUTIONS TO GNP GROWTH BY INDUSTRIAL ORIGIN, 1973-81

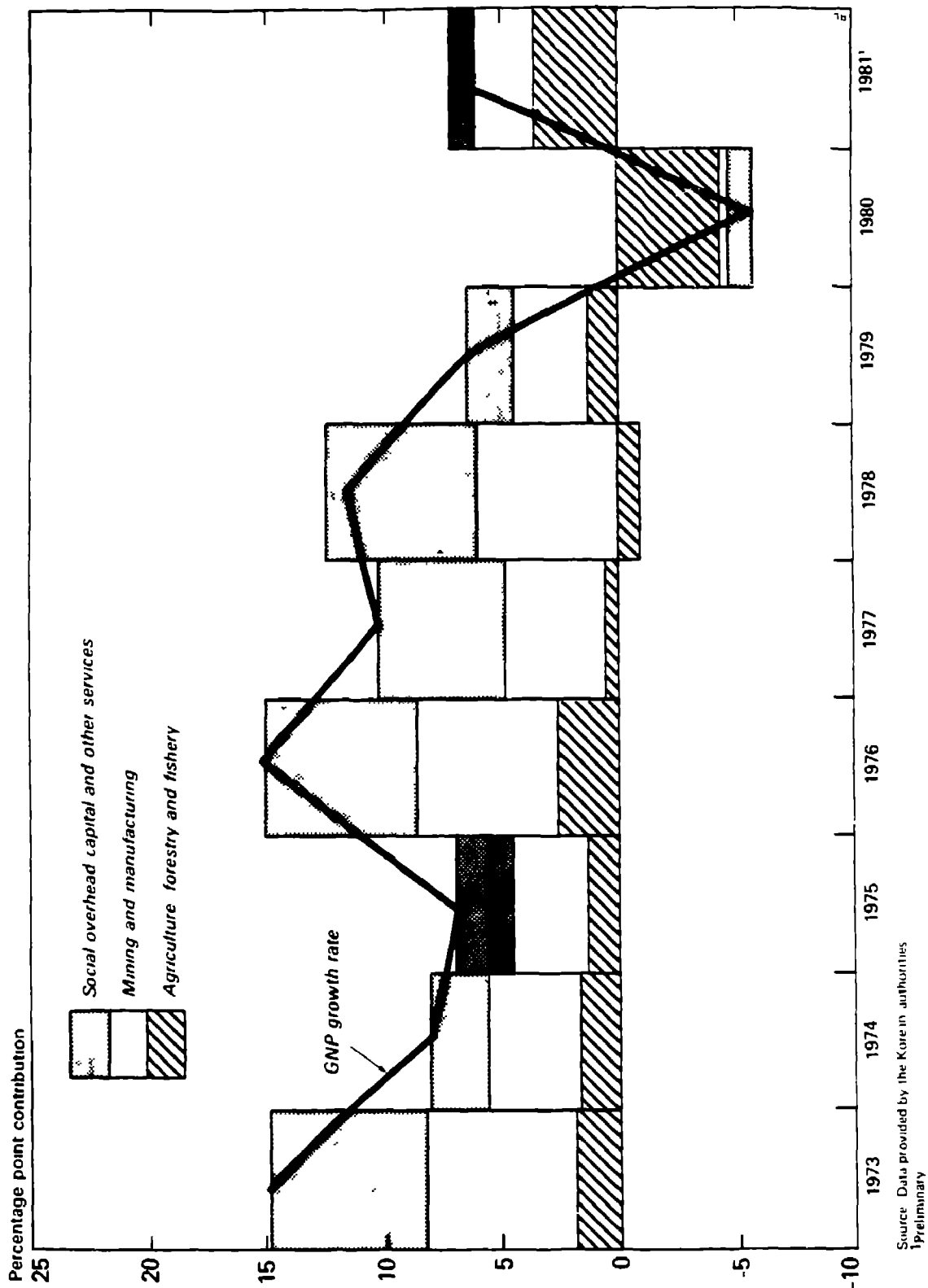


Table 5. Korea. Industrial Origin of Gross National Product at 1975  
Market Prices, 1977-81

(Percentage change over same period of previous year)

	1977	1978	1979	1980				1981 1/					
				1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Year	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Year
griculture, forestry, and fishing	2.1	-4.0	6.7	-7.5	-19.9	-2.0	-27.6	-22.0	9.2	0.6	6.8	33.1	23.0
ining	11.8	4.3	-2.0	-6.3	3.9	-4.1	1.6	-1.0	-1.0	9.1	11.3	6.6	6.8
nufacturing	14.4	20.7	9.8	-1.4	-3.2	-1.5	1.6	-1.1	3.0	7.6	9.7	6.6	6.8
cial overhead capital 2/ (Construction)	20.6 (25.2)	21.3 (25.3)	8.8 (1.7)	5.4 (9.6)	3.0 (1.1)	1.1 (-2.8)	-0.8 (-7.3)	2.0 (-0.8)	-0.3 (-15.8)	0.7 (-12.2)	4.2 (-3.7)	7.4 (7.3)	3.1 (-5.6)
her services 3/	8.7	10.3	2.0	-2.4	-10.2	-4.4	-6.8	-6.1	-2.3	2.7	3.3	2.0	1.5
oss national product (Excluding agri- culture)	10.3 (12.8)	11.6 (16.1)	6.4 (6.3)	-1.1 (-0.7)	-6.1 (-4.6)	-2.1 (-2.2)	-12.0 (-2.2)	-6.2 (-2.5)	0.8 (0.3)	4.1 (4.4)	6.3 (6.2)	14.0 (5.0)	7.1 (4.0)

Source: Bank of Korea, Monthly Statistical Bulletin.

1/ Preliminary.

2/ Includes the following electricity, gas and water, construction, transportation, storage, and communications.

3/ Including net factor income from abroad.

Table 6. Korea: Agricultural Output, 1977-81

(In thousands of metric tons) 1/

	1977	1978	1979	1980	1981
Grains	6,985 (-2.5)	7,308 (4.6)	6,856 (-6.2)	4,690 (-31.6)	6,215 (32.5)
Rice	6,006 (15.2)	5,797 (-3.5)	5,136 (-11.4)	3,550 (-30.9)	5,063 (42.6)
Barley and wheat	862 (-53.2)	1,388 (61.0)	1,555 (12.1)	903 (-41.9)	916 (1.4)
Other	117 (13.6)	123 (5.1)	165 (34.1)	237 (43.6)	236 (-0.4)
Chinese cabbage	2,774 (-11.0)	4,002 (44.3)	3,445 (-13.9)	3,040 (-11.8)	3,572 (17.5)
Radishes	1,855 (9.4)	2,407 (29.8)	2,072 (-13.9)	1,973 (-4.8)	2,097 (6.3)
Garlic, onions, and red peppers	555 (43.4)	374 (-32.6)	855 (128.6)	653 (-23.6)	573 (-12.3)
Pulses	390 (10.8)	355 (-9.0)	326 (-8.2)	257 (-21.2)	216 (-16.0)
Potatoes	595 (-10.8)	565 (-5.0)	501 (-11.3)	515 (2.8)	456 (-11.5)
Fish catch	2,421 (0.6)	2,354 (-2.8)	2,422 (2.9)	2,410 (-0.5)	2,755 (14.3)
<u>Addendum:</u>					
	(Yield: metric tons per hectare)				
Rice productivity	4.88	4.71	4.17	2.88	4.14

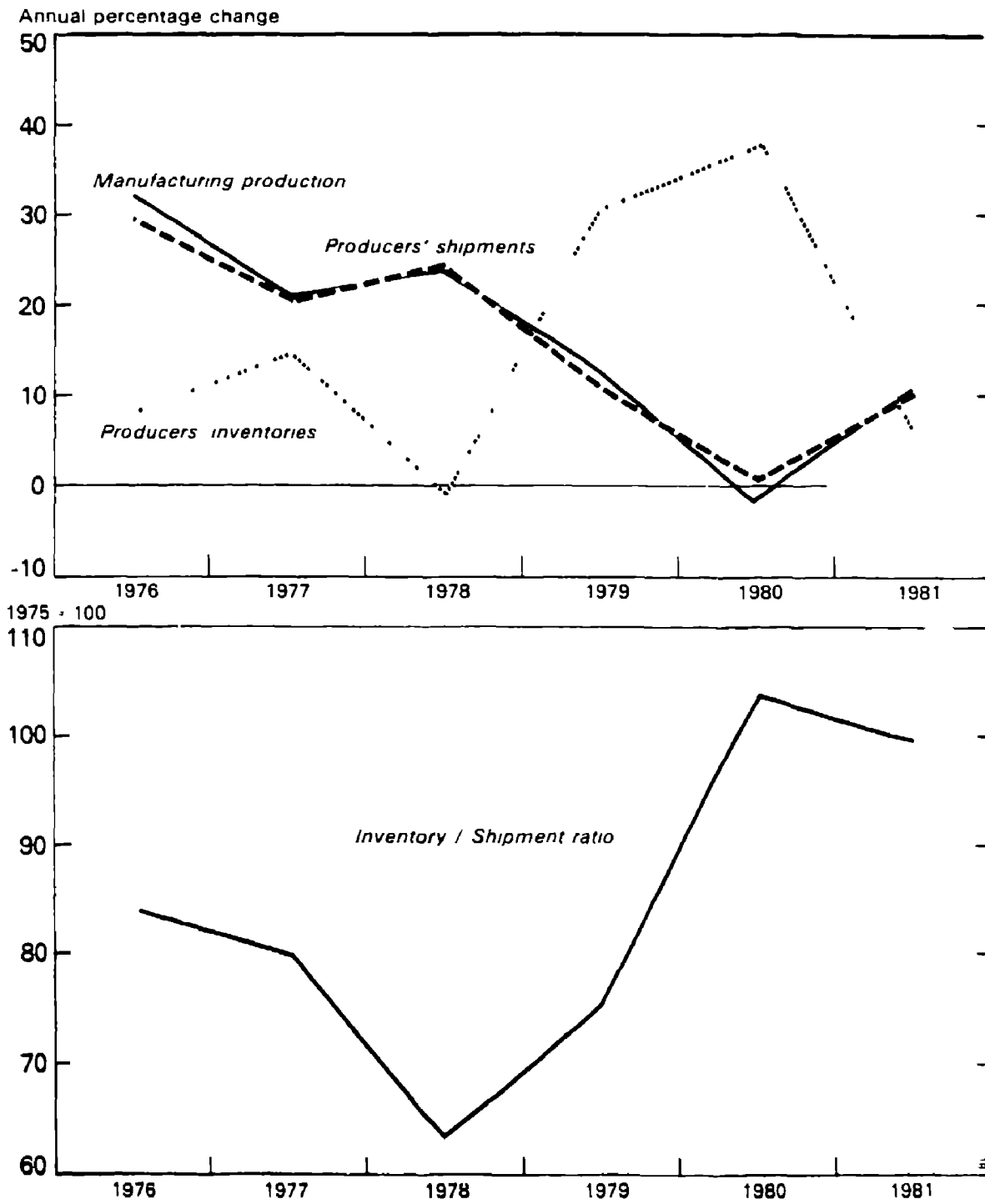
Source: Ministry of Agriculture and Fisheries.

1/ Annual percentage changes in parentheses.

## CHART 3

## KOREA

## ACTIVITY IN MANUFACTURING, 1976-81



Source: Data provided by the Korean authorities

quarter when exports weakened. Output of the export-oriented textile industry strengthened following the improvement in competitiveness during 1980, and remained buoyant through most of 1981 as Korea successfully penetrated new markets in developing countries; in the last quarter of 1981, however, textile output declined slightly on a seasonally adjusted basis. Output of basic metal industries showed a similar pattern, with exports performing well and domestic demand for steel also proving buoyant, mainly on the strength of infrastructure projects (notably subway construction). The other strong performer in 1981 was the fabricated metal products, machinery, and equipment sector, which had suffered in 1980 from the sharp downturn in demand for consumer durables, in 1981, although domestic demand for automobiles remained sluggish, demand for household appliances (particularly, color TVs and refrigerators) grew sharply. Shipbuilding continued to perform exceptionally, with production increasing by over 70 per cent in 1981 after an 80 per cent rise the previous year. Performance in other sectors was more modest, with the output of nonmetallic minerals (mainly cement) and wood products held in check by the continuing recession in domestic construction activity, while the chemicals and allied products sector continued to be afflicted by high costs, especially in petrochemicals and fertilizer production.

Value-added in mining and quarrying increased by nearly 7 per cent in 1981, following a 1 per cent decline in 1980. The higher output was primarily due to increased production of anthracite and salt resulting from government efforts to encourage the domestic coal industry and more favorable weather conditions.

Domestic construction activity has generally been depressed since the boom of 1977-78, which had prompted government measures to discourage speculative activity in real estate. Value-added in construction, which had risen only slightly in 1979, declined in 1980 and the first three quarters of 1981 before picking up in the fourth quarter (Table 5). Even this modest performance, however, was sustained only by government construction and the investment program of the electricity industry. In 1980, the downturn in construction demand, as measured by the floor area of permits issued (Table 7), was most acute in industrial building, which then recovered somewhat during 1981, when, on the other hand, permits for residential building suffered the sharpest decline. Permits for other nonindustrial construction also declined in 1981. To stimulate a recovery of private housing construction, in June 1981 the Government extended the period of temporary reductions in capital gains tax rates on real estate transfers and increased the deduction intended to compensate for inflation. In January 1982, the lower capital gains tax rates were further extended until March 1984. Other measures announced at the same time included W 300 billion in new housing loans and reduced interest rates on construction loans from the National Housing Fund.

In contrast to domestic construction, overseas construction activity has expanded rapidly in recent years and has become both a major source of foreign exchange earnings and a significant employer of Korean workers overseas (Table 8). Following the relaxation in mid-1979 of measures

Table 7. Korea: Building Construction Permits, 1977-81

(Floor Area in thousand square meters)

	1977	1978	1979	1980	1981			
					1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr. Year
Residential	12,880 (35.7)	17,516 (36.0)	14,737 (-15.9)	14,740 (--)	1,878 (-48.2)	3,515 (-29.9)	2,668 (-24.2)	2,248 (-12.9) 10,309 (-30.1)
Commercial	3,615 (11.6)	4,110 (13.7)	4,430 (7.8)	5,653 (27.6)	1,012 (-40.4)	1,690 (13.0)	1,313 (-3.6)	943 (-14.1) 4,958 (-12.3)
Industrial	3,413 (-2.3)	5,997 (75.7)	4,870 (-18.8)	2,222 (-54.4)	412 (-21.8)	698 (46.0)	717 (15.9)	821 (33.7) 2,648 (19.2)
Social, Educational, and others	2,434 (38.5)	3,195 (31.3)	3,469 (8.6)	3,112 (-10.3)	514 (-30.0)	872 (6.7)	683 (-16.1)	861 (15.3) 2,930 (-5.8)
Total	22,342 (24.2)	30,818 (37.9)	27,505 (-10.8)	25,727 (-6.5)	3,816 (-42.0)	6,775 (-13.2)	5,381 (-14.6)	4,873 (-3.3) 20,845 (-19.0)

Source: Economic Planning Board, Monthly Statistics of Korea.

1/ Percentage change from corresponding period of previous year in parentheses.



Table 8. Korea: Construction Contracts Overseas, 1977-81

	1977	1978	1979	1980	1981 <u>1/</u>
(In millions of U.S. dollars)					
Contract value	<u>3,752</u>	<u>8,145</u>	<u>6,731</u>	<u>8,424</u>	<u>14,370</u>
Middle East	<u>3,623</u>	<u>7,982</u>	<u>6,358</u>	<u>7,953</u>	<u>13,565</u>
Other countries	129	163	373	471	805
(Number of agreements)					
Work agreements	<u>188</u>	<u>235</u>	<u>231</u>	<u>265</u>	<u>270</u>
Middle East	<u>177</u>	<u>214</u>	<u>215</u>	<u>227</u>	<u>231</u>
Other countries	11	21	16	38	39
(Number of workers at end of period)					
Korean labor force overseas	<u>69,623</u>	<u>85,873</u>	<u>110,911</u>	<u>135,740</u>	<u>168,034</u>
Middle East	<u>52,247</u>	<u>84,289</u>	<u>109,573</u>	<u>131,679</u>	<u>158,497</u>
Other countries	17,376	1,584	1,338	4,061	9,537

Source: Ministry of Finance.

1/ Preliminary.

restricting overseas construction contracts, whose earlier introduction had been prompted by the emergence of domestic labor shortages, the value of new contracts awarded to Korean firms rose sharply to reach a record level of US\$14.4 billion in 1981, of which over 90 per cent was for projects in the Middle East. The number of Korean construction workers overseas is estimated to have exceeded 168,000 by end-1981, or nearly double the 1978 level.

### 3. Energy

The major sources of energy supply in Korea are oil and coal, which in 1981 accounted for 59 per cent and 32 per cent of total energy use, respectively (Table 9). The other sources of energy are firewood (5 per cent), nuclear power, hydroelectricity, and natural gas (each 1 to 2 per cent). Oil is entirely imported, mostly from the Middle East on the basis of long-term contracts.

In late 1980, the Government announced a comprehensive energy conservation program which aims at restraining the growth of energy consumption and encouraging energy users to switch from oil to coal and other

Table 9. Korea: Sources of Energy, 1979-86

(Share in per cent)

	1979	1980	1981	1986 Projection
Oil	64.4	60.3	58.9	49.8
Coal	23.5	29.8	32.0	31.5
(Imported)	(2.8)	(10.3)	(13.7)	(16.8)
Hydroelectricity	1.5	1.1	1.2	1.1
Nuclear	2.1	2.0	1.6	9.8
Natural gas	0.9	1.0	1.2	5.6
Firewood	<u>7.6</u>	<u>5.7</u>	<u>5.1</u>	<u>2.2</u>
Total	100.0	100.0	100.0	100.0
<u>Addendum:</u>				
Share of imported energy sources <u>1/</u> in total energy use	70.2	73.7	75.4	81.9

Source: Ministry of Energy and Resources.

1/ Includes oil, imported coal, nuclear fuel, and natural gas.

non-oil sources to reduce oil dependence. Administered energy prices have been adjusted promptly in line with increases in costs; prices of petroleum products were doubled in 1980 and raised by 22 per cent in 1981, while during 1980-81 average electricity prices were increased by 80 per cent and coal prices by 91 per cent. Other measures to conserve energy use included restrictions on the use of street lights, elevators, air-conditioners and on operating hours of gas stations and entertainment establishments. In the industrial sector, the conservation program features efforts to identify and remedy wasteful use of energy through government-sponsored energy audits of major plants in energy-intensive sectors of manufacturing. Through these measures, the Government aims to reduce total energy use by a minimum of 5 per cent by 1986. In addition, the Government has initiated an extensive program of special loans on preferential terms to help enterprises switch from oil to coal-fired boilers. Loans under this program totaled W 140 billion in 1981, when especially significant progress in reducing oil consumption was achieved in the cement industry; in this sector alone, the equivalent of 5 million barrels of annual consumption, or more than 2 per cent of the total for the economy, is estimated to have been saved through the conversion of boilers.

On the supply side, the Government's long-term energy program emphasizes the development of non-oil energy sources, primarily through a major program of nuclear power station construction. Twelve new nuclear power plants are to be completed by 1991, in addition to one which is already in operation. Ten of these are either under construction, or in various stages of preparation; two are expected to come into operation by the beginning of 1984. As a result, the share of electricity generation provided by nuclear sources is projected to rise from 8 per cent in 1981 to 40 per cent by 1986. Although some increase in domestic coal production is anticipated during the next few years, the energy program entails increasing reliance on imports of coal, as well as of natural gas and nuclear fuel. The share of imported sources in total energy output, which increased from 70 per cent in 1979 to 75 per cent in 1981, is thus projected to reach 82 per cent by 1986. At the same time, dependence on oil imports is expected to continue to decline, from 59 per cent in 1981 to about 50 per cent by 1986 and near 40 per cent by the beginning of the 1990s.

Oil exploration efforts, including three wells drilled in a joint development zone with Japan, have so far failed to discover any fields with commercial potential. A further exploratory well is to be drilled in 1982 in Korea's exclusive continental shelf area

#### 4. Employment and wages

The fluctuations in economic activity during 1980-81 led to significant changes in labor market conditions. Prior to the 1980 recession, conditions were tight, with the rate of unemployment below 3 per cent and wage increases exceeding 30 per cent per annum during 1976-79 (Chart 4). For most of this period, increases in real wages were much greater than productivity gains, contributing to the erosion of Korea's

external competitiveness. During the period of rapid economic expansion in the 1970s, the growth of employment was concentrated on the manufacturing and service sectors, while agricultural employment generally declined.

The recession in 1980 and the subsequent recovery in 1981 saw sharp reversals of these trends. In 1980, total employment, which had increased by nearly 6 per cent during 1977-79, rose only marginally (Table 10), while manufacturing employment fell by 5 per cent, registering the first annual decline since the period of rapid economic development began in the early 1960s. With the labor force still expanding, the rate of unemployment rose to more than 5 per cent. In 1981, the unemployment rate declined to 4.5 per cent, as total employment increased by 2.5 per cent, outpacing the growth of the labor force. Despite the resumption of manufacturing output growth, however, employment in that sector declined by a further 3 per cent. To some extent, this development, and the associated acceleration of manufacturing productivity growth (from 11 per cent in 1980 to 17 per cent in the first nine months of 1981), may represent a lagged adjustment to developments in 1980 as employers were slow to lay off skilled workers. Employment in the services sector grew by 5 per cent in 1981, in line with past trends, but agricultural employment reversed its previous downward trend and rose by 3 per cent. In part, this reflected a shift in migration trends; the rural population and labor force increased for the first time in a number of years, as some of the laid-off urban workers returned to rural areas.

The easing of labor market pressures in 1980 was accompanied by a significant slowdown in wage increases; nominal wages in manufacturing rose by 23 per cent, compared with over 30 per cent in each of the four preceding years. As a result real wages, growth of which averaged 17 per cent per annum during 1975-79, fell by more than 4 per cent in 1980. Early in 1981, the Government initiated a large-scale educational campaign to explain to the public the adverse consequences of excessive wage increases and to ensure that gains in export competitiveness would not be eroded by rising labor costs as economic activity recovered. Following these efforts, nominal wage increases moderated again to about 19 per cent <sup>1/</sup> and, despite the slowdown in inflation, real wages are estimated to have declined by a further 3.5 per cent. With productivity growth accelerating, the increase in unit labor costs was therefore contained below 5 per cent, compared with about 13 per cent in 1979 and 10 per cent in 1980.

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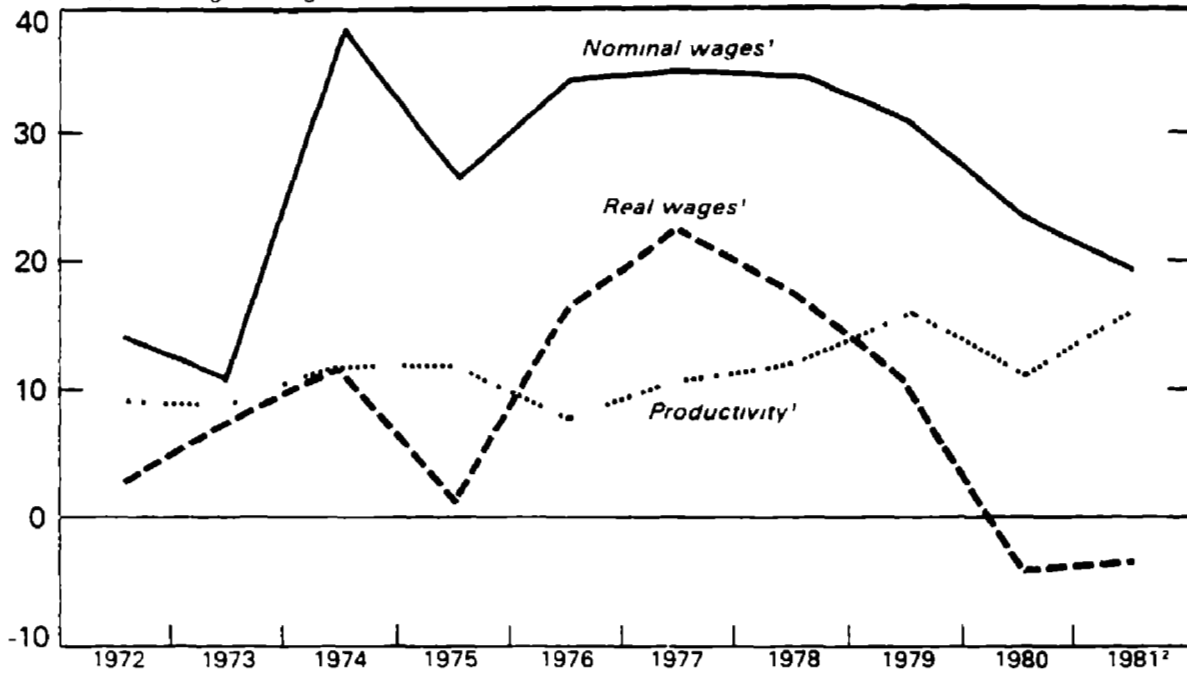
<sup>1/</sup> Major wage settlements in early 1981 averaged 17 per cent. Movements in actual earnings are also significantly influenced by bonus payments, typically paid in the last month of a quarter (bonuses accounted for 10 per cent of total earnings in 1980); total bonus payments per worker in the first 10 months of 1981 were 26 per cent higher than in the corresponding period of 1980.

## CHART 4

## KOREA

## WAGES, UNEMPLOYMENT AND PRODUCTIVITY, 1972-81

Annual percentage change



Per cent of labor force



Source: Data provided by the Korean authorities and staff estimates

<sup>1</sup>In manufacturing<sup>2</sup>Estimates

Table 10. Korea: Population, Labor Force, and Employment, 1977-81

(In millions of persons)

	1977	1978	1979	1980	1981
Population <u>1/</u>	23.34	24.02	24.68	25.34	25.97
Labor force	13.44	13.93	14.21	14.45	14.71
Employment	<u>12.93</u>	<u>13.49</u>	<u>13.66</u>	<u>13.71</u>	<u>14.05</u>
Agriculture, forestry, and fishing	5.40	5.18	4.89	4.66	4.81
Mining	0.10	0.11	0.11	0.12	0.12
Manufacturing	2.80	3.02	3.13	2.97	2.87
Social overhead capital and other services	4.62	5.19	5.54	5.95	6.25
Unemployment	0.51	0.44	0.54	0.75	0.66
(per cent of labor force)	(3.8)	(3.2)	(3.8)	(5.2)	(4.5)

Source: Economic Planning Board, Monthly Statistics of Korea.1/ Aged 14 years and over.5. Price developments

Inflation slowed down sharply in 1981 after a significant acceleration the year before (Table 11). The wholesale price index (WPI), rose by less than 12 per cent (December to December), compared with 24 per cent in 1979 and 44 per cent in 1980. Likewise, the increase in the consumer price index (CPI) was less than 13 per cent in 1981, down from 21 per cent and 35 per cent, respectively, during 1979 and 1980. On an annual average basis, the increase in the WPI was 19 per cent in 1979, 39 per cent in 1980 and 23 per cent in 1981. To a considerable extent, the deceleration of inflation in 1981 reflected the absence of special factors which had characterized 1980--a major depreciation of the won, rising oil prices, and a poor harvest--but the underlying rate of domestic inflation also moderated. The decline in inflation was especially marked in the second half of 1981, when the WPI rose at an annual rate of only 2.5 per cent.



Tentative staff estimates, based on an econometric analysis of the impact of changes in import prices on domestic inflation, <sup>1/</sup> indicate that about 27 percentage points of the 44 per cent increase in the WPI during 1980 were contributed by the combination of increases in world prices and a 30 per cent effective nominal depreciation of the won during the year (Chart 5). Of the remainder, more than half was contributed by a 46 per cent increase in domestic food prices due mainly to the bad harvest. In the face of tight financial policies and the fall in economic activity, the contribution of other domestic factors is estimated to have declined from about 10 percentage points in 1979 to 7 points in 1980.

All of these influences on domestic inflation were significantly reduced in 1981, as the increase in import prices moderated, the nominal depreciation of the won slowed, food supplies improved, and further progress was achieved in moderating domestic cost pressures. Depreciation of the won and the increase in world prices are estimated together to have contributed about 7 percentage points to the increase in the WPI during the year, but this was entirely due to the lagged impact of the depreciation and a rise in world import prices in the latter part of 1980 and the first quarter of 1981. Between the first and last quarters of 1981, world import prices actually declined by nearly 1 per cent, and the won appreciated in nominal terms, adding another 1 per cent to the

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<sup>1/</sup> For details, see SM/81/31, Annex I. In the specification of the model, the prices of traded goods in domestic currency are assumed to be determined by world market prices and the exchange rate for the won, while changes in the prices of nontraded goods depend on excess real money balances and the gap between actual and potential output. Ceteris paribus, a 10 per cent increase in the domestic price of imports is estimated to raise the WPI by about 3 per cent in the first quarter, 4 per cent within two quarters, and 5 per cent in the long run. Using these results, the contribution of foreign factors to domestic inflation is computed by analysis of movements in import prices in domestic currency, taking into account the estimated lags. This contribution is then decomposed into two elements: changes in the nominal effective exchange rate for the won, and changes in world prices. The remaining change in the WPI is attributed to domestic factors, of which the contribution of domestic food prices is identified from analysis of movements in the "agricultural and marine foods" category of the WPI. Other domestic factors account for the residual, which may be regarded as an estimate of the underlying rate of domestically generated inflation. The results of this analysis are broadly consistent with those of a separate staff study which identifies the direct and indirect effects on the WPI of changes in non-oil import prices and the price of oil, taking explicit account of the latter's particular significance in the input-output structure of the economy; the analysis employed here focuses on the direct and indirect effects of import prices in the aggregate. Additional work has also been carried out to link changes in the WPI with changes in the CPI and the GNP deflator, indicating that, when the prices of traded goods rise faster than the prices of nontraded goods (as in 1980), the WPI, in which the share of imported goods is comparatively large, tends to increase more rapidly than the CPI and the GNP deflator.

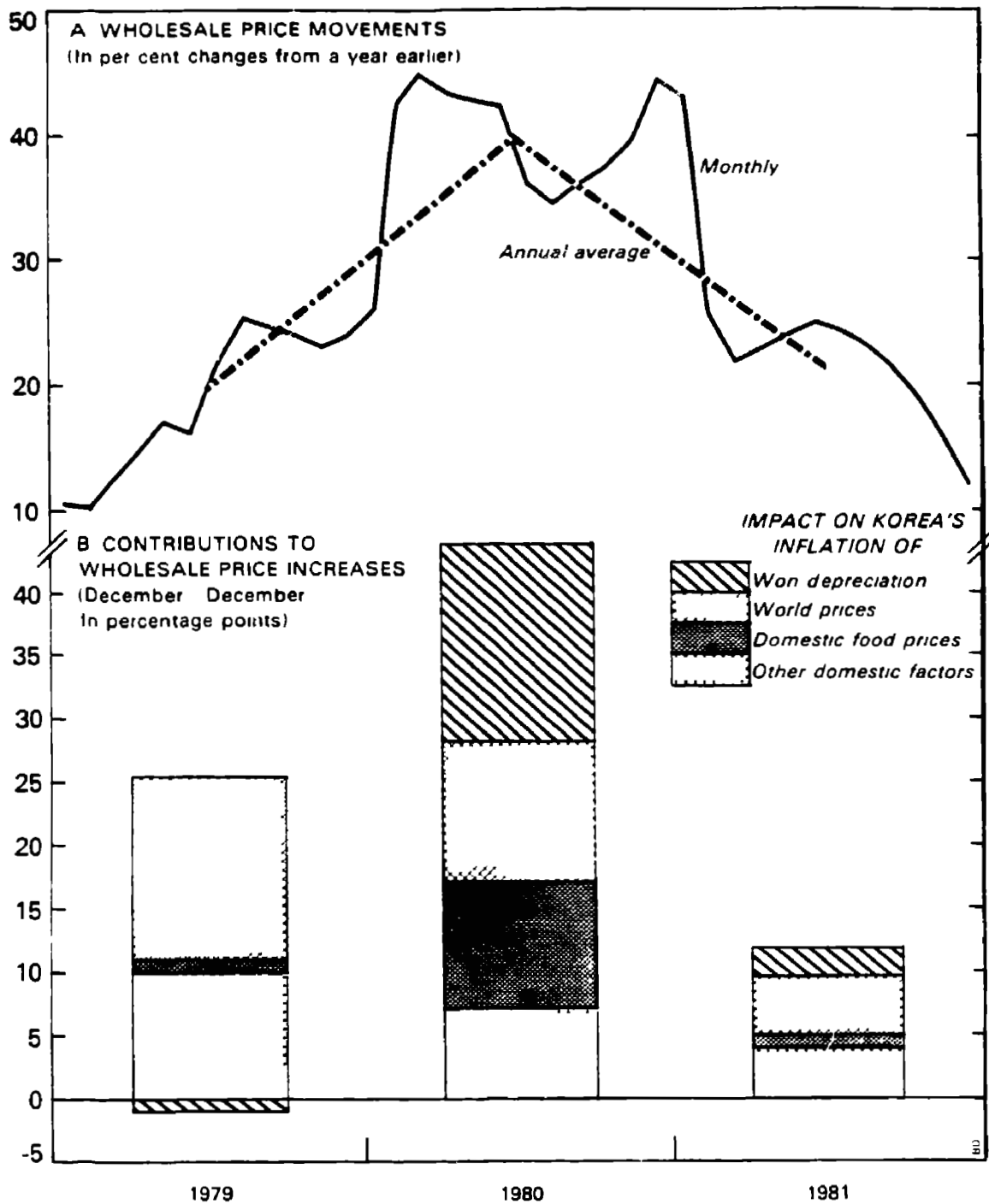


decline in import prices in domestic currency. With agricultural production recovering to normal levels, domestic food prices fell in the last quarter and rose by less than 5 per cent during the year as a whole; as a result, agricultural prices contributed only 1 percentage point to the increase in the WPI in 1981, compared with about 10 points in 1980. Under the influence of wage moderation, productivity gains, and prudent demand management, the contribution of other domestic factors to inflation is estimated to have declined further to 4 percentage points in 1981.

Short term fluctuations in wholesale prices during the course of 1981 reflected developments in the above-mentioned influences and also the timing of consequent adjustments to administered prices. The WPI rose by 10.4 per cent in the first half of 1981, but by only 1.2 per cent in the second half, including a fall in the last quarter. The increase in the first half was concentrated in the second quarter (6.9 per cent), as adjustments to administered prices of petroleum products (15 per cent), coal (20 per cent), and electricity (10 per cent) were made in April. Food price rises also accelerated sharply in the second quarter, due mainly to increases for grains, fresh fruit, and meat. The increase in the WPI slowed to 2.1 per cent in the third quarter, as grain and meat price increases moderated in the face of improving supplies, and manufactured goods benefited from stable raw material prices and moderation in labor cost increases. In August, however, coal prices were raised by a further 16 per cent. In the fourth quarter, the WPI actually declined by 0.8 per cent due to falling food prices. Under a combination of an improved harvest and reduced net purchases of rice by the Grain Management Fund, as the Government began to allow a decline in official stocks, rice prices fell by 20 per cent in the last four months of the year, while prices of fresh fruit, meat, potatoes, and vegetables also dropped sharply; overall, prices of agricultural and marine foods fell by almost 11 per cent in the final quarter. Prices of nonagricultural commodities rose by just over 2.2 per cent, compared with 1.2 per cent in the third quarter, as prices of electricity and petroleum products were raised by 6 per cent at the end of November.

The price control system was further liberalized in 1981. The arrangements under which increases in prices charged by 58 "monopolistic" or "oligopolistic" enterprises, covering 35 commodities, were subject to prior government approval were replaced in 1981 by a monitoring scheme under which price increases must be reported to the Government within three days. The new scheme, which initially covered 150 enterprises and 97 commodities, is intended to provide information for decisions on import liberalization and actions to counter monopolistic abuses under the 1981 Monopoly Regulation and Fair Trade Law.

CHART 5  
KOREA  
WHOLESALE PRICES, 1979-81



Sources: Data provided by the Korean authorities and staff calculations

## 6. Monetary and credit policy

### a. Overview of developments and policies during 1980-81

Monetary policy in 1980 aimed mainly at controlling inflation by curbing domestic second-round effects of the oil price adjustments and the depreciation of the won. To this end, monetary conditions during the year were kept tight, contributing substantially to the curtailment of aggregate domestic demand and thereby facilitating external adjustment. In mid-1980, monetary policy was eased somewhat to accommodate the greater-than-expected imported inflation which had occurred in the first half and to provide room for larger bank borrowing by the Government for the financing of higher expenditure to stimulate the economy.

The objective of monetary policy in 1981 was to permit a resumption of growth while securing a reduction in inflation and supporting further external adjustment. As the stimulative stance of fiscal policy adopted in the second half of 1980 was to continue in 1981 to provide momentum for growth, monetary policy was designed to accommodate larger bank borrowing by the public sector. The growth of nominal broad money (adjusted for the offset of compensatory balances, see next subsection) accelerated somewhat, and with the rate of inflation declining, the real average stock of broad money rose by approximately 10 per cent in 1981, compared with a decline of 8 per cent in 1980. While the income velocity of money had risen in 1980 following three years of steady decline, velocity fell slightly in 1981 in line with the deceleration in the rate of inflation (a close association between the behavior of velocity and inflation is observable in Korea, Chart 6). On the whole, the stance of monetary policy in 1981 was sufficiently tight to help bring about a further reduction in domestically generated inflation and a decline in the current account deficit, while also permitting a recovery of economic activity.

Interest rates, which are under official control, were reduced by a total of 4 percentage points between November 1981 and January 1982; at the end of February, the prime lending rate was 15.5 per cent. While interest rates in real terms had been strongly negative in 1980 and in the first three quarters of 1981, they turned positive by a small margin in the fourth quarter of 1981 as a result of the decline in the rate of inflation.<sup>1/</sup>

The reform of the financial sector, which was initiated in 1980 with the main objective of strengthening the role of the market mechanism in the financial system, was continued in 1981. The measures implemented in 1981 included a partial liberalization of the commercial paper market, a reduction in the differential between general and preferential interest rates, and a strengthening of the autonomy of bank management. The Government also sold its equity in one of the five nationwide commercial banks to the private sector, and its share in the ownership of the other

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<sup>1/</sup> In late March 1982, most interest rates were further reduced by 1.5 to 2.4 percentage points.

four nationwide banks was reduced by foregoing the acquisition of new shares when the capital of these banks was increased. Furthermore, in early 1982, direct credit control by the Bank of Korea through establishing credit ceilings for each individual bank was abolished. Henceforth, in managing liquidity, the Bank of Korea will rely solely on traditional instruments of monetary control, such as rediscounts, reserve requirements, and open market operations.

b. Monetary developments and policies in 1981

(1) Domestic credit and liquidity

Recorded average broad money grew by about 26 per cent in 1981, or by approximately the same rate as in 1980 (Table 12). However, because of a government-directed reduction in outstanding deposits held against loans as compensatory balances undertaken since the third quarter of 1980, the recorded growth of credit and liquidity understated the effective increase. The Government's objective in directing a reduction in compensatory balances was to reduce the effective cost of credit.<sup>1/</sup> But the offsetting of compensatory balances against a corresponding amount of the loan also had the effect of lowering, *ceteris paribus*, the recorded levels of credit and deposits, while leaving credit and liquidity actually available to the public unchanged. If an adjustment is made for the offset of compensatory balances, average broad money grew effectively by about 34 per cent in 1981, compared with 28 per cent in 1980.<sup>2/</sup> The higher liquidity growth in 1981 was brought about by an acceleration in the rate of growth of domestic credit (annual average) from 41.5 per cent in 1980 to 43.0 per cent in 1981; net foreign assets of the banking system declined by W 1,682 billion in 1981, compared with a decline of W 818 billion in 1980 (Table 13). With liquidity growing faster and the annual average rate of inflation (WPI) declining because of factors not related to domestic demand (see section 5 above), monetary conditions eased markedly in 1981 and the income velocity of money fell by over 2 percentage points (Table 12).

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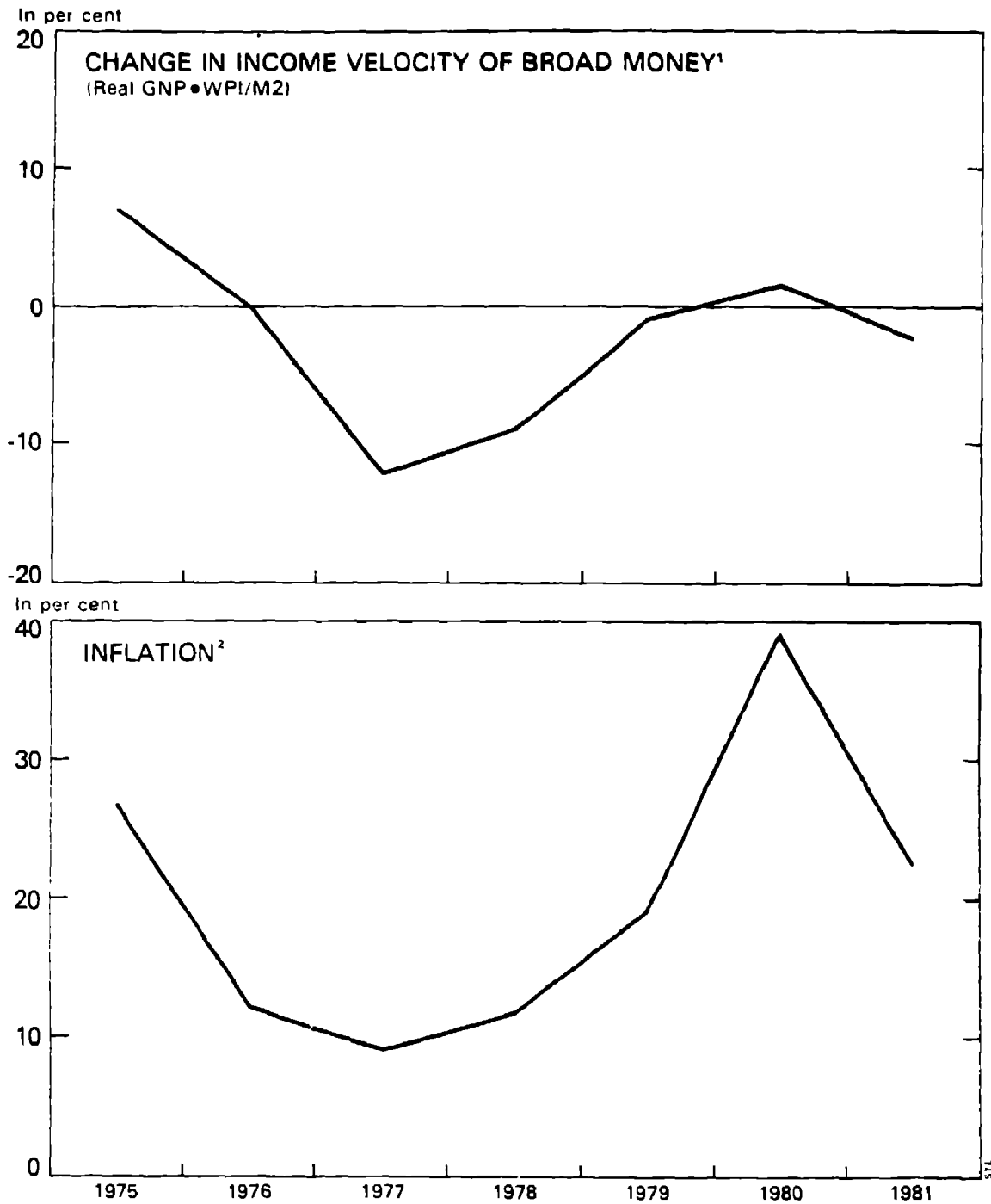
<sup>1/</sup> The holding of part of the proceeds of a new loan in a captive deposit account (compensatory balances) had been widely used by banks to supplement profits from regulated interest rates. The proportion of a loan to be held in compensatory balances accounts was negotiated between the bank and the borrower. To reduce effective credit costs, the Bank of Korea instructed banks in September 1980 to eliminate compensatory balances in excess of those required as security for the loan by allowing firms to repay part of the loans with these deposits. Furthermore, in April 1981, the Bank of Korea issued instructions aimed at limiting the practice of requesting compensatory balances from borrowers in the future.

<sup>2/</sup> All growth rates of money and credit presented in this subsection take account of the offset of compensatory balances and are derived from seasonally adjusted series. Growth rates of credit also exclude valuation adjustments for foreign currency loans to residents.

## CHART 6

## KOREA

## INCOME VELOCITY OF MONEY AND INFLATION, 1975-81



Source: Staff calculations based on data provided by the Korean authorities

<sup>1</sup>Takes into account offset of compensatory balances

<sup>2</sup>Change in annual average WPI

Table 12. Korea: Developments in GNP, Prices, Monetary Aggregates, and Velocity of Circulation, 1978-81

(Per cent change from preceding period) 1/

Period Averages	1978	1979	1980			1981		
			1st Half	2nd Half	Year	1st Half	2nd Half	Year
Real GNP	11.6	6.4	-1.5	-5.6	-6.2	8.2	1.6	7.1
WPI	11.7	18.8	21.0	14.0	38.9	10.9	7.3	22.5
Domestic credit	37.0	38.8	20.3	16.3	40.0	18.1	15.8	37.0
Broad money (M2)	37.4	27.6	12.0	13.0	26.6	13.0	11.4	26.4
Real broad money (M2/WPI)	23.0	7.4	-7.4	-0.9	-8.9	1.9	3.8	3.2
Velocity of broad money (Real GNP x WPI/M2)	-9.3	-0.9	6.4	-4.7	3.0	6.2	-2.1	3.8
Domestic credit adjusted for offset of compensatory balances	37.0	38.8	20.3	18.6	41.5	21.5	17.0	43.0
Broad money adjusted for offset of compensatory balances (M2 adjusted)	37.4	27.6	12.0	15.5	28.4	17.9	13.0	34.2
Real adjusted broad money (M2 adjusted/ WPI)	23.0	7.4	-7.4	1.3	-7.6	6.3	5.3	9.6
Velocity of adjusted broad money (Real GNP x WPI/M2 adjusted)	-9.3	-0.9	6.4	-6.8	1.5	1.8	-3.5	-2.3

Source: Staff calculations based on data provided by the Korean authorities.

1/ Seasonally adjusted series.



The easing of monetary conditions in 1981 occurred gradually as the year progressed. Despite a relatively high rate of credit expansion in the first half (21.5 per cent),<sup>1/</sup> monetary conditions were somewhat tighter in the first six months as prices were still rising by more than 10 per cent under the impact of the increase in import prices and domestic food prices, and as real GNP rebounded from the slump of late 1980 caused by the crop failure.<sup>2/</sup> As a result, the income velocity of money accelerated in the first half. Although the rate of credit expansion was lower in the second half (17.0 per cent), monetary conditions eased considerably as inflation abated substantially and as the growth of real GNP also slowed partly because of the less favorable export performance. Reflecting these factors, the income velocity of money fell by 3.5 percentage points in the second half.

Reflecting a more expansionary fiscal policy, the public sector accounted for about 25 per cent of the total domestic credit expansion in the first half of 1981, compared with 15 per cent in the second half of 1980. Following traditional practice, almost all of the bank credit to the public sector was extended by the Bank of Korea. Therefore, public sector credit was the major factor behind the growth of reserve money in the first two quarters of 1981 (Chart 7). Although public sector spending remained on an expansionary course in the second half of 1981, bank borrowing by the public sector slowed, as the Government covered a larger proportion of its financing needs in the bond market. The contribution of the public sector to the expansion of total domestic credit in the period June to December 1981 thus fell to about 10 per cent; for the year as a whole, this contribution was 16 per cent.

The demand for private sector credit in 1981 was mainly for working capital to finance increased production in response to the gradual recovery of consumer demand and the strength of exports in the first three quarters. Furthermore, the increase in debt service on foreign debt, partly related to high interest rates abroad, raised the credit requirements of the business sector. The demand for equipment funds remained low, as a result of the continued sluggishness of investment.<sup>3/</sup>

In the course of 1981, the Bank of Korea engaged frequently in open market operations, modified the rediscounting system, and changed the reserve requirements. To offset the liquidity impact of the large extension of central bank credit to the public sector, the Bank of Korea increased substantially the amount of stabilization bonds sold to the

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<sup>1/</sup> Growth over the preceding six-month period on seasonally adjusted basis.

<sup>2/</sup> The fact that the growth of money was not reduced in the final quarter of 1980 despite the sharp fall in income due to the crop failure suggests that a liquidity cushion may have been created toward the end of 1980 which alleviated the relatively tight credit situation suggested by the data for the first half of 1981. The existence of this liquidity cushion is indicated by the substantial decline in the income velocity of money recorded in the second half of 1980 (Table 12).

<sup>3/</sup> For the distribution of credit by sector, see Appendix Table IV.



banking system in the first half of 1981; a small amount of stabilization bonds was also sold to the public. Another significant policy measure in the first half of 1981 was a modification of the rediscounting mechanism for commercial bills. To facilitate the supply of working capital to firms and to strengthen rediscounting as an instrument of overall liquidity control, the rediscount ceilings for individual business companies were replaced by rediscount ceilings for each bank. In early July 1981, the Bank of Korea reduced the ratio of required noninterest-bearing reserves--which differed according to the type of deposit--from an average of 10.2 per cent to a uniform rate of 5.5 per cent. This measure was designed to protect the profitability of the banking system following an increase in some deposit rates with effect from July 1 (lending rates remained unchanged). A further reduction in the reserve ratio to 3.5 per cent was implemented in November 1981 in the wake of the interest rate reductions earlier that month which affected all nonpreferential lending but only some deposit rates. To offset the liquidity impact of the reduction in reserve requirements, the Bank of Korea sold large amounts of interest-bearing stabilization bonds to deposit money banks in July and November 1981, and requested banks to increase deposits in the interest-bearing stabilization account. As a result of the reduction in reserve requirements in mid-1981--which implied an increase in the money multiplier--and the absorption of freed reserves through the sale of stabilization bonds and the increase in deposits in the stabilization account, reserve money declined in the second half of 1981 (Chart 7).

## (2) Interest rate policy

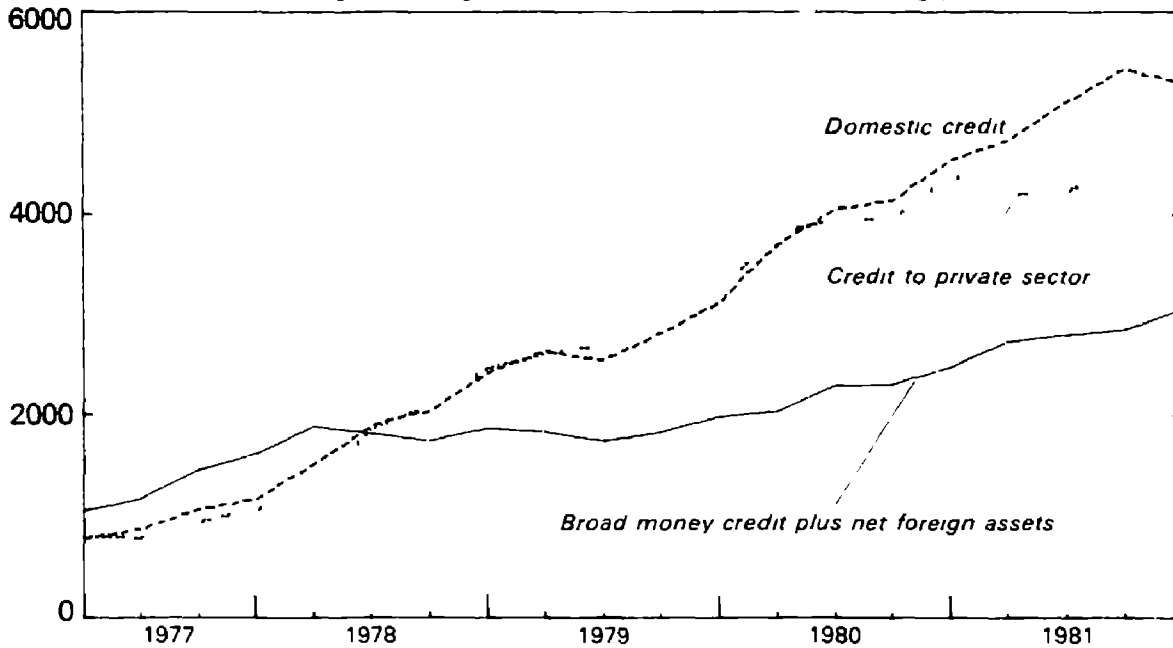
Bank interest rates in Korea are under official control. As a result of selective credit policies, a large number of preferential interest rates to support activities accorded priority by the Government have emerged over the years. Another distinctive feature of Korea's interest rate policy is that changes in interest rates also affect outstanding bank loans including medium- and long-term loans, with the new interest rate applying at the next interest payment date. Consequently, even a small increase or reduction in interest rates has a considerable impact on the corporate debt service burden.

As the rate of inflation accelerated rapidly in late 1979 and early 1980, interest rates were raised by a total of 6 percentage points in January 1980, with the prime rate increased to 24.5 per cent. After a gradual reduction by 5 percentage points in the second half of 1980, interest rates remained unchanged in the first half of 1981. In July, interest rates on savings deposits were raised from 5.5 per cent for deposits outstanding for less than 30 days and 12.3 per cent for other savings deposits, to a uniform rate of 14.4 per cent, with interest paid henceforth on the average outstanding balance (Table 14). At the same time, household checking deposits, on which previously no interest had been paid, were permitted to yield an interest rate of 14.4 per cent. The purpose of these measures was to increase savings and improve the competitive position of banks vis-a-vis nonbank financial institutions (NBFIs), which in the past had been permitted to offer higher deposit

CHART 7  
KOREA

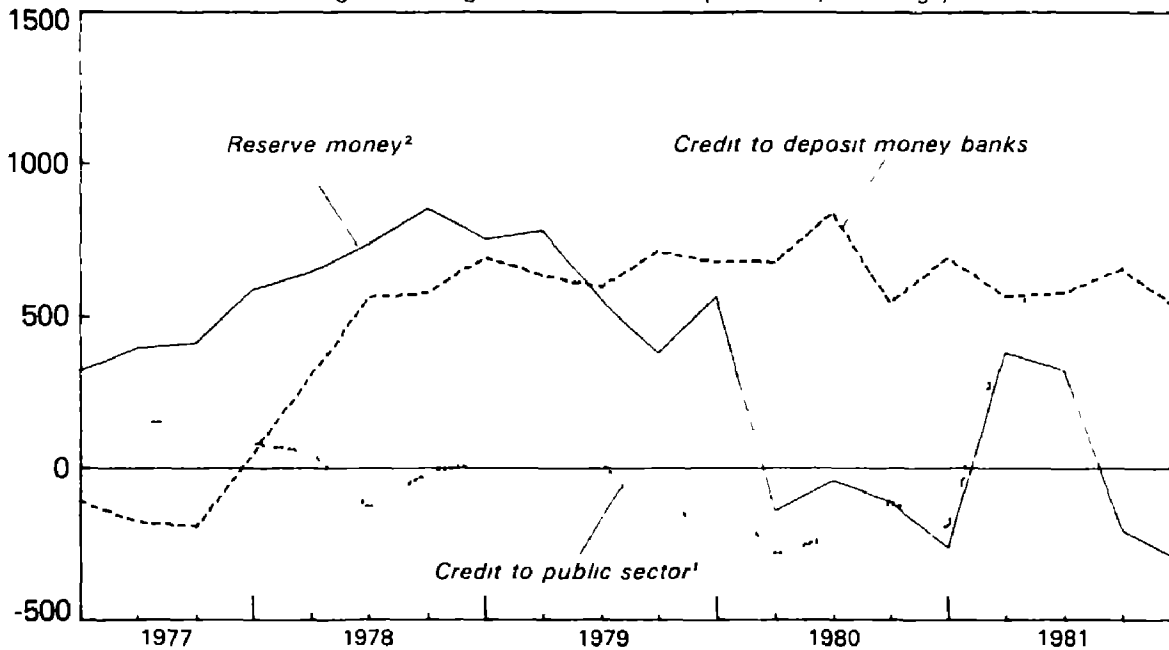
# FACTORS AFFECTING MONEY SUPPLY, 1977-81

In billions of won (Change in average stock over same quarter of preceding year)



# FACTORS AFFECTING RESERVE MONEY, 1977-81

In billions of won (Change in average stock over same quarter of preceding year)



Source: IMF *International Financial Statistics*

<sup>1</sup>Government and government agencies

<sup>2</sup>Credit plus net foreign assets minus other liabilities including stabilization bonds

Table 14. Korea: Selected Interest Rates on Deposits of  
Deposit Money Banks, 1979-82

(In per cent per annum)

Effective From	1979 Sept.	1980 <u>Jan.</u> <u>Nov.</u>		1981 Nov.	1982 Jan.
Household checking deposits	-- <u>1/</u>	--	--	14.4 <u>2/</u>	14.4
Notice deposits (more than 30 days)	10.0	10.0	10.5	8.3	10.8
Time deposits					
Over 3 months	15.0	19.2	14.8	14.8	14.4
Over 6 months	17.1	21.3	16.9	15.2	14.6
Over 1 year	18.6	24.0	19.5	17.4	15.0
Savings deposits					
Less than 30 days	5.5	5.5	5.5	14.4 <u>4/</u>	14.4
More than 30 days	12.6	16.8 <u>3/</u>	12.3	14.4 <u>4/</u>	14.4
Installment savings deposits 3 years	18.2	25.0	19.5 (22.5) <u>5/</u>	17.3 (20.3) <u>5/</u>	15.0
Workmen's wealth accumulation deposits <u>6/</u>					
2 years	25.7	28.4	28.4	28.4	28.4
5 years	30.2	33.6	33.6	33.6	33.6
<u>Memorandum items:</u>					
Selected interest rates on deposits of nonbank finan- cial institutions					
Investment and finance companies					
Bills resold: 1-29 days	20.6	23.8	19.2	18.1	15.5 <u>7/</u>
60-90 days	24.6	29.2	23.1	20.0	17.0 <u>7/</u>
Mutual credit cooperatives					
Time deposits, 1 year	19.8	24.9	22.5	19.5	15.9

Sources: Bank of Korea, Monthly Economic Statistics; and data provided by the Korean authorities.

1/ Interest rate of 6.0 per cent between April 1977 and April 1979.

2/ Established in July 1981.

3/ As of April 1980.

4/ As of July 1981.

5/ Special interest rate on household deposits.

6/ These rates include only the interest paid by banks and the government subsidy. In addition, employees are encouraged to contribute to the yield on these assets.

7/ As of February 1982.

rates than banks. The change in deposit rates caused a shift of deposits from narrow money to quasi-money, with the improved incentives for savings deposits apparently outweighing the attraction of interest payment on checking accounts, since personal checks are not a widespread means of payment in Korea.

Between November 1981 and January 1982, following a sharp decline in inflation and a drop in foreign interest rates, nonpreferential lending rates and most time deposit rates and the rate on installment savings deposits were reduced in steps by a total of about 4 percentage points (Chart 8 and Table 15). The interest rate on one-year time deposits was reduced from 19.5 per cent to 15.0 per cent and the prime lending rate (bank discount on bills) was lowered from 19.5 per cent to 15.5 per cent. Interest rates in real terms were negative in the first three quarters of 1981, though the negative margin declined as inflation abated (Table 16 and Chart 8).<sup>1/</sup> In the fourth quarter, with inflation further decelerating, interest rates in real terms became positive. As a result of the upturn in international interest rates from December 1981, nominal interest rates in Korea and U.S. dollar rates at end February 1982 were approximately at the same level.<sup>2/</sup>

### (3) Preferential credit policies

Lending at preferential interest rates to priority sectors and for priority activities has been an important feature of Korea's financial system. A substantial part of the preferential lending activity has been carried out through deposit money banks. Preferential lending is also channeled through the Korea Development Bank (KDB) and other development institutions, the Korea Housing Bank, the Small and Medium Industry Bank, and agricultural and fisheries cooperatives.<sup>3/</sup>

In carrying out their preferential lending activity, deposit money banks either use their own funds, supported by preferential rediscounting of eligible bills by the Bank of Korea, or act as conduit for government funds, including funds from the National Investment Fund (NIF). At the same time, banks are also a source of funds for the NIF as they have to hold a certain proportion of their deposits in bonds issued by the NIF. It is estimated that an amount equivalent to about 20 per cent of

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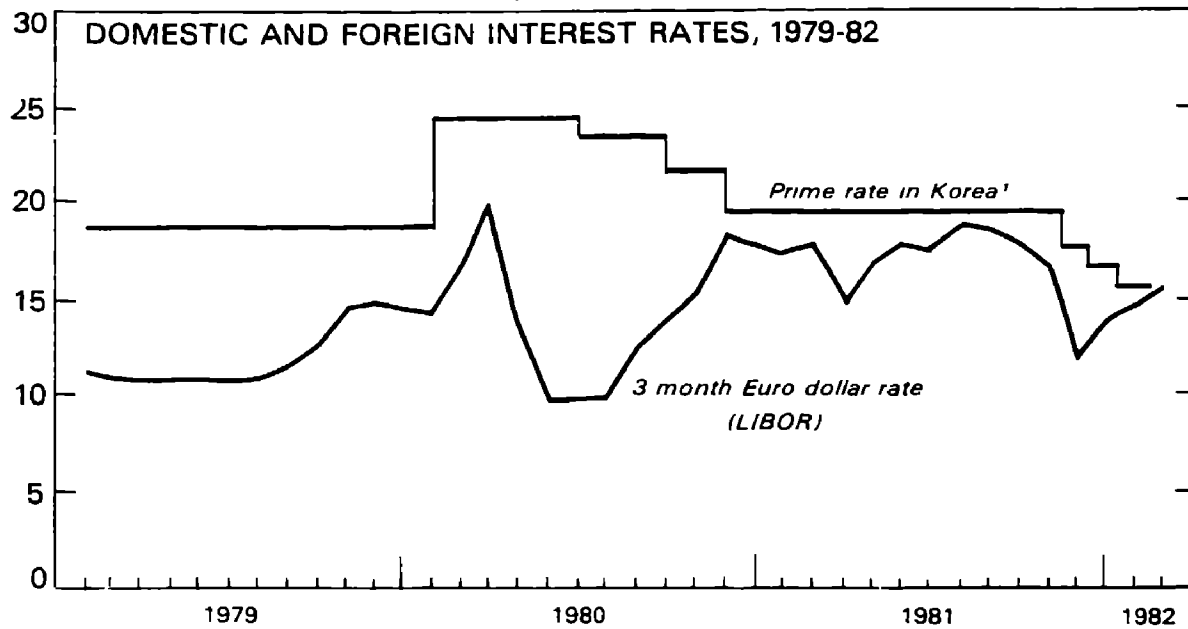
<sup>1/</sup> To measure real rates of interest, it is necessary to find a proxy for the expected rate of inflation, a task rendered difficult by the large and mostly exogenously induced fluctuations in the rate of inflation in Korea in recent years. The proxy used here is the rate of increase in the WPI during the latest 12-month period. This assumes that expectations adjust with a relatively short lag to actual price developments.

<sup>2/</sup> In late March 1982, deposit rates were further reduced by 2.4 percentage points and lending rates by 1.5 to 2.0 percentage points. The prime lending rate was adjusted to 13.5 per cent.

<sup>3/</sup> Credit extended by these institutions, with the exception of the KDB and the other development institutions, is included in domestic credit in the monetary survey (Table 12) and domestic credit expansion by sector (Appendix Table IV).

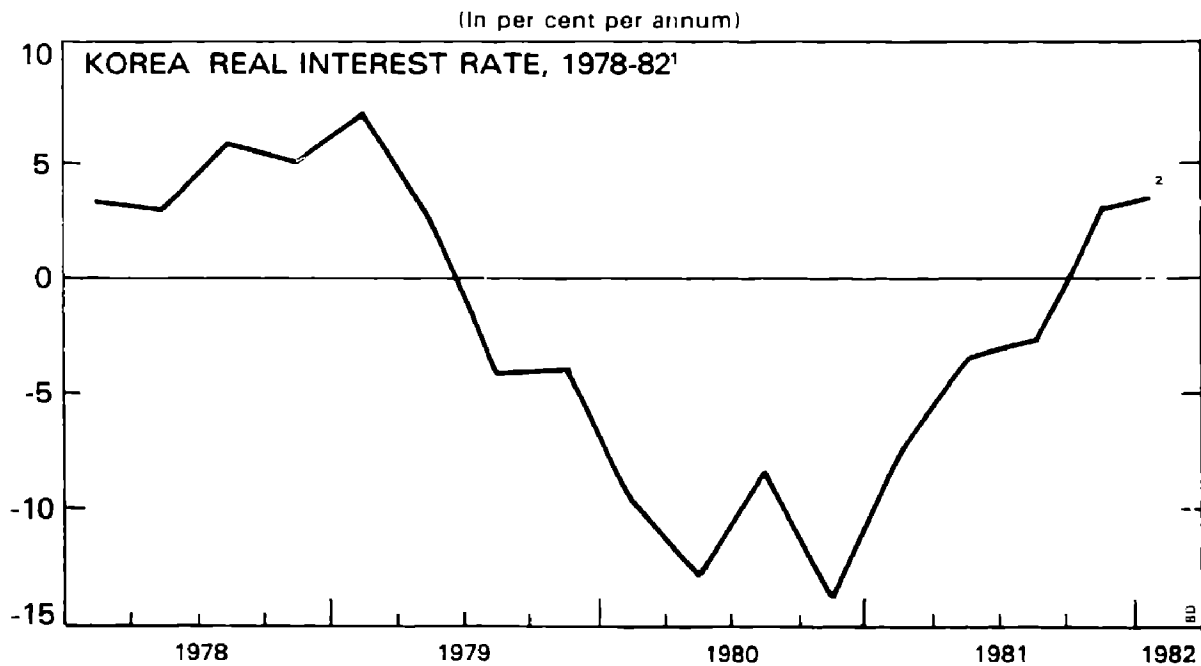
CHART 8  
KOREA  
INTEREST RATES

(In per cent per annum)



Source: Data provided by the Korean authorities and IMF *International Financial Statistics*

<sup>1</sup>Discount on bills



Source: Staff calculations based on data provided by the Korean authorities

<sup>1</sup>Interest rate on one year time deposits minus annual percentage change in wholesale prices, quarterly averages

<sup>2</sup>January 1982

Table 15. Korea: Bank of Korea Rediscount Rate and Major Interest Rates on Bank Loans, 1979-82

(In per cent per annum) 1/

Effective From	1979	1980		1981	1982
	September	January	November	November	January
Bank of Korea rediscount on commercial bills	14.5 (15.0)	20.5 (21.0)	15.5 (16.0)	12.5 (13.0)	6.5 (7.0)
Deposit money banks					
Discounts on bills (prime rate)	18.5 (19.0)	24.5 (25.0)	19.5 (20.0)	17.5 (18.0)	15.5 (16.0)
Overdrafts	20.5 (21.0-22.5)	26.5 (27.0-27.5)	21.5 (22.0-22.5)	18.5 (19.0-20.0)	15.5 (16.0-17.0)
Loans on installment savings deposits	18.5 (19.0)	24.5 (25.0)	17.5 (18.0)	15.5 (16.0)	15.5 (16.0)
Term loans					
Less than 3 years	18.5 (19.0-21.0)	24.5 (25.0-26.0)	19.5 (20.0-21.0)	17.5 (18.0-19.0)	15.5 (16.0-17.0)
3 to 8 years	19.5 (20.5)	25.5 (26.0)	20.5 (21.0)	18.5 (19.0)	16.5 (17.0)
8 to 10 years	20.5 (21.0)	26.5 (27.0)	21.5 (22.0)	19.5 (20.0)	17.5 (18.0)
<b>Memorandum items:</b>					
Loans with preferential interest rates from banks and other financial institutions					
Loans for exports	9.0	12.0	12.0	12.0	12.0
Loans for raw material imports	15.0	21.0	18.0	17.0	abolished
Agricultural production funds 2/	15.0	15.0	15.0	15.0	15.0
National housing construction fund	16.5	19.5	18.0	18.0	15.0 3/
Equipment funds for key industries from Korea Development Bank	15.0	21.0	18.5	17.5-19.5	15.5-17.5
National investment funds (NIF)	15.0-16.0	21.0-22.0	18.5-19.5	16.5-17.5	15.5-16.5

Sources: Bank of Korea, Monthly Economic Statistics; and data provided by the Korean authorities.

1/ Figures in parentheses refer to nonprime enterprises, and, where a range is indicated in the interest rate in parentheses, lending rates of local banks are included.

2/ Applies also to loans for fishery.

3/ As of end-February 1982.

Table 16. Korea: Real Interest Rate on One-Year Time Deposits, 1977-82

(Per cent per annum)

Average During Period	Nominal Interest Rate (i)	Rate of Inflation <u>1/</u> (P)	Real Interest Rate <u>2/</u> (r)
1977	15.8	9.0	6.2
1978	16.7	11.7	4.5
1979	18.6	18.8	-0.2
1980			
1st qtr.	24.0	37.7	-9.9
2nd qtr.	24.0	42.4	-12.9
3rd qtr.	23.7	35.4	-8.6
4th qtr.	20.7	40.2	-13.9
1981			
1st qtr.	19.5	29.3	-7.6
2nd qtr.	19.5	23.8	-3.5
3rd qtr.	19.5	22.9	-2.8
4th qtr.	18.5	15.3	2.8
November	17.4 <u>3/</u>	15.5	1.6
1982 January	15.0 <u>3/</u>	11.3	3.3

Source: Staff calculations based on data provided by the Korean authorities.

1/ Increase in the WPI over the same period a year ago.

$$\underline{2/} \quad r = \frac{1 - \dot{P}}{1 + \dot{P}}$$

3/ End of period.

the loans and discounts of deposit money banks to the manufacturing sector constitutes preferential bank lending (Appendix Table V). This share has declined slightly since 1977. About 75 per cent of the preferential bank lending is related to exports, with the remainder constituting mainly loans to industry with NIF funds. The importance of preferential loans for exports is also underscored by the fact that export-related refinancing has amounted to about 30 per cent of total claims on banks of the Bank of Korea. The loanable amount for export financing is expressed as so many won per U.S. dollar of exports. The implied loanable amount for exports, as a proportion of the value of exports, which was as high as 89 to 99 per cent at end-1979, fell to 72 to 83 per cent at end-1981, as the amount of won per U.S. dollar was not increased in 1981 despite a depreciation of the won vis-a-vis the U.S. dollar. However, adjustments made in January 1982 established a range with a maximum of 88 per cent and a minimum of 73 per cent at that time. Other eligibility criteria for export loans were relaxed in mid-1981. The preferential lending activity of the development and other specialized institutions is in part supported by funds from the Bank of Korea and the Government.

The gradual reduction in the differential between general and preferential interest rates is one of the objectives of the Government. Significant progress was achieved in this area in 1981, as the preferential rate for export loans remained at 12 per cent despite the 4 percentage-point reduction in the nonpreferential lending rates. Furthermore, the preferential lending rates on KDB, NIF, and national housing construction funds were reduced by only 3 percentage points or less (Table 15).

#### (4) Lending activity of foreign bank branches

The share of credit extended by the branches of foreign banks in total domestic credit of the banking system to the private sector, which had increased from 8 per cent to 12 per cent between December 1979 and December 1980, fell to 11 per cent at the end of December 1981. Two factors were principally responsible for this relative decline. The limits on foreign currency swaps against won with the Bank of Korea, which have been the major source of funds for credits extended in domestic currency by the branches of foreign banks, were not raised until March 1982.<sup>1/</sup> The demand for credit in foreign currency, which is not affected by these swap limits, was relatively low because of the smaller differential between domestic and foreign interest rates, which reduced the

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<sup>1/</sup> Under the swap system, the branches of foreign banks swap U.S. dollars against won with the Bank of Korea for a period of up to 12 months and at a guaranteed exchange rate. The profit margin available to banks on the swap funds is 1 per cent, irrespective of the levels of domestic and foreign interest rates, which means that if domestic interest rates are lower than foreign rates, the Bank of Korea provides a subsidy. When U.S. dollar interest rates approached the level of domestic rates in late 1980, swaps with deutsche mark funds were also permitted because of the lower interest rates on deutsche mark funds.



interest rate incentive for borrowing in foreign currency (Chart 8). The branches of foreign banks have traditionally provided about one half of the foreign currency loans.

c. Nonbank financial institutions and capital markets

The nonbank financial institutions (NBFIs) consist of the Korea Development Bank (KDB) and other official development institutions, specialized savings institutions, short-term finance companies, merchant banks, and insurance companies. The official development institutions are the largest segment of the NBFIs. They were created for the purpose of channeling funds, including government funds and the proceeds of official foreign borrowing, to priority sectors of the economy. The second largest class of NBFIs are the short-term finance companies. These companies are permitted to offer a wide range of services, including the acceptance, guarantee, discount, purchase, or sale of promissory notes and the issuance of their own paper. They can also participate, with certain limitations, in capital market activities. Merchant banks were established only recently, but their activities have been growing rapidly. The growth of NBFIs was also encouraged by the greater discretion some NBFIs, notably the short-term finance companies, can exercise in allocating credit.

Deposits with NBFIs amounted to about 30 per cent of the combined deposits of NBFIs and deposit money banks at the end of 1981 (a financial survey is presented in Appendix Table VI). Deposits with NBFIs grew at an average annual rate of 44 per cent in the period 1978-81, compared with an annual average rate of growth of 29 per cent for the liabilities (M2) of deposit money banks. This difference reflected mainly the fact that NBFIs were permitted to offer more attractive interest rates on their liabilities than deposit money banks. The growth of deposits with NBFIs continued to outpace the rise in broad money (adjusted for the effect of the offsetting of compensatory balances) in the first half of 1981, but, following the introduction of interest-bearing checking deposits with deposit money banks and the increase in interest rates on savings deposits, the growth rates of broad money and NBFIs deposits were approximately the same in the third quarter of 1981. In the first nine months of 1981 as a whole, deposits with NBFIs rose by 24 per cent, compared with a rate of increase of 18 per cent in adjusted broad money. As a result of the interest rate adjustments of mid-1981 and the selective deposit rate reductions in late 1981-early 1982, the interest rate differential between deposit money banks and NBFIs was reduced (Table 15).

Korea's corporate sector has traditionally derived a significant share of its liquidity needs from the commercial paper market. The paper issued in this market has not, however, been related to trade transactions, but has been in the nature of promissory notes with or without payment guarantee from short-term finance companies.<sup>1/</sup> The market for this paper has been operated by the short-term finance

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<sup>1/</sup> For paper related to trade transactions, the term commercial bill is used. This paper is discountable with banks, and the Bank of Korea refinances commercial bills.

companies and merchant banks which invest in paper issued by corporations, act as brokers, or issue their own paper. Interest rates in this market have been under official control, but, with effect from late June 1981, the Government freed from control interest rates on corporate paper with maturities of 91 to 180 days.<sup>1/</sup> The market for this new commercial paper expanded very fast in the second half of 1981, attracting funds both from the unorganized money market and the bond market. The amount of total issues in the period July-December 1981 was about W 1,000 billion and the outstanding amount at the end of the year was about W 600 billion. The latter increase was almost as large as the increase in the stock of all corporate commercial paper in 1980 as a whole. The interest rate in the new commercial paper market was around 25 per cent throughout the second half of 1981. To reduce the risk of default in this rapidly expanding market, the Government in early 1982 tightened the eligibility criteria and established limits on the amounts individual corporations can raise in this market.

New issue activity in the market for corporate bonds was relatively weak in the first half of 1981 but increased in the third and fourth quarters of the year as the demand for funds by corporations rose, which was partly related to maturing debt. Total new issues amounted to W 1,036 billion, representing a growth rate of about 7 per cent over the previous year; in 1980, new issues had risen by over 50 per cent. Yields on corporate bonds were around 26 per cent at the beginning of 1981 and declined steadily in the first half to about 22 per cent by mid-1981. In the final quarter of the year yields rose again to about 27 per cent in response to the increased demand for funds by corporations and larger issues of government bonds. Increased investor interest in the more liquid liberalized market for corporate commercial paper may also have resulted in a shift of funds from this market, thereby contributing to the increase in bond yields.

The gradual improvement in the economic situation, as well as the favorable export performance and the substantial increase in construction orders from overseas, resulted in sharp increases in the volume of shares traded and in the composite stock price index in the period April to July 1981. Subsequently, however, the trading volume and the stock price index started to decline, due to profit taking, the emergence of the new commercial paper market, and the decline in export orders. After having reached a peak of 210.2 in July 1981, the stock market price index fell to 178.4 by the end of the year, compared with 139.6 at end-1980 and 207.2 at end-1978.

## 7. Public finance

### a. Structure of the public sector

The public sector in Korea includes central and local governments and a wide range of financial and nonfinancial public enterprises. The Central Government consists of the central national administration

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<sup>1/</sup> A nominal interest ceiling of 40 per cent per annum was retained.

(legislative, ministries, and agencies); provincial and local governments comprise the nine provinces, the two largest cities (Seoul and Pusan), 38 municipalities, and 139 counties. Although local governments have substantial administrative responsibility, they have only limited authority to raise revenue or borrow, and receive about 60 per cent of their income from the Central Government in the form of grants and subsidies; local taxes are mainly property taxes (see Annex I of Supplement 1 to this report, to be issued shortly).

Public enterprises comprise (1) those organized in the form of departments or agencies of the Central Government; (2) government-invested companies or corporations; and (3) other government-invested institutions. Government-invested companies include all the manufacturing, industrial, and other organizations recognized by the authorities as public enterprises, based on the criterion of a 50 per cent or greater equity share. Together with the more significant government-invested institutions, which are classified as financial institutions, these companies are listed in Appendix Table VII. With the exception of the Korea Development Bank, government contributions to these enterprises take the form of equity. In this report the available public sector is defined to include the Central Government and the five nonfinancial public enterprises organized essentially along departmental lines.<sup>1/</sup> Thus, provincial and local governments and the government-invested entities are omitted.

The role of public enterprises in Korea is to provide specific goods and services, to fulfill an assigned role in industrialization, and to further economic development. In some enterprises, administrative controls have tended to keep sales prices below economic levels. In part reflecting these price controls, the financing of the activities of these enterprises has entailed substantial reliance on borrowing both from domestic institutions, including the banking system, and from abroad. Interest rates on loans from domestic institutions tend to be heavily subsidized.

The operations of the public sector are effected through a complex funding structure comprising a general account, various special accounts, extrabudgetary funds, and other nonbudgetary transactions (Annex I). The general account covers the activities of government ministries and agencies and accounts for about 80 per cent of central government expenditure and net lending, receiving the bulk of central government tax revenues and some nontax revenues. Special accounts are established for specific projects, or in some cases where revenues are earmarked for particular expenditures. The national budget covers only operations funded through the general account and 12 special accounts. Extrabudgetary funds are set up to pursue particular government objectives, notably, net lending operations; two of these funds, those for Grain Management and Supply, are treated as nonfinancial public enterprises and therefore have corresponding enterprise special accounts, while the remainder are consolidated with the Central Government in this report. In addition,

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<sup>1/</sup> Railways, Communications, Supply Fund, Office of Monopoly, and the Grain Management Fund. The operations of these enterprises are described below.

two nonbudgetary transactions--foreign borrowing directly on-lent to the private sector, and foreign military sales credits--are also included in the analysis of Central Government and consolidated public sector operations.

Two main changes were introduced to this funding structure during 1981 and early 1982.<sup>1/</sup> In the consolidated Central Government an important addition was the establishment in July 1981 of the National Housing Fund which absorbed the housing loan operations of the Korea Housing Bank and Citizens National Bank and through which the increased public funds for housing are now allocated. Another major change occurred in the nonfinancial public enterprise sector: in January 1982, telecommunications was removed from the Communications Special Account (and, hence, from the available public sector as defined here) when the independent government-invested corporation, Korea Telecommunications Authority (KTA), was established. Its management will be independent of the Ministry of Communications, and it will not have access either to government budgetary support or to Bank of Korea financing. Henceforth, the Communications Special Account comprises only the relatively insignificant postal service.

Central government revenues are recorded when they are deposited with the Bank of Korea, and expenditure is recorded on the basis of checks issued. Previously, the fiscal year, which is the calendar year, included a complimentary period of 20 days in the following January for both revenue and expenditure. Effective January 1, 1982, the complimentary period was abolished. This modification is not expected to have much impact on recorded 1981 expenditure because many relevant payments were intentionally made before the end of the calendar year. Regarding revenue, almost all of the complimentary period revenue has come from customs duties. As a result, customs revenue is understated by about 7 per cent for 1981 and is somewhat overstated for 1982. The budget is normally approved no later than December. A supplementary budget, encompassing policy changes or revised estimates, has become a regular feature during the second half of the financial year.

#### b. Recent developments

##### (1) Overview

Over the past two decades fiscal policy has played an important role in Korea's rapid development, primarily through the mobilization of domestic resources and through a concentration of expenditure programs

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<sup>1/</sup> There were also some minor adjustments. These included the split of the Veterans' Relief Special Account into two parts, one of which was added to the General Account and the other to the Veterans' Relief Fund, and the elimination of the Job Rehabilitation Fund and the transfer of its functions to the private sector. Also, two other relatively small extrabudgetary funds were added: the Electronics Industry Promotion Fund (January, 1981) and the Marine Promotion Fund (January, 1982). Two other funds (Cultural Estate and National Welfare Pension) are not included in budget estimates, but do appear in final settlement. The Science and Technology Promotion Fund exists in law, but currently channels no funds.

on economic development, particularly the provision of infrastructure. While these fundamental directions have continued in the more recent past, there has also been in the last several years a discernible shift toward the more active use of fiscal policy as a countercyclical demand management tool.<sup>1/</sup> Moreover, while economic development expenditures of the public sector have focused historically on the provision of economic services, notably transportation, communication, and other infrastructure facilities, there has recently been a gradual shift toward social development expenditures, particularly housing, education, and social security. Taxation policy has been concerned primarily with improving the elasticity of the tax system and providing incentives to priority sectors, particularly to heavy and chemical industries and exports. By and large, the borrowing requirements of the public sector have not been a major source of domestic credit expansion, although the Grain Management and Fertilizer Funds have been significant borrowers from the Bank of Korea. During 1970-79, the public sector deficit averaged 2.9 per cent of GNP. During the second half of 1980 and during 1981, fiscal policy was used to provide some stimulus to growth; as a result, the overall deficit averaged 4.2 per cent of GNP during 1980-81 (Table 17), with the public sector accounting for 8 per cent and 16 per cent, respectively, of domestic credit expansion.<sup>2/</sup> For 1982 the public sector's share in total credit expansion is projected at 14 per cent, and the overall deficit is expected to decline to 2.7 per cent of GNP.

To complement the depreciation of the won in January 1980, and in view of the sharp increases in oil prices, the authorities initially pursued a tight fiscal policy during that year to facilitate adjustment in the economy. As the year progressed there was a sharp deterioration in the business climate, with aggregate output declining and unemployment rising. Therefore, fiscal policy was eased somewhat in the second half of the year in order to stimulate growth, and particularly to offset the effects of the sharp fall in rural incomes due to the crop failure. However, in 1980 as a whole, the stance of fiscal policy was relatively contractionary. The fiscal stimulus in the second half of the year was provided in the form of an increase by some W 450 billion over earlier projections of central government expenditure. The additional outlays were focused on employment-intensive investment projects in the agricultural sector, additional contributions to the Small and Medium

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<sup>1/</sup> See "An Analysis of Fiscal Impact" in Supplement 1 to this report, to be issued shortly.

<sup>2/</sup> The fiscal and monetary accounts in this report use, as do the authorities, different definitions for the position of the public sector with the banking system: (1) government lending funds in deposit money banks are treated as net lending in the fiscal accounts at the time the deposit is placed in deposit money banks, whereas the monetary data include these deposits in government deposits (netted out against claims on the Government); (2) fiscal accounts prior to 1982 include the 20-day complimentary period; (3) bank borrowing by the Fertilizer Fund, a government-directed agency in the private sector, is included in the monetary accounts as net credit to the public sector. For details on the financing of the consolidated public sector operations and a reconciliation of the fiscal and monetary accounts, see Appendix Table VIII.

Table 17. Korea: Operations of Central Government and Consolidated Public Sector, 1978-82

	1978	1979	1980	1981		Budget 1982
				Original estimate	Latest estimate	
<u>(In billions of won)</u>						
Central Government						
Expenditure <u>1/</u>	4,408	5,990	7,682	9,542	10,127	11,882
Revenue	4,108	5,445	6,833	8,558	8,628	10,931
Deficit (-)	-300	-545	-849	-984	-1,499	-951
Financing	300	545	849	984	1,499	951
Domestic	-65	272	523	649	1,031	735
Bank	(-111)	(251)	(434)	(557)	(663)	(371)
Nonbank	(46)	(21)	(89)	(92)	(368)	(364)
Foreign	365	273	326	335	468	216
Consolidated public sector						
Expenditure <u>1/</u>	5,001	6,210	8,455	10,836	11,481	12,493
Revenue	4,385	5,770	7,281	9,524	9,354	11,093
Deficit (-)	-616	-440	-1,174	-1,312	-2,127	-1,400
[Deficit] <u>2/</u>		[-435]	[-1,087]		[-1,924]	[-1,399]
Financing	616	440	1,174	1,312	2,127	1,400
Domestic	257	174	856	984	1,667	1,191
Bank	(177)	(71)	(607)	(662)	(1,024)	(699)
Nonbank	(80)	(103)	(249)	(322)	(643)	(492)
Foreign	359	266	318	328	460	209
<u>(In per cent of GNP) <u>3/</u></u>						
Central Government						
Expenditure <u>1/</u>	19.2	20.6	22.4	20.7	23.5	22.8
Revenue	17.9	18.7	19.9	18.6	20.0	21.0
Deficit (-)	1.3	1.9	2.5	2.1	3.5	1.8
Consolidated public sector						
Expenditure <u>1/</u>	21.8	21.4	24.6	23.6	26.6	24.0
Revenue	19.1	19.9	21.2	20.7	21.7	21.3
Deficit (-)	2.7	1.5	3.4	2.9	4.9	2.7
[Deficit] <u>2/</u>		[1.5]	[3.2]		[4.4]	[2.7]

Sources: Korean authorities; and staff estimates.

1/ Includes net lending.

2/ In January 1982, telecommunications was removed from the Communications Special Account (CSA) when the independent publicly owned corporation, Korea Telecommunications Authority, was established. From 1982, the CSA will include only the relatively small postal service. The figures in brackets provide the deficit in each year with the CSA deleted, so that comparisons with 1982 can be made without the definitional problem of the available public sector arising.

3/ GNP figures used: 1978, W 22,918 billion; 1979, W 29,072 billion; 1980, W 34,322 billion; 1981 original estimate, W 46,000 billion; 1981 latest estimate, W 43,155 billion; 1982, W 52,143 billion.

Industry Bank, increased funds for low income earners' housing, and a salary bonus for government employees. Revenues were more buoyant than expected because of the impact of high inflation on indirect taxes, which more than offset the weakness in direct taxes and the loss of revenue resulting from discretionary tax measures associated with the fiscal stimulus. The Central Government deficit rose from 1.9 per cent of GNP in 1979 to 2.5 per cent in 1980; during the same period, the public sector deficit rose from 1.5 per cent of GNP to 3.4 per cent. These increases led to a greater need for financing from the banking system, and net credit to the public sector, as defined in the monetary accounts, amounted to W 396 billion after having declined by W 129 billion in 1979. Net foreign borrowings, amounting to W 318 billion in 1980 compared with W 266 billion in 1979, were largely for loans on-lent to the private sector and foreign military sales (FMS) credits.<sup>1/</sup>

At the outset of 1981, the economic environment was still characterized by relatively high unemployment, continuing high levels of inventories and excess capacity, and a sluggish world economic outlook. Consequently, fiscal policy continued to aim at the provision of some stimulus to growth and, for the year as a whole, the stance was comparatively expansionary. The measures centered initially on increasing the tempo of public spending, primarily on rural projects to cushion the loss in agricultural incomes, and on low-income housing. Public construction activities, which normally are concentrated in the second half of the year, were also advanced into the first half. These steps aimed at boosting employment, thereby sustaining consumer demand, while allowing time for a lagged recovery of the business sector. Reinforcing these expenditure measures were several temporary tax changes: income taxes for low-income workers were cut, special excise duties for selected consumer durables were reduced, the temporary investment tax credit was extended, and a scheme to encourage additional investment by certain smaller firms was prolonged. When, despite strong export growth, the anticipated recovery in private investment did not materialize as the year progressed, the Government chose to maintain the higher pace of expenditure in the second half through the adoption of a Supplementary Budget. Once again, the spending was concentrated on housing and social overhead capital; about a fifth of the increase in spending was due specifically for repair of typhoon damage. Thus, compared with previous years the structure of expenditure in 1981 shifted toward public capital formation and housing, particularly through net lending, as reflected in the large deficits of the two most important extrabudgetary funds, the National Investment Fund and the National Housing Fund (Appendix Tables X, XI, XII, and XIII).

The tax/GNP ratio fell slightly in 1981, reflecting the economic slowdown and countercyclical policy. The buoyancy of corporate tax receipts was affected by the sharp decline in profits during the previous year and by tax credits and concessions granted in response to the recession in economic activity. Discretionary changes in rates and exemptions also led to a decline in the ratio of personal taxes to GNP. Meanwhile, the buoyancy of sales taxes was adversely affected by the rapid decrease in the rate of inflation and reductions in selective

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<sup>1/</sup> Details of the financing of the Central Government and the public sector are contained in Appendix Tables VIII and IX.

excises. The ratio of customs duties to GNP also declined, due to sluggish imports, the lagged effects of duty reductions in 1980, and accounting changes involved in eliminating the fiscal year complimentary period. As a result of these developments, the central government deficit rose from 2.5 per cent of GNP in 1980 to 3.5 per cent in 1981. Correspondingly, the consolidated public sector deficit/GNP ratio rose from 3.4 per cent to 4.9 per cent. The somewhat larger increase in the overall deficit reflected the building up to more normal levels of official rice stocks purchased by the Grain Management Fund following the rice crop failure in 1980 and also extraordinarily large capital outlays on telecommunications plant and equipment by the Communications Special Account.

As a result of the more expansionary stance of fiscal policy during 1981, net credit to the public sector from the banking system more than doubled, from W 396 billion in 1980 to W 928 billion in 1981. This accounted for 16 per cent of net credit expansion in the economy during 1981 versus 8 per cent in 1980. The additional expenditures of the second half of 1981 were largely financed through bond issues to the nonbank public. Since these issues were concentrated in the fourth quarter of the year, some crowding out is likely to have occurred: commercial bond issues dropped by 47 per cent between October and December, a decline not attributable to seasonal factors, while government and corporate bond yields increased from 23 to 24 per cent in September to 26 to 27 per cent in December.

## (2) Revenue developments, 1978-81

Since the mid-1970s, the Korean authorities have made continuous efforts to improve the efficiency, equity, and elasticity of the tax system through implementation of structural changes.<sup>1/</sup> These have included the defense surtax introduced in 1975-76, which raised the overall ratio of taxes to GNP by almost 2 percentage points, and the establishment in 1977 of a value-added tax (VAT), which simplified the indirect tax system. During 1979-80, changes in the tax system were more modest, with increasing emphasis placed on taxation's role in stabilization and income distribution policy. The tax rates in the individual income tax schedule were frequently revised, and exemptions and deductions raised. Significant reforms of the tax system were begun in 1981 as part of the overall policy of structural adjustment. These included an increase in the separate taxation ratio for interest and dividend incomes, a simplification of the corporate tax structure, and an extension of VAT. The tax reform measures introduced effective in 1982 continued these changes, but were much broader in scope.<sup>2/</sup>

Between 1978 and 1981, total central government revenue increased from 17.9 per cent to 20.0 per cent of GNP, with nontax revenue increasing at a faster rate than tax revenue, based on markedly increased interest receipts and the effects of higher fees and charges (Table 18 and Appendix Table XIV). This revenue growth and the changes in its

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<sup>1/</sup> For a detailed description of tax changes during 1977-80, see SM/78/206 (8/1/78), SM/80/15 (1/18/80), and SM/81/31 (2/6/81).

<sup>2/</sup> The 1982 changes are described below with the 1982 budget and are detailed further in Supplement 1 to this report, to be issued shortly.



Table 18. Korea: Composition of Central Government Revenue, 1978-82

(In per cent)

	1978	1979	1980	Latest Estimate 1981	Budget Estimate 1982
Tax revenue	90.1	88.8	86.3	85.2	85.2
Tax on income and profits	25.4	25.4	22.0	20.8	21.6
Corporate	(12.3)	(12.4)	(10.8)	(10.2)	(10.8)
Individual	(13.1)	(13.0)	(11.2)	(10.6)	(10.8)
Taxes on goods and services	42.6	43.2	45.3	46.5	45.1
Taxes on international trade	18.9	16.8	14.8	14.6	15.0
Other taxes (including social security and property taxes)	3.2	3.4	4.2	3.3	3.5
Nontax revenue (including capital revenue and grants)	9.9	11.2	13.7	14.8	14.8
Total revenue and grants	100.0	100.0	100.0	100.0	100.0
<u>Memorandum items:</u>					
Tax revenue as percentage of GNP	16.2	16.6	17.2	17.0	17.9
Total revenue as percentage of GNP	17.9	18.7	19.9	20.0	21.0

Source: Appendix Table XIV.

composition during 1978-81 reflect, in addition to the structural changes just discussed, general macroeconomic developments. Through 1978, the rapid growth of the economy resulted in very buoyant corporate tax revenues and customs duties. Between 1979 and 1981, however, the decline in economic activity and temporary discretionary adjustments in tax brackets, rates, and deductions sharply reduced the buoyancy of these revenues and contributed to the fall in the share of personal income tax in total revenue. These shifts became more apparent in 1980 than in 1979 because revenues for the latter period consisted in part of lagged collections of direct taxes based on the 1978 income year. Revenue from taxes on goods and services was especially buoyant during 1979-80 because of the effects of increases in selective excises in mid-1978, an increase in the petroleum excise, and the large increases in oil prices over the two-year period. Tax revenue as a proportion of GNP further increased

to an estimated 17.2 per cent in 1980, due largely to the impact of the high inflation rate on indirect taxes and the sharp rise in the profits of the fiscal monopoly, following price increases of 40 per cent in mid-1980. The ratio of VAT receipts to GNP rose from 3.7 per cent in 1979 to 4.3 per cent in 1980. Reflecting the lagged collection of business taxes, and compounded by rising unemployment and discretionary tax changes,<sup>1/</sup> there was a substantial reduction in the share of direct taxes in total GNP in 1980. The ratio of taxes on international trade to GNP also declined sizeably, as the impact on customs revenue of more slowly growing imports, tariff reductions, and the deferral of customs duty payments due from exporters was only partly offset by the sharp rise in import prices.

In 1981, the ratio of tax revenues to GNP fell slightly from the previous year. The buoyancy of corporate tax collections was affected by the sharp decline in profits in the 1980 income year, and by the tax credits and concessions granted to companies in response to weak economic conditions. The ratio of personal income taxes to GNP continued to decline in response to discretionary changes in tax rates and exemptions; the personal exemption was raised to offset the effect of inflation-induced bracket creep, and there was also a temporary reduction in income tax ranging from 10 per cent to 20 per cent for low-income earners. The buoyancy of domestic taxes on goods and services also declined in 1981, owing to reductions in selective excises. However, the share of VAT receipts to GNP rose, owing mainly to the extension of the tax base to include intercity transportation and rental proceeds from real estate. Despite increased duties on some items, the ratio of customs revenues to GNP fell in 1981, reflecting sluggish import growth, the lagged effects of duty reductions in 1980, and the assignment of some 1981 duty receipts to the 1982 fiscal year, when the complimentary period was abolished.

### (3) Expenditure developments, 1978-81

Between 1978 and 1981, total expenditure of the Central Government rose by 9.2 per cent annually in real terms and increased from 19.2 per cent to 23.5 per cent of GNP. Growth was quite uneven, however, as the real increase was 13.9 per cent in 1979 and 12.3 per cent in 1981, but only 1.9 per cent during the highly inflationary year of 1980. On an economic classification, the composition of expenditure was relatively stable. Over the period the share of current expenditures in total outlays remained around 75 per cent, with the share of expenditure on goods and services constituting 38 to 39 per cent; within this, about 13 per cent constituted wages and salaries (Appendix Table XV). Similarly, the share of subsidies and transfers remained reasonably constant, averaging 29 per cent. Interest payments, however, grew very

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<sup>1/</sup> Discretionary tax changes in 1980 included 20 per cent of interim prepayments of corporation tax and of tax payments by nonwage and salary earners; a widening of the eligibility for the deferred tax scheme; and an increase in the temporary investment tax credit for small and medium industries involved primarily in the production of private consumption needs.

rapidly, at over 25 per cent per year in real terms, but from a relatively small base. Capital outlays declined steadily from about 16 per cent of expenditure in 1978 to 11 per cent in 1981, but this was offset by an almost equal increase in net lending funds, which are used almost entirely for capital purposes.

The functional classification of expenditure (Appendix Table XVI) reveals some clear shifts in priorities over the recent past. In line with the shift in policy emphasis toward social expenditures and away from traditional areas of spending on economic development, outlays on education, social security and welfare, and housing and community amenities rose from 19.3 per cent of total expenditure in 1978 to 22.8 per cent in 1980. There was a particularly sharp increase in housing outlays in 1979 as the Government embarked on a program to improve housing, particularly for low-income families. On the other hand, outlays on economic services, after a sharp increase in 1979, declined rapidly from 31.8 per cent of expenditures in that year to 26.0 per cent in 1980. Defense expenditures absorbed about 30 per cent of total outlays (about 7 per cent of GNP) in 1980-81, somewhat more than in 1979.

In 1981 the share of central government expenditure in GNP continued to rise, buoyed by the expansionary fiscal policy. The areas of increase are largely reflective of the supplementary budget and stimulative package described earlier, as well as the continuing shift toward social outlays. The share of expenditure on education, social security and welfare, and housing and community amenities increased further to 24.1 per cent of total spending, while outlays on economic services continued to decline to 24.6 per cent. The unusually large increase by 41 per cent in agricultural outlays included both repair of typhoon damage and the special rural projects undertaken to offset the fall of rural incomes due to the poor 1980 harvest. Similarly, the more than doubling of housing outlays was associated with the overall shift in priorities just discussed and also the short-term countercyclical fiscal stance. The abrupt increase in electricity outlays included about W 100 billion in nonrecurrent capital expenditures for a hydroelectric project. These expenditures, as well as the extraordinarily large capital outlays on telecommunications plant and equipment (W 256 billion) account for the sharp jump in net lending which grew by 35 per cent in real terms in 1981.

#### c. 1982 budget

Budgetary policy for 1982 focuses on stabilization and aims at reducing both the central government and public sector deficits by 1.7 percentage points of GNP, to 1.8 per cent and 2.7 per cent, respectively (Table 17). The reduction in the central government deficit will be brought about through increased tax effort and spending restraint. The most significant factor in containing the deficit of the nonfinancial public enterprises (NFPEs) is the projected reduction of over 20 per cent in the deficit of the Grain Management Fund (GMF) to be accomplished primarily through price adjustments (Appendix Table XVII). Toward the end of 1981, for the first time, the government sales price of rice was

raised above the purchase price by about 2 per cent. During 1982, the gap between these two prices is expected to be widened to about 10 per cent.

Central government revenue is projected to increase by 26.7 per cent (12.1 per cent in real terms), implying a rise in its share of GNP by 1 full percentage point to 21 per cent. Of this increase, about 0.9 percentage point of GNP is to come from the underlying elasticity of the tax system and the remainder from discretionary tax changes (see Supplement 1 to this report for a detailed description of these changes). To sustain revenue performance and tax elasticity, a composite tax, which includes both surtax and direct tax elements, has been introduced for a period of five years. It is expected to generate annual average revenues of about W 300 billion per year during 1982-86, and its proceeds have been earmarked to finance additional expenditures in education. The 1982 changes in corporate and personal income tax laws are designed to improve efficiency and equity of the tax system and to raise personal disposable incomes of middle-income groups, particularly wage and salary earners. Major changes have been made in the tax status of corporations: reductions in rates to reduce the disparities between open and closed corporations and to sharpen the progressivity of the rate structure; changes in certain deductions and tax credits in order to favor smaller companies and to promote technology and manpower development; reduction in the number of so-called "key" industries, and within these, a gradual shift toward indirect tax incentives and away from direct tax exemptions; introduction of a minimum tax on public corporations; and imposition of limits on special expenditures, deductions, and tax credits available to private companies which in effect also places a minimum tax on private corporations.

Changes in personal income taxation include a reduction in tax rates, notably for the middle-income brackets, the introduction of unified treatment of wage and salary earners, increases in the standard deduction for spouse and the special deduction for handicapped persons, and rationalization of deductions for education allowances, donations, and medical expenses. Other changes in the tax law for 1982 include reductions and rationalization of capital gains and inheritance taxes, and a revision of special excise tax rates to reflect differences in income elasticities of demand by product as income grows. In addition, import duties for 340 items have been adjusted and rationalized, resulting in a decline of the simple average tariff rate from 24.9 per cent to 23.4 per cent and in the import-weighted average rate from 12.8 per cent to 12.4 per cent.

The net revenue gain for 1982 from these tax measures is estimated at about W 31.3 billion, or approximately 0.1 per cent of GNP; additional revenue resulting from the education tax (W 237.9 billion) and changes in special excise tax rates (W 18.2 billion) will be largely offset by revenue losses associated with increased deductions and lower tax rates for individual income taxpayers. The positive revenue impact of corporate tax changes will be realized only from 1983, based on returns from the 1982 income year.

Despite the tighter fiscal stance for 1982 as a whole, steps have again been taken to bring forward into the first half about 60 per cent of public sector investment projects, most of which were scheduled to commence later in the year, and a relatively large amount of housing loans will be released during the first quarter. In addition, the temporary investment tax credit has been extended through the end of the year. Net domestic bank borrowing by the public sector is projected to account for about 14 per cent of net domestic credit expansion, compared with 16 per cent in 1981.

For the year as a whole, central government expenditure is projected to increase by 17.3 per cent (3.8 per cent in real terms), implying a reduction in its share of GNP to 22.8 per cent from 23.5 per cent in 1981. The growth in current outlays will slow from last year, reflecting the sharp decrease in the rate of growth of wage and salary payments, which will rise by only 1.7 per cent in real terms, due mainly to an average increase of only 9 per cent in nominal wage rates for civil servants, compared with 15 per cent in 1981. The increase in subsidies to NFPEs is to cover the deficit of the national railway. By contrast, capital spending is projected to increase by 17.7 per cent in real terms. The marked decline in net lending to NFPEs results almost entirely from the elimination of telecommunications from the NFPE sector. The continuing high level of net lending to others is primarily attributable to the operations of the National Investment Fund and the National Housing Fund (Appendix Tables XI and XIII).

The expenditure estimates for 1982 entail a continuation of recent trends in the composition of spending, although defense outlays are forecast to drop to about 27 per cent of the total from around 30 per cent the last two years. Social expenditures (education, social security and welfare, and housing and community amenities, all priority areas under the Fifth Plan, 1982-86) will rise to almost 28 per cent of the total in 1982, up from 24 per cent last year, reflecting real rates of growth in each component of nearly 20 per cent or more.

To improve fiscal planning the authorities have introduced in 1982 a medium-term plan to serve as a guide for year-to-year implementation of the budget. This three-year revenue and expenditure plan serves as a logical link between the annual budget and the Fifth Plan. Its objectives are to ensure that the composition and level of development expenditure evolve in accordance with government priorities and changes in resource availability. Toward these ends, the medium-term fiscal guidelines will be complemented in 1983 by introducing a system of zero-based budgeting that will streamline budget procedures.

#### d. Public enterprise performance

The five nonfinancial public enterprises (Railroads, Communications Service, Office of Monopoly, Supply Fund, and Grain Management Fund), which, together with the Central Government, constitute the available public sector, have particular significance for fiscal management because of the effects of official pricing policies on their financing requirements. Throughout the period 1978-81, these enterprises were in combined deficit, and a further deficit is forecast for 1982.

Railroads have experienced small operating surpluses since 1978 through periodic revisions in charges, with their investment program financed largely by borrowings; in 1982, however, the railway will receive a W 22.6 billion current subsidy. The capital expansion program for 1982 is estimated at W 228.6 billion, up significantly from the previous two years, when investment averaged about W 170 billion. Sources of financing typically include foreign borrowing and loans from the Central Government, effected through the Korean Development Bank.

For the Communications Service, operating profits in the past on telecommunications substantially exceeded operating losses of the postal service, so that, until 1979, its investment program was financed from internal sources. However, in 1980 and 1981, when the automatic telephone dialing system was installed, investment spending from the Communications Account increased to W 550.5 billion and W 1,048.9 billion, respectively. As a result, recourse to central government lending amounted to W 97 billion in 1980 and W 255.5 billion in 1981. Additionally, significant amounts of financing were raised through telephone bonds. As mentioned previously, the establishment of the KTA in 1982 leaves the Communications Account with only the small postal service. Consequently, in 1982 the Communications Service deficit will be only W 0.5 billion, to be financed through changes in cash balances with deposit money banks.

The Office of Monopoly Enterprise markets tobacco and ginseng. Because prices of these commodities have been increased regularly in recent years, revenue transfers to the Central Government from the Monopoly Enterprise Special Account have increased at an average annual rate of 34 per cent during 1978-81 and are expected to increase by 25 per cent in 1982.

The Supply Fund is responsible for government procurement and also purchases goods from the private sector during periods of slack demand for subsequent resale. During the recessionary years of 1980-81, borrowings from the BOK were higher than usual, in order to help finance the purchase of manufacturers' inventories as part of the overall program of fiscal stimulus. In 1982, BOK borrowings are budgeted to be maintained at the 1981 level of W 50 billion, although the 1982 deficit is projected at W 58.9 billion, compared to W 10.1 billion in 1981.

Through the Grain Management Fund (GMF), the Government purchases and sells approximately one quarter of the country's production of grains, principally rice and barley, and controls all necessary grain imports. Until 1981, purchase prices had been set higher than selling prices (both of which were higher than world prices), in line with the policy of encouraging production and raising farm incomes. The deficit of the GMF in any one year is dependent on the relationship between the purchase and selling price, the relative amounts of domestic purchases and imports, inventory movements, and the timing of payments to growers.<sup>1/</sup>

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<sup>1/</sup> A more detailed description of the GMF's operations is contained in Annex II of SM/77/97 (5/2/77).

The deficits on the operations of the GMF have been substantial throughout much of the past five years, and they have generally been financed by borrowing from the BOK and by the placement of grain bonds with the deposit money banks and other financial institutions.

Recent operations of the GMF are detailed in Appendix Table XVII. The substantial increase in the GMF operational deficit in 1981 to an estimated W 325 billion, compared with a small surplus originally forecast, was the result essentially of an increase in rice stocks. This stockpiling was the combined result of a decline in rice consumption in the wake of the 1980 crop failure and a decision by the authorities to build up official rice stocks to more comfortable levels. At the end of 1981 official stocks stood at about 10 million sok (1.44 million M.T.), or about three months' consumption, which is regarded by the authorities as the minimum adequate level of national stocks. Private stocks, which would normally amount to about 2 to 3 million sok, were negligible by late 1981, largely because an intensive government campaign aimed at publicizing the recovery of agriculture in 1981 so as to discourage hoarding, had convinced the public that rice prices would drop substantially, with the result that private stocks were dissipated before the harvest. Consequently, the Government was forced to hold more stocks than it had planned. The resulting larger deficit was financed by borrowings from the BOK and issues of grain bonds to the general public at market rates.

The projected reduction of the GMF deficit in 1982 by over 20 per cent is based on the expectation that release prices for rice will continue to be raised during the course of the year to about 10 per cent above the purchase price. In late 1981, for the first time, the GMF rice release price was raised above the purchase price, by about 2 per cent. Net borrowing from the BOK is expected to be W 200 billion in 1982 partly for repayment of grain bonds held by banks and the public.

The Fertilizer Fund, while not included in the public sector in the fiscal accounts, is a government-controlled agency which has access to borrowings from the BOK. As shown in Appendix Table XVIII, its deficit has increased each year since 1978, with significant BOK borrowings (W 100 billion) in 1981. The Fertilizer Account (FA) deficit depends on the relationship between the purchase and selling prices, the relative amounts of domestic purchases and imports, the types of fertilizer handled, and inventory movements. Although the Government has regularly adjusted both selling and purchase prices of fertilizers, the former is still well below the latter. Because the authorities are now in the process of reorganizing, rationalizing, and consolidating fertilizer operations into fewer plants which can operate nearer peak capacity, no official projections for FA revenues, expenditures, and financing are available for 1982.

### III. External Developments

#### 1. Overview

Korea's balance of payments came under severe pressure in 1979-80. The current account deficit quadrupled in 1979 to US\$4.2 billion (6.9 per cent of GNP) and further widened to US\$5.3 billion (9.4 per cent of GNP) in 1980 (Table 19 and Chart 9). The external position was initially weakened by the expansionary domestic policies pursued during 1977-78, which resulted in strong demand pressures and a gradual erosion of external competitiveness. These difficulties were seriously compounded by the oil price hikes: the price-induced increases in the oil import bill during 1979-80 amounted to US\$3.4 billion, equivalent to 6 per cent of GNP. Sharply rising international interest rates and weak external demand were also important factors in the worsening of the payments position.

The strong adjustment measures taken in 1980, which included a substantial depreciation of the won in real terms combined with tight financial policies, led to considerable external adjustment during 1980-81. In 1980, even though the current account deficit widened, the increase was equivalent to less than one half of the price-induced rise in the oil import bill (Table 20). In 1981, the current account deficit declined to US\$4.7 billion (7.5 per cent of GNP); adjusted for the exceptional rice imports necessitated by the poor 1980 harvest, the underlying current account deficit in 1981 was only about 6.5 per cent of GNP.

The external adjustment was brought about mainly by favorable developments in the trade account. Despite a decline in the terms of trade of 17 per cent in 1980 and 3 per cent in 1981, the trade deficit remained unchanged at US\$4.4 billion in 1980 and declined to US\$3.2 billion in 1981. This performance was attributable to a rapid expansion in exports, combined with a sharp slowing in import growth. Exports performed remarkably well, reflecting largely the gains in Korea's competitive position following the depreciation. Although external demand remained weak, the volume of exports grew by over 30 per cent in 1980-81, compared with a slight decline in 1979; in value terms, the increase totaled 42 per cent. By contrast, the import value rose by only 26 per cent during the same period, reflecting the restraining effect of the depreciation, the tight monetary policy, and generally depressed domestic economic activity. The import volume rose by only 5 per cent in 1980-81, a substantial drop from the average annual growth rate of 21 per cent recorded during 1977-79.

The services account deteriorated sharply in 1980-81, partly offsetting the gains in the trade account. The deficit on the services account, which was only US\$0.2 billion in 1979, widened substantially to US\$1.4 billion in 1980, and to US\$2.0 billion in 1981. This trend is attributable mainly to large increases in interest payments, owing to high international interest rates and Korea's rising external debt. The widening deficit on the transportation account, reflecting higher oil



Table 19. Korea: Balance of Payments, 1978-81

(In millions of U.S. dollars)

	1978	1979	1980	1981 Prov. Actual
Trade balance	-1,781	-4,396	-4,384	-3,254
Exports, f.o.b.	12,711	14,705	17,214	20,850
Imports, f.o.b.	-14,491	-19,100	-21,598	-24,105
Oil and oil products	(-2,200)	(-3,360)	(-5,825)	(-6,638)
Services (net)	224	-195	-1,386	-1,998
Freight and insurance	-122	-197	15	195
Investment income	-742	-1,181	-2,102	-2,950
Receipts	(286)	(332)	(553)	(711)
Payments	(-1,028)	(-1,513)	(-2,655)	(-3,661)
Overseas construction (net)	1,049	1,399	1,451	1,860
Other (net)	-39	-216	-750	-1,103
Transfers (net)	472	439	449	512
Current account	-1,085	-4,151	-5,321	-4,741
Medium- and long-term capital	2,166	2,663	1,857	2,766
Direct investment (net)	89	35	6	96
Loans to private sector	1,930	1,622	1,416	1,172
Loans to public sector	820	1,086	1,518	1,628
Amortization	-825	-1,123	-1,085	-1,235
Loans to nonbank financial institutions (net) 1/	136	1,177	179	1,056
Trade credits and other (net)	-16	-134	-177	50
Private short-term capital	-1,171	844	1,945	-68
Errors and omissions	-312	-350	-396	-291
Allocation of SDRs	—	22	25	25
Overall balance	-402	-973	-1,890	-2,309
Monetary movements 2/	402	973	1,890	2,309
Assets	-377	-897	-863	-326
Liabilities	779	1,970	2,753	2,635
Use of Fund credit (net)	-112	-125	593	628
Other, of which:	891	1,995	2,160	2,007
Short-term	(917)	(1,583)	(2,030)	(1,161)
Medium- and long-term 3/	(-26)	(412)	(130)	(841)

Sources: Bank of Korea, Monthly Economic Statistics (December 1981); data provided by the Korean authorities; and staff estimates.

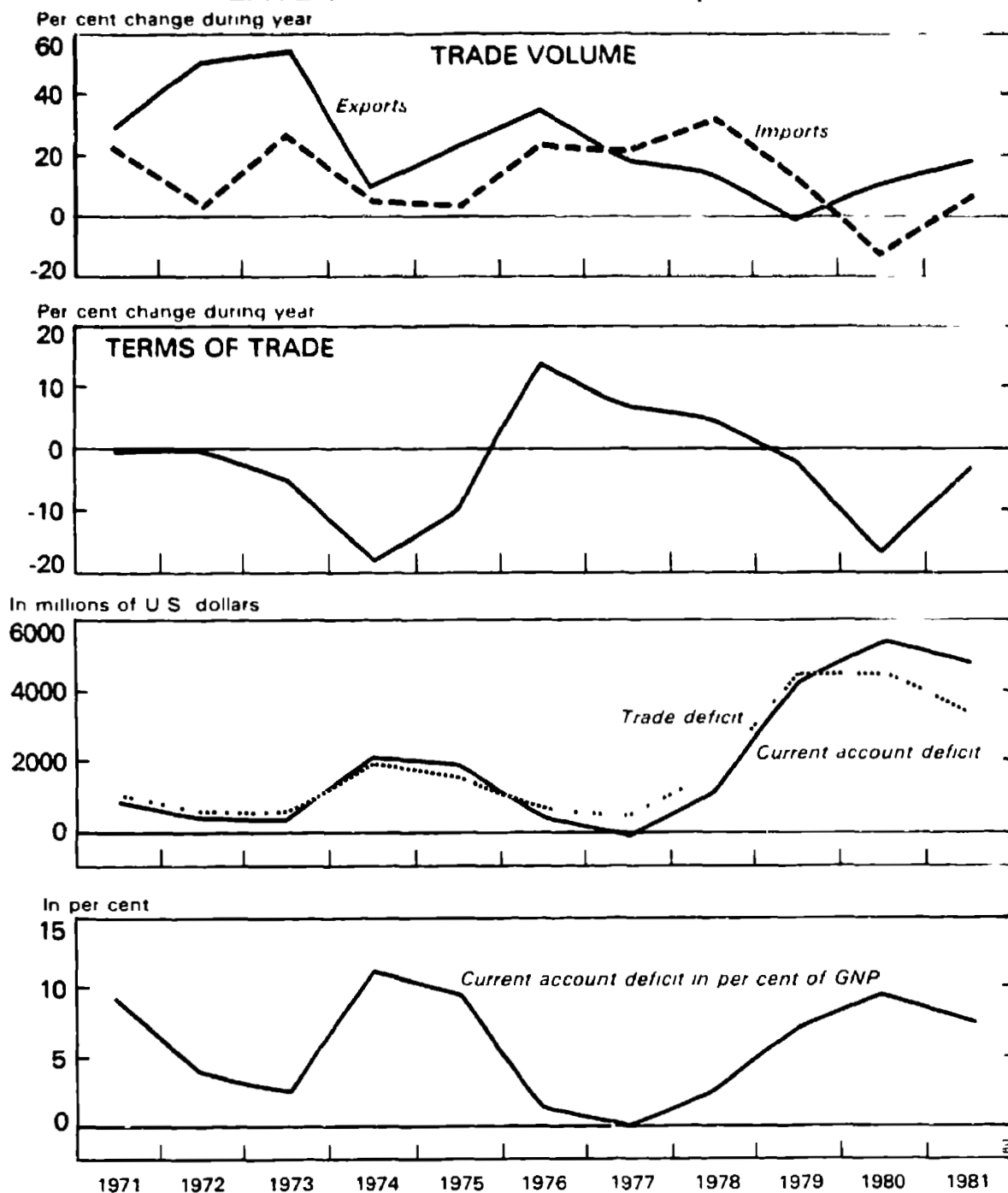
1/ Comprising mainly loans to the Korean Development Bank (KDB), the Export-Import Bank of Korea (KEXIM), Korea Long-Term Credit Bank, and merchant banks.

2/ A negative sign indicates an increase in assets or a decrease in liabilities.

3/ Including loans to the Bank of Korea, the Korean Exchange Bank (KEB), and commercial banks.

CHART 9  
KOREA

EXTERNAL DEVELOPMENTS, 1971-81



Sources: The Bank of Korea Economic Statistics Yearbook (various issues) and staff estimates

Table 20. Korea: Developments in External Trade, 1977-81

(In annual per cent changes; unless otherwise indicated)

	1977	1978	1979	1980	1981
Exports-value	28.5	26.5	18.5	16.3	21.1
Volume	19.0	14.2	-0.9	10.6	18.7
Unit value	9.5	10.7	19.5	5.3	2.0
Imports-value	23.2	38.5	35.9	13.1	11.6
Volume	20.5	31.2	11.8	-13.8	6.3
Oil	(17.1)	(6.0)	(2.7)	(-0.8)	(-1.8)
Non-oil	(23.8)	(35.2)	(11.0)	(-14.3)	(9.0)
Unit value	2.3	5.6	22.1	26.9	5.0
Oil	(6.4)	(3.4)	(41.7)	(82.9)	(15.3)
Non-oil	(2.2)	(5.6)	(16.5)	(15.0)	(1.9)
Terms of trade	7.0	4.9	-2.1	-17.0	-3.0
Foreign market growth <u>1/</u>	6.8	9.5	5.3	1.6	5.0
Average LIBOR <u>2/</u> (in per cent)	6.0	8.7	12.0	14.4	16.5
Korea's real GNP	10.3	11.6	6.4	-6.2	7.1
<u>Memorandum items:</u>					
Change in current account deficit (US\$ million)	317	-1,098	-3,066	-1,170	580
Price-induced change in oil import bill	180	80	1,010	2,370	840
Current account deficit in per cent of GNP	--	2.3	6.9	9.4	7.5

Sources: Bank of Korea, Monthly Economic Statistics (December 1981); and staff estimates.

1/ Weighted average of growth in partner countries' (non-oil) import volume.

2/ Three-month Euro-dollar deposits.

costs, was also a contributing factor. Receipts from overseas construction services stagnated in 1980 because of events in the Middle East, but resumed their growth in 1981 and so helped to limit the deterioration in the services account.

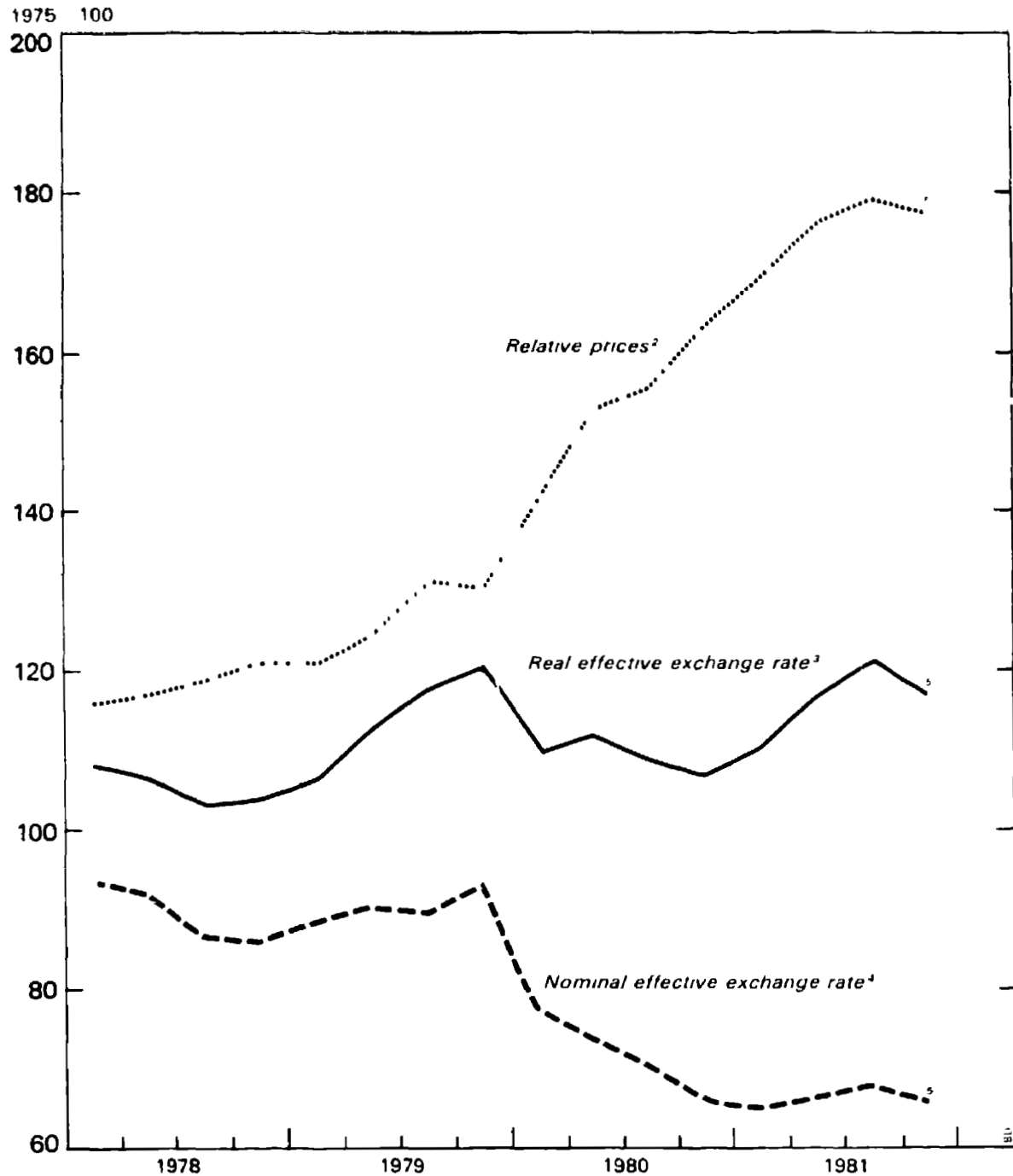
A large part of the current account deficit continued to be financed by medium- and long-term nonbank borrowing. In 1980, however, net inflows of long-term capital declined considerably, owing to the temporary postponement of planned borrowings from banks in view of the political uncertainties following the assassination of President Park in October 1979. Consequently, short-term capital inflows during the year were exceptionally large as greater reliance was placed on short-term trade credits. The overall deficit in the balance of payments (defined to include as financing items all borrowings of the banking system) nearly doubled to US\$1.9 billion, with the bulk of the deficit financed through short-term borrowing by banks. With the political situation stabilizing, long-term capital flows returned to their normal pattern in 1981 and provided most of the financing; short-term capital actually swung into a small net outflow. Largely because of the turnaround in short-term capital movements, the overall payments deficit widened to US\$2.3 billion. Short-term borrowings of the banking system also fell, but their medium-term borrowings rose to provide the needed scale of financing. Net use of Fund credit during 1980-81 amounted to about US\$600 million per year.

The financing requirements of 1980-81 raised Korea's external debt from 31 per cent of GNP in 1979 to 48 per cent in 1981; during this period, the debt-service ratio rose from 15 per cent to 20 per cent. Gross international reserves increased in 1980-81 by US\$1.2 billion, but in terms of coverage of imports of goods and services, they declined slightly. The exchange and trade system, which was not significantly changed in 1980 when the balance of payments pressures were particularly heavy, was liberalized further in 1981.

## 2. Exchange rate developments

For a period of five years until January 12, 1980 the won had been pegged to the U.S. dollar at a fixed rate of W 484 per U.S. dollar. During 1977-79, the nominal (trade-weighted) effective exchange rate had depreciated moderately, but since prices and unit labor costs in Korea had been rising much faster than in trading partners, particularly in 1978-79, there had been a gradual loss in external competitiveness, leading to a weakening export performance in the late 1970s. In order to reverse this trend, the won was depreciated by 16.6 per cent on January 12, 1980. At the end of February 1980, a flexible exchange rate regime was adopted whereby the exchange rate of the won was determined on the basis of a currency basket, with other factors also taken into account. Under this arrangement, the won was permitted to move further downward during the course of the year, bringing the total effective depreciation to about 30 per cent in nominal terms between the fourth quarter of 1979 and the fourth quarter of 1980 (Chart 10); in real terms, the depreciation was 11 per cent, approximately restoring Korea's external competitiveness to its 1976-77 level (Table 21 and Appendix Table XIX).

CHART 10  
KOREA  
INDICES OF EXCHANGE RATES<sup>1</sup> AND  
RELATIVE PRICES, 1978-81



Sources: IMF *International Financial Statistics* and staff estimates

<sup>1</sup>Quarterly averages; an increase in the index indicates an appreciation of the won

<sup>2</sup>Ratio of Korean wholesale prices to wholesale prices of trading partners

<sup>3</sup>Nominal effective exchange rate adjusted for relative rates of inflation (WPI)

<sup>4</sup>Trade weighted

<sup>5</sup>Preliminary

Table 21. Korea: Indices of Exchange Rates 1/  
and Relative Prices, 1975-81

(1975 = 100)

Period Averages		Nominal Effective Exchange Rate <u>2/</u> (1)	Relative Prices <u>3/</u> (2)	Real Effective Exchange Rate <u>4/</u> (1) x (2)
1975		100.0	100.0	100.0
1976		101.7	106.0	107.8
1977		98.6	110.9	108.0
1978		89.4	117.9	105.4
1979		90.2	126.4	114.2
1980		71.5	153.1	109.2
1981		66.1	175.6	116.1
1978	I	93.3	115.6	107.9
	II	91.4	116.5	106.5
	III	86.9	118.7	103.2
	IV	86.0	120.7	103.8
1979	I	88.4	120.6	106.6
	II	90.2	124.5	112.3
	III	89.7	131.0	117.5
	IV	92.4	130.1	120.2
1980	I	77.4	141.7	109.8
	II	73.3	152.5	111.7
	III	69.9	155.0	108.4
	IV	65.5	163.1	106.8
1981	I	64.9	169.6	110.1
	II	66.1	176.0	116.4
	III	67.6	179.1	121.1
	IV	65.7	178.0 <u>5/</u>	116.9 <u>5/</u>

Sources: IMF, International Financial Statistics; and staff estimates.

1/ An increase in the index indicates an appreciation of the won.

2/ Trade-weighted.

3/ Ratio of Korean wholesale prices to wholesale prices of trading partners.

4/ Nominal effective exchange rate adjusted for relative price changes.

5/ Preliminary.

During the first nine months of 1981, the won was allowed to move upward with the U.S. dollar, leading to an effective appreciation of 3 per cent in the nominal value of the won between the fourth quarter of 1980 and the third quarter of 1981. As relative prices were also moving against Korea, the won appreciated in real terms during this period by some 13 per cent. In November, partly in line with the weakening of the U.S. dollar, the won depreciated somewhat in nominal terms, so that in the fourth quarter of 1981, the index of the nominal effective exchange rate for the won was approximately the same as a year earlier. Nevertheless, since the rate of inflation in Korea, while decelerating sharply in the second half of 1981, remained higher than in trading partners, the real effective exchange rate for the won in the last quarter of 1981 was still almost 10 per cent higher than a year earlier.

### 3. Developments in exports

#### a. Overall trends

The weakening trend in exports of the late 1970s was reversed in 1980. The volume of exports, which had actually declined during 1979, resumed an upward trend in the first quarter of 1980, and continued to grow strongly through the third quarter of 1981 (Table 22). The volume of exports rose by 11 per cent in 1980 and 19 per cent in 1981, compared with an average volume growth of 11 per cent per year during 1977-79. In value terms, exports increased by 16 per cent and 21 per cent in 1980 and 1981, respectively. This recovery in exports occurred in spite of continuing weak external market conditions; foreign market growth for Korea's exports (approximated by the weighted average of the growth in the non-oil import volume of Korea's major export markets) rose by less than 2 per cent in 1980 and about 5 per cent in 1981, compared with an average market growth rate of over 7 per cent per year in the late 1970s. The favorable export performance thus primarily reflected substantial gains in Korea's market shares, owing to the improved competitiveness achieved in 1980 and more vigorous efforts to diversify markets. In the second half of 1981, however, there was a significant weakening of exports, with the arrivals of letters of credit falling by 5 per cent in real terms over the second half of 1980; following the usual lags, this led to a weakening of actual exports in the last quarter of 1981.

The policy emphasis on investment in heavy and chemical industries of the late 1970s resulted in some changes in the commodity structure of Korean exports in 1980-81. Ships emerged as an important export item and exports of metal and metal products also rose rapidly, but the export performance of chemical products was mixed. On the whole, however, light manufactures retained their dominant position. The share of textiles and clothing, the largest group of exports, which amounted to about 32 per cent in the mid-1970s was still 29 per cent in 1980-81 (Appendix Table XX). Similarly, the share of footwear exports remained at around 5 per cent, and exports of electrical machinery and electronics accounted for an average of 10 per cent of total exports in 1980-81, the same share as in the mid- and late-1970s. On the other hand, the relative importance of exports of wood and wood products fell, partly because of sluggish demand.

Table 22. Korea: Exports and Export Orders, 1978-82

(In per cent change from preceding year)

		Exports		Export Orders 1/	
		Value	Volume	Value	Volume
1978	I	28.3	19.2	19.3	12.6
	II	24.5	14.5	18.8	5.8
	III	26.2	12.7	30.0	11.3
	IV	<u>27.2</u>	<u>16.5</u>	<u>19.3</u>	<u>-1.9</u>
	Year	26.5	14.2	21.7	6.6
1979	I	17.4	-3.4	24.3	-0.6
	II	19.7	-1.4	12.9	-6.2
	III	24.4	3.2	5.1	-8.7
	IV	<u>13.1</u>	<u>-0.7</u>	<u>-1.3</u>	<u>-10.8</u>
	Year	18.5	-0.9	9.8	-6.5
1980	I	21.6	12.0	14.7	8.5
	II	14.3	6.5	9.7	4.9
	III	12.0	6.6	25.6	20.6
	IV	<u>18.1</u>	<u>16.8</u>	<u>49.3</u>	<u>43.2</u>
	Year	16.3	10.6	24.4	18.8
1981	I	22.9	20.5	24.8	18.0
	II	30.9	25.4	30.0	22.0
	III	23.5	22.0	2.1	-3.9
	IV	<u>10.5</u>	<u>8.4</u>	<u>-3.1</u>	<u>-6.2</u>
	Year	21.1	18.7	12.4	6.7
1982	January	5.5	...	-7.0	...
	February	3.7	...	-9.9	...

Sources: Bank of Korea, Economic Statistics Yearbook (various issues); data provided by the Korean authorities; and staff estimates.

1/ Arrivals of export letters of credit.



In 1980, over half of the growth in exports stemmed from the rapid expansion in selected heavy machinery and chemical exports. Exports of metal and metal products (accounting for 14 per cent of total exports) rose by 3 per cent in value terms, ship exports by 20 per cent, and chemicals by 47 per cent (Appendix Tables XX and XXI). Below average performances were recorded for some of the traditional mainstays of light manufactures, such as textiles and clothing, wood and wood products, and electrical machinery and electronics (including television sets, radios, and telecommunication equipment). This group of exports--demand for which is relatively price sensitive--was still suffering from the cumulative effect of past losses of competitiveness, including low productivity because of insufficient investment to upgrade technology and equipment. External demand for these products was also exceptionally weak and partly restricted by protectionist measures. Export growth in 1981 was more broadly based, with considerable improvements in light manufactures. Led by strong performance in textiles and clothing, light manufactures exports rose by almost 20 per cent. Heavy manufactures also grew strongly, with ship exports more than doubling. The weak performers were exports of electrical machinery, electronics, and chemicals.

Efforts to diversify markets were successful in 1980-81 as evidenced by the marked shift in the directional pattern of exports. The share of exports to the main industrial countries, which had already fallen from 80 per cent in the early 1970s to about 65 per cent in the late 1970s, dropped further to well below 60 per cent in 1981 (Table 23). With the share of exports to oil-producing countries also declining, the share of a group of over 150 mainly developing countries rose from 25 per cent in the late 1970s to about 35 per cent in 1981. The decline in the share of the traditional markets in the industrial countries partly reflected a slowdown in demand and the effect of protectionist measures; exports to oil-producing countries, mainly associated with the expanding construction activity of Korean firms in the Middle East and the associated supply of materials and equipment, have recently been adversely affected by import substitution efforts in host countries.

Korea's trade with the United States continued to show a small deficit in 1980-81, while the traditionally large deficit with Japan persisted (Table 24). As a result of the increases in oil prices during 1979-80, the trade deficit with the oil-producing countries increased sharply, averaging about US\$4 billion in 1980-81. However, the trade surplus with other countries, which had shrunk in 1979, widened substantially in 1980-81, and the global trade deficit also narrowed during this period.

#### b. Trade measures affecting exports

Currently, 148 items of Korean exports (mainly labor-intensive, light manufactures, equivalent to about 29 per cent of total exports) are subject to protectionist measures in major foreign markets. Most of these measures were introduced in the mid to late 1970s and were a factor contributing to the deterioration in export performance in the late 1970s; they also spurred export diversification into new areas, such as

Table 23. Korea: Direction of Exports, 1971 and 1978-81

(In per cent of total exports)

	1971	1978	1979	1980	1981 Jan.- Nov.
United States	49.8	31.9	29.1	26.3	26.3
Japan	24.6	20.7	22.3	17.4	16.2
Saudi Arabia	--	5.6	4.7	5.4	5.1
Germany, Fed. Rep. of	2.9	5.2	5.6	5.0	3.8
United Kingdom	1.3	3.1	3.6	3.3	3.4
Canada	2.7	2.6	2.6	2.0	2.2
Other Asia	6.4	6.3	7.4	9.3	9.5
Other oil exporters	0.2	4.4	4.9	3.5	2.8
Other	<u>12.1</u>	<u>20.6</u>	<u>20.6</u>	<u>27.8</u>	<u>30.7</u>
Total	100.0	100.0	100.0	100.0	100.0

Source: Bank of Korea, Economic Statistics Yearbook, (various issues).

Table 24. Korea: Trade Balances with Selected  
Partner Countries, 1971 and 1978-81

(In millions of U.S. dollars)

	1971	1978	1979	1980	1980 Jan.- Nov.	1981 Jan.- Nov.
Japan	-692	-3,354	-3,304	-2,819	-2,527	-2,509
Exports	262	2,627	3,353	3,039	2,772	3,145
Imports, c.i.f.	-954	-5,981	-6,657	-5,858	-5,299	-5,654
United States	-146	1,010	-229	-283	-225	-158
Exports	532	4,058	4,374	4,607	4,150	5,114
Imports, c.i.f.	-678	-3,043	-4,603	-4,890	-4,375	-5,272
Oil producers	-173	-1,379	-2,224	-4,005	-3,271	-3,302
Exports	17	1,226	1,447	1,793	1,625	1,773
Imports, c.i.f.	-190	-2,605	-3,671	-5,798	-4,896	-5,075
Other	-315	1,462	473	2,320	1,767	2,005
Total <u>1/</u>	-1,326	-2,261	-5,284	-4,787	-4,256	-3,964

Source: Bank of Korea, Economic Statistics Yearbook (various issues).

1/ Differs from Table 1 because of partial inclusion of freight and insurance in imports.

chemicals and heavy industries. In 1980-81, three new trade barriers were introduced, but a small number of restrictions were removed or relaxed.

Trade barriers on Korean exports are currently applied by the European communities and 15 industrial countries; they affect traditional export commodities (such as marine products, textiles, footwear, and other leather goods) and new export products, such as steel and steel products, some rubber products, and electronic consumer goods (Appendix Table XXII). The measures include import and tariff quotas, voluntary export restraint agreements, special import licensing limitations, and administrative guidance. New trade barriers introduced in 1980-81 included increases by the United States in the existing tariffs on imports of canned mushrooms and porcelain in steel cookware; and the introduction by Canada of a global quota on imports of nonleather footwear. Also in 1980-81, the United States replaced the quota on specialty steel products by placing these products under administrative surveillance arrangements in January 1981 (whereby countervailing or antidumping duties could be imposed), and Finland replaced the special import licensing requirement for textiles by a bilateral quota on certain textiles. In 1981, the United States removed the restrictions on imports of handbags, citizen band receivers, and footwear.

#### 4. Imports

In 1980-81, the expansion in the value of imports decelerated markedly from the exceptionally high rates recorded in the late 1970s. The slowdown was brought about initially by a sharp cutback in import volume and was reinforced by a recent moderating trend in import prices. In 1980, the value of imports expanded by only 13 per cent, despite a 27 per cent increase in import prices following the second oil shock. In volume terms, imports fell by 13.8 per cent, with the volume of oil imports declining by about 1 per cent and that of non-oil imports falling by over 14 per cent. Several factors contributed to this decline: the tight financial policies, the restraining effect of the depreciation, the sluggishness of investment demand, the income-reducing impact of the sharp deterioration in the terms of trade, and the fall in rural incomes. With the exception of imported raw materials for export production, grains, and oil, all other broad categories of imports declined. In nominal terms, capital goods imports fell especially sharply (21 per cent), followed by consumer goods (15 per cent) and raw materials for domestic production (6 per cent) (Appendix Table XXIII). In volume terms, the decline in these imports was even more pronounced as import prices for these categories increased by between 9 per cent and 23 per cent. Imports of raw materials for export production rose by 13 per cent in value; however, this increase was considerably less than the expansion in exports, reflecting a drawdown in inventories, as well as more efficient use of imported raw materials following the depreciation.

The growth in the value of imports slowed further to 12 per cent in 1981. Since the volume of imports rose, this slowdown was made possible by a deceleration in the increase in import prices to 5 per cent, with oil prices increasing by 15 per cent and non-oil import prices by only 2 per cent. Oil imports declined by 2 per cent in volume terms as a result of strong conservation and oil-substitution efforts. The volume of non-oil imports grew by about 6 per cent, of which about 2.5 percentage points were accounted for by the exceptional grain imports necessitated by the crop failure of 1980. The resumption of growth in other imports reflected the recovery of domestic demand and the strong growth (21 per cent in value) in imported raw materials for export production. Consumer goods rose by 15 per cent in value, but imports of raw materials for domestic production increased by only 9 per cent, reflecting weak investment demand.

The commodity structure of Korea's imports was significantly affected by the increases in oil prices and the sharp curtailment of most non-oil imports. Despite the decline in oil consumption, the price hikes raised the share of petroleum imports--mainly crude oil--from an average of 15 per cent in 1977-78 to an average of 25 per cent in 1980-81; by comparison, the share in the early 1970s averaged 8 per cent. The increase in the share of oil was approximately matched by a drop in the share of capital goods imports, from an average of 30 per cent in the late 1970s to 20 per cent in 1980-81. The share of raw materials for export production increased to about 23 per cent, but remained below the average of the 1970s, partly because of increased import substitution.

The changes in the commodity structure of imports also affected the directional pattern of imports. While Japan and the United States remained the principal suppliers, their relative importance declined significantly over the years, whereas the relative share of oil producers increased. Japan's share fell to 25 per cent in 1981 from 40 per cent in 1978--a trend that partly reflects the recent sharp decline in imports of capital goods. With increasing diversification of sources of imports, the share of countries other than the principal industrial and oil-producing countries increased steadily to 22 per cent in 1981, about double their share in the early 1970s (Appendix Table XXIV).

## 5. Services and transfers

The services account deteriorated substantially in 1980-81, with the deficit rising from about US\$200 million in 1979 to US\$1.4 billion in 1980 and further to US\$2.0 billion in 1981. This deterioration is in sharp contrast to the 1970s when the balance on the services account fluctuated within a relatively narrow range of US\$250 million surplus or deficit. The recent increases in the deficits were caused primarily by larger investment income payments, mainly interest payments. Another contributing factor was the widening deficit in the transportation account, a consequence of the oil price increases. Net receipts from overseas construction, which include workers' remittances, have been by far the single largest net inflow item; they stagnated in 1980, but

recovered in 1981. Changes in the other components of the services account were relatively minor. Net transfers remained stable at around US\$500 million in the last few years.

Investment income payments consist almost entirely of interest payments on foreign debt, which now constitute over 40 per cent of total service payments. Investment income payments grew rapidly from just over US\$1.5 billion in 1979 to US\$2.7 billion in 1980 and US\$3.7 billion in 1981. In fact, these increases exceeded the increases in the deficits of the services account during this period. The larger interest payments were due both to rising external debt and higher international interest rates, combined with an increase in the share of debt bearing variable interest rates. The stock of external debt grew by 55 per cent (US\$12 billion) in 1980-81, and the average three-month Euro-dollar rate (LIBOR) rose from 12 per cent in 1979 to 16.5 per cent in 1981.<sup>1/</sup> The share of debt bearing variable interest rates has also risen, reflecting increased reliance on short-term debt and on medium-to long-term loans on commercial terms. Investment income receipts comprise mainly interest earned on foreign assets of the monetary authorities and financial institutions. These receipts rose in 1980-81 in line with higher world interest rates.

The deficit on the transportation account doubled from about US\$400 million in 1979 to over US\$800 million in 1981. This resulted mainly from higher charterage and port charges. Net earnings from overseas construction activity <sup>2/</sup>, of which a large component is remittances of Korean workers abroad, stagnated in 1980, but increased by almost 30 per cent in 1981. The temporary stagnation in 1980 was related mainly to the political unrest in the Middle East. The favorable outcome in 1981 reflects the substantial increases in the number of Korean workers abroad (23 per cent) and the value of work completed (50 per cent).

## 6. Capital movements

Medium- and long-term capital inflows consist mainly of borrowings by the private and public sectors and, more recently, by nonbank financial institutions;<sup>3/</sup> direct and portfolio investment inflows are relatively small. Capital outflows consist mainly of loan repayments. After rising rapidly in the late 1970s, medium- and long-term net capital inflows dropped by almost one third to US\$1.9 billion in 1980, but recovered to US\$2.8 billion in 1981. These movements reflect fluctuations in gross borrowings by nonbank financial institutions; in contrast, borrowings by the private and public sectors followed a relatively stable

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<sup>1/</sup> For details of developments on interest payments, see subsection 7 below.

<sup>2/</sup> For details on Korea's overseas construction activity, see section II, 2 above.

<sup>3/</sup> Mainly Korea Development Bank (KDB), Export Import Bank of Korea (KEXIM), Korea Long-Term Credit Bank, and merchant banks.

course during this period. Borrowings by nonbank financial institutions, which rose sharply to US\$1.2 billion in 1979, fell to US\$0.2 billion in 1980 and returned to US\$1 billion in 1981. The decline in 1980 was related to the civil disturbances early in the year which led to a reconsideration of the long-term borrowing plans for the second half of 1980. Rather than taking the risk of having to accept significantly stiffer borrowing terms on long-term bank loans, the authorities decided to postpone some of the planned borrowings. Borrowing by the private sector also declined in 1980 because of the depressed investment activity, but borrowing by the public sector increased by about US\$0.4 billion to US\$1.5 billion, owing to strong public sector investment activity. In 1981, the nonbank financial institutions resumed their medium- and long-term borrowings in international capital markets. Public sector borrowing also rose somewhat, but private sector borrowing continued to decline as investment remained sluggish and interest rates continued to rise.

The widening deficit of the current account in 1980, combined with the fall in net inflows of medium- and long-term capital, led to a large increase in short-term borrowing in that year (from US\$0.8 billion in 1979 to US\$1.9 billion in 1980). This was facilitated by a relaxation of regulations in 1979, including an extension of the settlement period for imports on a deferred payment basis, and was further encouraged by measures taken in 1980 to increase the use of import bills and other short-term trade credits. Moreover, the oil price increase led to a larger inflow of trade credits for oil imports. In 1981, the short-term capital account swung into a small net outflow of US\$70 million. This turnaround, occurring mostly in the last quarter of the year, was brought about by a decrease in trade credits to finance trade in general, and oil imports in particular; there was also an increase in export credits extended by Korea. A narrowing of the differential in the cost of borrowing between the domestic and external markets, including exchange rate expectations, may also have contributed to this turnaround.

The overall balance of payments, defined to include as financing items all external borrowings of the banking system, recorded deficits of US\$1.9 billion in 1980 and US\$2.3 billion in 1981, compared with a deficit of under US\$1 billion in 1979. Bank borrowing constituted the bulk of the financing; net use of Fund credit amounted to 22 per cent and 24 per cent of the total financing requirement in 1980 and 1981, respectively. In line with the scaling down of medium- and long-term borrowing, the short-term foreign liabilities of commercial banks (including the Korean Exchange Bank (KEB), an official institution) and branches of foreign banks were built up by US\$2 billion in 1980. These were in the form of an increase in the refinancing of trade credits (US\$0.8 billion) and a larger use by branches of foreign banks of swap facilities to finance domestic lending (US\$1.1 billion); the swap facilities with Bank of Korea were enlarged in early 1980 to facilitate inflows of foreign currency loans. In 1981, because of the turnaround in short-term capital flows, the overall payments deficit widened slightly. However, in contrast to 1980, medium-term borrowings by commercial banks, including the KEB, provided a greater share of the financing. Banks'

short-term borrowings increased by US\$1.2 billion, almost all of which stemmed from the increase in refinancing of trade credits; borrowing under the swap facilities increased only slightly as the swap limits were not raised in 1981.

Gross official reserves rose by about US\$860 million in 1980 and further by US\$326 million in 1981 (Table 25). In terms of coverage of imports of goods and services, gross reserves declined from 2.8 months at end-1980 to 2.5 months at end-1981; the coverage ratio had averaged 3 months in the late 1970s.

## 7. External debt

The widening current account deficits in recent years and the consequent large financing requirements have led to sharp increases in Korea's external debt.<sup>1/</sup> Between 1978 and 1981, total outstanding (disbursed) external debt more than doubled to US\$32.8 billion (Table 26). In real terms, using export unit prices as deflator, the stock of debt increased by 76 per cent during this period (Table 27); using import unit prices as deflator, the real stock of debt rose by 36 per cent. During this period, the ratio of external debt to GNP rose from 31 per cent to 48 per cent; and the ratio of debt to exports of goods and services grew from 87 per cent to 110 per cent, despite the rapid increase in exports in 1980-81. Total debt service (including interest payments on short-term debt) rose from US\$2.3 billion in 1978 to US\$4.2 billion in 1980 and US\$5.5 billion in 1981 (Table 28). With debt-service payments outpacing exports, the debt service ratio rose from 13 per cent in 1978 to 18 per cent in 1980, and 20 per cent in 1981. In 1980, sharply rising international interest rates were the most important contributing factor, accounting for an estimated US\$0.7 billion of the US\$1.3 billion increase in interest payments. In 1981, interest payments increased further by US\$1 billion, of which US\$0.4 billion was due to an increase in interest rates.

The maturity structure of debt has weakened in recent years as a result of heavy recourse, especially in 1980, to short-term borrowings. The share of short-term debt in total debt rose from 28 per cent in 1978 to a peak of 40 per cent in 1980, declining to 38 per cent in 1981 (Table 26). Short-term trade credits increased from 20 per cent of imports in 1978 to 36 per cent in 1981. The weakening of the maturity structure has been accompanied by an increase in interest rates. The average interest rate on new debt commitments, which had fluctuated only slightly around 8 per cent in the late 1970s, increased to 10.5 per cent in 1979, 11.4 per cent in 1980 (Appendix Table XXV), and is estimated

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1/ External debt is defined in this report to cover private and public long- and short-term debt, including purchases from the Fund. Prior approval by the Ministry of Finance is required for the contracting of foreign debt by both the public and private sectors. Financial institutions may contract loans without prior approval, but prior consultation with the Ministry of Finance is required for loans in excess of US\$100 million.



Table 25. Korea: International Reserves, 1977-81

(In millions of U.S. dollars)

End of Period	1977	1978	1979	1980	1981
Monetary authorities	2,973	2,975	2,991	2,956	2,711
Gold	(6)	(30)	(31)	(31)	(31)
SDRs	(12)	(15)	(25)	(13)	(64)
Reserve position in the Fund	(--)	(14)	(25)	(--)	(--)
Foreign exchange	(2,955)	(2,736)	(2,910)	(2,912)	(2,616)
Commercial banks	<u>1,333</u>	<u>2,143</u>	<u>2,719</u>	<u>3,616</u>	<u>4,186</u>
Gross international reserves	4,306	4,938	5,710	6,571	6,897
Gross international reserves in mil- lions of SDRs <u>1/</u>	3,545	3,790	4,334	5,152	5,925
Gross international reserves in months of imports of goods and services	3.9	3.2	2.8	2.8	2.5

Sources: Data provided by the Korean authorities; IMF, International Financial Statistics; and staff estimates.

1/ Converted at end-of-period exchange rate.

Table 26. Korea: Outstanding External Debt by  
Maturity and Borrower, 1977-81 1/

(In millions of U.S. dollars)

	1977	1978	1979	1980	Est. 1981
Debt with maturity of more than three years	8,508	10,582	13,658	15,129	18,544
Financial institutions	(763)	(838)	(2,128)	(2,302)	(4,181)
Public sector	(3,886)	(4,642)	(5,758)	(6,530)	(7,849)
Private sector	(3,859)	(5,102)	(5,772)	(6,298)	(6,514)
Trade credits with maturities of one to three years	350	486	563	617	621
Short-term debt of the private sector <u>2/</u>	2,840	1,660	2,510	4,450	4,690
Short-term debt of commercial banks	1,887	2,798	4,352	6,453	7,627
Swaps	(792)	(1,262)	(1,951)	(3,036)	(3,269)
Refinancing	(695)	(1,216)	(2,028)	(2,770)	(3,892)
Deposits	(326)	(128)	(143)	(200)	(254)
Other	(74)	(192)	(230)	(447)	(212)
Use of Fund credit	<u>341</u>	<u>263</u>	<u>138</u>	<u>713</u>	<u>1,341</u>
Total	13,926	15,789	21,221	27,362	32,823
<u>Memorandum item:</u>					
Undisbursed loans with maturity of more than three years	4,101	5,616	4,566	7,678	6,844

Source: Data provided by the Korean authorities.

1/ Excludes liabilities of merchant banks.

2/ Estimates.

Table 27. Korea: External Debt Indicators, 1977-81

	1977	1978	1979	1980	1981
(In billions of U.S. dollars)					
Nominal stock of debt, end of period	13.9	15.8	21.2	27.4	32.8
Stock of debt deflated by					
Export unit prices	13.9	13.5	15.9	20.3	23.8
Import unit prices	13.9	14.1	14.6	15.8	19.2
(In per cent)					
Ratio of debt <u>1</u> / to GNP	33.6	31.4	30.8	42.1	47.5
Ratio of gross international reserves to debt	30.9	32.0	26.9	24.0	21.0
Ratio of debt <u>1</u> / to exports of goods and services	90.0	86.6	94.7	107.6	109.8
Ratio of stock of short-term trade credits <u>2</u> / to merchandise imports	33.6	19.8	23.8	33.4	35.6

Sources: Data provided by the Korean authorities; and staff calculations.

1/ Average stock during the year.

2/ Short-term debt of the private sector and refinancing by banks.

Table 28. Korea: Debt Service 1/, 1977-81

(In millions of U.S. dollars)

	1977	1978	1979	1980	1981
Interest <u>2/</u>	650	931	1,354	2,609	3,601
Medium- and long-term debt	(528)	(727)	(962)	(1,420)	(1,791)
Other	(132)	(204)	(392)	(1,189)	(1,810)
Amortization <u>3/</u>	829	1,332	1,617	1,541	1,861
Financial institutions	(113)	(224)	(132)	(127)	(204)
Public sector	(130)	(224)	(261)	(257)	(309)
Private sector	(436)	(687)	(952)	(827)	(955)
Medium-term trade credits	(150)	(197)	(272)	(329)	(373)
Total debt service	1,479	2,263	2,971	4,150	5,462
Debt service ratio (in per cent) <u>4/</u>	11.3	13.2	15.2	18.4	19.9
Interest payments ratio <u>5/</u>	5.0	5.4	6.9	11.6	13.1
<u>Memorandum items:</u>					
Exports of goods and services	13,074	17,161	19,531	22,577	27,417

Source: Data provided by the Korean authorities.

1/ Includes IMF.

2/ Excludes interests on short- and medium-term trade credit of the private sector which are included in amortization, and interest payments on debt of merchant banks.

3/ Excludes amortization of debt with maturities of less than one year.

4/ Ratio of total debt service to exports of goods and services.

5/ Ratio of interest payments to exports of goods and services.

to have increased to 12.5 per cent in 1981. This trend reflects the sharp increases in interest rates in world capital markets and Korea's rising share of debt carrying variable interest rates, which made interest payments more sensitive to short-term variations in international interest rates.

The increase in the share of debt with variable interest rates from an estimated 50 per cent in 1978 to over 60 per cent in 1981 resulted from increased medium-term borrowings on commercial terms (Appendix Table XXVI), as well as rising short-term debt. From end-1978 to end-1981, the stock of disbursed debt with maturities of more than three years increased by 75 per cent, or about US\$8 billion, and about two thirds of this increase was obtained on commercial terms: US\$3.5 billion was on account of Korean financial institutions and US\$1.5 billion was by the private sector. Foreign financial institutions provided the bulk of the increase in medium-term loans, mostly in the form of syndicated Euro-currency loans (Appendix Table XXVII). Loans from the traditionally concessional sources, i.e., multilateral and bilateral official lenders, have declined in importance. The increased reliance on international capital markets has been facilitated by Korea's ability to maintain access to capital markets at relatively favorable terms.<sup>1/</sup>

## 8. Exchange and trade system <sup>2/</sup>

### a. Exchange arrangement

The exchange rate structure around the basic rate of W 484 per U.S. dollar remained unchanged between December 1974 and January 12, 1980, when a new basic exchange rate of W 580 per U.S. dollar was established. Effective February 27, 1980, a new exchange rate regime was introduced whereby the won is linked to a currency basket but other factors are also taken into account. The Bank of Korea establishes daily the exchange rate of the won in terms of the U.S. dollar, which is the intervention currency. On December 31, 1981, the buying and selling rates of the Bank of Korea for the U.S. dollar were W 698.70 and W 702.30, respectively, per US\$1, and the telegraphic transfer buying and selling rates of the foreign exchange banks were W 698.30 and W 702.70, respectively, per US\$1. The buying and selling rates for certain other currencies are posted daily by foreign exchange banks on the basis of buying and selling rates for the U.S. dollar in markets abroad. There are no taxes or subsidies on purchases or sales of foreign exchange.

With the introduction of the new exchange rate regime, the foreign exchange certificates were abolished; foreign exchange certificates had been issued by foreign exchange banks against all foreign exchange earnings in prescribed currencies surrendered by residents.

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<sup>1/</sup> The loans (and their terms) secured by financial institutions in the past few years are detailed in Appendix Tables XXVIII to XXX.

<sup>2/</sup> For further details, see IMF, Annual Report on Exchange Arrangements and Exchange Restrictions, 1981.

b. Exports

Korea maintains an elaborate structure of government-supported export financing and export credit insurance programs to promote exports. Short-term export financing is channeled through the deposit money banks at preferential interest rates. In 1981, the interest rate applied by banks on export loans was 12 per cent, compared with an average prime lending rate of 18.5 per cent. The loan period may not, in principle, exceed 90 days. Loans for exports are extended to those who produce or process export goods, as well as exporters themselves. These loans are subdivided by use into various types: loans for the production and accumulation of export goods, loans for the domestic purchase of export goods including purchase for stockpiling, loans for the import of raw materials for export use including import for stockpiling, loans for the domestic purchase of raw materials for export use including purchase for stockpiling, loans for supplies of services, and loans to prepare agricultural and marine products for export. At the beginning of 1982, the maximum amount of loans ranged between 73 and 88 per cent of the value of exports depending on the type of loans, compared with between 72 per cent to 83 per cent in 1981.

Medium- and long-term export financing is provided by the Korea Export-Import Bank (KEXIM) established in 1976. Acting as an agent for the Government, KEXIM also provides cover against losses in export finance and overseas investments. KEXIM's financing consists mainly of preferential loans to Korean suppliers with maturities extending from 6 months to 10 years and sometimes even to 20 years. The Bank is also authorized to extend credit for a large variety of interrelated services. The establishment of KEXIM was prompted by the growing importance of heavy and chemical industrial products in Korea's exports, which generally require larger volumes of credit and longer maturities than the exports of consumer and light capital goods. So far, KEXIM's credits have been concentrated in the ship export sector, but the financing of the construction of plants abroad is expected to assume increasing importance. Currently, KEXIM applies an 8 per cent interest rate on its domestic currency loans, a commitment fee of 1/4 of 1 percentage point is charged on undisbursed amounts. KEXIM-supported contracts require 15 to 20 per cent down payment, with KEXIM financing up to 80 per cent of the credit. The exporter must finance the balance in the private market at commercial rates. As a result of the mixture of private export credits at market interest rates and financing by KEXIM at preferential rates, the blended interest rate on the full value of export credit transactions supported by KEXIM is estimated to be about 2 percentage points higher than the rate of interest applied on its domestic currency loans. KEXIM also extends foreign currency loans on which it applies the LIBOR rate, plus a spread ranging between 1 to 1.25 percentage points. Despite its rapid growth in recent years, KEXIM's financing still supports only a small fraction of Korean exports, mainly because a large proportion of Korea's exports is sold on a cash or short-term credit basis.

Export subsidies other than the interest subsidy were practically eliminated in 1980. These subsidies had been reduced over time and by 1978 were limited to an exemption of exports of industrial equipment goods from certain direct taxes and a railroad allowance in the form of a 20 per cent discount for exports of minerals. The effective rate of these subsidies was practically nil in 1979-80.

c. Imports

All imports require licenses; applications for imports of commodities that are not on the list of restricted items are automatically approved, subject to the general limits set by the Foreign Exchange Supply and Demand Plan. In May 1978, Korea initiated a major import liberalization program as a result of which the list of prohibited import goods was abolished and the list of imports with automatic approval expanded. The share of imports on the automatic approval list, out of all basic items in the Customs Cooperation Council Nomenclature (CCCN), rose from 54.0 per cent in 1978 to 68.5 per cent in 1979 and to 68.6 per cent in 1980. In May 1981, the commodity classification system was changed from the CCCN four-digit system to the CCCN eight-digit system. On the basis of the new classification 396 commodity categories were transferred from the restricted to the automatic approval list, raising the share of imports on the automatic approval list and of all basic items on the list from 69.4 per cent to 74.7 per cent. Some liberalized items remained subject to surveillance, so that restrictions could be reintroduced if domestic production were impaired. The majority of the liberalized goods were raw materials and capital goods, but increasingly consumer nondurables and newly competitive exportables are being included. The main objectives of the import liberalization program are to improve the structure of industry by removing price distortions and enhancing competition, to stabilize domestic prices by increasing supplies, and to facilitate trade negotiations with countries restricting imports from Korea. Tariff quotas were introduced in January 1981 for 64 items, including foodstuffs, chemicals, pulp, and steel products (the tariff rate for the quotas was reduced from an average 19.5 per cent to 9.2 per cent). In January 1982, import tariffs were reduced for 311 items and raised for 29 items, lowering the import-weighted average tariff rate from 12.8 to 12.4 per cent.

d. Foreign Exchange Demand and Supply Plan

The Foreign Exchange Demand and Supply Plan sets overall ceilings on the amount of foreign exchange that may be used. The Plan has been made more flexible in recent years. Under the present system, relatively high ceilings are established for broad categories of payments and the Minister of Finance has delegated to the Bank of Korea the authority to exceed these ceilings by 10 per cent or to effect shifts of funds between payment categories up to a maximum of 10 per cent of these ceilings.

e. Advance import deposit requirements

The system of advance import deposit requirements was abolished in February 1982. Over the past few years, the system had been greatly simplified and the rates substantially reduced: deposit requirements for general imports, which had ranged between 5 and 200 per cent, were abolished in 1978; then, deposits were confined to imports on a deferred payment basis, and the rates were progressively reduced from 10 to 40 per cent in 1978 to 5 to 20 per cent in 1980; finally, the deposit requirement was abolished in February 1982.

f. Travel

The general basic travel allowance of US\$3,000 for each trip and the basic travel allowance of US\$1,000 per trip for persons employed abroad remained unchanged.

g. Capital

A major modification of the foreign exchange regulations took place in 1979, enabling Korean banks to handle all foreign exchange transactions not specifically prohibited. The objectives of this measure were to open up the foreign exchange market, encourage offshore banking activities, simplify procedures, and decentralize foreign exchange operations. Further simplification and decentralization measures were introduced in October 1980.

All restrictions on foreign currency loans from and to abroad were lifted in January 1979 and all residents were permitted to hold foreign currency deposit accounts. Offshore banking activities and forward exchange transactions in currencies other than won were permitted. In October 1980, forward transactions for foreign loans and interest payments and forward transactions in pound sterling, deutsche mark, and Japanese yen were also permitted. Restrictions on the holding of foreign stocks or securities by foreign exchange banks were removed in January 1979. Authorization continues to be required for borrowing abroad of more than US\$200,000 with maturities in excess of three years.

Limitations on import credits for major raw materials were eliminated in 1980, the number of goods permitted to be imported on a deferred payment basis was expanded (in terms of the share of these goods in total imports), and the minimum import amount on a deferred payment basis was reduced from US\$100,000 per item to US\$50,000 per item. Furthermore, the settlement period for import with deferred payment was extended from 120 to 180 days. In February 1982, the system of imports on a deferred payment basis was changed from a positive to a negative list. Items subject to tariff rates below 20 per cent are now permitted to be imported on a deferred payment basis.

The limits on swaps between foreign bank branches in Korea and the Bank of Korea--an important source of domestic currency lending by foreign bank branches--were raised in 1980 and early 1982. The scope of the use



of funds received under these swaps had in previous years been extended by including export financing and the purchase of Monetary Stabilization Bonds; permitting foreign bank branches to make loans to all enterprises with foreign investment; no longer restricting foreign bank branches to providing funds only to enterprises with the same national origin as the bank; and permitting banks to provide loans to up to 100 per cent of the foreign investment. The scope was further expanded in 1982 by eliminating the limit on lending to foreign-invested enterprises.

In July 1981, a new set of guidelines was announced to promote foreign direct investment: (1) the range of projects permissible for foreign investment was expanded from 427 to 527 types of industries; (2) the list of projects in which 100 per cent and 50 per cent foreign participation is permissible was extended; (3) the regulation requiring a minimum of two years before the repatriation of capital was abolished; and (4) the list of eligible Foreign Trust Fund was expanded.

#### h. Recent changes in the exchange and trade system

Changes in the exchange and trade system since the last Article IV consultation are as follows:

##### Changes during 1981

January 5: Tariff quotas were introduced for the period up to June 30, on 64 items of imports including foodstuffs, chemicals, pulp, and steel products. The tariff rate for the quotas was reduced from an average of 19.5 per cent to 9.2 per cent.

May 30: The commodity classification system was changed from the CCCN four-digit system to the CCCN eight-digit system. On the basis of the new classification, 396 commodity categories were transferred from the restricted to the automatic approval list, raising the share of imports on the automatic approval list out of all basic items in the CCCN from 69.4 per cent to 74.7 per cent.

June 20: The maximum emigrant remittance was established at US\$100,000 for each household; authorization from foreign exchange banks is required for such remittances up to US\$20,000 and authorization from the Bank of Korea is required for remittances over US\$20,000.

July 29: A new set of guidelines was announced to promote foreign direct investment. The new features included: (1) expansion of the range of projects permissible for foreign investment; (2) extension of the list of projects where 100 per cent and 50 per cent foreign participation is permissible; and (3) elimination of the regulation requiring a minimum period of two years before the repatriation of capital.

August 1: The limit on borrowing by Koreans living abroad from foreign branches of Korean banks was raised from US\$50,000 to US\$100,000.

August 1: The following changes were introduced to activate direct investment abroad: (1) the procedure was simplified, e.g., the requirement of prior approval of the Bank of Korea was abolished; and (2) approval was no longer required for retained profits up to US\$10,000.

August 1: The list of invisible transactions for which payments are automatically approved was extended.

#### Changes during 1982

January 1: Import tariffs were adjusted and rationalized for 340 items, with rates reduced for 311 items and increased for 29 items, lowering the import-weighted average rate to 12.4 per cent from 12.8 per cent.

February 1: The system of imports on a deferred payment basis was changed from a positive list to a negative list. Items subject to tariff rates below 20 per cent were permitted to be imported on a deferred payment basis.

February 1: The advance deposit requirement of 3 to 20 per cent for imports on a deferred payment basis was abolished.

Table I. Korea: Expenditure on Gross National Product at 1975 Constant Market Prices, 1979-81  
(In billions of won)

	1979				1980				1981 1/			
	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Year	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Year	1st qtr.	2nd qtr.
Consumption	11,071.1	2,595.6	2,668.2	2,729.8	10,965.7	2,472.3	2,795.6	2,855.7	3,100.6	11,424.2	2,472.3	2,795.6
Private	(9,624.5)	(2,239.1)	(2,313.0)	(2,350.5)	(9,491.5)	(2,294.4)	(2,428.4)	(2,475.3)	(2,710.4)	(9,908.5)	(2,294.4)	(2,428.4)
Government	(1,446.6)	(356.5)	(355.2)	(374.3)	(1,474.2)	(377.9)	(367.2)	(380.4)	(390.1)	(1,515.7)	(377.9)	(367.2)
Gross domestic fixed capital formation	5,653.4	1,066.8	1,346.3	1,278.4	4,976.4	915.0	1,249.1	1,214.6	1,339.2	4,718.0	915.0	1,249.1
Increase in stocks	511.2	-314.4	-206.7	-321.2	-315.8	-296.7	-161.8	-222.7	884.8	203.6	-296.7	-161.8
Exports of goods and services	5,596.2	1,339.8	1,479.0	1,578.1	6,148.2	1,594.0	1,830.2	1,874.5	1,923.1	7,221.8	1,594.0	1,830.2
Imports of goods and services	7,957.5	1,775.8	1,823.0	1,834.5	7,346.1	1,762.9	2,132.2	2,059.2	1,973.1	7,927.4	1,762.9	2,132.2
Statistical discrepancy	-4.9	65.4	-90.1	-34.0	-86.6	-77.5	-31.0	-17.4	-21.8	-147.8	-77.5	-31.0
Net factor income from abroad	-110.4	-84.4	-145.2	-90.9	-499.0	-129.5	-189.3	-132.8	-220.9	-672.5	-129.5	-189.3
Gross national product	14,759.1	2,893.0	3,228.4	3,305.8	13,842.8	2,914.8	3,360.5	3,512.8	5,031.9	14,820.0	2,914.8	3,360.5

Source: Bank of Korea, Monthly Statistical Bulletin.

1/ Preliminary.

Table II. Korea: Industrial Origin of Gross National Product at 1975 Constant Market Prices, 1979-81  
(In billions of won)

	1979	1980				Year	1981 1/							
		1st qtr.	2nd qtr.	3rd qtr.	4th qtr.		1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Year			
Agriculture, forestry and fishing	2,828.6	156.1	266.6	379.2	1,405.7	2,207.5	170.4	268.2	405.1	1,871.5	2,715.2			
Mining	173.4	37.2	48.9	41.5	44.0	171.6	36.8	53.4	46.2	46.9	183.3			
Manufacturing	4,818.0	1,144.5	1,208.0	1,179.0	1,232.3	4,763.8	1,178.3	1,300.2	1,293.7	1,313.2	5,085.4			
Social overhead capital	2,261.6	506.7	611.8	586.9	601.0	2,306.5	505.0	616.0	611.3	645.3	2,377.7			
Construction	891.9	166.2	256.3	229.4	232.5	884.4	139.9	224.9	221.0	249.5	835.3			
Electricity, gas and water	235.2	61.8	60.2	63.1	64.2	249.3	65.2	65.8	69.6	71.3	271.9			
Transport, storage and communication	1,134.4	278.7	295.4	294.4	304.3	1,172.8	300.0	325.3	320.7	324.5	1,270.5			
Other services	4,677.6	1,132.8	1,238.2	1,210.0	1,311.2	4,892.3	1,153.6	1,312.0	1,289.3	1,375.9	5,130.9			
Wholesale and retail trade	2,661.4	599.3	669.1	630.5	714.6	2,613.5	600.8	712.2	691.9	770.9	2,775.8			
Financial services	544.4	131.8	160.3	164.8	180.7	637.6	142.0	168.0	161.4	184.8	656.2			
Public administration	430.5	110.8	111.4	111.6	113.2	447.0	112.3	115.0	115.1	111.0	453.4			
and defense	1,151.8	290.9	297.4	303.1	302.8	1,194.2	298.5	316.9	320.9	309.3	1,245.6			
Other														
Net factor income from abroad	-110.4	-84.4	-145.2	-90.9	-178.6	-499.0	-129.5	-189.3	-132.8	-220.9	-672.5			
Gross national product	14,759.1	2,893.0	3,228.4	3,305.8	4,415.6	13,842.8	2,914.8	3,360.5	3,512.8	5,031.9	14,820.0			

Source: Bank of Korea, Monthly Statistical Bulletin.

1/ Preliminary.

(Percentage change over preceding period)

**Source: Economic Planning Board, Monthly Statistics of Korea.**

**Source:** Economic Planning Board, Monthly Statistics of Korea

Table IV. Korea: Credit Expansion of Deposit Money Banks by Sector, 1977-81

(Annual and quarterly changes in billions of won)

	1977	1978	1979	1980	1981			
					1st qtr.	2nd qtr.	3rd qtr.	4th qtr.
Total change	1,141.8	2,743.3	3,104.4	4,951.3	1,101.6	1,283.1	1,230.9	2,066.1
Claims on public sector	-4.7	99.5	-129.1	396.2	403.1	199.9	-40.9	366.0
Net claims on Government	-104.7	69.5	-129.1	366.2	333.1	169.9	-40.9	366.0
Claims on government agencies	100.0	30.0	--	30.0	70.0	30.0	--	--
Claims on private sector	1,146.5	2,643.8	3,233.5	4,555.1	698.5	1,083.2	1,271.8	1,700.1
Loans with banking funds	842.6	1,728.4	2,248.5	3,027.5	695.8	957.6	1,019.3	1,382.6
Of which:								
Exports	(105.6)	(315.8)	(344.0)	(493.6)	(155.0)	(194.6)	(137.7)	(-10.8)
Housing	(65.0)	(163.5)	(245.5)	(311.8)	(74.9)	(91.4)	(137.1)	(213.1)
Agriculture and fishery	(43.0)	(40.6)	(73.5)	(104.2)	(135.4)	(160.6)	(23.6)	(-270.0)
Special loans for medium industry	(104.5)	(169.3)	(184.4)	(271.3)	(72.0)	(66.3)	(94.7)	(124.9)
Raw material for domestic use	(0.1)	(162.5)	(-116.3)	(-22.8)	(-21.8)	(0.6)	(-0.1)	(1.8)
Other	(523.6)	(876.7)	(1,517.4)	(1,869.4)	(280.3)	(444.1)	(626.3)	(1,323.6)
Other	303.9	915.4	985.0	1,527.6	2.7	125.6	252.5	317.5
Of which:								
Loans with NIF	(75.0)	(91.0)	(75.0)	(42.6)	(-13.0)	(23.9)	(18.3)	(90.0)
Foreign currency loans	(141.2)	(591.6)	(631.4)	(873.2)	(-15.0)	(-8.2)	(30.1)	(172.0)
Securities	(35.6)	(122.2)	(64.4)	(146.7)	(8.3)	(51.6)	(12.1)	(42.7)
Other 1/	(51.4)	(110.6)	(214.2)	(465.1)	(22.4)	(58.3)	(192.0)	(12.8)
								(285.5)

Sources: Data provided by the Ministry of Finance; and the Bank of Korea.

1/ Includes loans with government funds, credits to Korea Development Bank (KDB), advances to customers, and credits to EXIM Bank.

Table V. Korea: Subsidized Credits Outstanding from Deposit Money  
Banks to the Manufacturing Sector, 1977-81

(In billions of won and in per cent)

	December						October	
	1977			1978			1979	
	Amount	Per cent	Per cent	Amount	Per cent	Per cent	Amount	Per cent
							Amount	Per cent
Loans with banking funds								
Export loans	567.3	56.3		883.2	61.6		1,227.2	67.4
Machine industry promotion 1/	28.2	2.8		26.1	1.8		15.1	0.8
Equipment for export industries	70.9	7.0		57.0	4.0		42.7	2.3
Special equipment	36.8	3.6		35.0	2.5		30.1	1.6
Industrial rationalization	7.1	0.7		7.8	0.5		7.5	0.4
Other 2/	19.0	1.9		19.8	1.3		--	--
Total	728.7	72.3		1,028.1	71.7		1,322.6	72.5
Loans with government funds								
Medium industry	8.0	0.8		8.8	0.6		9.2	0.5
Foreign loan funds	75.0	7.4		108.9	7.6		130.2	7.1
Total	83.0	8.2		117.7	8.2		139.4	7.6
Loans with NIF 3/ funds	196.7	19.5		287.7	20.1		362.7	19.9
Total subsidized credits	1,008.4	100.0		1,433.5	100.0		1,824.7	100.0
Total subsidized credits to manufacturing as a proportion (per cent) of total loans and discounts								
		21.4			21.0			19.5
								19.9

Source: Bank of Korea, Monthly Economic Statistics.

1/ The Machine Industry Promotion Fund is being phased out and replaced by NIF.

2/ Comprises the rural industry and defense industry promotion funds.

3/ National Investment Fund.

Table VI. Korea: Financial Survey, 1975-81 1/  
(In billions of won)

Outstanding at End of Period	1975	1976	1977	1978	1979		1980		1981	
		December			Sept.	Dec.	Sept.	Dec.	Mar.	June
Net foreign assets	-369	24	593	172	-600	-501	-1,867	-2,354	-2,997	-3,566
Assets	806	1,517	2,421	2,573	2,813	3,012	4,396	4,957	4,534	4,762
Liabilities	1,175	1,493	1,828	2,401	3,413	3,513	6,263	7,311	7,531	8,328
Domestic credit	5,043	6,326	8,185	11,869	15,016	16,588	21,878	24,498	26,202	28,234
Government (net)	100	-9	-215	-446	-1,189	-909	-1,302	-858	-611	-590
Official entities	110	110	210	240	240	240	270	270	340	370
Private sector	4,833	6,225	8,190	12,075	15,965	17,256	22,909	25,086	26,473	27,454
Total liquidity	3,838	5,168	7,300	9,936	11,564	12,970	15,433	17,020	17,911	18,766
Money	1,182	1,544	2,173	2,714	3,010	3,274	3,487	3,807	3,825	3,712
Quasi-money	1,968	2,661	3,702	5,215	5,982	6,603	7,951	8,728	9,188	9,687
NBFI 2/ deposits	749	1,127	1,697	2,477	2,889	3,510	4,422	5,103	5,408	5,905
(Less inter- institution deposits)	(60)	(164)	(270)	(469)	(317)	(418)	(427)	(618)	(510)	(538)
Other items	836	1,182	1,478	2,105	2,852	3,117	4,578	5,124	5,294	5,902
Debentures issued	64	123	214	265	358	391	658	689	815	880
Guarantees	268	334	302	334	363	379	561	637	698	700
Other	504	725	962	1,506	2,131	2,347	3,359	3,798	3,781	4,322

Source: Bank of Korea, Monthly Economic Statistics.

1/ The Financial Survey covers the banking system and other financial institutions including the Development Institutions--the Korea Development Bank, the Korea Development Finance Company, and the Export-Import Bank of Korea--the savings institutions, the life insurance companies, and the investment companies.

2/ Nonbank financial institutions.



Table VI. Korea: Financial Survey, 1975-81 1/

(In billions of won)

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		December			Sept.	Dec.	Sept.	Dec.	Mar.	June
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Other	504	725	962	1,506	2,131	2,347	3,359	3,798	3,781	4,322

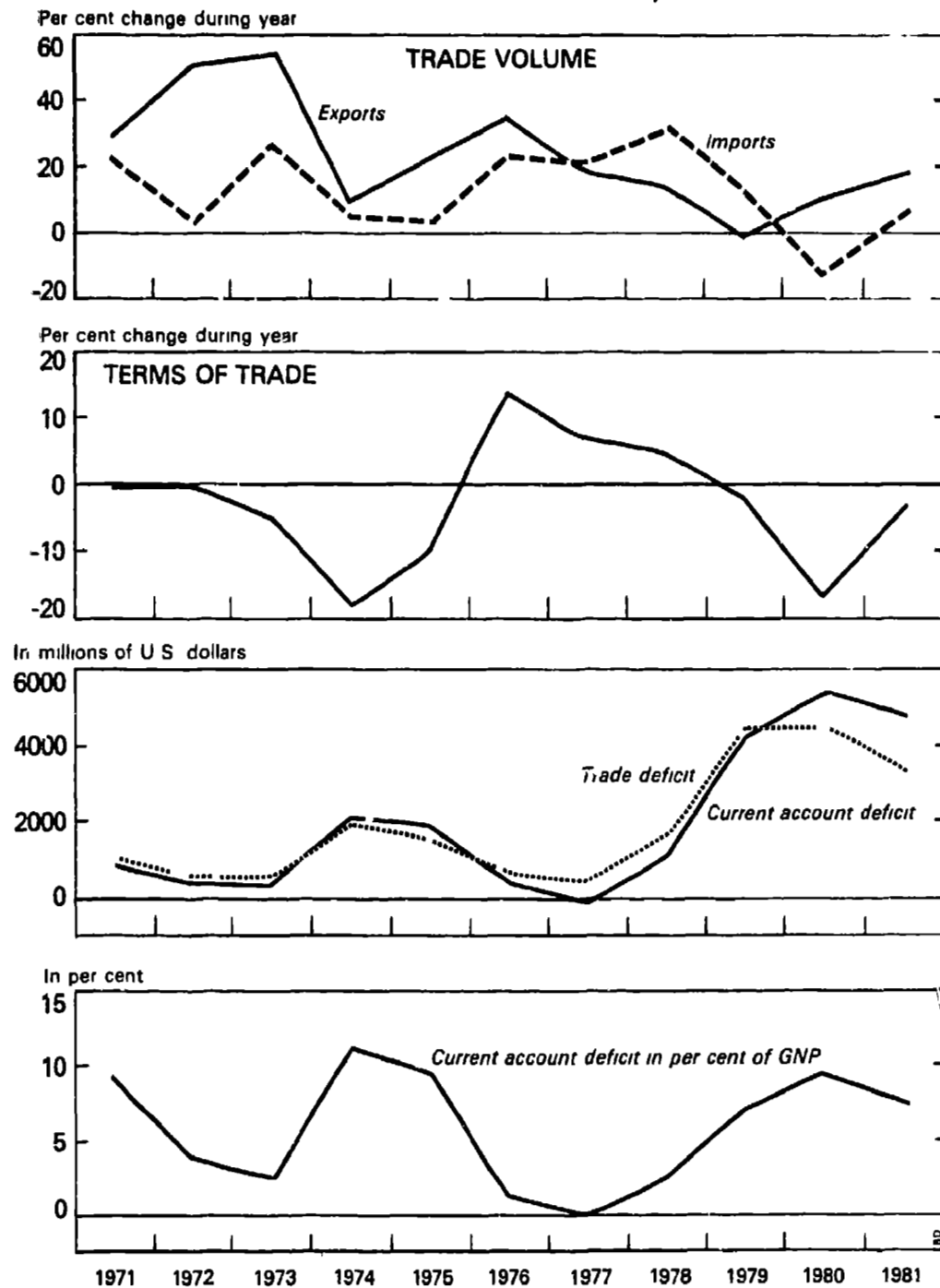
Source: Bank of Korea, Monthly Economic Statistics.

1/ The Financial Survey covers the banking system and other financial institutions including the Development Institutions--the Korea Development Bank, the Korea Development Finance Company, and the Export-Import Bank of Korea--the savings institutions, the life insurance companies, and the investment companies.

2/ Nonbank financial institutions.

CHART 9  
KOREA

EXTERNAL DEVELOPMENTS, 1971-81



Sources: The Bank of Korea Economic Statistics Yearbook (various issues), and staff estimates

Table 20. Korea: Developments in External Trade, 1977-81

(In annual per cent changes; unless otherwise indicated)

	1977	1978	1979	1980	1981
Exports-value	28.5	26.5	18.5	16.3	21.1
Volume	19.0	14.2	-0.9	10.6	18.7
Unit value	9.5	10.7	19.5	5.3	2.0
Imports-value	23.2	38.5	35.9	13.1	11.6
Volume	20.5	31.2	11.8	-13.8	6.3
Oil	(17.1)	(6.0)	(2.7)	(-0.8)	(-1.8)
Non-oil	(23.8)	(35.2)	(11.0)	(-14.3)	(9.0)
Unit value	2.3	5.6	22.1	26.9	5.0
Oil	(6.4)	(3.4)	(41.7)	(82.9)	(15.3)
Non-oil	(2.2)	(5.6)	(16.5)	(15.0)	(1.9)
Terms of trade	7.0	4.9	-2.1	-17.0	-3.0
Foreign market growth: 1/	6.8	9.5	5.3	1.6	5.0
Average LIBOR 2/ (in per cent)	6.0	8.7	12.0	14.4	16.5
Korea's real GNP	10.3	11.6	6.4	-5.2	7.1
<u>Memorandum items:</u>					
Change in current account deficit (US\$ million)	317	-1,098	-3,066	-1,170	580
Price-induced change in oil import bill	180	80	1,010	2,370	840
Current account deficit in per cent of GNP	--	2.3	6.9	9.4	7.5

Sources: Bank of Korea, Monthly Economic Statistics (December 1981); and staff estimates.

1/ Weighted average of growth in partner countries' (non-oil) import volume.

2/ Three-month Euro-dollar deposits.

costs, was also a contributing factor. Receipts from overseas construction services stagnated in 1980 because of events in the Middle East, but resumed their growth in 1981 and so helped to limit the deterioration in the services account.

A large part of the current account deficit continued to be financed by medium- and long-term nonbank borrowing. In 1980, however, net inflows of long-term capital declined considerably, owing to the temporary postponement of planned borrowings from banks in view of the political uncertainties following the assassination of President Park in October 1979. Consequently, short-term capital inflows during the year were exceptionally large as greater reliance was placed on short-term trade credits. The overall deficit in the balance of payments (defined to include as financing items all borrowings of the banking system) nearly doubled to US\$1.9 billion, with the bulk of the deficit financed through short-term borrowing by banks. With the political situation stabilizing, long-term capital flows returned to their normal pattern in 1981 and provided most of the financing; short-term capital actually swung into a small net outflow. Largely because of the turnaround in short-term capital movements, the overall payments deficit widened to US\$2.3 billion. Short-term borrowings of the banking system also fell, but their medium-term borrowings rose to provide the needed scale of financing. Net use of Fund credit during 1980-81 amounted to about US\$600 million per year.

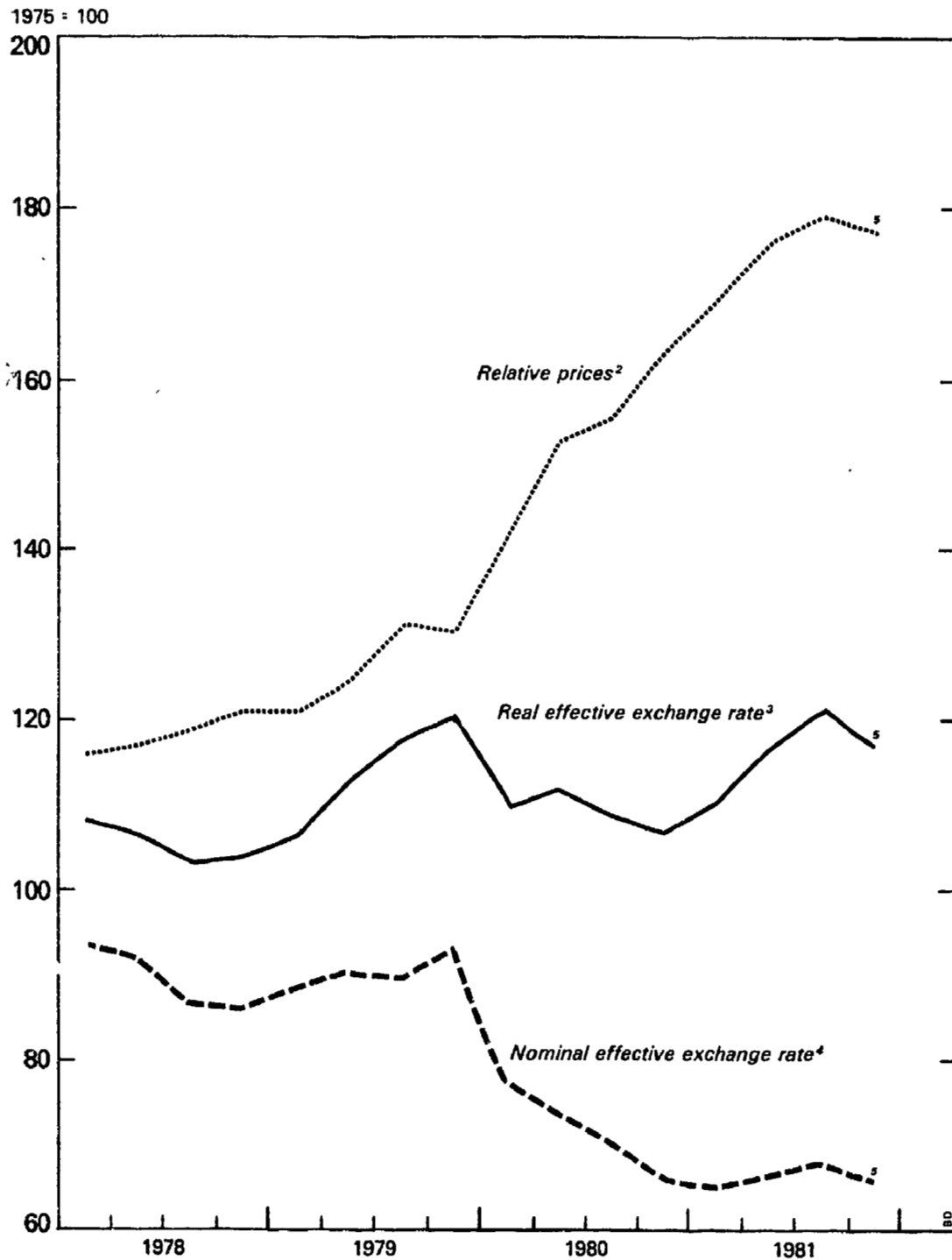
The financing requirements of 1980-81 raised Korea's external debt from 31 per cent of GNP in 1979 to 48 per cent in 1981; during this period, the debt-service ratio rose from 15 per cent to 20 per cent. Gross international reserves increased in 1980-81 by US\$1.2 billion, but in terms of coverage of imports of goods and services, they declined slightly. The exchange and trade system, which was not significantly changed in 1980 when the balance of payments pressures were particularly heavy, was liberalized further in 1981.

## 2. Exchange rate developments

For a period of five years until January 12, 1980 the won had been pegged to the U.S. dollar at a fixed rate of W 484 per U.S. dollar. During 1977-79, the nominal (trade-weighted) effective exchange rate had depreciated moderately, but since prices and unit labor costs in Korea had been rising much faster than in trading partners, particularly in 1978-79, there had been a gradual loss in external competitiveness, leading to a weakening export performance in the late 1970s. In order to reverse this trend, the won was depreciated by 16.6 per cent on January 12, 1980. At the end of February 1980, a flexible exchange rate regime was adopted whereby the exchange rate of the won was determined on the basis of a currency basket, with other factors also taken into account. Under this arrangement, the won was permitted to move further downward during the course of the year, bringing the total effective depreciation to about 30 per cent in nominal terms between the fourth quarter of 1979 and the fourth quarter of 1980 (Chart 10); in real terms, the depreciation was 11 per cent, approximately restoring Korea's external competitiveness to its 1976-77 level (Table 21 and Appendix Table XIX).

## CHART 10

## KOREA

INDICES OF EXCHANGE RATES<sup>1</sup> AND  
RELATIVE PRICES, 1978-81

Sources: IMF, *International Financial Statistics*, and staff estimates.

<sup>1</sup>Quarterly averages; an increase in the index indicates an appreciation of the won.

<sup>2</sup>Ratio of Korean wholesale prices to wholesale prices of trading partners

<sup>3</sup>Nominal effective exchange rate adjusted for relative rates of inflation (WPI).

<sup>4</sup>Trade weighted.

<sup>5</sup>Preliminary.

Table 21. Korea: Indices of Exchange Rates 1/  
and Relative Prices, 1975-81

(1975 = 100)

Period Averages	Nominal Effective Exchange Rate <u>2/</u> (1)	Relative Prices <u>3/</u> (2)	Real Effective Exchange Rate <u>4/</u> (1) x (2)
1975	100.0	100.0	100.0
1976	101.7	106.0	107.8
1977	98.6	110.9	108.0
1978	89.4	117.9	105.4
1979	90.2	126.4	114.2
1980	71.5	153.1	109.2
1981	66.1	175.6	116.1
1978 I	93.3	115.6	107.9
II	91.4	116.5	106.5
III	86.9	118.7	103.2
IV	86.0	120.7	103.8
1979 I	88.4	120.6	106.6
II	90.2	124.5	112.3
III	89.7	131.0	117.5
IV	92.4	130.1	120.2
1980 I	77.4	141.7	109.8
II	73.3	152.5	111.7
III	69.9	155.0	108.4
IV	65.5	163.1	106.8
1981 I	64.9	169.6	110.1
II	66.1	176.0	116.4
III	67.6	179.1	121.1
IV	65.7	178.0 <u>5/</u>	116.9 <u>5/</u>

Sources: IMF, International Financial Statistics; and staff estimates.

1/ An increase in the index indicates an appreciation of the won.

2/ Trade-weighted.

3/ Ratio of Korean wholesale prices to wholesale prices of trading partners.

4/ Nominal effective exchange rate adjusted for relative price changes.

5/ Preliminary.

During the first nine months of 1981, the won was allowed to move upward with the U.S. dollar, leading to an effective appreciation of 3 per cent in the nominal value of the won between the fourth quarter of 1980 and the third quarter of 1981. As relative prices were also moving against Korea, the won appreciated in real terms during this period by some 13 per cent. In November, partly in line with the weakening of the U.S. dollar, the won depreciated somewhat in nominal terms, so that in the fourth quarter of 1981, the index of the nominal effective exchange rate for the won was approximately the same as a year earlier. Nevertheless, since the rate of inflation in Korea, while decelerating sharply in the second half of 1981, remained higher than in trading partners, the real effective exchange rate for the won in the last quarter of 1981 was still almost 10 per cent higher than a year earlier.

### 3. Developments in exports

#### a. Overall trends

The weakening trend in exports of the late 1970s was reversed in 1980. The volume of exports, which had actually declined during 1979, resumed an upward trend in the first quarter of 1980, and continued to grow strongly through the third quarter of 1981 (Table 22). The volume of exports rose by 11 per cent in 1980 and 19 per cent in 1981, compared with an average volume growth of 11 per cent per year during 1977-79. In value terms, exports increased by 16 per cent and 21 per cent in 1980 and 1981, respectively. This recovery in exports occurred in spite of continuing weak external market conditions; foreign market growth for Korea's exports (approximated by the weighted average of the growth in the non-oil import volume of Korea's major export markets) rose by less than 2 per cent in 1980 and about 5 per cent in 1981, compared with an average market growth rate of over 7 per cent per year in the late 1970s. The favorable export performance thus primarily reflected substantial gains in Korea's market shares, owing to the improved competitiveness achieved in 1980 and more vigorous efforts to diversify markets. In the second half of 1981, however, there was a significant weakening of exports, with the arrivals of letters of credit falling by 5 per cent in real terms over the second half of 1980; following the usual lags, this led to a weakening of actual exports in the last quarter of 1981.

The policy emphasis on investment in heavy and chemical industries of the late 1970s resulted in some changes in the commodity structure of Korean exports in 1980-81. Ships emerged as an important export item and exports of metal and metal products also rose rapidly, but the export performance of chemical products was mixed. On the whole, however, light manufactures retained their dominant position. The share of textiles and clothing, the largest group of exports, which amounted to about 32 per cent in the mid-1970s was still 29 per cent in 1980-81 (Appendix Table XX). Similarly, the share of footwear exports remained at around 5 per cent, and exports of electrical machinery and electronics accounted for an average of 10 per cent of total exports in 1980-81, the same share as in the mid- and late-1970s. On the other hand, the relative importance of exports of wood and wood products fell, partly because of sluggish demand.

Table 22. Korea: Exports and Export Orders, 1978-82

(In per cent change from preceding year)

		Exports		Export Orders 1/	
		Value	Volume	Value	Volume
1978	I	28.3	19.2	19.3	12.6
	II	24.5	14.5	18.8	5.8
	III	26.2	12.7	30.0	11.3
	IV	<u>27.2</u>	<u>16.5</u>	<u>19.3</u>	<u>-1.9</u>
	Year	26.5	14.2	21.7	6.6
1979	I	17.4	-3.4	24.3	-0.6
	II	19.7	-1.4	12.9	-6.2
	III	24.4	3.2	5.1	-8.7
	IV	<u>13.1</u>	<u>-0.7</u>	<u>-1.3</u>	<u>-10.8</u>
	Year	18.5	-0.9	9.8	-6.5
1980	I	21.6	12.0	14.7	8.5
	II	14.3	6.5	9.7	4.9
	III	12.0	6.6	25.6	20.6
	IV	<u>18.1</u>	<u>16.8</u>	<u>49.3</u>	<u>43.2</u>
	Year	16.3	10.6	24.4	18.8
1981	I	22.9	20.5	24.8	18.0
	II	30.9	25.4	30.0	22.0
	III	23.5	22.0	2.1	-3.9
	IV	<u>10.5</u>	<u>8.4</u>	<u>-3.1</u>	<u>-6.2</u>
	Year	21.1	18.7	12.4	6.7
1982	January	5.5	...	-7.0	...
	February	3.7	...	-9.9	...

Sources: Bank of Korea, Economic Statistics Yearbook (various issues); data provided by the Korean authorities; and staff estimates.

1/ Arrivals of export letters of credit.



In 1980, over half of the growth in exports stemmed from the rapid expansion in selected heavy machinery and chemical exports. Exports of metal and metal products (accounting for 14 per cent of total exports) rose by 43 per cent in value terms, ship exports by 20 per cent, and chemicals by 47 per cent (Appendix Tables XX and XXI). Below average performances were recorded for some of the traditional mainstays of light manufactures, such as textiles and clothing, wood and wood products, and electrical machinery and electronics (including television sets, radios, and telecommunication equipment). This group of exports--demand for which is relatively price sensitive--was still suffering from the cumulative effect of past losses of competitiveness, including low productivity because of insufficient investment to upgrade technology and equipment. External demand for these products was also exceptionally weak and partly restricted by protectionist measures. Export growth in 1981 was more broadly based, with considerable improvements in light manufactures. Led by strong performance in textiles and clothing, light manufactures exports rose by almost 20 per cent. Heavy manufactures also grew strongly, with ship exports more than doubling. The weak performers were exports of electrical machinery, electronics, and chemicals.

Efforts to diversify markets were successful in 1980-81 as evidenced by the marked shift in the directional pattern of exports. The share of exports to the main industrial countries, which had already fallen from 80 per cent in the early 1970s to about 65 per cent in the late 1970s, dropped further to well below 60 per cent in 1981 (Table 23). With the share of exports to oil-producing countries also declining, the share of a group of over 150 mainly developing countries rose from 25 per cent in the late 1970s to about 35 per cent in 1981. The decline in the share of the traditional markets in the industrial countries partly reflected a slowdown in demand and the effect of protectionist measures; exports to oil-producing countries, mainly associated with the expanding construction activity of Korean firms in the Middle East and the associated supply of materials and equipment, have recently been adversely affected by import substitution efforts in host countries.

Korea's trade with the United States continued to show a small deficit in 1980-81, while the traditionally large deficit with Japan persisted (Table 24). As a result of the increases in oil prices during 1979-80, the trade deficit with the oil-producing countries increased sharply, averaging about US\$4 billion in 1980-81. However, the trade surplus with other countries, which had shrunk in 1979, widened substantially in 1980-81, and the global trade deficit also narrowed during this period.

#### **b. Trade measures affecting exports**

Currently, 148 items of Korean exports (mainly labor-intensive, light manufactures, equivalent to about 29 per cent of total exports) are subject to protectionist measures in major foreign markets. Most of these measures were introduced in the mid to late 1970s and were a factor contributing to the deterioration in export performance in the late 1970s; they also spurred export diversification into new areas, such as

Table 23. Korea: Direction of Exports, 1971 and 1978-81

(In per cent of total exports)

	1971	1978	1979	1980	1981 Jan.- Nov.
United States	49.8	31.9	29.1	26.3	26.3
Japan	24.6	20.7	22.3	17.4	16.2
Saudi Arabia	--	5.6	4.7	5.4	5.1
Germany, Fed. Rep. of	2.9	5.2	5.6	5.0	3.8
United Kingdom	1.3	3.1	3.6	3.3	3.4
Canada	2.7	2.6	2.6	2.0	2.2
Other Asia	6.4	6.3	7.4	9.3	9.5
Other oil exporters	0.2	4.4	4.9	3.5	2.8
Other	<u>12.1</u>	<u>20.6</u>	<u>20.6</u>	<u>27.8</u>	<u>30.7</u>
Total	100.0	100.0	100.0	100.0	100.0

Source: Bank of Korea, Economic Statistics Yearbook, (various issues).

Table 24. Korea: Trade Balances with Selected  
Partner Countries, 1971 and 1978-81

(In millions of U.S. dollars)

	1971	1978	1979	1980	1980 Jan.- Nov.	1981 Jan.- Nov.
Japan	-692	-3,354	-3,304	-2,819	-2,527	-2,509
Exports	262	2,627	3,353	3,039	2,772	3,145
Imports, c.i.f.	-954	-5,981	-6,657	-5,858	-5,299	-5,654
United States	-146	1,010	-229	-283	-225	-158
Exports	532	4,058	4,374	4,607	4,150	5,114
Imports, c.i.f.	-678	-3,043	-4,603	-4,890	-4,375	-5,272
Oil producers	-173	-1,379	-2,224	-4,005	-3,271	-3,302
Exports	17	1,226	1,447	1,793	1,625	1,773
Imports, c.i.f.	-190	-2,605	-3,671	-5,798	-4,896	-5,075
Other	-315	1,462	473	2,320	1,767	2,005
Total <u>1/</u>	-1,326	-2,261	-5,284	-4,787	-4,256	-3,964

Source: Bank of Korea, Economic Statistics Yearbook (various issues).

1/ Differs from Table 1 because of partial inclusion of freight and insurance in imports.

chemicals and heavy industries. In 1980-81, three new trade barriers were introduced, but a small number of restrictions were removed or relaxed.

Trade barriers on Korean exports are currently applied by the European communities and 15 industrial countries; they affect traditional export commodities (such as marine products, textiles, footwear, and other leather goods) and new export products, such as steel and steel products, some rubber products, and electronic consumer goods (Appendix Table XXII). The measures include import and tariff quotas, voluntary export restraint agreements, special import licensing limitations, and administrative guidance. New trade barriers introduced in 1980-81 included increases by the United States in the existing tariffs on imports of canned mushrooms and porcelain in steel cookware; and the introduction by Canada of a global quota on imports of nonleather footwear. Also in 1980-81, the United States replaced the quota on specialty steel products by placing these products under administrative surveillance arrangements in January 1981 (whereby countervailing or antidumping duties could be imposed), and Finland replaced the special import licensing requirement for textiles by a bilateral quota on certain textiles. In 1981, the United States removed the restrictions on imports of handbags, citizen band receivers, and footwear.

#### 4. Imports

In 1980-81, the expansion in the value of imports decelerated markedly from the exceptionally high rates recorded in the late 1970s. The slowdown was brought about initially by a sharp cutback in import volume and was reinforced by a recent moderating trend in import prices. In 1980, the value of imports expanded by only 13 per cent, despite a 27 per cent increase in import prices following the second oil shock. In volume terms, imports fell by 13.8 per cent, with the volume of oil imports declining by about 1 per cent and that of non-oil imports falling by over 14 per cent. Several factors contributed to this decline: the tight financial policies, the restraining effect of the depreciation, the sluggishness of investment demand, the income-reducing impact of the sharp deterioration in the terms of trade, and the fall in rural incomes. With the exception of imported raw materials for export production, grains, and oil, all other broad categories of imports declined. In nominal terms, capital goods imports fell especially sharply (21 per cent), followed by consumer goods (15 per cent) and raw materials for domestic production (6 per cent) (Appendix Table XXIII). In volume terms, the decline in these imports was even more pronounced as import prices for these categories increased by between 9 per cent and 23 per cent. Imports of raw materials for export production rose by 13 per cent in value; however, this increase was considerably less than the expansion in exports, reflecting a drawdown in inventories, as well as more efficient use of imported raw materials following the depreciation.

The growth in the value of imports slowed further to 12 per cent in 1981. Since the volume of imports rose, this slowdown was made possible by a deceleration in the increase in import prices to 5 per cent, with oil prices increasing by 15 per cent and non-oil import prices by only 2 per cent. Oil imports declined by 2 per cent in volume terms as a result of strong conservation and oil-substitution efforts. The volume of non-oil imports grew by about 6 per cent, of which about 2.5 percentage points were accounted for by the exceptional grain imports necessitated by the crop failure of 1980. The resumption of growth in other imports reflected the recovery of domestic demand and the strong growth (21 per cent in value) in imported raw materials for export production. Consumer goods rose by 15 per cent in value, but imports of raw materials for domestic production increased by only 9 per cent, reflecting weak investment demand.

The commodity structure of Korea's imports was significantly affected by the increases in oil prices and the sharp curtailment of most non-oil imports. Despite the decline in oil consumption, the price hikes raised the share of petroleum imports--mainly crude oil--from an average of 15 per cent in 1977-78 to an average of 25 per cent in 1980-81; by comparison, the share in the early 1970s averaged 8 per cent. The increase in the share of oil was approximately matched by a drop in the share of capital goods imports, from an average of 30 per cent in the late 1970s to 20 per cent in 1980-81. The share of raw materials for export production increased to about 23 per cent, but remained below the average of the 1970s, partly because of increased import substitution.

The changes in the commodity structure of imports also affected the directional pattern of imports. While Japan and the United States remained the principal suppliers, their relative importance declined significantly over the years, whereas the relative share of oil producers increased. Japan's share fell to 25 per cent in 1981 from 40 per cent in 1978--a trend that partly reflects the recent sharp decline in imports of capital goods. With increasing diversification of sources of imports, the share of countries other than the principal industrial and oil-producing countries increased steadily to 22 per cent in 1981, about double their share in the early 1970s (Appendix Table XXIV).

## 5. Services and transfers

The services account deteriorated substantially in 1980-81, with the deficit rising from about US\$200 million in 1979 to US\$1.4 billion in 1980 and further to US\$2.0 billion in 1981. This deterioration is in sharp contrast to the 1970s when the balance on the services account fluctuated within a relatively narrow range of US\$250 million surplus or deficit. The recent increases in the deficits were caused primarily by larger investment income payments, mainly interest payments. Another contributing factor was the widening deficit in the transportation account, a consequence of the oil price increases. Net receipts from overseas construction, which include workers' remittances, have been by far the single largest net inflow item; they stagnated in 1980, but

recovered in 1981. Changes in the other components of the services account were relatively minor. Net transfers remained stable at around US\$500 million in the last few years.

Investment income payments consist almost entirely of interest payments on foreign debt, which now constitute over 40 per cent of total service payments. Investment income payments grew rapidly from just over US\$1.5 billion in 1979 to US\$2.7 billion in 1980 and US\$3.7 billion in 1981. In fact, these increases exceeded the increases in the deficits of the services account during this period. The larger interest payments were due both to rising external debt and higher international interest rates, combined with an increase in the share of debt bearing variable interest rates. The stock of external debt grew by 55 per cent (US\$12 billion) in 1980-81, and the average three-month Euro-dollar rate (LIBOR) rose from 12 per cent in 1979 to 16.5 per cent in 1981.<sup>1/</sup> The share of debt bearing variable interest rates has also risen, reflecting increased reliance on short-term debt and on medium-to long-term loans on commercial terms. Investment income receipts comprise mainly interest earned on foreign assets of the monetary authorities and financial institutions. These receipts rose in 1980-81 in line with higher world interest rates.

The deficit on the transportation account doubled from about US\$400 million in 1979 to over US\$800 million in 1981. This resulted mainly from higher charterage and port charges. Net earnings from overseas construction activity <sup>2/</sup>, of which a large component is remittances of Korean workers abroad, stagnated in 1980, but increased by almost 30 per cent in 1981. The temporary stagnation in 1980 was related mainly to the political unrest in the Middle East. The favorable outcome in 1981 reflects the substantial increases in the number of Korean workers abroad (23 per cent) and the value of work completed (50 per cent).

## 6. Capital movements

Medium- and long-term capital inflows consist mainly of borrowings by the private and public sectors and, more recently, by nonbank financial institutions;<sup>3/</sup> direct and portfolio investment inflows are relatively small. Capital outflows consist mainly of loan repayments. After rising rapidly in the late 1970s, medium- and long-term net capital inflows dropped by almost one third to US\$1.9 billion in 1980, but recovered to US\$2.8 billion in 1981. These movements reflect fluctuations in gross borrowings by nonbank financial institutions; in contrast, borrowings by the private and public sectors followed a relatively stable

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<sup>1/</sup> For details of developments on interest payments, see subsection 7 below.

<sup>2/</sup> For details on Korea's overseas construction activity, see section II, 2 above.

<sup>3/</sup> Mainly Korea Development Bank (KDB), Export Import Bank of Korea (KEXIM), Korea Long-Term Credit Bank, and merchant banks.

course during this period. Borrowings by nonbank financial institutions, which rose sharply to US\$1.2 billion in 1979, fell to US\$0.2 billion in 1980 and returned to US\$1 billion in 1981. The decline in 1980 was related to the civil disturbances early in the year which led to a reconsideration of the long-term borrowing plans for the second half of 1980. Rather than taking the risk of having to accept significantly stiffer borrowing terms on long-term bank loans, the authorities decided to postpone some of the planned borrowings. Borrowing by the private sector also declined in 1980 because of the depressed investment activity, but borrowing by the public sector increased by about US\$0.4 billion to US\$1.5 billion, owing to strong public sector investment activity. In 1981, the nonbank financial institutions resumed their medium- and long-term borrowings in international capital markets. Public sector borrowing also rose somewhat, but private sector borrowing continued to decline as investment remained sluggish and interest rates continued to rise.

The widening deficit of the current account in 1980, combined with the fall in net inflows of medium- and long-term capital, led to a large increase in short-term borrowing in that year (from US\$0.8 billion in 1979 to US\$1.9 billion in 1980). This was facilitated by a relaxation of regulations in 1979, including an extension of the settlement period for imports on a deferred payment basis, and was further encouraged by measures taken in 1980 to increase the use of import bills and other short-term trade credits. Moreover, the oil price increase led to a larger inflow of trade credits for oil imports. In 1981, the short-term capital account swung into a small net outflow of US\$70 million. This turnaround, occurring mostly in the last quarter of the year, was brought about by a decrease in trade credits to finance trade in general, and oil imports in particular; there was also an increase in export credits extended by Korea. A narrowing of the differential in the cost of borrowing between the domestic and external markets, including exchange rate expectations, may also have contributed to this turnaround.

The overall balance of payments, defined to include as financing items all external borrowings of the banking system, recorded deficits of US\$1.9 billion in 1980 and US\$2.3 billion in 1981, compared with a deficit of under US\$1 billion in 1979. Bank borrowing constituted the bulk of the financing; net use of Fund credit amounted to 22 per cent and 24 per cent of the total financing requirement in 1980 and 1981, respectively. In line with the scaling down of medium- and long-term borrowing, the short-term foreign liabilities of commercial banks (including the Korean Exchange Bank (KEB), an official institution) and branches of foreign banks were built up by US\$2 billion in 1980. These were in the form of an increase in the refinancing of trade credits (US\$0.8 billion) and a larger use by branches of foreign banks of swap facilities to finance domestic lending (US\$1.1 billion); the swap facilities with Bank of Korea were enlarged in early 1980 to facilitate inflows of foreign currency loans. In 1981, because of the turnaround in short-term capital flows, the overall payments deficit widened slightly. However, in contrast to 1980, medium-term borrowings by commercial banks, including the KEB, provided a greater share of the financing. Banks'

short-term borrowings increased by US\$1.2 billion, almost all of which stemmed from the increase in refinancing of trade credits; borrowing under the swap facilities increased only slightly as the swap limits were not raised in 1981.

Gross official reserves rose by about US\$860 million in 1980 and further by US\$326 million in 1981 (Table 25). In terms of coverage of imports of goods and services, gross reserves declined from 2.8 months at end-1980 to 2.5 months at end-1981; the coverage ratio had averaged 3 months in the late 1970s.

## 7. External debt

The widening current account deficits in recent years and the consequent large financing requirements have led to sharp increases in Korea's external debt.<sup>1/</sup> Between 1978 and 1981, total outstanding (disbursed) external debt more than doubled to US\$32.8 billion (Table 26). In real terms, using export unit prices as deflator, the stock of debt increased by 76 per cent during this period (Table 27); using import unit prices as deflator, the real stock of debt rose by 36 per cent. During this period, the ratio of external debt to GNP rose from 31 per cent to 48 per cent; and the ratio of debt to exports of goods and services grew from 87 per cent to 110 per cent, despite the rapid increase in exports in 1980-81. Total debt service (including interest payments on short-term debt) rose from US\$2.3 billion in 1978 to US\$4.2 billion in 1980 and US\$5.5 billion in 1981 (Table 28). With debt-service payments outpacing exports, the debt service ratio rose from 13 per cent in 1978 to 18 per cent in 1980, and 20 per cent in 1981. In 1980, sharply rising international interest rates were the most important contributing factor, accounting for an estimated US\$0.7 billion of the US\$1.3 billion increase in interest payments. In 1981, interest payments increased further by US\$1 billion, of which US\$0.4 billion was due to an increase in interest rates.

The maturity structure of debt has weakened in recent years as a result of heavy recourse, especially in 1980, to short-term borrowings. The share of short-term debt in total debt rose from 28 per cent in 1978 to a peak of 40 per cent in 1980, declining to 38 per cent in 1981 (Table 26). Short-term trade credits increased from 20 per cent of imports in 1978 to 36 per cent in 1981. The weakening of the maturity structure has been accompanied by an increase in interest rates. The average interest rate on new debt commitments, which had fluctuated only slightly around 8 per cent in the late 1970s, increased to 10.5 per cent in 1979, 11.4 per cent in 1980 (Appendix Table XXV), and is estimated

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<sup>1/</sup> External debt is defined in this report to cover private and public long- and short-term debt, including purchases from the Fund. Prior approval by the Ministry of Finance is required for the contracting of foreign debt by both the public and private sectors. Financial institutions may contract loans without prior approval, but prior consultation with the Ministry of Finance is required for loans in excess of US\$100 million.



Table 25. Korea: International Reserves, 1977-81

(In millions of U.S. dollars)

End of Period	1977	1978	1979	1980	1981
Monetary authorities	2,973	2,975	2,991	2,956	2,711
Gold	(6)	(30)	(31)	(31)	(31)
SDRs	(12)	(15)	(25)	(13)	(64)
Reserve position in the Fund	(--)	(14)	(25)	(--)	(--)
Foreign exchange	(2,955)	(2,736)	(2,910)	(2,912)	(2,616)
Commercial banks	<u>1,333</u>	<u>2,143</u>	<u>2,719</u>	<u>3,616</u>	<u>4,186</u>
Gross international reserves	4,306	4,938	5,710	6,571	6,897
Gross international reserves in mil- lions of SDRs <u>1/</u>	3,545	3,790	4,334	5,152	5,925
Gross international reserves in months of imports of goods and services	3.9	3.2	2.8	2.8	2.5

Sources: Data provided by the Korean authorities; IMF, International Financial Statistics; and staff estimates.

1/ Converted at end-of-period exchange rate.

Table 26. Korea: Outstanding External Debt by  
Maturity and Borrower, 1977-81 1/

(In millions of U.S. dollars)

	1977	1978	1979	1980	Est. 1981
Debt with maturity of more than three years	8,508	10,582	13,658	15,129	18,544
Financial institutions	(763)	(838)	(2,128)	(2,302)	(4,181)
Public sector	(3,886)	(4,642)	(5,758)	(6,530)	(7,849)
Private sector	(3,859)	(5,102)	(5,772)	(6,298)	(6,514)
Trade credits with maturities of one to three years	350	486	563	617	621
Short-term debt of the private sector <u>2/</u>	2,840	1,660	2,510	4,450	4,690
Short-term debt of commercial banks	1,887	2,798	4,352	6,453	7,627
Swaps	(792)	(1,262)	(1,951)	(3,036)	(3,269)
Refinancing	(695)	(1,216)	(2,028)	(2,770)	(3,892)
Deposits	(326)	(128)	(143)	(200)	(254)
Other	(74)	(192)	(230)	(447)	(212)
Use of Fund credit	<u>341</u>	<u>263</u>	<u>138</u>	<u>713</u>	<u>1,341</u>
Total	13,926	15,789	21,221	27,362	32,823
<u>Memorandum item:</u>					
Undisbursed loans with maturity of more than three years	4,101	5,616	4,566	7,678	6,844

Source: Data provided by the Korean authorities.

1/ Excludes liabilities of merchant banks.

2/ Estimates.

Table 27. Korea: External Debt Indicators, 1977-81

	1977	1978	1979	1980	1981
<u>(In billions of U.S. dollars)</u>					
Nominal stock of debt, end of period	13.9	15.8	21.2	27.4	32.8
Stock of debt deflated by					
Export unit prices	13.9	13.5	15.9	20.3	23.8
Import unit prices	13.9	14.1	14.6	15.8	19.2
<u>(In per cent)</u>					
Ratio of debt <u>1/</u> to GNP	33.6	31.4	30.8	42.1	47.5
Ratio of gross international reserves to debt	30.9	32.0	26.9	24.0	21.0
Ratio of debt <u>1/</u> to exports of goods and services	90.0	86.6	94.7	107.6	109.8
Ratio of stock of short-term trade credits <u>2/</u> to merchandise imports	33.6	19.8	23.8	33.4	35.6

Sources: Data provided by the Korean authorities; and staff calculations.

1/ Average stock during the year.

2/ Short-term debt of the private sector and refinancing by banks.

Table 28. Korea: Debt Service 1/, 1977-81

(In millions of U.S. dollars)

	1977	1978	1979	1980	1981
Interest <u>2/</u>	650	931	1,354	2,609	3,601
Medium- and long-term debt	(528)	(727)	(962)	(1,420)	(1,791)
Other	(132)	(204)	(392)	(1,189)	(1,810)
Amortization <u>3/</u>	829	1,332	1,617	1,541	1,861
Financial institutions	(113)	(224)	(132)	(127)	(204)
Public sector	(130)	(224)	(261)	(257)	(309)
Private sector	(436)	(687)	(952)	(827)	(955)
Medium-term trade credits	(150)	(197)	(272)	(329)	(373)
Total debt service	1,479	2,263	2,971	4,150	5,462
Debt service ratio (in per cent) <u>4/</u>	11.3	13.2	15.2	18.4	19.9
Interest payments ratio <u>5/</u>	5.0	5.4	6.9	11.6	13.1
<u>Memorandum items:</u>					
Exports of goods and services	13,074	17,161	19,531	22,577	27,417

Source: Data provided by the Korean authorities.

1/ Includes IMF.

2/ Excludes interests on short- and medium-term trade credit of the private sector which are included in amortization, and interest payments on debt of merchant banks.

3/ Excludes amortization of debt with maturities of less than one year.

4/ Ratio of total debt service to exports of goods and services.

5/ Ratio of interest payments to exports of goods and services.

to have increased to 12.5 per cent in 1981. This trend reflects the sharp increases in interest rates in world capital markets and Korea's rising share of debt carrying variable interest rates, which made interest payments more sensitive to short-term variations in international interest rates.

The increase in the share of debt with variable interest rates from an estimated 50 per cent in 1978 to over 60 per cent in 1981 resulted from increased medium-term borrowings on commercial terms (Appendix Table XXVI), as well as rising short-term debt. From end-1978 to end-1981, the stock of disbursed debt with maturities of more than three years increased by 75 per cent, or about US\$8 billion, and about two thirds of this increase was obtained on commercial terms: US\$3.5 billion was on account of Korean financial institutions and US\$1.5 billion was by the private sector. Foreign financial institutions provided the bulk of the increase in medium-term loans, mostly in the form of syndicated Euro-currency loans (Appendix Table XXVII). Loans from the traditionally concessional sources, i.e., multilateral and bilateral official lenders, have declined in importance. The increased reliance on international capital markets has been facilitated by Korea's ability to maintain access to capital markets at relatively favorable terms.<sup>1/</sup>

## 8. Exchange and trade system <sup>2/</sup>

### a. Exchange arrangement

The exchange rate structure around the basic rate of W 484 per U.S. dollar remained unchanged between December 1974 and January 12, 1980, when a new basic exchange rate of W 580 per U.S. dollar was established. Effective February 27, 1980, a new exchange rate regime was introduced whereby the won is linked to a currency basket but other factors are also taken into account. The Bank of Korea establishes daily the exchange rate of the won in terms of the U.S. dollar, which is the intervention currency. On December 31, 1981, the buying and selling rates of the Bank of Korea for the U.S. dollar were W 698.70 and W 702.30, respectively, per US\$1, and the telegraphic transfer buying and selling rates of the foreign exchange banks were W 698.30 and W 702.70, respectively, per US\$1. The buying and selling rates for certain other currencies are posted daily by foreign exchange banks on the basis of buying and selling rates for the U.S. dollar in markets abroad. There are no taxes or subsidies on purchases or sales of foreign exchange.

With the introduction of the new exchange rate regime, the foreign exchange certificates were abolished; foreign exchange certificates had been issued by foreign exchange banks against all foreign exchange earnings in prescribed currencies surrendered by residents.

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<sup>1/</sup> The loans (and their terms) secured by financial institutions in the past few years are detailed in Appendix Tables XXVIII to XXX.

<sup>2/</sup> For further details, see IMF, Annual Report on Exchange Arrangements and Exchange Restrictions, 1981.

b. Exports

Korea maintains an elaborate structure of government-supported export financing and export credit insurance programs to promote exports. Short-term export financing is channeled through the deposit money banks at preferential interest rates. In 1981, the interest rate applied by banks on export loans was 12 per cent, compared with an average prime lending rate of 18.5 per cent. The loan period may not, in principle, exceed 90 days. Loans for exports are extended to those who produce or process export goods, as well as exporters themselves. These loans are subdivided by use into various types: loans for the production and accumulation of export goods, loans for the domestic purchase of export goods including purchase for stockpiling, loans for the import of raw materials for export use including import for stockpiling, loans for the domestic purchase of raw materials for export use including purchase for stockpiling, loans for supplies of services, and loans to prepare agricultural and marine products for export. At the beginning of 1982, the maximum amount of loans ranged between 73 and 88 per cent of the value of exports depending on the type of loans, compared with between 72 per cent to 83 per cent in 1981.

Medium- and long-term export financing is provided by the Korea Export-Import Bank (KEXIM) established in 1976. Acting as an agent for the Government, KEXIM also provides cover against losses in export finance and overseas investments. KEXIM's financing consists mainly of preferential loans to Korean suppliers with maturities extending from 6 months to 10 years and sometimes even to 20 years. The Bank is also authorized to extend credit for a large variety of interrelated services. The establishment of KEXIM was prompted by the growing importance of heavy and chemical industrial products in Korea's exports, which generally require larger volumes of credit and longer maturities than the exports of consumer and light capital goods. So far, KEXIM's credits have been concentrated in the ship export sector, but the financing of the construction of plants abroad is expected to assume increasing importance. Currently, KEXIM applies an 8 per cent interest rate on its domestic currency loans; a commitment fee of 1/4 of 1 percentage point is charged on undisbursed amounts. KEXIM-supported contracts require 15 to 20 per cent down payment, with KEXIM financing up to 80 per cent of the credit. The exporter must finance the balance in the private market at commercial rates. As a result of the mixture of private export credits at market interest rates and financing by KEXIM at preferential rates, the blended interest rate on the full value of export credit transactions supported by KEXIM is estimated to be about 2 percentage points higher than the rate of interest applied on its domestic currency loans. KEXIM also extends foreign currency loans on which it applies the LIBOR rate, plus a spread ranging between 1 to 1.25 percentage points. Despite its rapid growth in recent years, KEXIM's financing still supports only a small fraction of Korean exports, mainly because a large proportion of Korea's exports is sold on a cash or short-term credit basis.

Export subsidies other than the interest subsidy were practically eliminated in 1980. These subsidies had been reduced over time and by 1978 were limited to an exemption of exports of industrial equipment goods from certain direct taxes and a railroad allowance in the form of a 20 per cent discount for exports of minerals. The effective rate of these subsidies was practically nil in 1979-80.

c. Imports

All imports require licenses; applications for imports of commodities that are not on the list of restricted items are automatically approved, subject to the general limits set by the Foreign Exchange Supply and Demand Plan. In May 1978, Korea initiated a major import liberalization program as a result of which the list of prohibited import goods was abolished and the list of imports with automatic approval expanded. The share of imports on the automatic approval list, out of all basic items in the Customs Cooperation Council Nomenclature (CCCN), rose from 54.0 per cent in 1978 to 68.5 per cent in 1979 and to 68.6 per cent in 1980. In May 1981, the commodity classification system was changed from the CCCN four-digit system to the CCCN eight-digit system. On the basis of the new classification 396 commodity categories were transferred from the restricted to the automatic approval list, raising the share of imports on the automatic approval list and of all basic items on the list from 69.4 per cent to 74.7 per cent. Some liberalized items remained subject to surveillance, so that restrictions could be reintroduced if domestic production were impaired. The majority of the liberalized goods were raw materials and capital goods, but increasingly consumer nondurables and newly competitive exportables are being included. The main objectives of the import liberalization program are to improve the structure of industry by removing price distortions and enhancing competition, to stabilize domestic prices by increasing supplies, and to facilitate trade negotiations with countries restricting imports from Korea. Tariff quotas were introduced in January 1981 for 64 items, including foodstuffs, chemicals, pulp, and steel products (the tariff rate for the quotas was reduced from an average 19.5 per cent to 9.2 per cent). In January 1982, import tariffs were reduced for 311 items and raised for 29 items, lowering the import-weighted average tariff rate from 12.8 to 12.4 per cent.

d. Foreign Exchange Demand and Supply Plan

The Foreign Exchange Demand and Supply Plan sets overall ceilings on the amount of foreign exchange that may be used. The Plan has been made more flexible in recent years. Under the present system, relatively high ceilings are established for broad categories of payments and the Minister of Finance has delegated to the Bank of Korea the authority to exceed these ceilings by 10 per cent or to effect shifts of funds between payment categories up to a maximum of 10 per cent of these ceilings.

e. Advance import deposit requirements

The system of advance import deposit requirements was abolished in February 1982. Over the past few years, the system had been greatly simplified and the rates substantially reduced: deposit requirements for general imports, which had ranged between 5 and 200 per cent, were abolished in 1978; then, deposits were confined to imports on a deferred payment basis, and the rates were progressively reduced from 10 to 40 per cent in 1978 to 5 to 20 per cent in 1980; finally, the deposit requirement was abolished in February 1982.

f. Travel

The general basic travel allowance of US\$3,000 for each trip and the basic travel allowance of US\$1,000 per trip for persons employed abroad remained unchanged.

g. Capital

A major modification of the foreign exchange regulations took place in 1979, enabling Korean banks to handle all foreign exchange transactions not specifically prohibited. The objectives of this measure were to open up the foreign exchange market, encourage offshore banking activities, simplify procedures, and decentralize foreign exchange operations. Further simplification and decentralization measures were introduced in October 1980.

All restrictions on foreign currency loans from and to abroad were lifted in January 1979 and all residents were permitted to hold foreign currency deposit accounts. Offshore banking activities and forward exchange transactions in currencies other than won were permitted. In October 1980, forward transactions for foreign loans and interest payments and forward transactions in pound sterling, deutsche mark, and Japanese yen were also permitted. Restrictions on the holding of foreign stocks or securities by foreign exchange banks were removed in January 1979. Authorization continues to be required for borrowing abroad of more than US\$200,000 with maturities in excess of three years.

Limitations on import credits for major raw materials were eliminated in 1980, the number of goods permitted to be imported on a deferred payment basis was expanded (in terms of the share of these goods in total imports), and the minimum import amount on a deferred payment basis was reduced from US\$100,000 per item to US\$50,000 per item. Furthermore, the settlement period for import with deferred payment was extended from 120 to 180 days. In February 1982, the system of imports on a deferred payment basis was changed from a positive to a negative list. Items subject to tariff rates below 20 per cent are now permitted to be imported on a deferred payment basis.

The limits on swaps between foreign bank branches in Korea and the Bank of Korea--an important source of domestic currency lending by foreign bank branches--were raised in 1980 and early 1982. The scope of the use



of funds received under these swaps had in previous years been extended by including export financing and the purchase of Monetary Stabilization Bonds; permitting foreign bank branches to make loans to all enterprises with foreign investment; no longer restricting foreign bank branches to providing funds only to enterprises with the same national origin as the bank; and permitting banks to provide loans to up to 100 per cent of the foreign investment. The scope was further expanded in 1982 by eliminating the limit on lending to foreign-invested enterprises.

In July 1981, a new set of guidelines was announced to promote foreign direct investment: (1) the range of projects permissible for foreign investment was expanded from 427 to 527 types of industries; (2) the list of projects in which 100 per cent and 50 per cent foreign participation is permissible was extended; (3) the regulation requiring a minimum of two years before the repatriation of capital was abolished; and (4) the list of eligible Foreign Trust Fund was expanded.

#### h. Recent changes in the exchange and trade system

Changes in the exchange and trade system since the last Article IV consultation are as follows:

##### Changes during 1981

January 5: Tariff quotas were introduced for the period up to June 30, on 64 items of imports including foodstuffs, chemicals, pulp, and steel products. The tariff rate for the quotas was reduced from an average of 19.5 per cent to 9.2 per cent.

May 30: The commodity classification system was changed from the CCCN four-digit system to the CCCN eight-digit system. On the basis of the new classification, 396 commodity categories were transferred from the restricted to the automatic approval list, raising the share of imports on the automatic approval list out of all basic items in the CCCN from 69.4 per cent to 74.7 per cent.

June 20: The maximum emigrant remittance was established at US\$100,000 for each household; authorization from foreign exchange banks is required for such remittances up to US\$20,000 and authorization from the Bank of Korea is required for remittances over US\$20,000.

July 29: A new set of guidelines was announced to promote foreign direct investment. The new features included: (1) expansion of the range of projects permissible for foreign investment; (2) extension of the list of projects where 100 per cent and 50 per cent foreign participation is permissible; and (3) elimination of the regulation requiring a minimum period of two years before the repatriation of capital.

August 1: The limit on borrowing by Koreans living abroad from foreign branches of Korean banks was raised from US\$50,000 to US\$100,000.

August 1: The following changes were introduced to activate direct investment abroad: (1) the procedure was simplified, e.g., the requirement of prior approval of the Bank of Korea was abolished; and (2) approval was no longer required for retained profits up to US\$10,000.

August 1: The list of invisible transactions for which payments are automatically approved was extended.

Changes during 1982

January 1: Import tariffs were adjusted and rationalized for 340 items, with rates reduced for 311 items and increased for 29 items, lowering the import-weighted average rate to 12.4 per cent from 12.8 per cent.

February 1: The system of imports on a deferred payment basis was changed from a positive list to a negative list. Items subject to tariff rates below 20 per cent were permitted to be imported on a deferred payment basis.

February 1: The advance deposit requirement of 3 to 20 per cent for imports on a deferred payment basis was abolished.

Table I. Korea: Expenditure on Gross National Product at 1975 Constant Market Prices, 1979-81

(In billions of won)

	1979	1980				1981 <sup>1/</sup>					
		1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Year	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Year
Consumption	11,071.1	2,595.6	2,668.2	2,729.8	2,972.2	10,965.7	2,672.3	2,795.6	2,855.7	3,100.6	11,424.2
Private	(9,624.5)	(2,239.1)	(2,313.0)	(2,350.5)	(2,588.9)	(9,491.5)	(2,294.4)	(2,428.4)	(2,475.3)	(2,710.4)	(9,908.5)
Government	(1,446.6)	(356.5)	(155.2)	(379.3)	(383.3)	(1,474.2)	(377.9)	(367.2)	(380.4)	(390.1)	(1,515.7)
Gross domestic fixed capital formation	5,653.4	1,066.8	1,346.3	1,278.4	1,285.0	4,976.4	915.0	1,249.1	1,214.6	1,339.2	4,718.0
Increase in stocks	511.2	-314.4	-206.7	-321.2	526.5	-315.8	-296.7	-161.8	-222.7	884.8	203.6
Exports of goods and services	5,596.2	1,339.8	1,479.0	1,578.1	1,751.4	6,148.2	1,594.0	1,830.2	1,874.5	1,923.1	7,221.8
Imports of goods and services	7,957.5	1,775.8	1,823.0	1,834.5	1,912.9	7,346.1	1,762.9	2,132.2	2,059.2	1,973.1	7,927.4
Statistical discre- pancy	-4.9	65.4	-90.1	-34.0	-27.9	-86.6	-77.5	-31.0	-17.4	-21.8	-147.8
Net factor income from abroad	-110.4	-84.4	-145.2	-90.9	-178.6	-499.0	-129.5	-189.3	-132.8	-220.9	-672.5
Gross national product	14,759.1	2,893.0	3,228.4	3,305.8	4,415.6	13,842.8	2,914.8	3,360.5	3,512.8	5,031.9	14,820.0

Source: Bank of Korea, Monthly Statistical Bulletin.

<sup>1/</sup> Preliminary.

Table II. Korea Industrial Origin of Gross National Product at 1975 Constant Market Prices, 1979-81

(In billions of won)

	1979				1980				1981 1/			
	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Year	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Year	1st qtr.	2nd qtr.
Agriculture, forestry and fishing	2,828.6	156.1	266.6	379.2	1,405.7	2,207.5	170.4	268.2	405.1	1,871.5	2,715.2	2,715.2
Mining	173.4	37.2	48.9	41.5	44.0	171.6	36.8	53.4	46.2	46.9	183.3	183.3
Manufacturing	4,818.0	1,144.5	1,208.0	1,179.0	1,232.3	4,763.8	1,178.3	1,300.2	1,293.7	1,313.2	5,085.4	5,085.4
Social overhead capital	2,261.6	506.7	611.8	586.9	601.0	2,306.5	505.0	616.0	611.3	645.3	2,377.7	2,377.7
Construction	891.9	166.2	256.3	229.4	232.5	884.4	139.9	224.9	221.0	249.5	835.3	835.3
Electricity, gas and water	235.2	61.8	60.2	63.1	64.2	249.3	65.2	65.8	69.6	71.3	271.9	271.9
Transport, storage and communication	1,134.4	278.7	295.4	294.4	304.3	1,172.8	300.0	325.3	320.7	324.5	1,270.5	1,270.5
Other services	4,677.6	1,132.8	1,238.2	1,210.0	1,311.2	4,892.3	1,153.6	1,312.0	1,289.3	1,375.9	5,130.9	5,130.9
Wholesale and retail trade	2,661.4	599.3	669.1	630.5	714.6	2,613.5	600.8	712.2	691.9	770.9	2,775.8	2,775.8
Financial services	544.4	131.8	160.3	164.8	180.7	637.6	142.0	168.0	161.4	184.8	656.2	656.2
Public administration	430.5	110.8	111.4	111.6	113.2	447.0	112.3	115.0	115.1	111.0	453.4	453.4
and defense	1,151.8	290.9	297.4	303.1	302.8	1,194.2	298.5	316.9	320.9	309.3	1,245.6	1,245.6
Other												
Net factor income from abroad	110.4	-84.4	-145.2	-90.9	-178.6	-499.0	-174.5	-189.3	-132.8	-220.9	-672.5	-672.5
Gross national product	14,759.1	2,893.0	3,228.4	3,305.8	4,415.6	13,842.8	2,914.8	3,360.5	3,512.8	5,031.9	14,820.0	14,820.0

Source: Bank of Korea, Monthly Statistical Bulletin.

1/ Preliminary.

Table III. Korea: Seasonally Adjusted Manufacturing Production, 1978-81  
(Percentage change over preceding period)

	1978	1979	1980				1981			
			1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.
Food, beverages, and tobacco	21.0	17.7	-1.5	-2.9	1.5	--	-1.9	2.6	1.3	-3.3
Textiles, wearing apparel, and leather	17.1	5.1	3.0	5.9	-0.8	8.6	7.6	3.0	1.9	-0.7
Wood and wood products, including furniture	18.7	-4.8	-10.9	-7.0	-9.2	1.4	-27.4	0.5	14.3	-2.2
Paper and paper products, printing and publishing	16.8	13.1	4.9	0.1	3.3	4.2	9.6	-2.0	4.0	0.9
Chemicals, petroleum, coal rubber, and plastic	21.3	14.7	-0.4	-1.0	-5.4	6.4	-0.3	0.8	0.9	-2.7
Nonmetallic mineral products	15.6	10.2	-4.7	3.6	-5.3	-5.8	-0.8	-6.9	16.8	2.6
Basic metal industries	32.4	29.4	-0.8	3.2	3.3	5.1	8.0	7.1	16.2	7.8
Fabricated metal products, machinery, and equipment	41.0	11.7	-7.8	-5.3	2.6	1.2	-14.7	5.5	9.8	3.7
Total	23.8	12.1	-1.6	-0.3	-0.8	3.8	-1.9	2.4	5.4	-0.2
										10.6

Source: Economic Planning Board, Monthly Statistics of Korea.

Table IV. Korea: Credit Expansion of Deposit Money Banks by Sector, 1977-81

(Annual and quarterly changes in billions of won)

	1977	1978	1979	1980	1981			
					1st qtr.	2nd qtr.	3rd qtr.	4th qtr.
Total change	1,141.8	2,743.3	3,104.4	4,951.3	1,101.6	1,283.1	1,230.9	2,066.1
Claims on public sector	-4.7	99.5	-12.1	396.2	403.1	199.9	-40.9	366.0
Net claims on Government	-104.7	69.5	-129.1	366.2	333.1	169.9	-40.9	366.0
Claims on Government agencies	100.0	30.0	--	30.0	70.0	30.0	--	--
Claims on private sector	1,146.5	2,643.8	3,233.5	4,555.1	698.5	1,083.2	1,271.8	1,700.1
Loans with banking funds	842.6	1,728.4	2,248.5	3,027.5	695.8	957.6	1,019.3	1,382.6
Of which:								
Exports	(105.6)	(315.8)	(344.0)	(493.6)	(155.0)	(194.6)	(137.7)	(-10.8)
Housing	(65.0)	(163.5)	(245.5)	(311.8)	(74.9)	(91.4)	(137.1)	(213.1)
Agriculture and fishery	(43.0)	(40.6)	(73.5)	(104.2)	(135.4)	(160.6)	(23.6)	(-270.0)
Special loans for medium industry	(104.5)	(169.3)	(184.4)	(271.3)	(72.0)	(66.3)	(94.7)	(124.9)
Raw material for domestic use	(0.1)	(162.5)	(-116.3)	(-22.8)	(-21.8)	(0.6)	(-0.1)	(1.8)
Other	(523.6)	(876.7)	(1,517.4)	(1,869.4)	(280.3)	(444.1)	(626.3)	(1,323.6)
Other	303.9	915.4	985.0	1,521.6	2.7	125.6	252.5	317.5
Of which:								
Loans with NIF	(75.0)	(91.0)	(75.0)	(42.6)	(-13.0)	(23.9)	(18.3)	(90.0)
Foreign currency loans	(141.2)	(591.6)	(631.4)	(873.2)	(-15.0)	(-8.2)	(30.1)	(172.0)
Securities	(35.6)	(122.2)	(64.4)	(146.7)	(8.3)	(51.6)	(12.1)	(42.7)
Other 1/	(51.4)	(110.6)	(214.2)	(465.1)	(22.4)	(58.3)	(192.0)	(12.8)
								(285.5)

Sources: Data provided by the Ministry of Finance; and the Bank of Korea.

1/ Includes loans with government funds, credits to Korea Development Bank (KDB), advances to customers, and credits to EXIM Bank.

Table V. Korea: Subsidized Credits Outstanding from Deposit Money  
Banks to the Manufacturing Sector, 1977-81

(In billions of won and in per cent)

	December						October	
	1977		1978		1979		1980	
	Amount	Per cent	Amount	Per cent	Amount	Per cent	Amount	Per cent
Loans with banking funds								
Export loans	567.3	56.3	883.2	61.6	1,227.2	67.4	1,720.8	72.4
Machine industry promotion 1/	28.2	2.8	26.1	1.8	15.1	0.8	10.2	0.4
Equipment for export industries	70.9	7.0	57.0	4.0	42.7	2.3	26.2	1.1
Special equipment	36.8	3.6	35.0	2.5	30.1	1.6	22.5	0.9
Industrial rationalization	7.1	0.7	7.8	0.5	7.5	0.4	6.3	0.2
Other 2/	19.0	1.9	19.8	1.3	—	—	—	—
Total	728.7	72.3	1,028.1	71.7	1,322.6	72.5	1,786.0	75.1
Loans with government funds								
Medium industry	8.0	0.8	8.8	0.6	9.2	0.5	10.3	0.4
Foreign loan funds	75.0	7.4	108.9	7.6	130.2	7.1	174.8	7.4
Total	83.0	8.2	117.7	8.2	139.4	7.6	185.1	7.8
Loans with NIP 3/ funds	196.7	19.5	287.7	20.1	362.7	19.9	405.3	17.1
Total subsidized credits	1,008.4	100.0	1,433.5	100.0	1,824.7	100.0	2,376.4	100.0
Total subsidized credits to manufacturing as a proportion (per cent) of total loans and discounts		21.4		21.0		20.3		19.5
								19.9

Source: Bank of Korea, Monthly Economic Statistics.

1/ The Machine Industry Promotion Fund is being phased out and replaced by NIP.

2/ Comprises the rural industry and defense industry promotion funds.

3/ National Investment Fund.

Table VI. Korea: Financial Survey, 1975-81 1/

(In billions of won)

Outstanding at End of Period	1975	1976	1977	1978	1979		1980		Mar.	1981	
		December			Sept.	Dec.	Sept.	Dec.		June	Sept.
Net foreign assets	-369	24	593	172	-600	-501	-1,867	-2,354	-2,997	-3,566	-4,192
Assets	806	1,517	2,421	2,573	2,813	3,012	4,396	4,957	4,534	4,762	4,417
Liabilities	1,175	1,493	1,828	2,401	3,413	3,513	6,263	7,311	7,531	8,328	8,609
Domestic credit	5,043	6,326	8,185	11,869	15,016	16,588	21,878	24,498	26,202	28,234	30,434
Government (net)	100	-9	-215	-446	-1,189	-909	-1,302	-858	-611	-590	-801
Official entities	110	110	210	240	240	240	270	270	340	370	370
Private sector	4,833	6,225	8,190	12,075	15,965	17,256	22,909	25,086	26,473	27,454	30,865
Total liquidity	3,838	5,168	7,300	9,936	11,564	12,970	15,433	17,020	17,911	18,766	20,033
Money	1,182	1,544	2,173	2,714	3,010	3,274	3,487	3,807	3,825	3,712	3,287
Quasi-money	1,968	2,661	3,702	5,215	5,982	6,603	7,951	8,728	9,188	9,687	10,987
NBFI 2/ deposits	749	1,127	1,697	2,477	2,889	3,510	4,422	5,103	5,408	5,905	6,336
(Less inter- institution deposits)	(60)	(164)	(270)	(469)	(317)	(418)	(427)	(618)	(510)	(518)	(577)
Other items	836	1,182	1,478	2,105	2,852	3,117	4,578	5,124	5,294	5,902	6,209
Debentures issued	64	123	214	265	358	391	658	689	815	880	852
Guarantees	268	334	302	334	363	379	561	637	698	700	649
Other	504	725	962	1,506	2,131	2,347	3,359	3,798	3,781	4,322	4,708

Source: Bank of Korea, Monthly Economic Statistics.

- 1/ The Financial Survey covers the banking system and other financial institutions including the Development Institutions--the Korea Development Bank, the Korea Development Finance Company, and the Export-Import Bank of Korea--the savings institutions, the life Insurance companies, and the investment companies.
- 2/ Nonbank financial institutions.



Table VII. Korea: Subscriptions to Government-Invested Corporations, 1980-82

(In millions of won)

Corporation's Name	1980	Latest Estimate 1981	Budget Estimate 1982
1. The Korea Development Bank <u>1/</u>	100,000	--	--
2. The Small and Medium Industry Bank	30,000	50,000	30,000
3. The Citizens National Bank	--	--	5,000
4. The Korea Housing Bank	--	--	7,000
5. Government Printing and Mint Agency	850	2,000	--
6. Korea Stock Exchange	--	--	--
7. Korea Electric Corporation <u>1/</u>	45,000	151,039	20,000
8. Dai Han Coal Corporation	10,000	13,000	14,000
9. Korea Mining Promotion Corporation	10,000	8,468	10,000
10. Korea Petroleum Development Corporation	15,647	453	5,200
11. Korea National Housing Corporation	33,200	45,500	19,232
12. Korea Highway Corporation	--	--	--
13. The Korea Land Development Corporation	15,000	70,000	20,000
14. Industrial Sites and Water Resources Development Corporation	3,213	29,936	41,847
15. Korea Trade Promotion Corporation	--	--	--
16. Korea General Chemical Company, Ltd.	--	--	--
17. Agriculture and Fishery Development Corporation	1,400	--	--
18. Agriculture Promotion Corporation	--	--	--
19. The National Textbook Company, Ltd.	--	2,600	2,400
20. Korea Overseas Development Corporation	--	--	--
21. Korea National Tourism Corporation	--	625	--
22. Korea Broadcasting System	4,742	4,456	5,764
23. Korea Labor Welfare Corporation	--	2,832	5,797
24. Korea Telecommunication Authority	--	500	--
25. Korea Dredging Corporation	--	--	--

Source: Data provided by the Korean authorities.

1/ One hundred billion won for the Korean Heavy Industry and Construction Company was channeled through the KDB in 1980, while the same amount for the same purpose was channeled through the Korean Electric Corporation in 1981.

Table VIII. Korea: Financing of Consolidated Public Sector Operations, 1978-82

(In billions of won)

	1978	1979	1980	Latest Estimate 1981	Budget Estimate 1982
I. Domestic financing <u>1/</u>	<u>256.6</u>	<u>174.0</u>	<u>856.0</u>	<u>1,666.7</u>	<u>1,190.5</u>
1. From monetary authorities	7.5	-39.5	264.4	799.5	308.1
1.1 Net borrowing	(258.6)	(-18.2)	(-20.1)	(576.0)	(246.0)
1.2 Change in deposits	(-251.1)	(-21.3)	(284.5)	(223.5)	(62.1)
2. From deposit money bank	169.2	110.7	342.8	224.9	390.4
2.1 Net borrowing	(169.2)	(110.7)	(342.8)	(224.9)	(390.4)
2.2 Change in deposits	(--)	(--)	(--)	(--)	(--)
3. Other	79.9	102.8	248.8	642.3	492.0
II. Financing abroad <u>2/</u>	<u>359.2</u>	<u>266.3</u>	<u>317.7</u>	<u>460.2</u>	<u>209.1</u>
4. From international development institutions (net)	92.6	111.0	103.2	112.7	121.9
5. From foreign governments (net) <u>3/</u>	244.1	61.6	66.4	33.0	92.1
6. Other (net)	22.5	93.7	148.1	314.5	-4.9
III. Financing (I + II)	<u>615.8</u>	<u>440.3</u>	<u>1,173.7</u>	<u>2,126.9</u>	<u>1,399.6</u>
<u>Memorandum items:</u>					
Net credit from banking system to public sector in fiscal accounts			607.2	1,024.4	698.5
Less: Change in government lending funds held in deposit money banks <u>4/</u>			298.3	259.4	225.0
Less: Complimentary period transactions <u>5/</u>			-57.4	100.0	--
Plus: Carryover from previous year <u>6/</u>			--	196.0	226.0
Plus: Net credit from BOK to Fertilizer Fund <u>7/</u>			30.0	100.0	100.0
Equals:			396.3	961.0	799.5
Net credit from banking system to public sector in monetary accounts			396.2	960.1 <u>8/</u>	800.0

Sources: Data provided by Korean authorities; and staff estimates. Pre-1980 available in part in Ministry of Finance, A Summary of Government Finance in Korea, 1980.

1/ Includes highway construction bonds, industrial reconstruction bonds, reimbursement securities for requisitioned properties, Reimbursement Securities Claim Fund, borrowing of the National Investment Fund, Grain Management Fund grain purchase certificates, grain bonds, and telephone bonds. It excludes deferred payments for rice producers that carry over to a subsequent fiscal year.

2/ Includes foreign borrowing directly on-lent to the private sector and to nonfinancial public enterprises.

3/ Includes foreign military sales credits from foreign governments.

4/ Government lending funds channeled through DMBs to third parties. Differs from IFS, line 26f, in that Government's holdings of DMB bonds are excluded in IFS, but included here, and IFS deletes all extrabudgetary fund accounts less than W 5 billion, while all funds are included here.

5/ Complimentary period for fiscal year was abolished in 1982.

6/ Carryover items appear only in budgets; they disappear (1980) on settlement.

7/ Net credit to the Fertilizer Fund is included in the monetary definition and under Fund program credit ceilings, but the Fertilizer Fund is not defined as part of the public sector in the fiscal accounts.

8/ February 1982 estimate; December 1981 estimate was W 960.1 billion.

Table IX. Korea: Financing of Central Government Operations, 1978-82

(In billions of won)

	1978	1979	1980	Latest Estimate 1981	Budget Estimate 1982
I. Domestic financing 1/	-64.7	271.6	523.3	1,030.9	734.7
1. From monetary authorities	-147.3	127.1	117.4	488.0	30.6
1.1 Net borrowing	(93.3)	(119.8)	(-185.1)	(306.0)	(-4.0)
1.2 Change in deposits	(-240.6)	(7.3)	(302.5)	(182.0)	(34.6)
2. From deposit money banks	36.0	124.2	316.4	174.9	340.5
2.1 Net borrowing	(36.0)	(124.2)	(316.4)	(174.9)	(340.5)
3. Other	46.6	20.3	89.5	368.0	363.6
II. Financing abroad 2/	365.0	273.0	325.5	468.0	216.4
4. From international development institutions (net)	92.6	111.0	103.2	112.7	121.9
5. From foreign governments (net)	80.5	5.5	50.3	20.1	96.2
6. Other (net)	28.3	100.4	155.9	322.2	2.4
7. Foreign military sales credit	163.6	56.1	16.1	12.9	-4.1
IV. Financing (I + II)	300.3	544.6	848.8	1,498.9	951.1

Sources: Data provided by Korean authorities; and staff estimates. Pre-1980 available in part in Ministry of Finance, A Summary of Government Finance in Korea, 1980.

1/ Includes highway construction bonds, industrial reconstruction bonds, reimbursement securities for requisitioned properties, reimbursement securities for Claim Fund, and borrowing of the National Investment Fund.

2/ Includes foreign borrowing directly on-lent to the private sector and to nonfinancial public enterprises.

Table X. Korea: Sources and Uses of Funds of the National Investment Fund, 1978-82

(In billions of won)

	1978	1979	1980 <u>1/</u>	1981 <u>1/</u>	1982 Pro- jection
<b>Sources of funds</b>					
National savings associations	26.4	37.0	32.0	48.0	53.0
Trust funds of various public entities	54.6	64.4	74.0	93.0	55.0
Banking institutions	202.8	172.3	260.0	247.0	350.0
Insurance and trust companies	24.1	16.2	32.0	35.0	64.0
Repaid loans	75.2	91.6	124.3	161.0	173.0
Other <u>2/</u>	<u>71.3</u>	<u>73.9</u>	<u>15.7</u>	<u>-41.0</u>	<u>-20.0</u>
Total	454.3	455.4	538.0	543.0	675.0
<b>Uses of funds</b>					
Heavy and chemical industries	239.5	285.2	365.0	333.0	410.0
Electric power	92.0	100.0	120.0	130.0	140.0
Food production	14.9	19.8	23.0	30.0	45.0
"Saemaul" plant construction	4.2	4.7	--	--	--
Exports by deferred payment	29.7	30.0	30.0	50.0	80.0
Other <u>3/</u>	<u>73.9</u>	<u>15.7</u>	<u>--</u>	<u>--</u>	<u>--</u>
Total	454.3	455.4	538.0	543.0	675.0

Source: Data provided by the Korean authorities.

1/ Preliminary estimate.

2/ Includes funds carried over from the previous year and, in 1981 and 1982, amortization of borrowings.

3/ Includes funds to be carried over to the following year.

Table XI. Korea: Operations of the National  
Investment Fund, 1980-82

(In billions of won)

	1980	Latest Estimate 1981	Budget Estimate 1982
Revenue	259.7	297.6	364.1
Current revenue	(259.7)	(297.6)	(364.1)
Capital revenue	(--)	(--)	(--)
Expenditure and net lending	542.4	772.0	441.5
Current expenditure	(235.4)	(309.3)	(376.1)
Capital expenditure	(--)	(--)	(--)
Net lending	(307.0)	(462.7)	(502.0)
Deficit <u>1/</u>	-282.7	-474.4	-514.0

Source: Data provided by the Korean authorities.

1/ This operational deficit includes interaccount transactions which make it noncomparable with the overall deficit of the consolidated Central Government.

Table XII. Korea: Sources and Uses of Funds of  
the National Housing Fund, 1981-82

(In billions of won)

	1981 Latest Estimate	1982 Projection
<b>Sources of funds</b>		
Homebuyers' Saving Deposits	13.1	16.8
National Housing Bonds	126.1	148.3
Issues	(152.0)	(200.0)
Redemptions	(-25.9)	(-51.7)
National Housing Fund Bonds	--	17.9
Housing lottery	6.1	6.2
Government equity contribution	--	39.0
Trust funds of various public entities	39.0	40.0
Repaid loans	22.9	61.0
Other <sup>1/</sup>	<u>47.8</u>	<u>84.7</u>
Total	255.0	413.9
<b>Uses of funds</b>		
Housing for sale to public and Housing Union members	159.6	266.9
Urban housing development	29.5	16.8
Housing for rent	--	14.9
Loans for selling KNHC's rented apartment units	8.0	33.9
Repair and improvement for rural houses	11.5	4.0
Financing projects carried over from previous period	<u>46.4</u>	<u>77.4</u>
Total	255.0	413.9

Source: Data provided by the Korean authorities.

<sup>1/</sup> Includes funds carried over from previous period and accrued interest from National Housing Bonds.

Table XIII. Korea: Operations of the National Housing Fund, 1981-82

(In billions of won)

	Latest Estimate 1981	Budget Estimate 1982
Revenue	37.6	114.4
Current revenue	(37.6)	(114.4)
Capital revenue	(--)	(--)
Expenditure and net lending	244.6	441.5
Current expenditure	(7.1)	(21.4)
Capital expenditure	(--)	(--)
Net lending	(237.5)	(420.1)
Deficit <u>1/</u>	-207.0	-327.1

Sources: Data provided by the Korean authorities.

1/ This operational deficit includes interaccount transactions which make it noncomparable with the overall deficit of the consolidated Central Government.

Table XII. Korea: Central Government Revenue, 1978-82

(In billions of won)

	1978	1979	1980	Latest Estimate 1981	Budget 1982
I. Tax revenue <u>1/</u>	3,702.1	4,837.4	5,896.8	7,348.3	9,317.2
1. Taxes on net income, profits, and capital gains	1,042.1	1,381.7	1,504.0	1,797.5	2,760.2
1.1 Company, corporate, or enterprise	(504.7)	(673.6)	(737.8)	(883.9)	(1,183.9)
1.2 Individuals	(537.4)	(708.0)	(766.0)	(913.4)	(1,176.4)
2 Social security contributions <u>2/</u>	42.5	63.2	72.8	86.0	111.0
3. Taxes on property <u>3/</u>	17.1	21.6	36.5	45.6	81.4
4. Taxes on goods and services	1,751.6	2,353.5	3,002.6	4,014.0	4,925.7
4.1 General sales taxes <u>4/</u>	(838.9)	(1,088.7)	(1,471.2)	(1,890.4)	(2,333.5)
4.2 Selective excises on goods and services <u>5/</u>	(632.7)	(904.8)	(1,111.4)	(1,443.6)	(1,740.3)
4.3 Profits of fiscal monopolies <u>6/</u>	(280.0)	(360.0)	(510.0)	(680.0)	(851.9)
5. Taxes on international trade <u>7/</u>	774.9	912.8	1,013.6	1,259.7	1,637.0
6. Other taxes <u>8/</u>	73.9	104.6	177.3	145.5	201.9
II. Nontax revenue <u>9/</u>	382.1	538.5	839.9	1,190.1	1,493.6
III. Capital revenue	23.5	69.5	96.5	89.2	120.3
IV Total revenue (I, II, and III)	4,107.7	5,445.4	6,833.2	8,627.6	10,931.1
V Grants	--	--	--	--	--
VI. Total revenue and grants (IV and V)	4,107.7	5,445.4	6,833.2	8,627.6	10,931.1
Memorandum items <u>10/</u>					
Tax revenue as percentage of GNP	16.2	16.6	17.2	17.0	17.9
Total revenue as a percentage of GNP	17.9	18.7	19.9	20.0	21.0

Source: Data provided by the Korean authorities. Pre-1980 available in part in Ministry of Finance, A Summary of Government Finance in Korea, 1980.

1/ Aggregate defense surtax and education tax revenue allocated as follows

(In billions of won)

	Defense				Budget	Education
	1978	1979	1980*	1981*	1982	Budget 1982
Corporation tax	145.9	180.4	220.6	286.3	429.3	32.7 <u>14/</u>
Individual income tax	69.7	93.3	95.5	123.0	152.0	79.7 <u>15/</u>
Taxes on property <u>11/</u>	1.6	0.5	1.9	2.4	4.1	
Selective excises <u>12/</u>	88.8	123.3	186.2	236.4	283.4	33.6 <u>16/</u>
Customs duties	128.5	180.5	252.3	310.0	400.9	
Other taxes <u>13/</u>	37.1	52.1	61.2	76.1	95.6	91.9 <u>17/</u>
Total	471.6	630.1	817.7	1,034.2	1,365.3	237.9

\* These figures will be revised slightly at a later date.

- 2/ Employer contributions to Industrial Workers' Accident Account and employee contributions to Veteran's Relief Fund
- 3/ Includes inheritance and gift tax, securities transaction tax, registration tax, and asset revaluation tax.
- 4/ Value-added tax
- 5/ Includes special excise tax, telephone tax, and liquor tax
- 6/ Transfer to Central Government from Monopoly Enterprise Special Account, covering cigarettes and red ginseng
- 7/ Customs duties Includes carryover
- 8/ Consists of stamp duties, carryover, and penalties to delinquency, and defense surtax on local taxes
- 9/ Interest income, administrative fees and charges, fines and forfeits, miscellaneous revenues and contributions to Government Employee Pension Fund
- 10/ Assumes a GNP of W 43,155 billion and W 52,143 billion for 1981 and 1982, respectively.
- 11/ Defense surtax on inheritance tax. In 1976, also included defense surtax on registration tax. In 1982 includes defense surtax on gift tax
- 12/ As of 1978, defense surtax on special consumption tax, liquor tax, and telephone tax.
- 13/ Defense surtax on local taxes. In 1979 also includes other defense tax on internal taxes and previous year receipts of defense surtax
- 14/ Covers tax on banking and insurance business income.
- 15/ Includes tax on interest (68.2) and dividend (11.5) income.
- 16/ Includes surtax on liquor
- 17/ Includes tax on cigarettes produced by fiscal monopoly.



Table XV. Korea: Economic Classification of  
Central Government Expenditure and Net Lending, 1978-82

(In billions of won)

	1978	1979	1980	Latest Estimate 1981	Budget 1982
Current expenditure	<u>3,196.6</u>	<u>4,104.4</u>	<u>5,641.1</u>	<u>2,207.2</u>	<u>8,852.9</u>
Expenditure on goods and services <u>1/</u>	<u>1,894.7</u>	<u>2,130.7</u>	<u>2,963.2</u>	<u>3,847.0</u>	<u>4,497.3</u>
Wages and salaries	(602.9)	(777.9)	(1,053.2)	(1,316.2)	(1,512.6)
Other purchases of goods and services <u>1/</u>	(1,291.8)	(1,352.8)	(1,910.0)	(2,530.8)	(2,984.7)
Interest payments	<u>190.2</u>	<u>285.2</u>	<u>433.5</u>	<u>662.5</u>	<u>807.7</u>
Domestic	(94.3)	(161.1)	(243.0)	(328.5)	(419.5)
Foreign	(95.9)	(124.1)	(190.5)	(334.0)	(388.2)
Subsidies and other current transfers	<u>1,111.7</u>	<u>1,688.5</u>	<u>2,244.2</u>	<u>2,697.7</u>	<u>3,547.9</u>
To nonfinancial public enterprises	(6.8)	(21.9)	(5.0)	(--)	(34.8)
To local government	(792.3)	(1,156.3)	(1,496.2)	(1,792.0)	(2,443.9)
To financial institutions	(10.3)	(16.3)	(21.3)	(35.8)	(54.1)
To households, nonprofit institutions, and others	(288.1)	(475.0)	(698.9)	(845.3)	(979.4)
Abroad	(14.2)	(19.0)	(22.8)	(24.6)	(35.7)
Capital expenditure	<u>703.8</u>	<u>1,119.6</u> <u>2/</u>	<u>920.9</u>	<u>1,145.7</u>	<u>1,523.9</u>
Acquisition of new and existing fixed capital assets	(319.6)	(398.9)	(509.8)	(553.5)	(790.9)
Purchases of land and intangible assets	(36.1)	(67.3)	(56.7)	(81.0)	(87.2)
Capital transfers	(344.0)	(641.5) <u>2/</u>	(321.9)	(448.6)	(554.9)
Purchases of inventories	(4.1)	(6.1)	(32.5)	(62.6)	(90.9)
Net lending <u>3/</u>	<u>507.6</u>	<u>766.0</u>	<u>1,120.0</u>	<u>1,773.6</u>	<u>1,505.4</u>
To nonfinancial public enterprises	(20.5)	(39.1)	(115.5)	(282.7)	(21.0)
Others	(487.1)	(726.9)	(1,004.5)	(1,490.9)	(1,484.4)
Total expenditure and net lending	4,408.0	5,990.0 <u>2/</u>	7,682.0	10,126.5	11,882.2

Source: Data provided by the Korean authorities. Pre-1980 available in part in Ministry of Finance, A Summary of Government Finance in Korea, 1980.

1/ "Other purchases of goods and services" includes foreign military sales credits from foreign governments.

2/ Includes a W 368 billion transfer from the Central Government to the Grain Management and Supply Funds for the purpose of amortizing their debt with the Bank of Korea.

3/ Net lending includes foreign borrowing directly on-lent to the private sector and to nonfinancial public enterprises.

Table XVI. Korea Functional Classification of  
Central Government Expenditure and Net Lending, 1978-82 <sup>1/</sup>

(In billions of won)

	1978	1979	1980	Latest Estimate 1981	Budget 1982
1. General public services	419.1	547.5	655.5	876.1	1,093.7
a. General administration	(208.7)	(260.8)	(256.9)	(314.4)	(390.9)
b. Public order and safety	(190.6)	(230.0)	(350.5)	(482.8)	(583.1)
c. Other	(19.8)	(56.7)	(48.1)	(78.6)	(119.7)
2. Defense <sup>2/</sup>	1,438.1	1,597.4	2,349.1	2,965.5	3,222.4
3. Education	605.0	863.0	1,124.4	1,464.7	1,940.3
a. Schools (kindergarten, primary, and secondary)	(501.1)	(709.3)	(941.5)	(1,194.6)	(1,624.3)
b. Universities and colleges	(55.2)	(93.3)	(131.4)	(189.6)	(245.7)
c. Other	(48.7)	(60.4)	(51.5)	(80.5)	(70.3)
4. Health	68.3	56.8	78.3	123.9	148.6
a. General administration and research	(10.6)	(13.4)	(16.9)	(24.1)	(19.8)
b. Hospitals and clinics	(45.0)	(28.6)	(41.3)	(73.8)	(93.9)
c. Individual health services	(0.7)	(0.8)	(0.9)	(5.0)	(12.6)
d. Population control	(6.7)	(6.7)	(8.8)	(9.9)	(10.0)
e. Other	(5.8)	(7.3)	(10.4)	(11.1)	(12.3)
5. Social security and welfare	189.4	283.0	437.9	580.1	792.7
a. General administration	(11.5)	(5.6)	(9.8)	(14.1)	(110.0)
b. Sickness and other temporary disablement	(42.1)	(80.2)	(88.5)	(133.8)	(168.0)
c. Old age, disability, and survivors	(112.6)	(136.5)	(254.8)	(354.8)	(405.7)
d. Other public assistance	(21.2)	(60.7)	(84.8)	(77.4)	(109.0)
6. Housing and community amenities	54.9	105.5	191.2	396.8	574.3
a. Housing	(17.5)	(64.0)	(92.7)	(337.5)	(509.2)
b. Community development	(35.0)	(35.0)	(85.2)	(43.7)	(44.2)
c. Sanitary services	(2.4)	(6.5)	(13.3)	(15.6)	(20.9)
7. Other community and social services	17.0	38.9	53.9	56.9	80.5
8. Economic services <sup>1/</sup>	1,114.8	1,905.3	1,996.7	2,490.0	2,379.3
a. General administration, regulation, research	(31.2)	(95.9)	(94.5)	(67.1)	(71.8)
b. Agriculture, forestry, fishing, and hunting	(217.0)	(598.3)	(451.8)	(638.5)	(641.9)
c. Mining, manufacturing, and construction	(354.7)	(355.2)	(365.5)	(616.5)	(603.2)
d. Electricity, gas, steam, and water	(208.0)	(265.2)	(163.7)	(306.4)	(213.8)
e. Roads	(85.5)	(85.3)	(148.3)	(159.0)	(219.1)
f. Inland and coastal waterways	(45.1)	(59.3)	(81.4)	(88.8)	(140.0)
g. Other transportation and communication	(92.3)	(212.9)	(285.7)	(462.1)	(253.7)
h. Other economic services	(71.0)	(233.2)	(205.8)	(151.7)	(235.8)
9. Unallocable and other purposes	441.4	592.7	795.0	1,171.9	1,650.4
a. Interest on public debt	(192.0)	(254.6)	(381.8)	(583.8)	(748.3)
b. Transfers of a general character to other levels of government	(246.9)	(336.3)	(410.0)	(520.0)	(719.0)
c. Other	(2.5)	(1.8)	(3.2)	(68.1) <sup>4/</sup>	(183.1) <sup>4/</sup>
Total expenditure and net lending	4,408.0	5,990.0 <sup>3/</sup>	7,682.0	10,126.5	11,882.2

Source Data provided by the Korean authorities. Pre-1980 available in part in Ministry of Finance, A Summary of Government Finance in Korea, 1980.

<sup>1/</sup> Includes National Investment Fund loans and net lending from foreign borrowing directly on-lent to NPFs and the private sector. Almost all of these funds are classified in economic services, although some appear in general research, health, and community development.

<sup>2/</sup> Includes foreign military sales credits from foreign governments.

<sup>3/</sup> Includes a W 368 billion transfer from the Central Government to the Grain Management and Supply Funds for the purposes of amortizing their debt with the Bank of Korea.

<sup>4/</sup> Includes the contingency reserve.

Table XVII. Korea. Grain Management Fund Operations, 1978-82 1/

(In billions of won)

	1978	1979	1980	Latest Estimate 1981	Projection 1982
Operating receipts	570.5	763.6	1,000.6	1,123.4	1,328.4
Rice sales	446.2	622.6	744.4	833.5	1,004.5
Barley sales	29.6	27.4	70.6	113.3	115.6
Sales to Central Government	62.9	73.2	115.7	142.0	167.0
Other grains	9.7	9.2	4.7	7.9	7.3
Byproducts <u>2/</u>	22.1	31.2	65.2	26.7	34.0
Operating expenditures	817.5	994.4	1,155.9	1,448.2	1,576.8
Domestic rice purchases <u>3/</u>	382.0	374.1	535.4	378.3	820.5
Rice imports <u>4/</u>	--	82.2	178.5	534.4	255.4
Domestic barley purchases	124.2	172.5	169.3	183.3	186.1
Barley imports	11.8	--	--	--	--
Other grains	3.9	1.6	4.3	38.6	--
Other grain imports	10.2	8.1	6.3	3.0	14.0
Handling and storage charges <u>5/</u>	67.8	117.2	138.8	221.7	211.9
Interest payment	17.6	38.7	58.2	76.9	74.9
Other <u>6/</u>	--	--	65.1	12.0	14.0
Operating surplus/deficit (-)	-247.0	-230.8	-155.3	-324.8	-248.4
Capital transfer from Central Government	--	268.0	--	--	--
Overall surplus/deficit (-)	-247.0	37.2	-155.3	-324.8	-248.4
Financing					
From BOK (net)	122.4	-67.2	156.1	276.3	200.0
Net borrowing	(134.0)	(-68.0)	(130.0)	(220.0)	(200.0)
Use of cash balances	(-11.6)	(0.8)	(26.1)	(56.3)	(--)
From deposit money bank <u>7/</u>	126.5	-7.5	-260.0	-260.0	-310.0
From Central Government <u>8/</u>	-5.4	--	--	--	--
From other financial institutions <u>7/</u>	3.5	37.5	--	--	--
From nonfinancial private sector <u>9/</u>	--	--	260.0	310.0	360.0
From abroad <u>10/</u>	--	--	-0.8	-1.5	-1.6

Source: Data provided by the Korean authorities.

- 1/ Calendar-year basis.  
2/ Includes miscellaneous revenue, including transfers from GMSA.  
3/ Includes previous-year rice and rice purchase financed by deferred payment.  
4/ Represents total value of rice imports, rather than current-year cash payment.  
5/ Includes management expenses of Grain Management Special Account (GMSA).  
6/ Includes transfers to GMSA and reserve funds.  
7/ Represents grain bonds.  
8/ From Foreign Loan Management Special Account and Agricultural Price Stabilization Fund.  
9/ Represents grain purchase certificates issued to farmers, and deferred payments.  
10/ Amortization to Government Fund Financing Special Account.

Table XVIII. Korea: Fertilizer Account Operations, 1978-81

(In billions of won)

	1978	1979	1980	Latest Estimate 1981
Revenue	<u>193.0</u>	<u>190.1</u>	<u>205.6</u>	<u>323.3</u>
Sales	193.0	185.0	201.6	317.5
Miscellaneous revenues	--	5.1	4.0	5.8
Expenditures	<u>230.5</u>	<u>255.3</u>	<u>370.7</u>	<u>504.0</u>
Domestic purchases	189.2	217.5	273.3	402.3
Imports	3.0	4.5	5.7	--
Handling and storage charges <u>1/</u>	19.0	20.9	26.0	34.1
Interest	4.9	8.3	36.2	53.6
Current transfers to fertilizer companies <u>2/</u>	14.4	4.1	29.5	14.0
Surplus/deficit (-)	<u>-37.5</u>	<u>-65.2</u>	<u>-165.1</u>	<u>-180.7</u>
Financing				
BOK borrowing (net)	30.0	--	30.0	100.0
NACF borrowing (net)	--	74.6	108.0	79.5
Promissory notes to fertilizer producers (net)	--	-9.4	27.1	1.2
Others (net) <u>3/</u>	7.5	--	--	--

Source: Data provided by the Korean authorities.

1/ Includes management expenses.

2/ The Government holds contracts for minimum fertilizer volume purchases from Ypungnum, Jinhae, and Namhae. This line represents the difference between these contractual obligations and the volume of fertilizer actually purchased and sold to farmers.

Table XIX. Korea: Relative Unit Labor Costs, 1978-81

(1975 = 100)

	Nominal Effective Exchange Rate <u>1/</u> (1)	Korea Unit Labor Costs <u>2/</u> (2)	Trading Partners' Unit Costs <u>2/</u> (3)	Relative Unit Labor Costs	
				(4)=(2)/(3)	(1) x (4) Adjusted for exchange rate changes
1978 I	92.31	163.4	112.5	145.2	134.0
II	90.10	166.6	111.9	148.9	134.2
III	85.91	193.6	112.6	171.9	147.7
IV	85.17	195.3	114.0	171.3	145.9
Year	88.37	179.7	112.8	159.3	140.5
1979 I	87.57	186.3	116.7	159.7	139.9
II	89.55	193.9	118.3	163.9	146.8
III	89.32	206.5	119.7	172.5	154.1
IV	91.94	223.4	121.3	184.1	169.3
Year	89.60	202.3	119.0	170.0	152.3
1980 I	77.79	267.2	123.5	167.7	130.5
II	73.87	219.6	128.8	170.5	126.0
III	70.69	237.7	133.5	178.1	125.9
IV	66.43	224.4	134.1	167.3	111.1
Year	72.20	222.2	130.0	170.9	122.4
1981 I	65.79	214.2	135.2	158.1	104.2
II	66.74	221.4	138.0	160.4	107.1
III	68.01	243.6	139.9	174.1	118.4
IV	66.22	...	...	...	...
Year	66.69	...	...	...	...

Sources: Data provided by the Korean authorities; IMF International Financial Statistics; and staff estimates.

1/ Weighted by trade shares of the eight largest partner countries for which data on unit labor cost are available; these trade shares constitute 97 per cent of the weighting pattern used in the calculation of the trade-weighted effective exchange rates shown in Table 21.

2/ For manufacturing sector only. For Korea, the series was constructed from the wage index and productivity index. For partner countries, unit labor costs are defined as compensation of employees per unit of real output (in the value added sense) in the manufacturing sector. Account is taken of employer-paid social insurance premia and other employment taxes, as well as wages and salaries.

Table XX. Korea: Commodity Composition of Exports, 1974, 1978-81

(In per cent of total exports)

	1974	1978	1979	1980	1981 <sup>1/</sup>
Food and beverages	7.7	8.3	8.0	7.3	6.5
Crude minerals, fuels and related materials, and oils and fats	7.1	3.0	2.7	2.2	2.1
Chemicals	2.1	2.7	3.5	4.5	3.2
Fertilizers	(0.7)	(1.3)	(1.5)	(2.0)	(1.0)
Other	(1.5)	(1.4)	(2.0)	(2.5)	(2.2)
Manufactures	67.8	65.5	65.1	65.8	65.5
Textiles and clothing	(32.5)	(32.3)	(31.0)	(29.4)	(29.3)
Wood and wood products	(4.8)	(3.6)	(3.3)	(2.3)	(2.2)
Footwear	(4.0)	(5.4)	(4.8)	(5.0)	(4.8)
Rubber manufactures	(1.5)	(1.8)	(2.3)	(2.9)	(2.4)
Metals and metal products	(13.0)	(9.0)	(11.7)	(14.4)	(13.9)
Other	(12.0)	(13.4)	(12.0)	(11.9)	(12.9)
Machinery and transport equipment	15.1	20.4	20.6	19.8	22.1
Electrical machinery and electronics	(10.6)	(9.8)	(11.2)	(10.9)	(9.7)
Transport equipment excluding ships	(2.7)	(2.5)	(3.9)	(3.1)	(2.9)
Ships	(...)	(6.3)	(3.4)	(3.5)	(6.6)
Other	(1.7)	(1.7)	(2.1)	(2.3)	(2.9)
Not elsewhere classified	0.2	0.2	0.1	0.5	0.5
Total	100.0	100.0	100.0	100.0	100.0

Sources: Bank of Korea, Economic Statistics Yearbook (1980); data provided by the Korean authorities; and staff estimates.

<sup>1/</sup> Staff estimates based on data for the first ten months.

Table XXI. Korea: Exports by Major Commodities, 1978-81 1/

	1978			1979			1980			1981		
	Millions of US\$	Per cent change	Millions of US\$	Per cent change	Millions of US\$	Per cent change	Millions of US\$	Per cent change	Millions of US\$	Per cent change	Millions of US\$	Per cent change
Food and beverages	1,053	--	1,200	14.0	1,276	6.3	1,390	8.9				
Crude minerals, fuels and related materials, and oils and fats	380	-10.0	406	6.8	378	-6.9	445	17.7				
Chemicals	341	50.9	532	56.0	780	46.6	690	-11.5				
Fertilizers	(162)	(128.2)	(223)	(37.7)	(344)	(54.3)	(212)	(-38.4)				
Other	(179)	(15.5)	(309)	(72.6)	(436)	(41.1)	(478)	(9.6)				
Manufactures	8,320	26.8	9,795	17.7	11,525	17.7	13,915	20.7				
Textiles and clothing	(4,108)	(30.7)	(4,664)	(13.5)	(5,145)	(10.3)	(6,230)	(21.1)				
Wood and wood products	(457)	(7.8)	(498)	(9.0)	(405)	(-18.7)	(470)	(16.0)				
Footwear	(686)	(40.6)	(729)	(6.3)	(874)	(19.9)	(1,020)	(16.7)				
Rubber manufactures	(227)	(41.9)	(341)	(50.2)	(499)	(46.3)	(500)	(-)				
Metals and metal products	(1,144)	(15.1)	(1,758)	(53.7)	(2,512)	(42.9)	(2,960)	(17.8)				
Other	(1,698)	(25.5)	(1,805)	(6.3)	(2,090)	(15.8)	(2,735)	(30.9)				
Machinery and transport equipment	2,587	48.6	3,101	8.5	3,461	11.6	4,700	35.8				
Electrical machinery and electronics	(1,246)	(34.7)	(1,684)	(35.2)	(1,911)	(13.5)	(1,070)	(8.3)				
Transport equipment excluding ships	(323)	(118.2)	(583)	(80.5)	(535)	(-8.2)	(610)	(14.0)				
Ships	(801)	(52.3)	(515)	(-35.7)	(618)	(20.0)	(1,410)	(128.2)				
Other	(217)	(52.8)	(319)	(47.0)	(397)	(24.5)	(610)	(53.7)				
Not elsewhere classified	30	...	21	...	85	...	115	...				
Total	12,711	26.5	15,055	18.4	17,505	16.3	21,255	21.4				

Sources: Bank of Korea, Economic Statistics Yearbook (1980); data provided by the Korean authorities; and staff estimates.

1/ Staff estimates based on data for the first ten months.

Table XXII. Korea: Trade Measures Affecting Exports

(As of January 1982)

Country	Commodities Affected	Main Types of Measures	Year of Intro- duction
Australia	Plywood	Tariff quota	1978
	Textiles	"	1974-77
	Tire cords and fabrics	"	1977
	Footwear	Import quota	1976
	Sheets and plates of iron steel	Tariff quota	1978
	Razors	"	1978
	Electric refrigerators	"	1978
	Chain pulley tackle and hoists	"	1978
	Electric insulators	"	1977
	Passenger motor vehicles	"	1977
	Fixed registers	"	1977
	Sleeping bags	"	1977
Austria	Textiles	Bilateral quota	1974-76
Benelux	Knives, forks, and spoons	Voluntary export restraint	1978
Canada	Leather handbags	Anti-dumping duties	1977
	Leather garments	Bilateral quota	1976
	Albums	Anti-dumping duties	1976
	Textiles	Bilateral quota	1970
	Waterproof rubber shoes	Anti-dumping duties	1979
	Nonleather footwear	Global quota	1981
	Bicycles, tricycles, and parts	Anti-dumping duties	1978
	Ball-type metal furniture carts	"	1977
Denmark	Knives, forks, and spoons	Import quota	1974
European Communities	Steel products	Basic price system	1978
	Textiles	Bilateral quota	1978
	Canned mushrooms	Unilateral quota	1978
Finland	Textiles	Bilateral quota	1975



Table XXII. Korea: Trade Measures Affecting Exports (Continued)

(As of January 1982)

Country	Commodities Affected	Main Types of Measures	Year of Intro- duction
France	Newsprint	Global quota	1978
	Silk fabrics	Unilateral quota	1974
	Umbrellas and sunshades	"	1977
	Radios	"	1977
	TV sets	"	1978
	Tiles	Global quota	1978
	Semiconductors	"	1978
	Microscopes	"	1978
	Electric measuring instruments	"	1978
	Wristwatches	Administrative guidance	-
	Toys	Unilateral quota	-
	Miscellaneous goods (Yacht, chemical products)	"	1977
Germany, Fed. Rep. of	Knives, forks, and spoons	Voluntary export restraint	1978
Ireland	Footwear	Voluntary export restraint	1979
Japan	Specific fish	Unilateral quota	1960
	Other fish	Import quota	1977
	Lavers	"	1960
	Undaria Pinnatifida	"	1977
	Leather goods	"	
	Baseball gloves and mitts	Administrative guidance	1975
	Cotton thread	"	
	Raw silk	Import quota	1974
	Silk yarn	"	1976
	Silk fabrics	"	1976
	Textiles	Administrative guidance	
	Leather footwear	Import quota	
New Zealand	Nearly all items	Import licensing	1975

Table XXII. Korea: Trade Measures Affecting Exports (Concluded)

(As of January 1982)

Country	Commodities Affected	Main Types of Measures	Year of Introduction
Norway	Tires and tubes	Bilateral quota	1974
	Leather garments	"	1978
	Textiles	"	1974
	Ski boots	"	1979
	Tableware of porcelain, China, and pottery	"	1975
	Knives, forks, and spoons	"	1974
Sweden	Textiles	Bilateral quota	1974
	Footwear	Global quota	1974
United Kingdom	Saccharin	Anti-dumping duties	1976
	Footwear	Voluntary export restraint	
	Knives, forks, and spoons	"	1978
	Monochrome TV sets	Unilateral quota	1977
United States	Canned mushrooms	Tariff increase	1980
	Ginseng products	Import prohibition	1977
	Textiles	Bilateral quota	1971
	Porcelain on steel cookware	Tariff increase	1980
	Color TV sets	Orderly marketing arrangement	1979
	Tubes and tires for bicycles	Countervailing duties	1979
	Lag screws, bolts, and nuts	Tariff increase	

Source: Data provided by the Korean authorities.

Table XXIII. Korea: Imports by Major Commodity Groups, 1978-81

	1978		1979		1980		1981 Est.	
	In millions of U.S. dollars	Share in per cent	In millions of U.S. dollars	Share in per cent	In millions of U.S. dollars	Share in per cent	In millions of U.S. dollars	Share in per cent
Consumer goods, other than grains	626	4.2	1,037	5.1	886	4.0	1,016	3.9
Grains	512	3.4	826	4.1	1,092	4.9	1,971	7.5
Industrial raw materials	9,294	62.1	12,768	62.8	15,810	70.9	17,875	68.4
for export production	3,920	26.2	4,568	22.5	5,150	23.1	6,248	23.9
for domestic use	5,374	35.9	8,200	40.3	10,660	47.8	11,627	44.5
Petroleum	(2,174)	(14.5)	(3,058)	(15.0)	(5,612)	(25.2)	(6,371)	(24.4)
Petroleum products	(108)	(0.7)	(295)	(1.5)	(501)	(2.2)	(513)	(2.0)
Other	(3,092)	(20.7)	(4,847)	(23.8)	(4,547)	(20.4)	(4,743)	(18.2)
Capital goods	4,540	30.3	5,708	28.1	4,504	20.2	5,270	20.2
Total c i f.	14,972	100.0	20,339	100.0	22,292	100.0	26,132	100.0

Source Data provided by the Korean authorities.

Table XXIV. Korea: Imports by Country of Origin, 1971 and 1978-81

(In per cent)

	1971	1978	1979	1980	1981 Jan.-Nov.
Japan	39.8	40.0	32.7	26.3	24.5
United States	28.3	20.3	22.6	21.9	22.7
Saudi Arabia	2.4	8.6	7.8	14.7	14.1
Kuwait	2.7	5.0	5.7	7.9	6.1
Germany, Fed. Rep. of	3.1	3.3	4.1	2.9	2.6
United Kingdom	2.3	1.4	2.5	1.4	1.6
Other: Asia	8.0	3.6	4.3	4.9	4.7
Other oil exporters	2.8	3.9	4.6	3.4	1.6
Other	<u>10.6</u>	<u>13.9</u>	<u>15.7</u>	<u>16.6</u>	<u>22.1</u>
Total	100.0	100.0	100.0	100.0	100.0

Source: Bank of Korea, Economic Statistics Yearbook (various issues); and data provided by the Korean authorities.

Table XXV. Korea: Average Terms of New External Debt  
Commitments, 1971-80

	1971	1973	1975	1976	1977	1978	1979	1980
<b>All creditors</b>								
Interest (per cent)	6.3	7.2	8.6	7.9	8.2	8.9	10.5	11.4
Maturity (years)	18.7	18.8	14.4	13.9	12.4	14.1	12.2	14.5
Grace period (years)	4.4	4.9	3.5	3.9	4.2	3.9	3.3	4.0
Grant element (per cent)	23.3	20.2	7.9	11.3	8.8	6.9	-1.9	-4.5
<b>Official creditors</b>								
Interest (per cent)	5.4	4.9	7.9	7.1	7.9	7.4	7.6	7.5
Maturity (years)	25.9	26.9	19.3	21.7	18.3	19.6	16.8	19.6
Grace period (years)	6.3	7.2	5.2	5.8	5.9	5.4	4.7	5.9
Grant element (per cent)	34.3	38.3	13.5	20.0	13.0	16.7	14.3	16.1
<b>Private creditors</b>								
Interest (per cent)	7.4	9.4	9.3	8.3	8.3	9.7	11.4	14.0
Maturity (years)	10.5	10.7	9.9	9.6	9.7	10.9	10.7	11.2
Grace period (years)	2.3	2.7	2.0	2.9	3.5	3.1	2.8	2.7
Grant element (per cent)	11.0	2.1	2.8	6.5	6.8	1.2	-7.1	-17.7

Source: World Bank, World Debt Table (1981).

Table XXVI. Korea: Medium- and Long-Term External Debt, 1978-81 1/

(In millions of U.S. dollars)

	<u>1-3 years</u>		<u>Over 3 years</u>			Total
	Trade Finance	Cash Loans	Financial Institu- tions	Public Sector	Private Sector	
1978						
Contracts	458.0	20.7	759.5	2,050.1	1,915.2	5,203.5
Drawings	333.5	--	300.0	980.2	1,929.8	3,543.5
Amortization	184.1	12.5	224.6	224.3	687.0	1,332.5
Interest	... <u>2/</u>	... <u>2/</u>	107.4	238.3	381.5	727.2
Outstanding						
Contracted	664.2	35.8	1,307.5	7,674.1	7,214.7	16,896.3
Disbursed	484.3	2.6	837.5	4,641.5	5,102.0	11,067.9
1979						
Contracts	178.2	32.2	1,172.1	1,005.0	1,232.0	3,618.5
Drawings	301.9	45.4	1,459.0	1,377.5	1,621.8	4,805.6
Amortization	259.6	12.3	132.1	261.5	951.9	1,617.4
Interest	... <u>2/</u>	... <u>2/</u>	173.1	278.0	510.7	961.8
Outstanding						
Contracted	582.8	55.7	2,310.9	8,417.6	4,494.8	18,861.5
Disbursed	526.6	35.7	2,127.8	5,757.5	5,771.9	14,219.5
1980						
Contracts	363.5	35.1	1,317.0	2,332.5	1,307.7	5,255.6
Drawings	343.0	41.7	397.8	1,516.7	1,417.4	3,716.6
Amortization	289.8	39.5	126.9	256.9	827.4	1,540.5
Interest	... <u>2/</u>	... <u>2/</u>	285.8	374.2	674.8	1,334.8
Outstanding						
Contracted	619.5	42.2	3,491.5	10,530.2	7,740.2	23,423.6
Disbursed	575.6	41.2	2,301.9	6,529.6	6,297.6	15,745.9
1981						
Contracts	256.6	89.2	1,521.8	2,605.0	986.3	5,458.9
Drawings	306.3	51.9	2,083.4	1,627.9	1,171.6	5,241.1
Amortization	320.4	33.7	204.4	308.3	954.8	1,821.6
Interest	... <u>2/</u>	... <u>2/</u>	486.8	437.9	820.2	1,744.9
Outstanding						
Contracted	555.7	97.7	4,808.9	12,826.9	7,771.7	26,060.9
Disbursed	561.5	59.4	4,180.9	7,849.2	6,514.4	19,165.4

Sources: Data provided by the Korean authorities; and staff estimates.

1/ Excludes liabilities to the Fund and liabilities of merchant banks.2/ Included in amortization.

Table XXVII. Korea: Public and Publicly Guaranteed Debt by Lender, 1977-80 1/

(In millions of U.S. dollars)

	1977		1978		1979		1980	
	Disbursed	Total	Disbursed	Total	Disbursed	Total	Disbursed	Total
International organizations	1,295	2,284	1,660	3,038	2,109	3,499	2,347	3,804
ADB	(335)	(632)	(402)	(753)	(461)	(827)	(510)	(924)
World Bank	(960)	(1,652)	(1,258)	(2,285)	(1,648)	(2,672)	(1,835)	(2,880)
Bilateral official sources	2,949	3,794	3,479	5,071	3,681	5,063	4,151	6,611
United States	(1,776)	(2,060)	(1,929)	(2,887)	(2,093)	(3,055)	(2,204)	(4,197)
Japan	(871)	(1,072)	(1,138)	(1,493)	(986)	(1,172)	(1,256)	(1,557)
Germany, F.D.R. of	(190)	(284)	(249)	(335)	(300)	(351)	(266)	(315)
Canada	(81)	(288)	(119)	(271)	(195)	(361)	(314)	(421)
Other	(31)	(90)	(44)	(85)	(107)	(124)	(111)	(121)
Financial institutions	2,039	3,694	2,970	5,553	5,355	7,574	6,572	9,526
Suppliers' credits	2,276	3,580	3,698	4,404	3,349	3,699	2,955	3,099
United States	(639)	(655)	(750)	(750)	(698)	(698)	(712)	(712)
Japan	(716)	(1,274)	(1,346)	(1,882)	(1,174)	(1,436)	(1,470)	(1,541)
Germany, F.D.R. of	(200)	(701)	(722)	(814)	(752)	(778)	(156)	(156)
Other	(721)	(950)	(880)	(958)	(725)	(787)	(617)	(690)
Bonds	167	167	266	266	200	200	249	249
Total	8,725	13,519	12,073	18,332	14,694	20,036	16,274	23,289

Source: World Bank, World Debt Table (1981).

1/ Most of this debt is medium- and long-term debt.

Table XXVIII Korea Eurocurrency Borrowing and Bond Issues by the Banking Sector, 1973-81

(In millions of U.S. dollars)

	Borrower	Lender	Amount	Maturity (years)	Interest	1976	1977		1978		1979		1980		1981		Out- standing	
						Out- standing	Inter- est	Out- standing	Inter- est	Out- standing	Inter- est	Out- standing	Inter- est	Out- standing	Inter- est			
Monetary authorities																		
1973	KEB	CFP (Synd)	40 0	10 (3)	1+10-1/4	3 3	--	5 3	--	5 3	--	5 3	--	5 3	--	5 3	10 6	
	KEB	CFP (Synd)	10 0	( )	1+10	9 0	--	2 0	--	2 0	--	2 0	--	2 0	--	2 0	--	
1974	KEB	Chemical	10 0	8 (3)	1+10	10 0	--	1 8	--	1 8	--	1 8	--	1 8	--	1 8	1 0	
	KEB	Abex	10 0	7 (5)	1+10	10 0	--	2 0	--	2 0	--	2 0	--	2 0	--	2 0	--	
	KEB	Bank of Montreal	5 0	8 (3)	1+10	5 0	--	0 9	--	0 9	--	0 9	--	0 9	--	0 9	0 5	
	KEB	Bank of Nova Scotia	5 0	8 (3)	1+10	5 0	--	0 9	--	0 9	--	0 9	--	0 9	--	0 9	0 5	
	KEB	IBF	7	8 (4)	1+10	7 5	--	1 2	--	1 3	--	1 3	--	1 3	--	1 2	1 3	
	BOB	CFP (Synd)	100 0	5 (2)	1+20	100 0	--	34 0	--	66 0	--	--	--	--	--	--	--	
1975	BOB	CFP (Synd)	100 0	5 (2)	1+20	100 0	--	23 2	--	76 8	--	--	--	--	--	--	--	
1976	KEB	CFP (Synd)	100 0	5 (2)	1+3 7/8	--	89 5	--	--	12 8	--	25 6	--	25 6	--	25 6	--	
1977	KEB	Deutsche (Synd)	100 0	7(2 5)	1+1 3/4	--	100 0	--	--	--	--	10 0	--	20 0	--	20 0	50 0	
1978	KEB	CFP (Synd)	250 0	10 (3)	1+7/8	--	--	--	100 0	--	150 0	--	--	--	--	33 3	216 7	
	KEB	BOB (Synd)	5 0	5 (5)	7 75	--	--	--	--	--	--	--	--	--	--	--	15 0	
1979	KEB	Lloyds (Synd)	400 0	10 (3)	1+5/8-7/4	--	--	--	--	--	320 0	--	80 0	--	--	--	400 0	
1980	KEB	Morgan (Synd)	500 0	8 (4)	1+3/4-7/8	--	--	--	--	--	--	--	80 0	--	420 0	--	500 0	
1981	KEB	CFP (Synd)	700 0	8 (4)	1+5/8	--	--	--	--	--	--	--	--	--	350 0	--	350 0	
	KEB	Bond	10 0	7 (7)	1+1/4	--	--	--	--	--	--	--	--	--	--	--	35 0	
	Total					2,382 0	--	329 0	189 5	95 5	100 0	183 8	370 0	56 7	160 0	59 8	770 0 92 0 1,580 6	
Commercial banks																		
1973	5 commercial banks and Industrial Bank	BOI, Irving Trust	31 3	5-8 (3)	1+10-1/4	16 5	--	7 1	--	6 7	--	0 8	--	0 9	--	1 0	--	
1980	Commercial Bank of Korea	BOA (Synd)	50 0	8 (4)	1+3/4-7/8	--	--	--	--	--	--	--	15 0	--	35 0	--	50 0	
1980	Hanil	APCO (Synd)	50 0	8 (3)	1+3/4-7/8	--	--	--	--	--	--	--	20 0	--	30 0	--	50 0	
1981	Choil-eung	CMB (Synd)	50 0	8 (4)	1+5/8	--	--	--	--	--	--	--	--	--	40 0	--	40 0	
	(Konyong Nam)	Mantrust	1 8	6 (2)	1+3/4-7/8	--	--	--	--	--	--	--	--	--	0 9	--	0 9	
	Total					183 1	--	16 5	--	7 1	--	6 7	--	0 8	35 0	0 9	105 9 1 0 140 9	

Source: Data provided by the Korean authorities

1/ Korea Exchange Bank

2/ Bank of Korea

3/ Borrowed jointly by KIB and a syndicate of five commercial banks and Medium Industry Bank

4/ One half of a US\$500 million loan obtained by KEB and KDB



Table XXIA Korea Autocurrency Borrowing and Bond Issues by KDB and Other Financial Institutions, 1974-81

(in millions of U.S. dollars)

Borrower	Lender	Amount	Maturity (Grace)	Interest	1976	1977	1978	1979	1980	1981	Out-stand- ing				
					Out-stand- ing	Dis- burse- ment	Amor- tiza- tion	Dis- burse- ment	Amor- tiza- tion	Dis- burse- ment		Amor- tiza- tion			
KDB 1	1974	BTC (Synd)	80 0	10 (3)	L+1 0	80 0	--	10 6	--	20 7	--	10 7	--	10 6	26 7
		Bond (TAI)	18 0	15 (6)	9 5	18 9	--	--	--	--	--	1 9	--	1 9	15 1
	1976	BTC (Synd)	80 0	10 (2)	L+7/8	40 0	40 0	--	--	22 8	--	22 8	--	11 6	--
		Bond (TAI)	15 0	5 (5)	9 5	15 2	--	--	--	--	--	--	--	15 0	--
		Bond	10 0	3 (3)	9 25	10 0	--	--	--	--	--	10 0	--	--	--
		Bond	24 3	3 (3)	8 75	24 3	--	--	--	--	--	24 3	--	--	--
		Bond	25 0	5 (5)	9 5	25 0	--	--	--	--	--	--	--	25 0	--
	1977	Bond	25 0	5 (5)	9 5	--	25 0	--	--	--	--	--	--	--	25 0
		Bond	44 9	7 (7)	7 25	--	44 9	--	--	--	--	--	--	--	44 9
	1978	BTC (Synd) 2/	250 0	10 (3)	L+7/8	--	--	130 0	--	120 0	--	--	--	33 3	216 7
		Bond	44 5	10 (5)	6	--	--	--	--	--	--	--	--	--	44 5
	1979	BTC (Synd)	600 0	10 (3)	L+5/8-3/4	--	--	--	--	600 0	--	--	--	--	600 0
		Bond	44 0	10 (10)	7 875	--	--	--	--	44 0	--	--	3 0	--	41 0
	1980	BTC (Synd)	600 0	8 (3)	L+0 875	--	--	--	--	--	--	--	600 0	--	600 0
		Bond	47 0	10 (5)	9 0	--	--	--	--	--	--	47 0	--	--	47 0
	1981	ETC (Synd)	500 0	8 (8)	L+1/2-3/4	--	--	--	--	--	--	--	300 0	--	300 0
		Bond	20 0	8 (8)	L+1/4	--	--	--	--	--	--	--	30 0	--	30 0
		Total	2,438 6			213 4	109 9	10 6	130 0	33 5	764 0	678 0	47 0	38 4	1,990 9
K LIAI 3/	1978	UBAF (Synd)	200 0	10 (3)	L+5/8-3/4	--	--	--	--	100 0	--	10 0	--	--	200 0
	1981	UBAF (Synd)	200 0	8 (3)	L+3/4	--	--	--	--	--	--	200 0	--	--	200 0
		Total	400 0			--	--	--	--	100 0	--	100 0	--	200 0	400 0
	LTCEB 4/ 1980	KAF	40 0	8 (2)	L+15/16	--	--	--	--	--	--	13 5	--	26 5	40 0
1981	KAF	60 0	8 (2-3)	L+5/8-7/8	--	--	--	--	--	--	--	30 0	--	30 0	
	Total	100 0			--	--	--	--	--	--	13 5	--	56 5	70 0	
	Mitsubishi Banks 1978	Soc. General (Synd)	75 0			--	--	43 0	--	24 6	1 0	--	--	--	--
1979	Lazard Brother (Synd)	111 5			--	--	--	--	38 9	--	--	--	--	--	
1980	Sammuel Montagu (Synd)	77 0			--	--	--	--	--	--	--	--	--	--	
1981	INP of Rhode Island (Synd)	10 0	7 (2)	1-3/4	--	--	--	--	--	--	--	--	--	--	
	Total	273 5			--	--	--	43 0	--	63 5	1 0	--	--	--	
	Total	3,212 3			213 4	109 9	10 6	173 0	33 5	927 5	679 0	160 5	38 4	1,460 9	

Source: Data provided by the Korean authorities

1/ Korean Development Bank

2/ One half of a US\$500 million loan obtained by KEB and KDB

3/ Export and Import Bank of Korea

4/ Long-Term Credit Bank

Table XXX. Korea: Syndicated Bank Loans to Korean Financial Institutions and Bond Issues, 1978-81

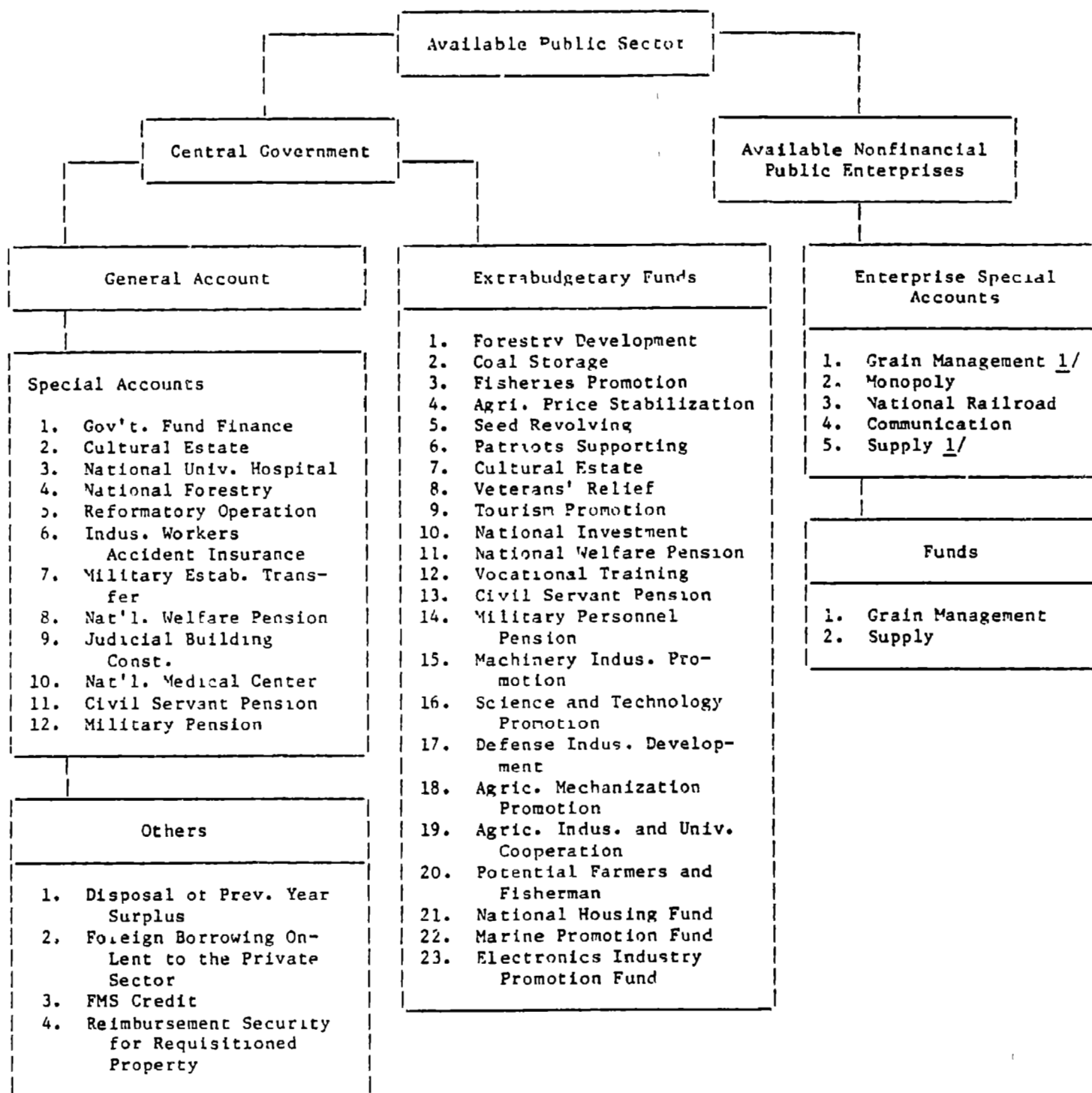
(In millions of U.S. dollars)

Year	Borrower	Lender or Syndicate Leader	Amount	Maturity	Interest
1978	Korean Development Bank (KDB)	Bond (Japan)	44.5 <u>1/</u>	10 years	6.7
	Korea Exchange Bank (KEB)	Bond (Saudi Arabia)	15.0 <u>2/</u>	5 years	7 3/4
	KEB and KDB	Citicorp	500.0	10 years	LIBOR + 7/8
	Five merchant banks	Societe Generale	70.0	5-7.5 years	LIBOR + 3/4 or 1
	Export & Import Bank of Korea (KEXIM)	Union des Banques Arabes et Francaises	<u>200.0</u>	10 years )	LIBOR + 5/8 for first 2 years LIBOR + 3/4 for remaining period
	Total		785.0		
1979	KEB	Chase Manhattan	400.0	10 years )	LIBOR + 5/8 for first 2 years LIBOR + 3/4 for remaining period
	KDB	Bank of America	600.0	10 years )	LIBOR + 5/8 for first 3 years LIBOR + 3/4 for remaining period
	KDB	Bank of Tokyo	128.0 <u>3/</u>	10 years	7.8
	Five merchant banks	Lazard Brothers	77.0	7-7.5 years	LIBOR + 1/2 or 3/4
	KDB	Bond (Kuwait)	<u>44.1</u> <u>4/</u>	10 years	7.875
	Total		1,249.0		
1980	KEB	Morgan Guaranty	500.0	8 years )	LIBOR + 3/4 for first 3 years LIBOR + 7/8 for remaining period
	Commercial Bank of Korea	Bank of America	50.0	8 years )	LIBOR + 3/4 for first 4 years LIBOR + 7/8 for remaining period
	Hanil Bank	Asia Pacific Capital Corporation	50.0	8 years )	LIBOR + 3/4 for first 4 years LIBOR + 7/8 for remaining period
	Six merchant banks	Samuel Montagu	27.0	3-8 years	LIBOR + 1/2 to 1
	KDB	Namura Securities	47.0	10 years	9
	KDB	BTC	<u>600.0</u>	8 years	LIBOR + 7/8
	Total		1,274.0		
1981	KEB	Chase Manhattan (CMB)	700.0	8 years	LIBOR + 5/8
	KEB	Bond (CSFB)	30.0	7 years	LIBOR + 1/4
	KDB	Citicorp	500.0	8 years )	LIBOR + 1/2 for first 4 years LIBOR + 5/8 for remaining period
	KDB	CSFB	30.0	8 years	LIBOR + 1/4
	KEXIM	Union des Banques Arabes et Francaises	200.0	8 years	LIBOR + 3/4
	Cho-Reung Bank	Chase Manhattan	50.0	8 years	LIBOR + 5/8
	KFB	Bond (Merrill Lynch)	30.0	8 years	LIBOR + 1/4
	KECO	Bond (Yamaichi)	<u>41.0</u>	12 years	8.8
	Total		1,581.0		

Source: Data provided by the Korean authorities.

1/ ₩ 10 billion.2/ Saudi riyals 50 million.3/ ₩ 28 billion4/ Kuwait dinars 15 million.

Korea: Composition of Central Government and Available Public Sector



1/ The administrative costs of the GMF and the Supply Fund are channeled through these accounts.

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