

FILE COPY

RESTRICTED

Report No. AS-133

This report was prepared for use within the Bank and its affiliated organizations. They do not accept responsibility for its accuracy or completeness. The report may not be published nor may it be quoted as representing their views.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT  
INTERNATIONAL DEVELOPMENT ASSOCIATION

---

CURRENT ECONOMIC POSITION

AND PROSPECTS

OF KOREA

(in four volumes)

VOLUME I

MAIN REPORT

January 11, 1968

Asia Department

CURRENCY EQUIVALENTS

U. S. \$1.00	=	Won 270
Won 1,000	=	U. S. \$3.70
Won 1,000,000	=	U. S. \$3,703.70

This Report is based on the findings of a Mission which visited Korea in September 1967. The Mission was composed of the following members:

Cornelis J.A. Jansen	Chief
Shu-Chin Yang	General Economist
Guenter H. Reif	General Economist
M. Shafi Niaz (FAO)	Agriculture
W. F. Doucet (FAO)	Fisheries
Jacques M. Gruot (BCEOM)	Transportation

TABLE OF CONTENTS

MAIN REPORT

	<u>Page No.</u>
BASIC DATA	
SUMMARY AND CONCLUSIONS .....	i - vii
I. <u>INTRODUCTION</u> .....	1
II. <u>THE RECENT ACCELERATION OF ECONOMIC GROWTH</u> .....	5
A. Growth of Production and Capital Formation .....	5
B. Sectoral Growth and Development Strategy .....	8
C. Growth of Foreign Trade .....	12
III. <u>THE FINANCING OF GROWTH</u> .....	17
A. Introduction .....	17
B. Public Savings and Investment .....	19
1. General Trend .....	19
2. Revenue Increases and Tax Efforts .....	22
3. Channelling Capital Funds .....	24
C. The Behavior of Private Savings .....	25
D. Stabilization Efforts and Financial Markets .....	27
E. Foreign Resources .....	29
IV. <u>THE OUTLOOK FOR PRODUCTION AND CAPITAL FORMATION</u> .....	33
A. Introduction .....	33
B. Agriculture .....	37
C. Fisheries .....	39

TABLE OF CONTENTS (Cont'd)

	<u>Page No.</u>
D. Mining and Manufacturing .....	40
E. Electric Power .....	44
F. Transportation .....	46
G. Conclusion .....	47
V. <u>PROSPECTS OF DOMESTIC RESOURCE MOBILIZATION</u>	49
A. Public Revenue and Tax Reforms .....	49
B. Public Expenditures (Current) and Savings .....	54
C. Private Savings .....	55
D. The Interest Rate Problem .....	58
VI. <u>PERSPECTIVE OF EXTERNAL TRADE AND FINANCING</u> ...	59
A. External Trade Prospects .....	59
1. Commodity Exports .....	59
2. Current Invisible Earnings .....	61
3. Imports and Import Policy .....	62
4. Prospects of Trade Deficits .....	63
B. Foreign Assistance: Needs and Prospects ..	64

APPENDIX ON FISCAL REFORM

STATISTICAL ANNEX

LIST OF CHARTS

MAP OF KOREA

BASIC DATA

	<u>1962-64</u>	<u>1965</u>	<u>1966</u>
<u>Area (sq. miles):</u>			38,426
<u>Exchange Rate:</u>			
Won per US\$1.00	172	265	271
<u>Population:</u>			
Total (million)		28.4	29.1
Growth rate (%)	2.9	2.7	2.5
Density (per sq. mile)		740	759
Density (per sq. mile of arable land)		3,380	3,590
<u>Gross National Product Per Capita:</u>			
In US\$ (at current prices)			131
Annual average real growth rate (%)	4.0	5.6	10.6
<u>Gross National Product:</u>			
Total value (billion Won at current prices) (billion US\$)		806 3.04	1,032 3.81
Annual average <u>real</u> growth rate (%)	6.9	7.4	13.4
Industrial origin (%)	100	100	100
Agriculture and forestry	41.7	36.8	36.3
Fisheries	1.2	1.7	1.6
Manufacturing	15.1	17.7	18.1
Transport	3.4	3.4	3.4
Other branches	38.6	40.4	40.6
<u>Investment and Domestic Saving:</u> (% of GNP at current market prices)			
Gross domestic investment, total	15.3	14.7	21.6
Gross domestic saving	5.8	8.2	13.0
<u>Resource Gap and Domestic Saving:</u> (% of Gross domestic investment at current market prices)			
Foreign Saving <u>1/</u>	58.9	44.5	39.9
Gross domestic saving	41.1	55.5	60.1

---

1/ Deficit of the nation on goods and services account.

	<u>1962-64</u>	<u>1965</u>	<u>1966</u>
<u>Finance of Gross Investment (%)</u>			
Total gross investment	100	100	100
National Saving	41.1	55.5	60.1
Public	-5.3	8.6	11.8
Private	46.4	46.9	48.3
Foreign Saving	58.9	44.5	39.9
<u>Gross Fixed Capital Output Ratio:</u> (at constant 1965 prices)			
	1.87	1.68	1.09
<u>Money, Credit and Prices</u> (annual average nominal rate of change in %)			
Total money supply	10.5	32.5	21.9
money	.8	76.5	23.8
quasi-money	31.5	94.3	121.0
Total bank credit outstanding to central government (net)	11.6	7.3	- 25.7
Total bank credit outstanding to private sector	17.8	30.9	44.1
Cost of living index	18.5	13.4	11.8
Wholesale price index	21.0	10.1	7.6
GNP implicit price index	24.5	15.1	11.3
<u>Public Sector Operations</u> (% of GNP at current market prices)			
General gov't. current receipts	11.8	11.3	13.3
General government current expenditures	12.6	10.0	10.9
General government saving	-0.6	1.3	2.4
General government capital expenditure (including loans <u>1/</u> to private sector)	6.7	5.1	7.3
General government capital expenditure (excluding loans to private sector)	5.1	4.5	5.9
Public sector investment	4.0	3.9	4.7
External assistance to government sector	5.0	4.1	3.4

---

1/ Loans made by the public sector are mostly utilized by the borrowers for capital goods; hence, it is here included in the General government capital expenditure.

	<u>1962-64</u>	<u>1965</u>	<u>1966</u>
<u>Balance of Payments (US\$ millions):</u>			
Merchandise trade			
Exports	86.9	175.6	250.4
Imports	417.3	420.3	679.9
Net merchandise (debit)	330.4	244.7	429.5
Services (excluding investment income)			
Receipts	91.9	110.5	198.7
Payments	70.3	65.8	22.8
Net services (credit)	21.6	44.7	105.9
Net investment income (credit)	9.7	1.4	0.6
Deficit on current account, excluding transfers	312.6	198.6	323.6
Total net transfers received	230.2	203.3	219.6
Private	47.5	63.7	97.6
Central government	182.7	134.6	122.0
<u>External Trade</u>			
Export of goods and services as % of GNP	9.5	9.7	11.7
Annual average nominal growth rate (%)	20.3 <u>1</u> /	38.1	57.0
Imports of goods and services as % of GNP	25.9	16.2	18.4
Annual average nominal growth rate (%)	- 25.5 <u>1</u> /	13.0	44.5
Export price index (1963 = 100)		106.1	106.9
Import price index (1963 = 100)		103.0	102.0
Terms of trade (1963 = 100)		103.0	104.8
<u>International Reserves</u>			
Total value (US\$ millions)	145.5	146.3	245.4
Months imports of goods and services	4	4	4
<u>I.M.F. Position (US\$ millions)</u>			
Quota		18.8	24.0
Drawings, gross		-	-

	<u>1962-64</u>	<u>1965</u>	<u>1966</u>
<u>External Public Debt</u>			
Total debt outstanding (US\$ millions)	247.12 <u>1/</u>	349.24	594.78
of which: undisbursed	78.61 <u>1/</u>	115.96	281.33
Total annual debt service (US\$ millions)	5.32 <u>1/</u>	6.47	11.58
Debt service ratio (%) <u>2/</u>	2.6 <u>1/</u>	2.3	2.6

---

1/ 1964 data only.

2/ Ratio of external debt service to the value of exports of goods and services and factor payments received.

## SUMMARY AND CONCLUSIONS

### A. Path of Rapid Growth

1. Korea's economic performance in the last two years has continued to be impressive. Production, investment, savings and exports exceeded by far the ambitious targets of the Government's development plan. The growth of GNP in real terms accelerated from 7 percent in 1962-64 to about 10 percent during 1965-67. Per capita GNP is also increasing fast, although at \$131, the level is still low. The rapid growth has led the Government to take a new look of the Second Five-Year Plan and the projected major targets are now higher than the original ones. The assessment of these changes required a more comprehensive review at some length in this report than would have usually been the case.

2. The main element in Korea's rapid economic development was the fast growth of capital formation. Gross fixed capital formation in 1966 jumped to 21 percent of GNP from 14 percent on average during 1962-64. About the same proportion to GNP is expected for 1967. The upsurge in capital formation was made possible by sharply increased availability of domestic and foreign finance which was partly the result of the Government's determination to promote economic development. The existence of a relatively well-developed construction industry is also an important factor.

3. Agriculture, accounting for over one-third of total output and employing over half of the labor force, is still the largest sector in the Korean economy. In spite of scarcity of cultivable land, Korea is among the developing countries where food production is rising faster than population and eventual self-sufficiency in food appears possible. The Mission noted with concern a certain slowdown in recent years in agricultural development programs with the result that the use of modern inputs, such as fertilizers, pesticides and lime, is progressing at a slower pace than set out in the Second Plan. Major land development and conservation programs also appear behind schedule. To some extent the slackening of agricultural development may have contributed to the apparent widening of the disparity between rural and urban incomes. Being aware of the problems, the Government is considering a number of policies to speed up agricultural development. For long run agricultural development, regional planning will be emphasized in the preparation of the next five-year plan.

4. Fisheries development in recent years has been very satisfactory. In a few years Korea has built up a major tuna fishing fleet producing for export. The Government is now emphasizing expansion of supporting shore facilities, training of fishing crews and has recently increased attention to the development of fishery in nearby seas and off-shore waters. Marketing and distribution of fish in Korea also needs improvement.

5. Manufacturing is the most dynamic sector in the economy and forms with rapidly expanding auxiliary activities (construction, power generation and transportation) the center of the economic boom. The annual growth of manufacturing output accelerated from 12 percent in 1962-64 to 18 percent in 1965-67. The share of manufacturing in GNP rose to 20 percent in 1967 from only 14 percent in 1960. Nearly one-third of total capital formation is now being channeled into manufacturing investments. Most of the increase, in manufacturing, is the result of private sector initiative, but the Government actively promotes and guides development by its credit policy, including approval of foreign suppliers credits, and fiscal incentives.

6. Although capacity increases in transport and power had been fast enough to match the expansion of manufacturing in 1965 and 1966, a power shortage arose in the summer of 1967, resulting in restrictions on industrial power consumption. Simultaneously, rapidly increasing transport demand caused bottlenecks in transport facilities. These difficulties forced the Government to reemphasize power and transportation in investment planning to avoid slowdown in the growth of the directly productive sectors.

7. Education is another sector lagging behind the requirements of rapid industrialization, especially in vocational training. The growing demand for technical personnel is already reflected in fast rising wages of skilled labor. In order to maintain Korea's comparative advantage, more emphasis on technical and commercial training is indispensable.

#### B. The Trade Gap

8. The rise of exports is phenomenal. It is estimated that 1967 merchandise exports amounted to about \$350 million or 8 percent of GNP, compared with annual exports at the end of the 1950's of only \$20-30 million. Diversity of export products and markets indicates that a large part of export gains in recent years probably represents solid achievements, although increasing restrictionist tendencies in the developed world certainly could hurt Korean exports. Manufacturing products now account for almost two-thirds of total exports, the assortment resembling that offered by the Rep. of China (Taiwan) and Hong Kong. U.S. and Japan, main traders with Korea, still buy 65 percent of Korean exports but Korea is increasingly penetrating other foreign markets. Commodity exports to Viet Nam amounted to 6 percent of the total in 1966 and probably less than this in 1967.

9. Korea's export success would certainly not have been possible without active Government support. Promotional measures include liberal credit and tax incentives as well as an import licensing system, favoring firms with good export performance. Since export subsidization pushes resources into exports to a large extent than would have occurred otherwise, the present incentive system should be carefully reexamined now that export industries are becoming in general more firmly established and accounting for a substantial proportion of investment outlays. Incentives should gradually be applied in a more discriminate manner, emphasizing new export goods, new markets and domestic value added portion of exports rather than gross export earnings.

10. Most of the recent spectacular increase in invisible earnings is related to the Viet Nam conflict. They are roughly estimated at \$120 million in 1967 or almost 20 percent of Korea's earnings from exports of goods and services.

11. Imports of raw materials and intermediate goods have increased quite substantially in recent years as a result of trade liberalization, expansion in industrial production, the construction boom, and increased local demand for fuel. Imports of machinery and equipment, another important item on the import bill, rose even faster than raw material imports, due to the upsurge in capital formation. On the other hand, the relative importance of grains and fertilizer imports has continued to decline. Import liberalization made further important progress when in July 1967 quantitative restrictions were moved from a positive to a negative approval system.

12. The trade gap narrowed, in relative terms. Exports of goods and services as a percentage of imports of goods and services rose from 30 percent in 1963 to 58 percent in 1966. However, the absolute size of the gap is still large - \$324 million in 1966.

#### C. Domestic Savings and Foreign Finance

13. Domestic savings in recent years exceeded all previous estimates. The savings rate jumped from 6 percent of GNP in 1962-64 to 13 percent in 1966 and will probably be about 14 percent in 1967. The marginal propensity to save out of private disposable income rose from 2 percent in 1963 to 21 percent in 1966. Despite the strikingly good performance, Korea's savings rate is still not very high as compared to many other developing countries and leaves scope for further improvement.

14. Apart from the impact of general economic expansion with rapidly rising incomes, private savings were encouraged by the Government's successful anti-inflationary policy, by the increase in interest rates, and by the Government's vigorous saving campaigns. There is, however, also evidence of growing inequality in income distribution and this may also have contributed to the increase of private savings. In view of possible adverse social and political consequences, the increasing inequality of income distribution requires Government's attention. The recent tax reform should be of help in correcting this situation.

15. The improvement in Korea's public finance noted in earlier Bank reports has continued. Although the scope of government development activities on current and capital accounts has been expanded greatly, a simultaneous revenue increase was large enough to allow government savings to grow further and to contribute an important part to capital formation. The main factor in rising government revenues has been increased tax revenues, mostly resulting from improved tax collection. The proportion of tax to GNP was raised from 6.7 percent in 1964 to 10.0 percent in 1966. Total domestic revenue (including monopoly profits, etc.) amounted to 14.0 percent of GNP. This is still relatively low, but the trend of increase is commendable. On the expend-

iture side, capital outlays have been expanding much faster than current expenditures, reflecting increasing government finance of development programs. The main expanding factor on current account were urgently needed salary increases for government employees and military personnel who had suffered a serious loss of purchasing power in previous years of inflation.

16. The elimination of fiscal deficit and restrictions on the expansion of private sector credit have contributed to monetary stability. The annual increase in wholesale prices came down from around 30 percent in 1963-64 to 6-8 percent a year. However, the danger of inflation has not yet been fully overcome. The expansionary effect of rapidly increasing net foreign exchange receipts from both exports of goods and services and foreign loans has recently been adding to monetary pressure. In order to keep the money supply down, the Government reinforced rigorous restrictions on bank credit to the private sector. In addition, the need for tight credit restrictions renders it at present difficult to lower the Korean interest rate structure.

17. Until the early 1960's foreign aid was almost equivalent to capital formation. The inflow of foreign resources is still very large but the relative contribution to total capital formation has dropped to around 40 percent. Grants are accounting for a smaller, loans and credits for a larger part of the inflow, particularly because of the increase in foreign suppliers' credits. The United States continues to be the largest donor, but Korea's recent aid agreements with Japan are substantial, providing for \$300 million of grants, \$200 million of soft loans and "at least" \$500 million of suppliers' credits, to be disbursed between 1966 and 1975. The improved economic situation and a favorable climate for private investment have recently also attracted a sizeable amount of foreign direct investment.

#### D. Prospects of Growth

18. The Korean Government estimates that the growth of GNP in real terms during the remainder of the Second Five-Year Plan period (1968-71) will amount to 10 percent a year as compared to the 7 percent target in the original Second Plan. Investment requirements for the whole Second Plan were estimated at won 1,430 billion (\$5.3 billion), 46 percent higher than in the Plan. The Mission has tried to explore the potential for economic growth reviewing production and investment prospects in major economic sectors and has tentatively concluded that as far as production possibilities are concerned, GNP may grow at a rate of between 8 and 11 percent during the rest of the Second Plan period, depending on whether the supply of power, transportation and other services will prove sufficient. Although proposed government programs to expand facilities in these sectors seem adequate, requirements on the tertiary sector are so heavy that it is uncertain that the programs will be completed in time so that delays in directly productive activities can be avoided.

### E. Domestic Resource Mobilization

19. The Korean Government wants the public sector to play a major role in the mobilization of domestic financial resources. This emphasis appears to be in the right direction, not only because of the uncertainties inherent in the mobilizing of private savings, but also because a large part of investments in the near future will be in social overhead capital requiring public outlays. The Mission is generally satisfied with the 1967 fiscal reform, although some provisions were watered down in the final version. The reform incorporates several suggestions of previous Bank missions. It will not only increase revenues, but also improve tax equity, encourage private savings and investments, and promote a healthier structure of business finance by favoring open corporations. From the prospective current revenue and expenditures, the Mission estimates that public savings are likely to rise from 3.5 percent of GNP in 1967 to almost 6 percent in 1971. The tax reform, however, would tend to slow down the increase in private disposable income and therefore private savings. As a result of the tax increase, it appears likely that there would be a dip in the marginal propensity to save in the private sector in 1968. A reasonably steady increase afterwards would carry total domestic savings from 13 percent in 1966 to 16 percent in 1971. This would leave an estimated savings gap of about 7 percent of GNP in 1971 as compared with 8.6 percent in 1966.

20. The Mission feels that in the interest of long-term self-sustained growth, even stronger efforts should be made for mobilizing domestic savings, in particular by improving the interest rate structure, strengthening financial institutions, and developing capital markets. At the same time, suppliers' credits from abroad should be reviewed carefully in order to avoid financing of unsound projects and unnecessary stimulation of monetary expansion. Present screening and approval procedures for private sector projects financed with foreign resources should be revised. Also development of domestic capital goods industry should be encouraged for in recent years foreign suppliers' finance had often been employed to the detriment of local machinery and equipment industry. In general, the Mission feels that Korean Monetary authorities should attempt to achieve a better balance between domestic and foreign finance.

### F. External Trade and Financing

21. Export prospects are favorable. A recent GATT mission investigating Korean export potential at the request of the Bank judges that demand conditions abroad might allow exports to grow from \$350 million in 1967 to close to \$1 billion in 1971 provided import restrictions in major importing markets do not increase sharply. But it is uncertain that production can be expanded to this magnitude or that domestic demand conditions would allow such a large exportable surplus. Also the Mission thinks it desirable, as pointed out before, that the export incentive

scheme be reviewed and this may also lead to some slowdown in export growth. It seems likely, however, that 1971 exports could amount to \$750 million, which is the present export target for 1971 of the Korean Government.

22. Current invisibles earnings will almost certainly drop after the cessation of hostilities in Viet Nam. Korean expectation for possible participation in Viet Nam's reconstruction and increased earnings from merchant shipping, civil aviation and international tourism seems too optimistic. On the other hand, imports of services are bound to rise rapidly because of anticipated sharp increase in commodity trade and need of the fast growing economy for foreigners' services in the productive process.

23. Import growth is likely to become slower after the recent sharp increase which was in part due to trade liberalization. The tempo of further trade liberalization will be an important factor in the future rise of imports.

24. The trade gap for the Second Plan period resulting from these tentative explorations is of the same order of magnitude as our independently estimated gap between investment and domestic savings. Our estimates are moderately higher than the estimates made by the Korea Government, but some allowance has to be made for the margin of error for such calculations. As a proportion of GNP, the trade gap would decline during the Second Plan period, from 8.7 percent in 1966 to 6.2 percent in 1971. This would be a considerable achievement, opening the prospect for eventual viability of the economy.

25. While cautious optimism about the future of the economy thus seems justified, it is clear that Korea needs a considerable inflow of foreign resources. In recent years, the average terms of foreign finance have been hardening. The development is in line with the increasing scarcity on a global scale of concessional assistance and the improved prospects of the Korean economy. It seems reasonable to expect that this trend will continue, raising the question whether it would be prudent for Korea to seek foreign resources on conditions that are on the average more onerous than in the past. In view of the present comparatively low debt service (less than 6.4 percent of foreign exchange earnings in 1968), sizeable foreign exchange reserves and favorable export prospects, Korea could stand some hardening of terms of foreign capital inflow. It should be possible for Korea to accept, in addition to grants and soft loans, a sizeable amount of conventional loans. However, in view of the still substantial amount of foreign resources needed to carry out the country's development program, the proportion of suppliers' credits should not be too large since this would rapidly lead to a dangerously high level of debt servicing obligations vis-a-vis prospective foreign exchange earnings. The Mission has traced the implication for debt servicing obligations of different compositions of capital inflow as to term and condition of repayment, and finds that a difficult situation would arise if the proportion of suppliers' credit in the inflow is raised beyond present levels. This present situation appears to justify a blend of concessional assistance and conventional loans to Korea, taking also into

account the demonstrated ability of the Government and the private sector to expand the productive capacity of the economy. Meanwhile, the Government should feel encouraged to pursue its recent policies for mobilizing increasingly large domestic resources for investment. The inflow of short and medium-term suppliers' credits should be strictly limited in order to prevent undue accumulation of future debt servicing obligations.

## I. INTRODUCTION

1. The impressive progress shown by Korea in many fields has continued in the last two years. Korea's enormous post-war problems had gradually been brought under control during the 1950's and early 1960's. The extensive war damage to productive facilities and infrastructure was repaired, while the refugees from the North were absorbed in the economic and social fabric of the country. Because of continuing threat from North Korea, defense expenditures have remained large, but a vast increase in production has made it gradually easier to carry this burden. On the whole, production grew fast throughout the post-war period but, confronted with pressing consumptive demands, including defense, and on the other hand the desire to expand productive capacity rapidly, the Government had persistent difficulties in controlling inflation without at the same time reducing growth severely. A vital factor for the progress of the economy during this period was United States grant aid, in many years larger than total capital formation. However, in spite of this aid, Government felt in most years unable to avoid inflationary financing. The economic difficulties were attended by political trouble eventually leading to the ouster of the Syngman Rhee regime in 1960. It was not until General Park Chung Hee was elected president in late 1963 and his democratic Republican party obtained a majority in subsequent national assembly elections that management of the country's affairs improved. This improvement - noted in our previous reports 1/ on Korea - has continued and gathered greater momentum.

2. One of the chief ambitions of the new regime was to build a prosperous, viable economy, eventually independent of foreign assistance. From the beginning, it recognized the importance of improving policies regarding domestic resource mobilization and removing the disincentive effects of inflation and over-valued exchange rate. By strict discipline in public expenditures and better tax collection, budget deficits on current account were eliminated in 1964 and followed by increasingly larger public savings. A combination of monetary and fiscal instruments including a drastic increase in official interest rates attracted private savings to the organized banking system and reduced the need to allocate credit by administrative decision. Monetary discipline made it possible in May 1964 to devalue the currency to a realistic level. With minor fluctuations this exchange rate has since then been maintained. Devaluation had a sharp incentive effect on exports which shot up in a most remarkable fashion. Price increases, while still substantial, became much smaller than in the preceding period. Government deliberately increased and widened the role of foreign loans in financing private investment. Japan's role in financing economic development both of

---

1/ "The Economy of Korea" (in eight volumes), FE-55a, June 17, 1966.  
"Appraisal of Korea's Second Five-Year Plan", AS-116, October 24, 1966.

the public and private sectors in Korea became very important after normalization of relations with that country in late 1965. The politically sensitive negotiations on normalization had dragged on for over a decade.

3. A spectacular increase in GNP, exports, capital formation and savings during the last two, three years have raised the Government's confidence that its policies are essentially correct and increased its determination to proceed in the same direction. Popular backing for the president has increased as shown by his reelection by a wide margin in May 1967. However, reports of vote rigging at subsequent elections for the National Assembly in a number of constituencies led to popular unrest and refusal for some time of the opposition party to take its seats in the Assembly. Meanwhile, a compromise has been worked out and the opposition participates again in parliamentary deliberations. The elections and ensuing political difficulties have not led to interruption or confusion of the administration as might have happened in the 1950's and early 1960's. This may be seen as an indication of Korea's increased stability. The continuity of cabinet officers and senior civil servants has contributed to marked increase in maturity and experience in decision making. It should be recalled that lack of administrative and managerial experience was one of the chief factors hampering progress after the end of the Second World War.

4. There are still political difficulties, some inherited, some new. Disparity in income distribution has been widening in recent years and the Government is aware that unless the benefits of development are spread to rural areas and lower income classes in the cities, disenchantment with the present system may grow. In the meantime, the Government has undertaken a large military commitment in Viet Nam where 45,000 Korean troops are participating in the conflict. Support for the Government's dynamic economic development policies appear to be wide based. There is widespread willingness in Korea to accept socio-economic change: willingness to learn new techniques, to switch from agricultural to industrial occupations, to adopt the living pattern of industrial society, and to apply birth control. And political resistance against sacrifices of development, such as increased public utility charges or more stringent application of tax laws, appears to be small. Political pressure to apply large-scale consumer subsidy is not in evidence. Most impressive of all is the willingness to increase domestic savings drastically as shown by a marginal savings rate of 21 percent over the last three years.

5. Another noteworthy achievement in Korea is the slowing down of population growth following implementation of an active family planning program. Population growth at 2.9 percent during 1955-65 came down to 2.4 percent in 1967. The planners expect that the rate will be further reduced to 2.3 percent in 1968 and slightly below 2 percent in 1971. Family planning program will be intensified by, among other things, encouraging more participation in rural areas and introduction of new means, e.g. birth control pills. The program has thus far mainly relied on intra-uterine devices. Acceptance among the population has met expectations. However, future progress may not be as rapid, for generally the initial acceptors are older women with four or more children who are more easily convinced. So far younger acceptors (aged 25-29) accounted for only 20 percent and it is likely that equal yearly increases in the number of acceptors will become more difficult. Also, the success of the program depends on the speed of training qualified medical staff and of establishing adequate facilities. The target set by the planners may therefore represent the maximum possibility.

6. The Government's medium-term development strategy was outlined in the Second Five-Year Plan which covers 1967-1971. The Plan was formulated in the perspective of a 15-year development period, 1967-1981. In the opinion of the Bank's appraisal mission which visited Korea in 1966, the Plan is a valuable, well-considered statement of government policies and expectations. In spite of certain shortcomings in analysis and what was then regarded as optimism on the possibility of achieving the Plan's savings and export targets, the Bank's report agreed with the basic strategy of the Plan. Its main objective was to lay the foundation for a high income economy in the 1980's at vastly raised levels of production and employment and no longer dependent on foreign assistance. The strategy outlined in the Plan aims at reduction in the growth rate of the population; increased agricultural productivity and efforts to reach self-sufficiency in foodgrain production; rapid industrialization, partly for exports, exploiting the country's comparative advantage in international competition; increased capital mobilization; continuing financial stability. This strategy appeared to respond to the country's development requirements. In most activities, private initiative, whenever necessary, stimulated by appropriate fiscal, credit and other incentives, was expected to make the required investments. The Government would encourage and guide. It would itself participate to the extent private initiative would be deficient: in infrastructure investments and heavy industrial investments exceeding the scope of private funds in Korea.

7. The planning machinery set up during the First Five-Year Plan (1962-66) was further strengthened to ensure implementation of the Second Plan. Planning units in each government agency were formed to help draft sector plans in coordination with the central planning

agency, the Economic Planning Board, and to watch over the implementation. These planning units need, in most instances, to be expanded with well-trained economists and engineers. Continued attention is necessary for the improvement of project preparation.

8. An important new feature of the Second Plan was the annual formulation of a comprehensive annual economic plan, the so-called Overall Resources Budget (ORB). This document is to reflect the Government's expectations and intentions with regard to the growth of the entire economy, in public and private sectors, in the forthcoming year. It is drawn up within the framework of the Plan but takes into account developments since its formulation. The purpose of the ORB is "setting public and private sector goals, projecting total available foreign and domestic resources, determining appropriate investment and consumption magnitudes, programming sectoral and project programs and formulating needed policy proposals, including stabilization policies and programs".<sup>1/</sup> The ORB has a three-year horizon: it reflects actual developments in the past year, revised expectations for the current year and, in the light of these two, newly formulated targets and policies for the next. The government budget, the foreign exchange budget, and the trade and stabilization program are formulated within the framework of the ORB. The ORB 1967 was prepared early in 1967, too late to serve the purpose of guiding the drafting of the 1967 government budget. But the ORB 1968 was formulated in time to serve this purpose.

---

<sup>1/</sup> "The Second Five-Year Economic Development Plan", para 224.

## II. THE RECENT ACCELERATION OF ECONOMIC GROWTH

### A. Growth of Production and Capital Formation

9. The principal characteristics of economic development in Korea in the last two or three years is an unusual and unexpected acceleration of the growth process. Output, capital formation, public and private savings, capital inflow, export of goods and services have all been growing at rates surpassing by far the ambitious targets of Korea's planners and the more cautious appraisals of outside observers, including the Bank's economic missions. Recent developments in output, capital and employment are summarized in Table 1. The growth rate of GNP had already reached the quite high level of 6.9 percent a year during 1962-64. <sup>1/</sup> But growth rates since then were even higher: 7.4 percent in 1965, 13.4 percent in 1966, and probably close to 10 percent in 1967. These rates are far above the target of 7 percent for 1965-1971 calculated in the Government's Second Five-Year Plan. The decline in population growth (see para 5) has allowed an annual rise of per capita GNP by about 7 percent between 1962-64 and 1966. Per capita GNP in 1966 is estimated at the equivalent of \$131. This is still low, but growth rates are unusually high. GNP growth rate in the majority of the developing countries is less than 6 percent and the growth rate of per capita GNP less than 3 percent. The main factors in this process of accelerated growth and of prospects for maintaining an ultra-high growth rate (as now intended by the Government) will be analyzed in this report. While doing this we will try to assess to what extent the expectations of the Second Five-Year Plan are matched by actual and expected developments.

10. Not less remarkable than the accelerated growth of GNP - and one of its main causes - was the increase in capital formation during recent years. During the first decade after the Korean war fixed capital formation had averaged around 10 percent of GNP. During 1962-64 the proportion rose markedly, to 13.6 percent, but in 1966 the rate jumped to 20.9 percent. A similar level is expected for 1967.

---

<sup>1/</sup> In discussing recent economic changes this report uses, wherever feasible, the years 1962-64 as a basic period for comparison. This period begins with the start of the present ruling party's consistent development effort and evens out certain fluctuations within this period. Especially the year 1964 was not quite normal because of unusually good weather and bumper crops, and important policy changes: devaluation, monetary stabilization, import restrictions. For this reason the Mission feels that the period 1962-64 rather than 1964 by itself would provide a suitable basis for comparison with subsequent events.

Table 1

Growth of Output, Capital and Employment 1/

	<u>1961</u>	<u>1962-64</u>	<u>1965</u>	<u>1966</u>
I. Rate of growth of GNP (%)	4.2	6.9	7.9	13.4
II. Rate of growth of the non-agricultural sector (%)	- <u>2/</u>	9.5	9.3	14.9
III. Percentage of gross fixed capital formation to GNP	10.6	13.6	14.6	20.9
IV. Percentage in total fixed capital formation of the non-agricultural sector	87.1	90.3	88.4	87.8
V. Incremental gross capital- output ratio <u>3/</u>	2.98	2.41	2.13	1.92
VI. Incremental fixed capital- output ratio for <u>3/</u> non-agricultural sector	- <u>2/</u>	2.81	1.78	2.27
VII. Rate of increase of persons employed (%)	n.a	n.a	3.2	1.6
VIII. Rate of growth of gross value- added per person employed (%)	n.a.	n.a.	4.5	11.0

1/ All rates of growth or increase are compound rates.

2/ No change in output in the non-agricultural sector in 1961 from 1960.

3/ Calculated by dividing capital formation by increments in value-added in the same period.

Source: Bank of Korea, National Accounts.

Many developed but very few developing countries 1/ have managed to reach such a high proportion of fixed capital formation to total output. How fast Korea is being converted into a high-investment economy is indicated by the fact that the increase in fixed capital formation is equivalent to almost half of the GNP increase since 1962-64. Measured at constant prices, fixed capital formation in 1966 was almost double the 1962-64 average. A further large increase is expected in 1967. The growth in capital formation has been very much faster than expected by Korea's planners - in fact the 1971 target for the proportion of capital formation to GNP was only 19.9 percent which is below the actual figure for 1966 and the expected 1967 level.

11. How was it possible for Korea to achieve such a speedy growth in capital formation? Increased availability of finance, domestic and foreign, and the Government's determination to expand productive capacity rapidly are foremost factors which will be discussed in this and the next chapter. In addition, however, it was of prime importance that Korea possessed an adequate construction industry. A very large part of Korea's machinery and equipment is imported, but local construction is required to match it with the necessary complement of factory and office buildings, roads, powerhouses, docks, and other structures. Lack of construction capability is a major restraint on capital formation in most of the developing world. Korea's construction industry, however, has proved able to fill the demand for construction services arising from the fast expansion of capital formation. 2/ Value added of construction industry has been increasing at almost the same neck-breaking speed as total capital formation. The results of this increased construction activity which is in evidence all over the country is perhaps the most conspicuous manifestation of the present boom. Factors which have favored the development of the construction industry are in the first place the emphasis in education to the training of civil engineers, surveyors and civil engineering technicians. Other factors are the experience gained during Japanese rule with Japanese engineering firms and the engineering experience of Korean personnel working with the United Nations forces during and after the Korean war.

---

1/ The significant cases appear to be: Greece, Israel, Peru, the Republic of China (Taiwan), Thailand, Tunisia, Yugoslavia. Source: IBRD World Table 3.

2/ In addition, Korean contractors have been awarded construction bids and are supplying construction services to Viet Nam (where over 10,000 Korean engineers and workers are engaged in military and civilian projects), to Thailand, and to Saudi-Arabia.

12. Rapid expansion of productive capacity has obviously been a major factor in the fast development of the economy. Also important, however, has been the increased and better utilization of existing productive capacity. The Government's financial stabilization efforts in 1964 had led to an acute raw materials shortage causing idleness of many industrial plants. Subsequent improvement in raw materials supply allowed increase in capacity utilization <sup>1/</sup> from 55 percent in 1964 to 74 percent in 1966.

13. The recent spurt in investment is largely the result of private initiative. Private investment accounts for almost all investment in manufacturing and in service industries, such as highway transportation, wholesale and retail trade, banking and insurance. The share of the public sector (this includes central and local governments and government enterprises) in total gross domestic capital formation declined sharply from 63 to 30 percent within five years since 1961, although in the last two years it has increased slightly. Government financing has been almost entirely restricted to investments in infrastructure - transportation, communications, power - and agriculture. This is in line with the Government's determination, clearly formulated in the First Plan and continued in the Second Plan, to develop Korea as an essentially private enterprise economy. As mentioned in paragraph 6 the Government is limiting its own capital formation to infrastructure facilities in which the private sector could not be expected to show sufficient interest and to those directly productive activities which are deemed of key importance in national development strategy, but which require too large funds to be financed by private investment alone. Examples are the Government's investments in shipbuilding, fertilizer production, oil refineries, and possible Government participation in the planned steel and petrochemical complexes.

#### B. Sectoral Growth and Development Strategy

14. The pattern of sectoral growth in recent years continues to be dominated by the rapid industrialization process which has been gathering momentum since the beginning of the First Five-Year Plan. Manufacturing production and a number of activities closely connected with it is growing much more rapidly than the economy as a whole. Primary production, is growing at a lower rate, although it too has several dynamic elements. The difference in growth rates and the resulting change in the composition of GNP is shown in Table 2. The table also shows the changing composition in recent years of capital formation by industry.

---

<sup>1/</sup> Source: BOK.

Table 2

Growth and Structure of Value Added and Capital Formation

	<u>Gross Value added</u> at 1965 market prices					<u>Domestic Fixed Capital Formation</u> (in percentage at 1965 prices)				
	Percentage Distribution		Annual Rate of Increase			<u>1962-64</u>	<u>1965</u>	<u>1966</u>	ICOR <u>1962-66</u> <sup>3/</sup>	
	<u>1961</u>	<u>1966</u>	<u>1962-64</u>	<u>1965</u>	<u>1966</u>					
GNP	100.0	100.0	6.3	7.9	13.4	100.0	100.0	100.0	1.97	
Agriculture and Forestry	42.3	36.3	1.6	5.5	11.0	8.5	10.0	7.3	0.70	
Fishery	1.5	1.6	11.9	9.8	10.6	1.3	1.6	4.8	2.42	
Manufacturing	13.5	18.1	12.3	22.3	16.1	22.6	25.9	32.4	1.89	
Construction	2.6	3.8	12.8	16.8	26.0	2.5	1.2	1.1	0.54	
Public Utilities <sup>1/</sup>	0.9	1.3	18.4	18.6	19.3	10.3	6.0	5.0	6.55	
Transport <sup>2/</sup>	2.9	4.1	14.6	16.8	17.2	22.7	20.5	24.6	6.89	
Commerce	15.2	15.3	8.1	4.7	16.9					
Housing	4.1	3.2	2.5	2.6	3.4					

Notes:

<sup>1/</sup> Electricity, gas, water supply and sanitation.

<sup>2/</sup> Transportation, communication, and storage.

<sup>3/</sup> Incremental capital output ratio derived from the total domestic fixed capital formation during 1962-66 divided by the increases of gross value-added during the same period of each sector respectively.

Source: Bank of Korea, National Accounts.

15. Agriculture is the largest sector of the economy; it accounts for one-third of total output and 54 percent of the population is counted as farm population. Agricultural development thus has large economic and social importance. Increased agricultural production and eventual self-sufficiency, especially of foodgrains, is moreover desirable for improvement in the balance of payments. The potential for increasing in agricultural land is limited, and therefore most of the increase in production is to come from higher yields per acre. These are still low in comparison with neighboring Japan and Taiwan and in relation to the productive potential of Korea's soils. Inputs of pesticide, lime, fertilizer, improved seeds, irrigation water, could all be raised substantially. The trend increase in these inputs following energetic government action in these fields since the Korean war, but especially in the 1960's has been encouraging. Korea is among the developing countries whose agricultural output is increasing faster than population and, although still a net importer of grains, there is the prospect of eventual self-sufficiency. Due to weather conditions, there are, however, large year-to-year crop variations. A bumper crop in 1964 was followed by slight overall output decline in 1965, followed by another bumper crop in 1966. 1966 was a year of unusually favorable weather and as a result agricultural output increased 11 percent over the preceding year. Results for 1967 are likely to be below this record.

16. Because agricultural output is so dependent on weather conditions it is better to review short-term agricultural development by analyzing the trend in inputs, such as lime, fertilizers, pesticides, and the efficiency of their application. Increased use of these inputs noted in the previous paragraph is still going on but at a slower rate than set out in the Second Five-Year Plan. It is not fully clear to the Mission whether this loss of momentum is the result of physical limitations such as supply difficulties or transport bottlenecks or whether Government's efforts to encourage agricultural development have slackened.

17. Fisheries development in recent years has continued to proceed at a very high rate. The major dynamic element in this sector is deep-sea fishing for tuna in southern oceanic waters. In spite of lack of skill and experience Korean deep-sea fisheries enterprises have proved able to handle almost overnight a major tuna fleet numbering 190 vessels by the end of 1966. Private vessel operations are deriving reasonable returns from their investments, because of low wages, willingness of crews to stay at sea for long periods, tax exemptions and subsidies. Government-owned and operated vessels have been faring poorly; they are now to be sold to private firms. Tuna exports have already greatly contributed to exports and to increased income of fishermen. Government is paying more attention now to the promotion of increased production in nearby seas and off-shore waters. Especially, the production of shell fish has good prospects.

18. Most dynamic in the economy is manufacturing. Growth rate of output accelerated from 12.5 percent in 1962-64 to around 18 percent a year during 1965-67. The share of manufacturing in GNP rose from 14 percent in 1960 to about 20 percent in 1967. Investment in manufacturing plants and equipment has more than tripled since 1962-64 in magnitude and its share in total capital formation went up from 23 to 32 percent. Increase in industrial production required, of course, a very large increase in power supply and transportation facilities. The growth rate of output in these sectors was as spectacular as in manufacturing. Value added of transportation increased 15-17 percent a year since 1962 and the growth rate of power output accelerated from 18 percent in 1962-64 to probably over 25 percent in 1967. Growth in transportation and power would not have been possible without big investments in these sectors during the First Five-Year Plan, which rightly stressed infrastructure development. Heavy investment in electric power generation temporarily ended, in 1964, the power shortage which arose after the partition of North and South Korea. Investment in transportation consisted chiefly of increases in the stock of moving assets, especially rolling stock of the railways. On the whole, since 1962, manufacturing industry and its major auxiliary sectors like construction, electricity and transportation have all grown at much faster rates than the economy as a whole. It would be close to the truth to say that the productive complex centered around manufacturing has led the growth of the entire economy. These four sectors combined contributed only 25 percent of the GNP in 1962-64 but about 32 percent in 1967. During the same period the share of agriculture, forestry, and fisheries dropped from 40 to 35 percent.

19. The increase in capacity in transport and power during 1965 and 1966 has proven fast enough to match the swift expansion of manufacturing. However, due to a slowdown in investment in electricity generation, the power shortage re-emerged in the summer of 1967 and a 15 percent reduction in electricity consumption by industrial enterprises was introduced. At the same time it became apparent that the vast increase in transport demand could not be fully met by existing transportation facilities. These bottlenecks point to the need for switching back to the strategy of giving high priority to the development of power and transportation. Shortages in these sectors threaten to slow down the directly productive sectors.

20. Another sector lagging behind the requirements of rapid industrialization is education. School attendance in Korea is very high (literacy among the young is almost complete) and the percentage of primary school graduates proceeding to intermediate and from there to higher education is also high. However, the output of the education system appears not fully geared to training manpower for industrial occupations. There is an emerging lack of technical personnel at the skilled worker and technician levels, especially in the fields of mechanical, electrical and chemical engineering. The lack is not so

much in quantity as in quality of output. Teaching methods, equipment and building are often obsolete, and qualified teachers are scarce. There is also need for improved instruction of commercial skills: accounting, bookkeeping, commercial English.

21. The quicker increase of wages in industries in which skilled labor plays an important role (metal products, machinery, transport equipment) suggests that scarcity of skilled workers is already having its effect on production cost. In view of the fact that Korea's comparative advantage rests in the large scope for raising the productivity of its labor force, it is clear that technical and commercial training should be rapidly improved and expanded.

### C. Growth of Foreign Trade

22. Merchandise imports and exports together climbed from an annual average of \$550 million in 1962-64 to \$966 million in 1966 and probably about \$1,300 million in 1967. Recent trade developments are summarized in Table 3. The amazing increase in exports has been a

Table 3

#### Recent Trade Developments

	Average <u>1962-64</u>	<u>1965</u>	<u>1966</u>	<u>1967</u> <sup>1/</sup>
	(in million dollars)			
Export of goods (f.o.b.)	86.9	175.1	250.3	350.0
Export of services (net)	<u>21.9</u>	<u>45.2</u>	<u>106.0</u>	<u>156.0</u>
Total exports	108.8	220.3	356.3	506.0
Imports of goods (f.o.b.)	<u>417.3</u>	<u>415.9</u>	<u>679.9</u>	<u>880.0</u>
Trade Gap (Foreign Savings)	308.5	195.6	323.6	374.0
Trade Gap as Percent of GNP	9.5	6.5	8.6	8.4

---

<sup>1/</sup> ORB.

Source: IMF Balance of Payments Yearbook; Bank of Korea National Accounts.

main element in the acceleration of economic growth. Since the beginning of the 1960's exports have expanded at a pace of around 40 percent a year and this rate was kept up in 1966 and 1967. Exports in 1966 and 1967 have been far higher than expected when in 1965 the Second Five-Year Plan was formulated. The very high growth rate in the first half of the decade had been achieved over a very low base (about \$20 million a year) and considering the already relatively advanced stage of the country's industrialization and the extremely low labor cost it could perhaps be said that in the late 1950's Korea was under-exporting. To a large extent this was due to the unrealistic exchange rate, and when the Government took action to remove the inhibiting effects of this rate (by the introduction of an export-import linking system in the early 1960's, and devaluation in 1964) exports began their rapid ascent. When the Second Plan was drafted, the planners thought that export growth, although remaining a vital element in the country's economic growth, would slow down to a rate of 21 percent a year. And the 1965 Bank mission, more cautious, estimated future export growth at only 15 percent a year. Events have proved these estimates too conservative. After a 43 percent increase in 1966, exports in 1967 will come close to, or reach, the official target of a 40 percent increase. 1967 exports will then amount to \$350 million, the equivalent of 8 percent of GNP.

23. Composition and diversity of export markets give the impression that much of the export increase of recent years represents solid achievement and that a sudden reversal of fortune, in which export volume or value would drop drastically, is unlikely to occur. As far as the composition of exports is concerned, the variety of products is large and products subject to sudden market changes are few: tungsten ore, which accounts for less than 4 percent of total export earnings, and a few other, less important minerals. Manufacturing products, over 62 percent of the total in 1966, dominate. The assortment of manufacturing products exported by Korea has some resemblance to that offered by the Republic of China (Taiwan) and Hong Kong. As in these countries the mainstay of industrial exports is textiles and clothing, and a large array of other light industrial products. A notable addition in the last year to the fast increasing number of export commodities is the production of electronic equipment parts for the U.S. market. Here also Korea follows the achievements of Taiwan and Hong Kong. An important item in Korea's exports, not represented in Hong Kong's export basket, is plywood. Total exports of this product, mostly to the United States, rose to \$30 million in 1966. Another export product deserving mention is the export of human hair and wigs, which in 1966 earned \$15.5 million. Apart from manufacturing products, Korea has been very successful in the export of fish and fisheries products reflecting the fast expansion of production in the fisheries sector. Finally, receipts from raw silk exports are rising sharply, mainly because of the increase in the world market price.

24. Over 80 percent of total exports is sold in developed countries. The most important purchasers are the United States and Japan which account for 38 and 27 percent of total exports. The danger of Korean exports being affected by demand fluctuations in these countries is mitigated by the fact that Korea's share in these markets is still miniscule, 0.3 percent of U.S. and 0.7 percent of Japanese imports. However, the future growth of cotton textiles exports is circumscribed by the provision of the Long Term Agreement on Cotton Textiles, and if restrictionist tendencies would gain further strength, certain other Korean exports might also be affected. Further diversification, by tapping the European markets, but also markets of the developing world, is of obvious importance.

25. Korea's export drive would not have been successful without the wholehearted support of the Korean Government. Since the early 1960's the Government has considered vigorous export growth and the resulting reduction in dependence on foreign assistance a chief objective of its economic policy. The Government's export promotion measures in the early 1960's were already mentioned. The most important incentives offered at present are the following:

(i) Credit incentives. Exporters receive 90-day credits at 6 percent interest p.a. for about 75 percent of the f.o.b. export value, while the normal commercial bank rate is 26 percent. Rates in the unorganized market are much higher, reportedly between 3.5 and 5 percent a month. A similar interest subsidy is offered to finance the purchase of raw materials, imported or domestic, to be used in export production.

(ii) Tax incentives. Export sales are exempt from the business activity tax, while profits on exports are 50 percent exempt from corporation tax. As usual in many countries, materials to be used in export production are exempt from import duty and commodity tax.

26. In addition to these incentives, which substantially favor the financial results of export transactions, Government also stimulates exports by making the granting of import licenses for raw materials to be used in the domestic market dependent on export performance. In recent years a large proportion of raw materials has been shifted to the Automatic Approval class. The Mission does not know to what extent import licensing is still manipulated to increase exports, but the impression is that this is still an important element in Korea's export performance. The effect of the export-import link may be to induce manufacturers to export at low profit or even at a loss, in order to be able to produce for a protected and therefore highly profitable domestic market. The heavy subsidization of exports is pushing resources into exports at some expense to the economy at large. After initial encouragement needed by the industry to acquire economies of scale, it should be feasible to reduce these incentives gradually and apply them in a discriminate manner, in order to prevent misallocation of resources.

27. Invisible exports increased in 1966 and 1967 in no less spectacular fashion than merchandise exports. Most of the increase is related to the Viet Nam conflict. Korea participates to a considerable extent in military procurement for Viet Nam. Moreover, Korean military personnel stationed in that country and most construction and other civilian workers engaged in Viet Nam are paid in U.S. dollars and part of their earnings is transferred to Korea. At the beginning of 1967 it was estimated that total invisible earnings associated with the Viet Nam conflict would amount to US\$91 million. However, actual earnings have been running ahead of this figure and more likely the total will exceed \$100 million. The Viet Nam conflict is probably also the indirect cause of part of United States military spending in Korea itself. During 1962-64 such spending amounted to \$70 million and when the Second Plan was drafted a gradual decline of this figure was assumed. However, in 1967, U.S. military spending in Korea will probably be in excess of \$100 million. Total invisible earnings associated with the Viet Nam conflict in 1967 are probably at least \$120 million. This is a large amount relative to total Korean resources, about 20 percent of expected 1967 exports of goods and services. It has changed the complexion of the current account of the balance of payments. Internally it has added strongly to the demand for goods and services.

28. The structure of imports in Korea is closely related to the country's poor endowment with natural resources and still low degree of industrialization. Almost all crude raw materials and a large part of intermediate inputs have to be imported. In recent years there has been a large increase in these imports. Total raw materials imports (including manufactured intermediates) in 1966 were almost twice as large as in 1964, and 1967 raw materials imports are expected to increase by 40 percent over the level reached in 1966. This extraordinary increase is, of course, related to the expansion of industrial production. However, in so far as raw materials imports have been increasing much faster than industrial production, there must also have been a considerable build-up of raw materials stocks after very tight import conditions in 1964 and part of 1965. To some extent raw materials imports are also related to the upswing in construction activity. A rough calculation indicates that about 20 percent of the increase in raw materials imports in 1966 consists of materials (structural steel, cement, lumber) which are related to increases in construction activity. And another 10 percent of the increase in raw materials imports appears related to the increased energy needs of transportation and power. By far the largest part of the increase in imports, however, seems directly related to manufacturing production.

29. Another very important element in Korea's import structure is the import of capital goods, especially of machinery and equipment. The swift upsurge of capital formation could not fail to have a very strong effect on the import of capital goods. Machinery and equipment imports have been rising even faster than raw materials imports. In 1967 these imports are expected to be four times larger than in 1965. Almost all machinery imports are financed by credits either from foreign governments or from private sources. A question arises whether in the approval policy for these credits (which will be more fully discussed in Chapter VI), greater attention should be paid to the possibility of local production of capital goods. The present stagnancy in the local machinery industry contrasts sharply with the tremendous increase in demand for machinery.

30. The relative importance of grains and fertilizer in total imports is declining, owing to increased domestic production. Consumer goods imports other than grains were, until recently, small because of quota restrictions or import prohibition. Trade liberalization and the increase in total private consumption is leading to a change in this trend. Consumer goods imports are expected to triple in 1967. Even then they will still be a small proportion of the total.

31. To what extent the increase in imports is the effect of the official trade liberalization policy is not easy to assess. The Government started its import liberalization program in 1965, moving an increasing number of commodities from restricted to automatic approval categories. The most recent important step on the road to import liberalization was taken in July 1967, when restrictions were moved from a positive to a negative system which means that henceforth all imports will be automatically approved unless specifically listed on the negative list. However, as in the past, the Government continues to protect domestic industry by complete prohibition of many competing imports. Currently, the Government is considering substantial further liberalization along with tariff reform. This step could go a long way in the shift from administrative to cost restriction.

### III. THE FINANCING OF GROWTH

#### A. Introduction

32. A low rate of domestic savings and almost complete dependence on foreign funds for the financing of development expenditure was for many years the weakest point in Korea's economic performance. The Bank's appraisal report of the Second Plan noted improvement in domestic resource mobilization but expressed doubt whether the Plan's savings target for 1971, 14.4 percent of the GNP, could be met. The results of recent years, however, have been very encouraging and in fact exceeded the Plan's expectations. The rate of savings to GNP jumped from 5.8 percent of GNP in 1962-64 to 13.0 percent in 1966 and is expected to have risen further to 14 percent in 1967 which is only slightly below the final year's target. <sup>1/</sup> The performance in 1966 and 1967 is to some extent favorably influenced by certain non-recurring events discussed later in the chapter. In spite of these qualifications it is clear that the improvement is significant and that a breakthrough has been made in the field of domestic resource mobilization.

33. As a result of the increase in domestic savings the pattern of development financing has changed radically. Foreign resources in the form of loans or grants contributed about 60 percent to the financing of investment during 1962-64 but this percentage decreased to around 40 percent in 1966 and 1967. Due to the rapid increase in investment, the foreign contribution is still large in absolute terms, about \$324 million in 1966 and an expected \$374 million in 1967. These developments are summarized in the following table:

---

<sup>1/</sup> Since the formulation of the Second Plan the national accounts statistics have been revised which resulted among other things in a rise by about 2 percentage points of the statistical estimate of the savings rate. The revision was made to take account of better information in the field of primary industry, wholesale and retail trade, and fixed capital formation. The base for constant price series was moved from 1960 to 1965.

Table 4

Composition of Savings  
(at current market prices)

	<u>Average</u> <u>1962-64</u>	<u>1965</u>	<u>1966</u>	<u>1967</u> <sup>1/</sup>	<u>Average</u> <u>1965-67</u>
	<u>In billion won</u>				
<u>Gross Domestic Capital Formation</u>	78.8	118.5	223.1	273.1	204.9
Foreign Trade Deficit <sup>2/</sup>	46.4	52.7	89.0	102.1	81.3
Gross Domestic Saving:	32.4	65.8	134.1	171.0	123.6
Public Sector <sup>3/</sup>	-4.2	10.2	29.3	37.5	24.7
Private Sector	36.6	55.6	104.8	133.5	99.0
	<u>As per cent of GNP</u>				
<u>Gross Domestic Capital Formation</u>	15.4	14.7	21.6	22.4	
Foreign Trade Deficit <sup>2/</sup>	9.1	6.5	8.6	8.4	7.8
Gross Domestic Saving:	6.3	8.2	13.0	14.0	11.7
Public Sector	-0.9	1.3	2.8	3.1	2.3
Private Sector	7.2	6.9	10.2	10.9	9.4
	<u>Marginal Propensity to Save</u>				
	-0.03	0.23	0.21	0.19	0.21

1/ Projected figures in Overall Resources Budget 1968.

2/ Deficit of the nation on goods and services account.

3/ Public sector savings are National Accounts estimates. The figures are slightly different from those in Table 5, which are based on fiscal data.

34. Compared with high-income countries and most low-income countries with a high growth rate, Korea's savings rate is still not very high.<sup>1/</sup> Obviously there is scope for future improvement. What counts in the analysis of recent developments is the fast rate at which savings are rising. The marginal propensity to save rose from an average of minus 3 percent during 1962-64 to 21 percent during 1965-67. The changes in economic policy and other factors that have contributed to this improvement are discussed in the following sections on public and private savings.

## B. Public Savings and Investment

### 1. General Trend

35. The improvement in public finance noted in earlier Bank reports has continued.<sup>2/</sup> In 1964 the current budget was balanced, for the first time, as part of the stabilization effort. Since then the scope of Government's development activities on current and capital accounts has been expanded greatly, but a simultaneous revenue increase was large enough to allow Government savings to grow further and to become an important part of total resources for capital formation. Development in the field of public finance are summarized in Table 5 and also illustrated in Chart I.

36. Table 5 shows four striking features:

(i) The relative size of the public sector increased after a dip during 1963-64. As part of the stabilization effort during 1963-64 current expenditures were frozen and capital expenditures limited to works underway. Mindful of the need to speed up development after some success in price stabilization, the 1966 and 1967 budgets were drawn up in a more aggressive manner; the emphasis was shifted from stabilization to growth. Government investments and loans were sharply increased in order to finance the implementation of various projects in the last year of the First Plan (1966) and to make a start with the Second Plan. On current account, Government faced up to the

---

<sup>1/</sup> The average rate of savings to GNP was 22.6 percent in the OECD countries during 1960-64 and 15.1 percent in the fast growing low-income countries mentioned in footnote 1 page 7.

<sup>2/</sup> In order to determine meaningful magnitudes of various categories of revenues and expenditures for the public sector as a whole, several government accounts have to be consolidated. On the basis of the data on government transactions reclassified by the Bank of Korea, a consolidated account, albeit still imperfect, is presented in Statistical Annex Table 10, which includes "central general government", "government enterprises" and "local governments." For detailed explanation, see 1966 Bank Report, FE-55a, Volume VII, Public Finance.

Table 5

Consolidated Public Revenues and Expenditures, 1961-1967

	I. <u>Amount (in billion won)</u>							
	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u> <sup>1/</sup>	<u>1967</u> <sup>2/</sup>
Current Revenue	38.1	48.5	57.4	68.2	91.2	137.6	163.7	199.2
(direct and indirect taxes)	(25.8)	(33.5)	(38.2)	(46.0)	(65.6)	(102.8)	(119.3)	(139.9)
Counterpart Funds	20.2	25.3	24.1	26.7	32.9	35.5	36.0	..
Net Borrowing (domestic and foreign)	6.3	0.4	5.1	5.0	-1.5	10.9	5.7	..
Other Capital Resources	<u>3.7</u>	<u>14.3</u>	<u>2.1</u>	<u>-0.2</u>	<u>-0.7</u>	<u>3.6</u>	<u>10.1</u>	<u>..</u>
Total	68.3	88.5	88.7	99.7	122.0	187.6	215.5	..
Current Expenditures	44.7	55.5	60.0	67.7	80.8	112.4	134.4	156.5
Capital Expenditures	23.6	33.0	28.7	32.0	41.2	75.2	81.1	..
	==	==	==	==	==	==	==	==
Savings on Current Account	-6.6	-7.0	-2.6	0.5	10.5	25.2	29.3	42.7

	II. <u>In Percentage of GNP</u>							
	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u> <sup>1/</sup>	<u>1967</u> <sup>2/</sup>
Current Revenue	12.8	13.9	11.8	9.8	11.3	13.3	13.4	16.3
(direct and indirect taxes)	(8.7)	(9.6)	(7.8)	(6.6)	(8.1)	(10.0)	(9.8)	(14.7)
Counterpart Funds	6.8	7.3	4.9	3.8	4.1	3.4	3.0	..
Net Borrowing (domestic and foreign)	2.1	0.1	1.1	0.7	-0.2	1.1	0.5	..
Other Capital Resources	<u>1.2</u>	<u>4.1</u>	<u>0.4</u>	<u>-</u>	<u>-0.1</u>	<u>0.4</u>	<u>0.8</u>	<u>..</u>
Total	22.9	25.4	18.2	14.3	15.1	18.2	17.7	..
Current Expenditures	15.1	15.9	12.3	9.7	10.0	10.9	11.0	12.8
Capital Expenditures	7.8	9.5	5.9	4.6	5.1	7.3	6.7	..
	==	==	==	==	==	==	==	==
Savings on Current Account	-2.2	-2.0	-0.5	0.1	1.3	2.4	2.4	3.5

1/ Preliminary budget.

2/ Recent estimates of the Economic Planning Board on basis of National Accounts data.

Source: Statistical Annex Table 10.

urgent need of compensating civil servants and military personnel for the curtailment in the purchasing power of their salaries during the previous years of inflation. In both 1966 and 1967, salaries were increased by 30 percent a year. Outlays for elementary education were also increased. In addition the Government had to carry new expenditures in connection with the dispatch of troops to Viet Nam. For this a partial compensation is received from the United States in the form of additional grants.

(ii) Capital expenditures have been increasing much faster than current expenditures. Capital expenditures in 1967 are about three times and current expenditures about two times the 1964 level. This is in current prices; in real terms capital expenditure almost doubled, while current expenditures rose by about 40 percent. As a percentage 1/ of GNP capital expenditure has also risen markedly to 7.3 percent in 1966 and 6.7 percent in 1967. 2/ The high level of Government capital expenditures is contributing greatly to the expansion of the productive capacity of the economy.

(iii) Government revenue has risen drastically. Increased tax revenue, mostly resulting from improved tax collection, is the main factor. However, in line with the decline in U.S. grant aid, the contribution of counterpart funds is diminishing; in the 1967 budget it amounts to only one-sixth of total revenue.

(iv) Government savings have grown. Government dissaving on current account had been a characteristic of post-war public finance in Korea. However, since 1961 revenue has grown consistently faster than current expenditure and this has resulted in continuous improvement. The reduction of public dissaving before 1965 was due to the freezing of current expenditures. However, the substantial increase in public savings in recent years can be attributed chiefly to the sharp increase in government revenue. This increase, mainly from larger tax income, raised the proportion of tax to GNP to 10 percent in 1966. By international comparison this percentage is still low 3/, but the trend of increase is impressive. The success in raising the level of revenue and of public savings, a difficult task in any developing country, is one of the most interesting recent developments on

---

1/ Roughly estimated by applying the implicit national accounts deflator for government consumption to current expenditures and the implicit deflator for fixed capital formation to capital expenditures.

2/ The percentage will be higher after the supplementary budget is included.

3/ Among 72 countries, there are only 7 with tax revenues below this percentage in recent years. See IMF, "Measuring Tax Effort in Developing Countries", (DM/67/3, revision, (July 1967), p.3.

the Korean scene. The action taken by the Korean Government in this field is summarized below.

## 2. Revenue Increases and Tax Efforts

37. The recent revenue increase covered the entire tax field, although central government revenue rose much faster than local government revenue and revenue from direct taxes faster than revenue from indirect taxes. The progress in indirect tax collection, while very satisfactory by itself, can be viewed as making up for lost ground during 1964-65 when import restrictions related to the stabilization effort and tax exemptions for preferred economic activities arrested the growth of indirect tax revenue. The total proportion of indirect tax is not yet fully back at the level attained in early 1960's. The fastest growing elements in indirect taxes since 1964-65 were the business activity tax, the commodity tax, the rates and coverages of which were enlarged, and customs duties which increased as a result of the 1964 devaluation and later of import expansion. However, the revenue from customs duties would have been almost twice as big but for exemptions chiefly on imports for approved investments and raw materials for export production. The revenue from several minor indirect taxes also increased sharply.

38. While the increase in indirect tax revenue was large, the rise in direct tax revenue was relatively more important. This was not the result of new tax laws or raises in tax rates, but entirely of more thorough collection of existing taxes and natural increases accompanying output growth and price rises. The former was particularly worth noting. The Korean Government judged that a major revenue increase could be achieved through full enforcement of existing tax laws. It therefore concentrated its efforts on the renovation of tax administration to haul in previously neglected, overdue, or untapped taxes. A new administrative arm, the Office of National Tax Administration, was created in order to centralize all tax collection functions. With the strong support of the President and vigorous and imaginative enforcement of tax collection, the Office was remarkably successful in 1966, its first year of operation. Actual tax receipts exceeded the preliminary budget by as much as 40 percent.

39. Efforts to improve tax collection<sup>1/</sup> have been made in a number of ways. One important contribution to the revenue increase was the decisive application of tax assessment criteria. In the past, tax rates raised through amendments to tax laws did not necessarily bring about revenue increase because in practice the tax base was not assessed in an effective and realistic way. Tax assessment criteria were elastically applied and left ample room for corruption. In order to improve the situation, the new Office conducted several surveys on gross receipts and income by type of business. These studies, differentiated according to size and location of establishments, formed the basis of official tax assessment

---

1/ A fuller discussion is given in the Annex on Fiscal Reform.

Table 6

<u>Tax Revenue</u> (in billion won)				
	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u> <sup>1/</sup>
<u>Total Tax Revenue</u>	<u>46.2</u>	<u>65.9</u>	<u>103.6</u>	<u>131.4</u>
<u>Central Government</u>	<u>37.4</u>	<u>54.6</u>	<u>87.7</u>	<u>118.7</u>
<u>Direct Taxes</u>	<u>14.0</u>	<u>19.1</u>	<u>34.3</u>	<u>46.7</u>
Personal Income	0.6	11.7	20.3	26.6
Corporate Income	4.1	5.7	10.9	16.6
Other	1.3	1.7	3.1	3.5
<u>Indirect Taxes</u>	<u>23.5</u>	<u>35.5</u>	<u>53.4</u>	<u>72.0</u>
Commodity Tax	3.3	7.0	10.4	14.5
Petroleum Tax	2.0	3.2	3.7	4.2
Business Activity Tax	3.2	4.4	7.3	10.4
Liquor Tax	2.9	3.8	6.3	8.1
Customs Duties	8.2	12.5	17.6	22.3
Other	3.9	4.6	8.1	12.5
<u>Local Government</u>	<u>8.7</u>	<u>11.2</u>	<u>16.0</u>	<u>12.7</u>
Direct Taxes	3.6	4.4	6.2	3.5
Indirect Taxes	5.1	6.9	9.8	9.2
<u>As Percent of GNP</u>				
<u>Total Tax Revenue</u>	<u>6.63</u>	<u>8.18</u>	<u>10.04</u>	<u>10.77</u>
<u>Central Government</u>	<u>5.37</u>	<u>6.77</u>	<u>8.50</u>	<u>9.73</u>
Direct Taxes	2.01	2.37	3.32	3.83
Indirect Taxes	3.37	4.40	5.17	5.90
<u>Local Government</u>	<u>1.25</u>	<u>1.39</u>	<u>1.55</u>	<u>1.04</u>
Direct Taxes	0.52	0.55	0.60	0.29
Indirect Taxes	0.73	0.86	0.95	0.75

<sup>1/</sup> Revised budget for central government; preliminary budget for local government.

criteria. Taxpayers were encouraged to submit their own assessment, but if there was no return from the taxpayer or the return was incorrect, the Office made a presumptive assessment on the basis of its own information. Thus in 1966 for personal business income tax, 99.5 percent of the taxpayers paid the tax on the basis of the average income level of the same type of business and the standard net profit ratio decided by the Office according to sample surveys. About 40 percent of corporate income tax was collected in this way. Similarly, in view of the lagging assessment of tax on workers engaged in personal service trade, the Office surveyed the wage status of workers engaged in such trade during March-April 1966 in the Seoul area and came up with an average wage table to aid in the proper assessment of this category of personal income tax.

40. Other important devices in enforcing tax collection were: (1) The strengthening of the withholding system, applied chiefly to personal income tax, corporate tax and business activity tax. (2) Intensified tax collection on unearned income. Thus a new standard price for rent of real estate was calculated on the basis of a nation-wide real estate survey which resulted in a 70 percent increase in the assessment basis. (3) The strengthening of liquor tax enforcement especially through daily inspection by different inspectors at the manufacturers. (4) Increased emphasis on collection of taxes from high income earners. (5) Application of appropriate taxation on foreign commercial firms.

41. The success of tax collection depends to a large extent on the integrity and efficiency of tax officials and the cooperation of taxpayers. In order to improve the morale of tax officials salaries were substantially increased relative to other government salaries, while discipline was strengthened through tightened internal inspection. District offices were given collection targets on the basis of tax studies and promotion of officials was linked to their performance. Meanwhile, public relations activities were stepped up by using mass communications media to inform the people why the citizen should pay taxes and what the advantages of the voluntary assessment and payment system are.

### 3. Channelling Capital Funds

42. The public sector plays an important role in mobilizing and channelling resources for development investment. Government capital expenditure amounts to about 7 percent of GNP and one-third of total capital formation. Part of government capital expenditures is being used for direct investment by the Central Government and its agencies which include the railways, post and telecommunications, and the tobacco and ginseng monopoly enterprises. The rest is used as capital grants to local governments; capital subscriptions of public corporations; loans and grants to the private sector.

43. Fiscal loans are channelled by the Government chiefly through six public financial institutions. Most important are the Korean Reconstruction Bank (KRB) extending mainly long-term loans to finance fixed capital assets in major industrial, mining, transportation and power projects, and the National Agricultural Cooperatives Federation (NACF) for agricultural loans. The decision on fiscal loans is only to a limited extent made by the financial institutions themselves. In important instances loan applications are reviewed in cooperation with the competent ministries and the KRB acts then as an executing agency on behalf of the government. A similar situation exists in other special financial institutions. The interest rates and terms of lending are also determined by the Government. The work of market forces in the allocation of government funds thus appears rather limited. The financial institutions mainly act as instruments to allocate resources along the line of Government's preference.

#### C. The Behavior of Private Savings

44. Important though the contribution made by public savings to the improvement in resource mobilization was, by far the largest part of the increase in savings since 1962-64 - about two-thirds - was derived from the private sector. The spectacular increase in private disposable income during those years was accompanied by a proportionately larger increase in private savings, comparable in size to the jump in private savings in the Republic of China (Taiwan) during the early 1960's. As in Taiwan, the shift is connected but only partly caused by favorable external circumstances: the 1964/65 sugar boom in Taiwan, the large external earnings connected with the Viet Nam conflict in Korea. In Taiwan the shift was followed by sustained rapid economic growth, increasingly financed from domestic sources. Hopes are rising that the same will occur in Korea.

45. The principal factor accounting for the increase in private savings is the economic expansion of recent years and the rapid rise of the marginal savings rate. Probably a very important factor closely connected with the fast rise in incomes is a growing inequality in the income distribution. The discrepancy between farm and non-farm per capita incomes had been declining between 1959-1964. The trend was reversed, however, in 1964 (see Chart II and Statistical Annex Table 9). Per capita farm incomes dropped from about two-thirds of non-farm incomes in 1964 to 45 percent or less in 1967. The deterioration which occurred in spite of the record grain crop in 1966 is partly due to a weakening of the farmers' "terms of trade" (see Volume II Agriculture) and is perhaps also connected with a lack of agricultural credit. Within the urban economy, there are also signs of increasing disparity. Wages of workers in manufacturing are lagging behind the general growth of per capita incomes in the

non-agricultural part of the economy although data for part of 1967 seem to indicate an accelerated wage rise. This growing discrepancy may have unfavorable social and political effects and is, as noted before, a matter of concern to Government and public opinion in Korea. However, part of the rapid increase in savings must be due to the increase in large and very large incomes connected with the industrial boom.

46. Apart from the impact of the general economic expansion, private savings were encouraged by favorable Government policies. Among these were the Government efforts to control inflation and the interest reform of September 1965. These policies, which will be more fully discussed in the next section, led to increased confidence in the currency and made saving more rewarding. Government has also vigorously encouraged personal savings by an effective nationwide saving campaign which gives public recognition to individuals and groups with outstanding savings records. In addition, salary and wage earners have been made to deposit in the banks part of their savings increments in recent years on a half-compulsory basis.

47. Another factor affecting private savings in recent years has been the large volume of remittances from abroad, especially from the civilian and military personnel in Viet Nam. Reportedly, a large part of these remittances are being deposited in the banks in the form of installment deposits (an arrangement by which the saver commits himself to certain monthly savings during a period of 2 years and receives 30 percent interest a year).

48. Net corporate earnings rose at approximately the same fast rate as corporate sales. The profit retention rate is very high (around 80 percent according to the national accounts) and thus net corporate savings also must have risen fast. The view on developments in Korean business finance is, as in many developing countries, obscured by a low degree of incorporation, lack of financial statements and a large proportion of borrowed funds. This financial structure is unwittingly encouraged by the tax laws.<sup>1/</sup> Corporate income is taxed 20-35 percent and, if distributed, the shareholder is charged again 12 percent income tax. As in many other countries, interest payments are counted as business costs and are therefore not taxed. The recipient of interest income from private loans pays 10 percent income tax. This situation encourages a minimum size of equity capital.

---

<sup>1/</sup> For details see Annex on Fiscal Reform.

D. Stabilization Efforts and Financial Markets

49. An important factor in mobilizing resources from the private sector, both household and business, was the increase in monetary stability in recent years. The Government's efforts in this direction during 1963/65 have been reviewed in our previous reports. During 1966 and 1967 the Government has continued its stabilization efforts with increasing emphasis on indirect controls and overall limitations on the credit volume. The Government continued to work in consultation with the Fund and the United States Operations Mission in Korea. The success of the stabilization effort is shown by the reduction in price increases. Wholesale prices went up by 35 percent in 1964, but less than 10 percent a year since then. The increase in the first eight months of 1967 over the comparable period in the previous year was 6 percent. The increase in the cost of living is about twice this level, partly due to raised utility charges and cost of other services.

50. A new element in the monetary picture in the last 18 months is the expansionary effect from rapidly increased net foreign exchange receipts. This problem, which would have appeared remote only a few years ago, arose from the buoyancy of exports, invisible earnings, remittances from abroad and the fact that an increased proportion of imports was covered by short- and long-term liabilities. These developments, reflected in the rise of foreign exchange reserves, had a large net expansionary influence on the money supply. Since the beginning of 1966 the main endeavor of monetary policy has become to prevent a rapid increase in the money supply arising from the foreign sector. The dimension of this task can be seen from the fact that the net amount of money created through foreign transactions amounted to won 35 billion in 1966, almost 60 percent of the money supply at the middle of the year. The rate of increase in foreign reserves remained very high in 1967.

51. The burden of keeping down money supply under these circumstances was almost entirely borne by restricting bank credit to the private sector. Net bank credit to the private sector went down sharply during 1966 and still further during 1967. The problem was eased, however, by the very large increase in time and savings deposits after the sharp increase in interest rates in September 1965. Before this date, the legal maximum rate on deposits had been far below the annual rate of price increase, so that interest rates in real terms were negative. The interest rate reform put an end to this by raising

the rates from 15 to 30 percent a year for time deposits of 18 months and over and the same proportionate increase for shorter terms. The subsequent inflow of funds into the banks was enormous. As a percentage of GNP time and savings deposits increased from 3 percent of GNP before to over 10 percent now. However, this remarkable inflow of funds into the banking system could not be fully used to expand the share of the banks in total business finance, because of the simultaneous need to neutralize the expansionary effect originating in the external sector. Bank credit did increase in relation to GNP (from 8 to 10 percent) but much less than the increase in their deposits would have warranted. Reserve requirements of the banks were raised substantially during 1966. They reached a peak during October 1966 till April 1967 when marginal reserve requirement against time deposits were 45 percent and against demand deposits 50 percent. As a result, almost half of the increase in deposits with the commercial banks since the beginning of 1966 was "sterilized" and the role of the organized banking system remained curtailed. 1/

52. The need for tight restrictions on bank credit makes it difficult to lower and rationalize the interest rate structure. Rates of the financial institutions still vary widely, from a low of 2 to a high of 36 percent a year. The purpose of the variations is not to take account of differences in term or risk, but mainly to encourage or subsidize activities which the Government considers desirable. A conspicuous example, export credits, has been discussed. Preferred industrial enterprises and certain agricultural activities also receive special credit rates. The special rates are far lower than the normal rates for commercial bank credit and probably far below the opportunity cost of capital in Korea. They constitute a powerful tool in the hands of the Government to direct resource allocation in conformity with the Government's development strategy. The results in terms of accelerated industrial expansion and increased exports have been impressive but greater attention should be paid to comparative advantage. Interest subsidization (as well as tax exemption) lowers the relative cost of capital and thus encourages greater use of it than warranted by the country's factor endowment. The dynamism afforded by the incentives may on the whole have been beneficial in promoting the transition to an economical scale of production, but as industrial enterprises and exports are becoming better established it would be desirable to apply the incentives on a more selective basis, and raise interest rates at the lower end.

---

1/ As a result of the high reserve requirements the earning position of the commercial banks suffered. Moreover the interest reform has the anomalous feature that less interest is received on prime commercial credit (26%) than is paid on time deposit of 18 months and over (30 percent).

### E. Foreign Resources

53. During the post-war period Korea has been one of the major recipients of foreign aid. During the 1950's and the early 1960's foreign aid was almost equivalent to the value of gross capital formation. The inflow of foreign resources is still very large - an expected \$374 million in 1967 - and shows no sign yet of declining. However, the situation has significantly changed. The relative contribution of foreign resources to total capital formation has dropped to around 40 percent. Meanwhile grants are now accounting for a smaller, but loans and credits for a larger part of the inflow.

54. Grants from the United States <sup>1/</sup> which were once practically the whole foreign resources inflow in Korea continued the steady decline since the early 1960's. In 1966 U.S. grant assistance had dropped to \$94 million from levels over \$300 million in the late 1950's. They are estimated to decline to \$85 million in 1967 but to increase slightly to \$92.5 million in 1968.

55. The normalization of relations with Japan included an agreement under which Japan would make available \$300 million of Japanese goods and services on a grant basis. The period of disbursement is 1966 - 1975; each year \$30 million will be made available. Due to pipeline problems 1966 arrivals amounted to only \$12 million consisting of a variety of capital goods and raw materials. The normalization agreement with Japan also included, for the same period, \$200 million of soft loans (3-1/2 percent interest, repayment in 20 years) and "at least" \$300 million of commercial credits. Commitments under commercial credits from Japan have proceeded very rapidly. In 1967 both governments agreed in principle to increase the amount of commercial credits by another \$200 million.

56. While the element of grants in the total inflow of resources is gradually losing importance, in spite of the Japanese claim funds, disbursements of loans are increasing. Especially the disbursements of commercial credits are rapidly increasing, amounting to \$135 million in 1966 and probably more in 1967; the major part of these credits is from Japan.

---

<sup>1/</sup> U.S. grants are chiefly made available in the form of raw materials and agricultural surplus commodities under U.S. Public Law 480. The won proceeds of these imports are made available to the Korean Government for support of Korea's defense and economic development. Part of PL 480 counterpart receipts (about 20 percent) is retained by the United States for its own use in Korea which includes a large amount of technical assistance. Commodity arrivals under Supporting Assistance and PL 480 amounted to \$110 million in 1966.

Table 7

The Financing of the Foreign Trade Deficit<sup>1/</sup>  
(in millions of U.S.\$.)

	<u>Average</u> <u>1962-64</u>	<u>1965</u>	<u>1966</u>	<u>1967</u> <sup>2/</sup>
<u>Foreign Trade Deficit</u>	<u>305.3</u>	<u>194.2</u>	<u>323.0</u>	<u>374</u>
<u>Grants to Public and Private Sector</u>	<u>230.3</u>	<u>203.3</u>	<u>219.6</u>	<u>215</u>
Grants by U.S. Government	<u>181.5</u>	<u>133.2</u>	<u>92.2</u>	
Grants by Japan Government	-	-	<u>29.3</u>	
Grants by U.N.	<u>1.4</u>	<u>1.4</u>	<u>0.3</u>	
Colombo Plan	-	-	<u>0.2</u>	
Private Donations	<u>47.5</u>	<u>68.7</u>	<u>97.6</u>	
<u>Loans to Public and Private Sector</u> (Net Disbursement)	<u>40.4</u>	<u>-2.5</u>	<u>203.2</u>	<u>230</u>
Long and Medium-Term Loans	<u>38.0</u>	<u>20.6</u>	<u>196.8</u>	
Official Loans	<u>22.1</u>	<u>-11.8</u>	<u>61.7</u>	
Commercial Loans	<u>15.9</u>	<u>32.4</u>	<u>135.1</u>	
Short-Term Loans	<u>2.4</u>	<u>-23.1</u>	<u>6.4</u>	
<u>Direct Investment</u>	<u>1.5</u>	<u>0.3</u>	<u>13.4</u>	
<u>Use of Assets</u>	<u>34.3</u>	<u>-4.9</u>	<u>-117.6</u>	<u>-71</u>
<u>Errors and Omissions</u>	<u>-1.2</u>	<u>-2.0</u>	<u>4.4</u>	

1/ Deficit of the Nation on Goods and Services Account.

2/ Projected figures in the Overall Resources Budget, 1968.

Source: Statistical Annex Table 12.

57. Foreign loans, official and private, are subject to National Assembly approval. The screening procedure followed by the administration before the loan is submitted to the Assembly determines whether the project is in line with the strategy of the development plan; leads to net foreign exchange earnings; and is technically and financially sound. The screening procedure involves the competent ministries, government financial institutions, and prominent persons from private life. The technical aspects of projects are studied by consultant firms. This procedure takes into account the most important steps in project appraisal but part of the work appears superficial and hasty. The speed with which foreign loans have been approved is shown by the following figures:

	<u>Official Loans</u>	<u>Commercial Credits</u>	<u>Total</u>
		(\$ million)	
Before 1965	120	118	238
1965	76	84	160
1966	155	105	260
Jan.-Sept. 1967	<u>66</u>	<u>74</u>	<u>140</u>
Total	417	381	798

58. In addition to these loans and credits on which agreements have been finalized by all parties concerned, the Korean Government has approved in principle another \$34 million in official loans and \$501 million of commercial credits. These loans, many of them involving Japanese supplies, are waiting for final approval by foreign governments and/or financiers. Korean businessmen have been displaying great dynamism in establishing contacts with potential suppliers of plant and equipment and financiers abroad and the Korean Government is confronted with an ever increasing volume of loan applications.

59. Most foreign loans to the private sector have been given repayment guarantees by the central bank, the Korean Reconstruction Bank, or by the commercial banks (which in fact are government controlled). The recipients of these guarantees are often also favored by the official credit policy and fiscal exemptions. Financial difficulties of the creditor can thus usually be smoothed over, but in spite of this KRB has been forced to make good on its repayment guarantees in 1966 to the extent of won 1 billion (\$3.7 million). Judging from the present rather small repayment obligations, the amount is not insignificant.

60. Direct investment from abroad has increased sharply. It amounted to \$13 million in 1966. There are now 49 enterprises in Korea, mostly in manufacturing, set up with foreign capital or foreign equity

participation. Many other proposals are under discussion and a further increase in the near future may be expected. Legal provisions for foreign investment are attractive. Foreign investment is exempt from personal income tax, corporation tax, and property tax, fully for five years and 50 percent for the three following years. Dividends may be fully remitted; up to 20 percent of the capital subscription may be repatriated each year, two years after the start of operations. Government has established a special office in the Economic Planning Board for the promotion of foreign investment aiming at reducing bureaucratic delays and acquainting potential investors with investment possibilities.

#### IV. THE OUTLOOK FOR PRODUCTION AND CAPITAL FORMATION

##### A. Introduction

61. The sharp increase in production and capital formation in 1965 and 1966 has raised the Korean government's expectations about the feasible rate of future economic growth. Economic indicators for part of 1967 show as yet no loss in growth momentum, and despite a shortfall in agricultural production, the official forecast of a 10.5 percent real growth in GNP may be realized or approximated. The government thinks that overall economic growth can be maintained at approximately the same high level throughout the Second Plan. These expectations are set out in the Overall Resources Budget (ORB) 1968, in which the government presents in a comprehensive fashion its expectations and policies for the forthcoming year. The ORB also contains a brief summary of the outlook until the end of the Second Plan. This view of the economic prospects was used by the government to determine scope and composition of its budget and to formulate future economic policies. As a kind of annual operational plan, the ORB is a remarkable attempt in planning, with few parallels among developing countries. For the purpose of economic analysis, it might have been more useful had the document contained more of the underlying reasoning and presented further details of proposed programs and policies.

62. In the process of preparation, the ORB applies the same sectoral model for the Korean economy that was used in the preparation of the Second Plan. The model is based on input-output tables for 1960 and 1963 updated to 1965 prices and complemented by studies of technical relationships in development projects subsequently undertaken or proposed. It also takes into account anticipated shifts in the use of intermediate goods such as the switch from coal to fuel oil. The model distinguishes 43 sectors, all in the mining and manufacturing industries, which is the most dynamic industry causing directly or indirectly most of the change in the economy. The prospects and requirements of the other sectors are assessed by independent studies of growth potential and relationships to manufacturing. The latter is particularly important in the case of the social overhead sector (power, transportation, communications). Any bottlenecks in these sectors in the future would be a physical constraint on the growth of total production. The results of the model-exercise were compared by the planners with the results of independent analyses of manufacturing prospects ("bottom-up" approach) and then adjusted. This has added more realism to the exercise. On the whole, planning in Korea appears to be growing in theoretical sophistication and practical insight.

63. Main assumptions of the ORB for 1968 are a 10 percent growth rate of GNP in real terms and gross capital formation at a level of 22.5 percent of GNP, only slightly above the relative levels in 1966 and 1967.

The trend of increasing domestic financing of capital formation is expected to continue. Domestic savings are expected to rise from 13.0 percent of GNP in 1966 to 15.4 percent in 1968. Correspondingly, the relative importance of foreign savings would decline. This is to be made possible by an increase in exports of goods from \$350 to \$450 million 1/ and a more modest rise in invisible earnings.

64. The ORB forecasts economic growth during 1969-1971 to continue at a rate of 10 percent a year as compared to the original GNP growth target of 7 percent. Investment requirements during the plan period are estimated to be 46 percent higher than the original Second Plan estimate. The government's revised growth perspective for 1968 and through 1971 is summarized in the following table:

---

1/ More recently the President announced in his budget message an export goal of \$470 million for 1968.

Table 8

The Government's Growth Perspective  
(at 1965 constant prices)

	<u>A. 1966 - 1968</u>			<u>(billion won)</u>	
	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>Growth rate in</u>	
				<u>1967</u>	<u>1968</u>
Consumption	794	872	945	9.9	8.4
Investment	207	237	263	14.4	10.9
Agriculture, Forestry and Fisheries	33	38	40	16.3	3.4
Mining and Manufacturing	71	72	75	1.2	3.9
Social Overhead	104	127	149	22.9	17.2
Exports, goods and services	121	172	209	42.3	21.7
(less) Imports, goods and services	208	271	307	30.4	13.2
GNP	914	1,010	1,111	10.5	10.0
Agriculture, Forestry and Fisheries	346	356	374	3.0	4.9
Mining and Manufacturing	181	215	251	18.6	18.5
Social Overhead and Services	386	438	486	13.4	10.9

B. Revised Outlook Towards 1971

	<u>Revised Outlook</u>	<u>1971</u>	<u>Original Plan</u>
GNP	1,478		1,170
Agriculture, Forestry and Fisheries	445		397
Mining and Manufacturing	380		314
Social Overhead	653		458
Commodity Exports (\$ million)	750		550
Invisible Exports (\$ million)	324		169
Imports, Goods and Services (\$ million)	1,372		962
		<u>1967-1971</u>	
Investment	1,430		980
Domestic Savings	1,009		603
Foreign Savings (\$ million)	1,587		1,421
(Long-term loans) (\$ million)	(1,190)		(835)

Source: Overall Resources Budget 1968.

65. In the present chapter an attempt is made to assess the feasibility of this growth perspective for production and capital formation. The last two chapters will discuss internal and external financial aspects. Before going into sectoral explorations we provide a rough check on the proposed overall investment magnitudes. For this purpose the incremental capital output ratios used in the original Second Plan <sup>1/</sup> were applied to the projected increase in output. The results are as follows:

Table 9  
Investment Requirements, 1967-71  
(at 1965 constant prices)  
(Billion Won)

	<u>Agriculture Forestry Fisheries</u>	<u>Mining and Manufacturing</u>	<u>Social Overhead &amp; Services</u>	<u>Total</u>
1. Value added in 1971 <sup>1/</sup>	445	380	653	1,478
2. Value added in 1966	<u>346</u>	<u>181</u>	<u>387</u>	<u>914</u>
3. Increment (2-1)	99	199	266	564
4. Incremental capital output ratio <sup>2/</sup>	1.86	2.41	4.19	
5. Investment requirement (3x4)	184	480	1,115	1,779

<sup>1/</sup> As projected in the Overall Resources Budget 1968.

<sup>2/</sup> Derived from the original Second Five-Year Plan.

66. The investment requirement computed above is won 1,779 billion and compares with an estimate of only won 1,430 billion for the same period in the ORB. The main factor in the increase in investment requirements is apparently the increased demand for social overhead and services, particularly the demand for power and transportation services. The capital output ratio in these sectors is high and this would lead to very high investment requirements. The above brief calculation would indicate that the investment provision in the ORB is too low. However, it is not possible to base a definite judgement on this overall approach since output increase is not only determined by investment but also by increased or more efficient utilization of existing capacity; in addition, some Second Plan investments will mature only after 1971. In order to evaluate better the prospects for production and investment it is necessary to review prospects in the major sectors of the economy. This is done in the following sections of this chapter.

<sup>1/</sup> The incremental capital output ratio for the entire economy implied in the Second Plan document was 2.92, as compared with an actual ratio of 2.18 during 1962-66, the period of the First Plan.

## B. Agriculture

67. In spite of limited land resources and rather unfavorable climate, the general outlook for agriculture has much improved during the 1960's. The trend in intake of agricultural inputs such as fertilizer, lime, pesticides, improved seed, irrigation water, over the last decade has shown increasing dynamism, at least until recently. Traditional restraints against use of more sophisticated cultivation methods and introduction of more valuable crops are diminishing. But yields per hectare are still low relative to soil potential and the scope for improvement is still large. Moreover, although there are no large virgin soils, the cultivated area can be expanded significantly, by reclamation of foothills and, with the use of irrigation water, by increased double cropping. These avenues of progress are recognized by the Korean government which is employing a large, differentiated agricultural administration that tries to realize the growth potential.

68. The Second Plan target of a 5 percent growth rate for agriculture represented an acceptable extrapolation of growth trends in the preceding years and should be attainable provided that policies and programs underlying this target would be implemented. The Bank's August 1966 appraisal mission 1/ felt that the program provisions in the Plan fell short of requirements and estimated that unless provisions were increased annual growth would perhaps be at 4 - 4.5 percent a year. This, of course, would still be a high growth rate compared with most developing countries.

69. In 1967, however, agricultural growth met a reversal. Production will be smaller than in 1966, perhaps by 2 - 3 percent. The ORB 1968 was drawn up in the expectation that agricultural production would rise by 3 percent in 1967 and by a further 4.8 percent in 1968. The current drop in agricultural production is due to adverse weather, especially a drought reducing rice production in the southern part of the country. But, to some extent, it may also have been influenced by a slackening in certain agricultural input programs. And this would also affect production in 1968. The major agricultural development efforts are discussed in the annex on agriculture to this report. As pointed out there, several agricultural development programs are behind schedule, including the fertilizer, lime and pesticides programs. Supply and distribution problems appear to be a cause of the slowdown; government action to solve this problem needs to be stepped up.

70. There also appears to be loss of momentum in such major land development programs as upland reclamation, irrigation, and land consolidation. The land development and agricultural input programs have

---

1/ Appraisal (AS-116) Annex on Agriculture, paragraph 5.

been the bright hope of Korean agriculture and it is therefore highly desirable that the program regains the momentum of a few years ago. It is also important that a beginning is made soon with the re-organization of Korea's anti-erosion work. Soil erosion in Korea has become very serious and a comprehensive, scientific approach is needed to bring it under effective control after the rather haphazard methods of the past.

71. To some extent recent farmers' performances may have been affected by the deterioration in the farmers' "terms of trade" mentioned earlier (para 45) and the scarcity of farm credit. Outstanding loans of the National Agricultural Cooperatives Federation (NACF) have been about constant when measured in real terms, although 1967 figures indicate some improvement. The farmers' lack of funds is a serious limitation for more use of agricultural inputs. The Mission, however, has some reservation about the Government's thought to increase the flow of funds to the countryside by withdrawing restrictions on absentee landownership and large holdings. This step seems contradictory to the spirit of the post-war land reform and its positive effect on the supply of funds to agriculture may be outweighed by adverse social consequences. It is recognized, however, that scarcity of funds in agriculture, especially the lack of working capital, is a very difficult problem and that new means must be found to channel resources from the non-agricultural sector of the economy to agriculture.

72. An important way to increase farm incomes will perhaps be the Government's plan to establish a government corporation for the processing of agricultural and fisheries products. The potential for processing vegetables and other agricultural products for domestic and foreign consumption is considerable, but private initiative, probably deterred by lack of funds and difficulties to organize the supply of raw materials, has not yet been very active. The Government intends to work in co-operation with private interests but to leave the field as private capital is able to take over. This is in line with the Government's general economic philosophy, although later on it may be difficult politically for the Government to divest itself of successful ventures.

73. The ORB estimates that agricultural production in 1968 will increase by 7.6 percent over the 1966 record crop. Given normal weather conditions this target may be attained provided the consumption of fertilizer and lime is greatly increased. Even then **substantial** grain food imports will be needed, at least 300,000 - 400,000 tons. For the remaining years it should be possible, however, to reach, on the average, a growth rate of agriculture of about 4.5 percent a year.

74. The ORB estimates of total investment in agriculture in 1967 and 1968 are very high. If they are correct, investment would not only be much higher than in the preceding year, but would also reach more

than one half of the five-year target in two years' time. Our analysis of agricultural development programs gives reason to doubt that investment can be raised in this manner, although additional information would be needed to suggest a more likely magnitude. Most probably, investment for 1967 is over-estimated and the investment which can be realized in 1968 will perhaps turn out to be smaller than the ORB forecast unless government programs are reactivated and the investment climate for the private sector is much improved.

Table 10

Investment in Agriculture and Forestry  
(at 1965 constant prices)  
(Billion Won)

	<u>Government</u>	<u>Private</u>	<u>Total</u>
1966 (actual)			23.7
1967 (ORB)	12.5	19.7	32.2
1968 (ORB)	<u>17.4</u>	<u>15.9</u>	<u>33.3</u>
1967 + 1968	29.9	35.6	65.5
Second Five-Year Plan (1967-71)	<u>85.7</u>	<u>42.9</u>	<u>128.6</u>
1967 + 1968 as % of Second Plan	35%	83%	51%

Source: Overall Resources Budget 1968.

C. Fisheries

75. Fisheries, until recently a backward sector, enjoys increased attention from Government and private interests. The industry is also receiving large amounts of foreign capital which has led to the build-up, in a few years time, of a major deep-sea fishing fleet. This fleet catches tuna in the Southern Pacific and Atlantic and caters to U.S. packers. The foreign exchange gain is considerable; mainly due to tuna fishing, marine products exports increased by \$30 million since 1962. Progress in coastal and near-water fisheries is slower, although mechanization is spreading.

76. The thrust of recent fishery development was towards the direct increase of fish output through fleet expansion. Development needs in related fishery fields were relatively neglected. The expansion of training, maintenance, preservation facilities, have been lagging behind. 1/

---

1/ Our findings in this respect are set out in the annex on fisheries in Volume II of this report.

Domestic supply and consumption is held back by poor facilities at the landing points and an underdeveloped distribution network throughout the country. Government appears to recognize these problems and implementation of the current fishery development plan will help in solving them. It should also be noted that government intends to promote shellfish production which has high export and employment potential.

77. On the whole, fishery production prospects are favorable. Given normal weather conditions, it should be possible to achieve or exceed in 1968 the 8.6% increase (in value added) forecast in the ORB. This growth target is modest compared with the 16 percent annual growth rate forecast in the Second Plan. Whether the Plan's very high growth target can be met, depends as mentioned above to a large extent on progress in improving the supporting facilities. Since large amounts of foreign funds are available to government and private sector for this purpose, development prospects in this respect are good. The most important financial source is Japan. \$130 million of Japanese funds are earmarked for the development of the Korean fishing industry (to be disbursed over 1966-1975) and the major part of it (\$80 million) is to be spent for improving ancillary facilities and modernizing near-water fishing. All considered, investment is likely to be carried out well ahead of the Second Plan and the production target of the Plan will probably be attained.

#### D. Mining and Manufacturing

##### Mining

78. Mining is a small sector in Korea contributing less than 2 percent to GNP. Main problems are inaccessibility and low quality of deposits and uneconomical scale of operation. Growth rate in 1966 was only 6% but growth rates of 14% and 10% are predicted for 1967 and 1968. Coal production is to reach 14 million MT in 1968 as compared to the original goal of 12.5 million MT, but coal supply is insufficient to meet expanding industry and household demand. Increased oil supplies are therefore planned and new thermal power plants will be operated on oil.

##### Manufacturing

79. The Mission believes that manufacturing will continue to be the leading sector in Korean development. In fact, the Government, somewhat changing the original Second Plan targets, is putting increased emphasis on industrialization. Five factors will determine the country's industrialization efforts in the coming years:

- (1) The ambitious export promotion program. The ORB's raised target of \$750 million for 1971 (\$450 million for 1968) will require considerable expansion of export industries.<sup>1/</sup>
- (2) Reemphasis on import substitution. Large-scale investments in iron and steel, petrochemicals, fertilizer and cement have either been completed or are contemplated for the future, in order to reduce growing imports of basic materials and intermediate goods.
- (3) Expansion of domestic consumption goods industries. Rapidly growing per capita income will necessitate substantial expansion of production for home consumption with a trend towards higher-valued commodities.
- (4) Increased Government investment and consumption demand, as reflected in the 1967 and 1968 budgets. Expansion, improvement and maintenance of national infrastructure will require substantial efforts, especially for transport and power.
- (5) Rapidly rising private investment demand as a result of the vigorous construction boom.

80. Recent manufacturing growth rates have considerably exceeded the previous Mission's estimate of a 10 percent growth per annum for 1965-1971. In 1966, gross value added increased by 16 percent. For 1967 and 1968, the Economic Planning Board estimated growth rates of 19 percent and 17 percent. Economic indicators during the first eight months show that industrial expansion continued at a very high rate. The production index seasonally adjusted increased by 20 percent over the corresponding period of last year. But the power shortage emerging last summer may have slowed down the pace of industrial growth in the last months of the year. On the whole, a growth rate of 18 - 19 percent is likely.

81. During the rest of the Second Plan period, the Government forecasts growth rates in the neighborhood of 17-19 percent. These are ambitious goals requiring large amounts of capital and a concurring expansion of infrastructure. The Mission noted with concern three major impediments for future development:

- (1) Present power shortage. Korea has, at the moment, a power deficit of about 60 MW. Despite large-scale investments, power shortage may not be fully relieved until 1969.

---

<sup>1/</sup> It is possible that the government's export targets will be revised upwards. See paragraph 63.

- (2) Insufficient transport facilities and inadequate other infrastructure, e.g. industrial water supply, have become a serious problem in some sectors.
- (3) Lack of domestic capital. Although at the moment, Korea is able to attract large amounts of foreign funds, it is still very difficult for the local sponsor to contribute the local cost portion because of insufficient domestic savings and inadequate financial markets. Improvement and expansion of institutional sources of credit available to manufacturers is of great importance. The establishment of a private development bank (the Korea Development Finance Corporation) next to the government-owned industrial banks (the Korean Reconstruction Bank and the Medium Industry Bank) could be of major significance in improving and enlarging the capital market in Korea, reducing at the same time the recently too liberal use of foreign suppliers' credits in industrial expansion.

82. As in all developing countries, manufacturing suffers from a number of shortcomings which will have to be overcome in the effort to build a modern, competitive industrial sector. Such shortcomings include obsolete machinery (in some of the older industries), small scale of operations of many plants, insufficient technological skill, inadequate quality control, and lack of managerial experience. They are particularly evident in textile, food processing, and non-electrical machinery industries. With low labor costs, rapidly rising prices in the heavily protected domestic market, and considerable Government export incentives, there is often too little encouragement for the entrepreneurs to improve the situation.

83. Since domestic demand for investment goods will continue to grow substantially, the establishment of an efficient machinery industry in Korea could be quite important for future economic development. Under the Second Plan, machinery output was to increase by 118% until 1971, requiring an investment of ₩ 32.8 billion at 1965 prices. So far non-electrical machinery has been limping far behind in the overall boom. The most important reason for the machinery industry's unsatisfactory condition is the fact that development projects in recent years have attracted a large volume of foreign equipment loans. Simultaneously, scarcity of domestic funds has kept demand for domestically produced machinery at an almost stagnant volume in spite of the investment boom. In addition, low technological standard and overpricing caused local manufacturers to prefer imported machinery. This situation needs the urgent attention of the Government. As pointed out by the previous Mission, Korea should concentrate on a limited number of production lines, and be prepared to import the rest. Complementary investment programs

and common market arrangements with neighboring Asian countries, such as the recent cooperation agreement for petrochemical production with Taiwan (see para 85), could also be useful to developing local machinery industry.

84. Textile and clothing, electrical machinery and appliances, and plywood industries will be particularly stimulated by the Government's accelerated export drive. Especially, the electronics industry has been attracting considerable amounts of foreign capital, mainly from the United States, and technical know-how. As in Taiwan and Hong Kong, most new plants are producing parts for the electronics industry in the United States. The position of Korean exporters of these and other manufactured products in the international market is not bad because of Korea's low-cost labor advantage and the large export incentives afforded to the exporter. Korea may, however, face more frequently quantitative restrictions in markets where the export drive had been too aggressive. In general, however, future growth of manufacturing exports will also depend on how much growing domestic consumption of major export goods can be restrained.

85. Besides on cement and fertilizer, where a high degree of import substitution has been reached, the Government's import substitution policy is now concentrating on iron and steel and petrochemicals. Key projects in the investment plan for the rest of the Second Plan are (i) the construction of an integrated iron and steel plant, and (ii) the establishment of a petrochemical complex. Both projects are deemed essential for the country's future industrial development.

(i) Located at Pohang (South-East coast), the integrated steel mill is to have an initial capacity of 600,000 MT ingot equivalent for the production of 480,000 MT of finished steel goods, including plates and billets. At a later date, capacity is to be expanded to 1,150,000 MT steel ingots. An international consortium of suppliers of steel making equipment estimates investment costs at \$160 million, thereof \$95 million foreign exchange. Engineering and financial studies of the project are still underway so that a full assessment is not yet possible. A UNIDO Mission endorsed the project in principle because of favorable long-term trends in steel demand. But plant production is likely to be high cost in the first several years and tariff protection will be required. Productive capacity will also be small in the beginning compared with neighboring Japanese plants, but will gradually be expanded. Coking coal will have to be imported. The blast furnace is specially designed to permit the use of low-grade domestic iron ore for 30% of total requirements. It would probably have been more economical to rely fully on imported pelletized ore. The Mission doubts whether the necessary infrastructural and supporting investments are covered by the investment figures given in the recent calculations. Despite these shortcomings, the Mission thinks that the project will become economical in due course in view of the fast growing domestic market.

(ii) The Ulsan petrochemical complex is to become the center of Korea's petrochemical industry. Investment costs are presently estimated at about \$160 million. The project will consist of two complexes: (1) a naphtha cracking unit of 60,000 MT ethylene, whose capacity shall be increased to 100,000 MT by 1971, and (2) a VCM polyethelene plant with related production units. A highly desirable aspect of this project is the planned regional cooperation with the Republic of China (Taiwan) which will import caprolactam from Korea and supply DMT. Financing of the foreign exchange part is still being negotiated with prospective contractors. The Government's decision to enter the petrochemical field is due to the key role of petrochemicals in modern industry. There is the danger, however, that some of the plants may produce at costs above international level. Although later large-scale plants are planned for Ulsan, they will have to compete with even bigger operations in Japan, Europe, and the United States. Another pitfall is the fast-changing technology in petrochemicals, which Korea will have to watch with a careful eye. Since demand for the numerous intermediates turned out by the complex (plastics, inputs for synthetic fiber production etc.) is so closely connected with the direction of Korea's industrialization effort, the project may in the long run be a desirable step, but the Mission is uncertain whether the time has already come for Korea to start this project. Extraordinary efforts will certainly be needed to make the complex technologically and economically successful.

86. Total investment requirements in manufacturing for the 1967-71 period were roughly estimated at won 430 billion at constant 1965 prices. The calculations were based on official investment estimates for 1967 and 1968, which the Mission considered feasible, and on information provided to the Mission regarding investment projects during the remainder of the Second Plan period.

#### E. Electric Power

87. The rapid growth of the economy as a whole and particularly of manufacturing has upset previous estimates of power demand. Power again became a bottleneck during 1967 when rapidly rising power consumption and the close down of some hydro-plants because of protracted drought caused a power gap. As a result, power consumption of some industries had to be curtailed. The Korean Government has consequently revised

the power development program (1967-1976). The original Second Plan estimated growth of power demand by 15.8% a year. However, actual development went much faster with power demand rising 17.1% in 1966 and about 27% in 1967. In the revised program, a growth rate of 27.6% is forecast for 1968, raising demand to 1,142 MW or 20% above the original estimate. During the rest of the Second Plan, demand for power is expected to increase further at about 27% a year.

88. Under the revised program, it is planned to enlarge installed capacity by about 30% a year during the Second Plan period. In 1971, the capacity would be 2,907 MW as compared to 769 MW in 1966. Most of the additions will be thermal plants. The construction schedule though ambitious, is, in the view of qualified observers, technically feasible. There is concern, however, whether transmission and distribution facilities will be completed in time, although provisions on paper seem to be sufficient. Some power rationing, with restraining effect on production, cannot be ruled out for the next few years. Required foreign financing for all plants to be completed by 1971 has been secured. Finance for more plants to be undertaken during the Second Plan, but to be completed later, is still being sought. About half of the investment will require foreign exchange. The total amount is 2.6 times larger than in the Second Plan.

Table 11.

<u>Expansion of Installed Capacity and Investment Requirements</u> (at 1965 constant prices)							
	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>Total (1967-71)</u>
Installed Capacity (MW)	769	944	1,319	1,917	2,242	2,907	-
Investment Requirements (billion won)	8.4	35.8	43.4	43.3	37.9	45.2	205.6
Foreign Exchange (million US \$)	10.1	85.0	87.6	77.7	58.0	73.5	381.8
Domestic (billion won)	7.4	12.4	19.5	22.1	22.1	25.2	101.3

F. Transportation

89. Transportation bottlenecks have served to focus attention on the key function of this sector in Korea's economic development. Transportation requirements had been analyzed in 1965-66 by a French-Dutch team of consultants sponsored by the Bank. The team's findings, the Korea Transportation Survey (KTS), were in large part adopted by the Korean Government and formed the basis for the transportation provisions in the Second Plan. In its traffic forecasts and assessment of investment requirements, the KTS was based on the assumption that GNP during the Second Plan would grow at an annual rate of 7%. The acceleration of growth in 1966 and 1967 and the prospect that growth during the remainder of the Second Plan will also be above the original 7% estimate made it necessary to revise the KTS recommendations. An attempt to do this is made in Volume IV: Transportation, of this report.<sup>1/</sup> This volume contains revised traffic forecasts and estimates of investment requirements by modes of transport. The forecasts assume that the growth rate of value added in transportation during the rest of the Second Plan period would amount to 17% a year. The 8% growth rate for transportation and storage in the Second Plan was therefore a serious underestimate even on the basis of the original lower GNP target growth rate. The revised growth rate is, however, not too far out of line with recent experience. In 1965 transportation value-added increased by 17.4%, and in 1966 by 18%. The estimated growth for 1967 is 17.3% and for 1968, 17% (ORB 1968; figures include storage and communications).

---

<sup>1/</sup> The author of this volume, Mr. Jacques M. Gruot of BCEOM, Paris, was the director of the team that made the survey in 1965/66.

90. The revised investment requirements proposed by the Mission in all modes of transport during the Second Plan years add up to won 220 billion, as compared to won 150 billion in the original Plan. The proposed phasing of the requirements is from won 36 billion in 1968 increasing to won 62 billion in 1971.

91. Our revised transportation plan emphasizes the improvement of the highway system and the expansion of the motor vehicle fleet. However, the role of the railways would also remain very important. Fast development is foreseen for harbor activity and for coastal shipping, particularly for petroleum products. Domestic and international air transportation will also grow in significance. This expansion of all modes of transportation will not only require increased investments, but also changes in administrative organization and procedures. Recommendations to this effect had been made in the KTS, but on revisiting Korea, the Mission found little progress in implementation. The Mission's views on these matters are given in detail in the transportation annex. Major suggestions are (i) the strengthening of the independence of the Korean National Railways; (ii) the establishment of a Government Agency of Public Roads for the planning, construction and maintenance of the highway system; (the World Bank Group has under consideration a government request for technical assistance for this purpose); (iii) the coordination of planning for all modes of transport: (the World Bank's technical assistance would also cover this subject); (iv) the establishment of an independent port authority for the operation, maintenance and construction of harbors; and (v) the basic improvement of all transportation statistics.

#### G. Conclusion

92. The outlook for production and capital formation resulting from these brief sectoral explorations can now be summed up and compared with other estimates, notably the outlook presented in the ORB and the calculation of investment requirements on a macro-economic basis in the beginning of this chapter. The results we arrive at are of course highly tentative, providing a plausibility check rather than an independent assessment. Regarding the investment in services other than power and transportation (communication, trade, housing, education, etc.) we have assumed that investments and production would grow as in the past at the same rate as the rest of the economy. This is of course only a very rough approximation.

Table 12.

Tentative Mission Forecast of Production and  
Investment  
 (at 1965 prices)

	Investment requirements (1967-71) <u>(Billion won)</u>	Annual growth of value added (1968-71) <u>(Percent)</u>
Agriculture and Forestry	130	4 - 5
Fisheries	30	10
Mining	20	8
Manufacturing	430	13 - 16
Power	210	22 - 27
Transportation	220	17
Other Services	<u>430</u>	<u>8 - 11</u>
Total Investment	1,470	Total GNP 8.1 - 10.6
Overall Resources Budget	1,430	10.0
Macro-economic calculation (Table 9).	1,779	
Original Second Five-Year Plan	980	7.0

23. Our calculations indicate that investment requirements in the ORB may be slightly under-estimated. As far as production is concerned, GNP may grow at rates between 8 and 11% depending on whether a sufficient supply of power, transportation and other services can be provided. Requirements on the tertiary sectors are very heavy. Although proposed action to expand facilities in these sectors seems sufficient (provided the Mission's revised transport plan is accepted by the Government), it is impossible to state with certainty that these requirements will be fulfilled to the necessary extent and that delays in directly productive activities can be entirely avoided. As a conclusion we might say that growth during the remainder of the Second Plan will probably not be less than 8%, may reach 10% (the Government's target), but is unlikely to be higher.

V. PROSPECTS OF DOMESTIC RESOURCE MOBILIZATION

A. Public Revenue and Tax Reforms

94. The Korean Government wants the public sector to play a major role in the mobilization of domestic financial resources. This emphasis appears to be in the right direction, not only because of the uncertainties inherent in the mobilizing of private savings, but also because a large part of investments in the near future will be in social overhead capital requiring public outlays. On the basis of a rather optimistic estimate of government savings for 1967, the ORB's planned increase in government savings in 1968 would account for 63 percent of the target increase in total domestic savings. Thus the achievement of the 1968 saving target would depend to a large extent on the successful implementation of the budget. The ORB expects domestic revenues in 1968 to reach won 255 billion, a 28 percent increase over the estimated revenue level of 1967. But Government consumption expenditures would increase only by 17 percent. Allowing also for a slight increase in government current transfers to the private sector, the saving target is therefore fixed at won 72 billion (see Table 13). The proportion of government revenue to GNP would be 18 percent in 1968 as compared with 16 percent estimated for 1967, and 14 percent in 1966. The implied marginal revenue rate is quite high, almost 30 percent for 1968, but not far out of line with recent very large increases in government revenue (the marginal rate is estimated at 29 percent in 1967 and 23 percent in 1966).

95. The recent sharp increase in government revenue (see Chapter III) was mainly due to improvements in tax collection. While there is still room for further improvement in this field, the potential appears to be diminishing. Some revenue increase can still be expected from

Table 13

The Public Sector: Revenues, Expenditures and Savings

	1966 ( <u>actual</u> )	1967 ( <u>budget</u> )	1967 ( <u>estimated</u> )	1968 ( <u>planned</u> )
	<u>Amount</u> (in billion won)			
GNP	1,032.0	1,219.8	1,219.8	1,408.4
Domestic revenue	144.9	182.2	199.2	254.7
Government consumption expenditures	104.8	131.6	142.3	166.4
Current transfers to the private sector	10.8	13.2	14.2	16.6
Government savings	29.3	37.5	42.7	71.7
	<u>As Percentage of GNP</u>			
Domestic revenue	14.04	14.94	16.33	18.08
Government consumption expenditures	10.16	10.79	11.67	11.81
Current transfer to the private sector	1.05	1.08	1.16	1.18
Government savings	2.84	3.07	3.50	5.09

tax collection enforcement as well as from economic growth, but the remaining gap would have to be filled by tax reform. Proposals for a tax reform had been under study during the last two years and were enacted in November 1967. In addition, a major tariff reform has reportedly been passed by the Assembly. Details of these fiscal reforms are presented in an Annex to this report. The Government has also raised selling prices of government monopolies and enterprises to increase their contribution to government revenue. Besides raising more revenues, the reforms also improve tax equity, provide incentives for private savings and investments, and encourage a healthier structure of business finance. The reform is also intended to afford adequate protection of domestic industries against foreign competition.

96. Planning and fiscal authorities have estimated that without changes in tax laws, the central government could collect in 1968 won 116 billion from internal taxes, which would be won 21 billion over the amount likely to be realized in 1967. This 22 percent increase in revenue can be regarded as generated by real output growth and price rises as well as by further improvement in tax collection. There remains a revenue gap of won 11.8 billion or 9.2 percent of the target, which was expected to be filled by additional revenues resulting from the tax reform originally proposed by the Government. However, after extensive political discussions, a revised version of the government draft was finally passed by the Assembly with the result that the expected revenue increase will be only won 5.3 billion, less than one-half of the revenue increase in the original version. The main features of the internal tax reform and its revenue effects are as follows.

97. Direct Taxes. Originally, the Government intended to modify income tax for greater equity, but any tax loss resulting from such modification had to be offset by gains from other parts of income tax. However, government proposals were watered down and mainly because of raising exemption limits revenue on this tax will temporarily drop by won 2.5 billion. But in the long run the income tax reform should have favorable effects making direct taxation more responsive to economic growth.

98. Indirect Taxes. Most of the revenue increases resulting from the tax reform will come from indirect taxes. In fact, all revisions on indirect taxes will yield additional revenue, totalling 6.3 billion won. Major increases are expected from alcohol, commodity and petroleum taxes. A new tax on the use of private telephone will also produce sizeable revenues. The coverage of commodity tax has been greatly expanded to include more luxury or non-essential consumption goods. They have been selected on the basis of those commodities normally consumed by the upper 30 percent of the income ladder.

99. Monopoly Profits. Government monopoly profits derived mainly from the sale of tobacco and cigarettes have been low in Korea as compared with most other countries and have not risen with the increases of national income and prices. Therefore, the Government raised the prices of cigarettes in October 1967, this will add won 5.8 billion to the 1968 revenue, a 40% increase over 1967.

100. Many of the tax revisions are in line with recommendations of the previous Mission. However, there are some points suggested by the previous Mission which were not included in the tax reform. Changes in petroleum products tax, for example, affect only kerosene and Bunker C oil, while the Mission emphasized the need of an increase in gasoline tax. The previous Mission had also suggested that the business activity tax on the production and trading of goods should be raised. A merger of business activity and commodity tax into a single sales tax could lead to improved collection and open the way for eventual change into a value-added tax.

101. The tariff revision aims both at more rational protection in connection with trade liberalization and at larger revenue. The number of dutiable items was increased by more than 50 percent. Rates on protected items were generally raised and rates on items for revenue purpose lowered and more uniformed. These changes, together with expected import increases, are expected to result in won 31.4 billion customs revenue for 1968, a 41 percent increase over the revenue estimate for 1967.

102. The Government expects that total revenue from internal taxes, monopoly profits and customs on general government account will reach won 167 billion in 1968, 31 percent over the corresponding revenue figure in the revised 1967 budget. The above figure falls short of the budgeted figure by won 7.2 billion. The gap is expected to be filled up by a corresponding increase in non-tax revenue. The Mission had no opportunity to assess whether this will be feasible or not. However, even if the revenue increase from other non-tax sources cannot fill the entire gap, the shortfall is relatively small, only about 0.5 percent of projected GNP. In view of the effects of the tax reforms, further improvements in revenue collections and a forecast 15.5 percent growth of GNP in current prices, it seems also likely that the expected revenue for the public sector as a whole (including local governments and surpluses from government enterprises) of won 255 billion is within reach.

103. It is more difficult, of course, to project revenues up to 1971, particularly because of the changes in tax rates. Therefore, we can only make some general observations. Regarding income tax and business income tax, we think revenue losses due to the tax reform will

be only temporary. Incomes of wage and salary earners are increasing quite rapidly because of salary hikes for government employees and rapid increases in other wages. Income of unincorporated businesses also is going up at a fast rate. Once the dip is over, the increase in revenues could be even faster than that of GNP, because of the more progressive rate structure and global system now introduced.

104. Indirect tax revenues may not continue to increase as rapidly as in 1968, but if commodity tax coverage is further extended, gasoline tax rate raised, and tax collection improved, total revenue from indirect taxes may also increase slightly more than GNP. But monopoly profits may not show much increase in proportion to GNP, because adjustment of cigarette prices seems always lagging behind wage and price rises. Revenues from local taxes including both direct and indirect taxes may show a rate of increase faster than central government's indirect taxes but slower than central government's direct taxes.

105. Increase in customs revenue after the customs reform may not be as rapid as GNP growth because of anticipated slower import growth. If the over-all tariff rate were to rise, as a result of the tariff reform from 10.7 percent of import value to 13 percent in 1971, then customs revenues may reach won 42 billion in 1971. The Mission feels that there is ample room to raise more tariff collections particularly by reducing exemptions and it may not be impossible to obtain won 60 billion by 1971.

Table 14

Projected Public Revenues  
(in billion won, at current prices)

	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>
Direct Taxes (Central Government)	46.8	59.6	75.1	93.7	116.2
Internal Indirect Taxes (Central Government)	49.7	72.2	99.0	130.9	168.9
Monopoly Profits	10.0	14.8	20.4	26.8	34.2
Customs	22.3	31.4	40.1	49.6	59.8
Others (local taxes, etc.)	<u>70.4</u>	<u>76.7</u>	<u>86.5</u>	<u>98.5</u>	<u>113.1</u>
<u>Total</u>	<u>199.2</u>	<u>254.7</u>	<u>321.1</u>	<u>399.5</u>	<u>492.2</u>
<u>As percentage of GNP</u>	<u>16.3</u>	<u>18.1</u>	<u>19.7</u>	<u>21.3</u>	<u>22.7</u>

Note: Assuming real GNP increases at 10 percent per annum and general price level increases at 5 percent per annum.

Source: Mission projections.

B. Public Expenditures (Current) and Savings

106. The level of current public expenditures, although rising, is still low as compared with other developing countries (10.8 percent of GNP in 1966, 7.1 percent if defense expenditures are excluded). For the Second Plan period, the percentage is expected to increase faster than before, chiefly because of the government's intention to raise further the salaries of civilian and military personnel. In addition, the number of government employees will be increased and non-salary expenditures will rise.

107. Since the real income of government employees has lagged far behind the increase of per capita income, the government has decided to raise the salaries of government employees by 30 percent in 1968 and intends to raise them further at the same rate until 1971. By then the gap between the salary of public servants and the average living level of urban families would have disappeared, which is the government's objective. Such salary increases are perhaps politically and socially justified, but from the public finance point of view it is still questionable whether the rate of salary increase should be as high as 30 percent a year up to 1971 and then suddenly drop, or whether the pattern should be more gradual. In the latter case, the standard of living of the civil servants would catch up with the living standard of urban families somewhat later, perhaps in 1973. The advantage would be somewhat slower increase of current expenditures and greater chance that public savings are increased.

108. In addition to the future salary policy, current expenditure will depend on government employment policy and associated non-salary expenses. The EPB expects that the number of government employees will increase up to 1971, at about the same annual rate as in the past (5.3 percent). This expectation is based on an analysis of the need for general government services and teachers which seem generally reasonable to the Mission. No increase is assumed in the number of military personnel. On the basis of past trends it is further assumed that the public sector's current expenditures on goods and services to be purchased from the private sector will increase by 1.1 percent per employee per annum. However, we wonder whether in this case past development is a good indicator, particularly for the years before 1964. For instance, the rapid increase in capital expenditures in the public sector expected during the Second Plan will also necessitate a fast increase in current expenditures for operation and maintenance. It will also be desirable to increase more rapidly expenditures on public health and other social services whose share in total public current expenditures is now rather low. Thus, the mission would regard a 3 percent annual increase per employee a more reasonable rate.

109. These calculations lead to the following tentative approximation for public savings during the Second Plan.

Table 15  
Tentative Projections of Public Savings

	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>
	<u>Amount (in billion won, at current prices)</u>					
Domestic Revenue	144.9	199.2	254.7	321.1	399.5	492.2
Current Expenditures	<u>115.6</u>	<u>156.5</u>	<u>199.0</u>	<u>248.2</u>	<u>301.4</u>	<u>366.8</u>
Public Savings	29.3	42.7	55.7	72.9	98.1	125.4
(at 1965 prices)	(26.0)	(35.3)	(43.9)	(54.8)	(70.2)	(85.4)
	<u>As percentage of GNP</u> <sup>1/</sup>					
Domestic Revenue	14.04	16.33	18.08	19.74	21.26	22.68
Current Expenditures	11.20	12.83	14.13	15.26	16.04	16.90
Public Savings	2.84	3.50	3.95	4.48	5.22	5.78

<sup>1/</sup> On the assumption of GNP growth in real terms of 10 percent a year and general price level increases of 5 percent a year.

Source: Mission estimates.

### C. Private Savings

110. Future prospects of private savings are hard to assess because of the lack of satisfactory statistics. Family surveys understate income and are therefore of little value for deriving meaningful consumption or savings functions. Corporations, especially "closed" corporations, generally do not disclose true financial statements. From what indirect information was available we guessed that the high incomes in the urban industrial sector have been the major contributor to the increase in private savings. This trend will probably continue, although the tax reform imposing higher taxes on high incomes may tend to reduce somewhat the growth of private savings.

111. The marginal propensity to consume (or to save) derived from the past statistical data of private disposable income and private consumption has shown rather irregular movements. Aside from the lack of direct consumption estimates changes in stocks have blurred the picture. In Korea, changes in stocks have been to a large extent parallel to the development of agricultural crops and changes in trade restrictions. As agricultural crops are affected chiefly by weather condition, such changes in stocks as reflected in private savings bear hardly any behavioral relationship to income changes. Changes in trade restrictions which in the past have led to large fluctuations in stocks of imported goods are also not the result of changes in the savings function. When stock changes are excluded, the statistics show somewhat better results. The marginal propensity to consume for the private sector so derived amounted to .79-.81 during 1966-67. But owing to the tax reform, the EPB expects it will rise to .91 in 1968. While we think that this drop may be possible, further growth in income beyond 1968 may again reduce the marginal propensity to consume and increase the marginal propensity to save, although it may not be as high as before the tax reform. For the purpose of projection, we will make two alternative assumptions regarding the marginal propensity to save: (a) an optimistic one of 0.10, 0.12, 0.15 and 0.18 respectively for 1968-71 and (b) a conservative one of 0.10, 0.11, 0.13 and 0.15. Applying these coefficients to the projected gross private disposable income (excluding stocks), we have tried to approximate private savings.

112. Projected private and government savings are compared with total investment requirements estimated in Chapter IV. For this purpose we used the more conservative estimate of private savings. The difference is the expected savings gap. The savings gap for 1967-71 at 1965 prices would be 490 billion won, or \$1.84 billion, 15 per cent higher than the ORB's revised outlook for the Second Plan period. By 1971, private savings would reach 10.3 percent of GNP and public savings 5.8 percent. The gap to be financed by foreign savings would be 7 percent of GNP, compared with 8.3 percent in 1967 and 10.8 percent in 1962. The gradual narrowing of the domestic savings gap indicated by these figures seems within the reach of the Koreans, given continued favorable conditions at home and abroad.

Table 16

Tentative Projections of Savings Gap

(in billion won, at current prices)

	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1971</u> Percentage of GNP
1. Gross Investment	275	318	368	428	501	23.1
2. Changes in Stocks	16	19	21	23	25	1.1
3. Gross Fixed Investment (= 1-2)	259	299	347	405	476	22.0
4. Private Savings (excluding stocks)	115	130	147	169	199	9.2
5. Private Savings (including stocks)	131	149	168	192	224	10.3
6. Government Savings	43	56	78	98	125	5.8
7. Total Domestic Savings (= 5+6)	174	205	246	290	349	16.1
8. Savings Gap (= 1-7)	101	113	122	138	152	7.0
9. Savings Gap (at 1965 prices)	88	93	96	104	109	
10. Savings Gap (in US \$ million)	331	350	361	391	410	
11. Totals for 1967-1971:	490 billion won; or \$1.843 billion.					

---

Source: Mission calculations.

D. The Interest Rate Problem

113. As stated in Chapter III, the main purpose of raising the interest rates in September 1965 was to make monetary savings more attractive and to enhance the role of modern financial institutions in channelling domestic resources into desirable production investments. While this policy has succeeded in absorbing enormous savings into the banking system, it has not yet led the financial institutions to expand fully their investment function. This is not entirely the fault of the policy; other factors are also responsible. As analyzed in Chapter III, monetary expansion generated by the rise in foreign exchange reserves has made it necessary to adopt a restrictive policy toward liquidity and credits. The overriding short-term objective of stability has thus immobilized a substantial portion of financial resources which may otherwise be used to finance investment. At the same time the capital market has remained undeveloped and there is therefore very little scope for accumulated funds to flow into equity rather than loans. Moreover, inducements and guarantees offered by the government to private foreign lenders and the low interest rate on such foreign loans have prompted private business to borrow from abroad. Hence, the enormous increase of foreign loans which has in turn generated more domestic monetary expansion and caused the monetary authorities to impose even more credit restrictions. In a way, this amounts to some extent to a substitution of foreign finance for domestic finance, which is contrary to the interests of Korea's long-run development.

114. The Mission feels that the Korean monetary authorities should reexamine the situation. Has the government overstressed its policy of attracting foreign private loans? Is it necessary to offer 100 percent guarantee on private foreign borrowings? Would a lower percentage of guarantee make the borrowers and lenders more careful in undertaking the projects? Would it not be wiser for government agencies to evaluate more thoroughly the projects financed by foreign commercial loans rather than affording them indiscriminate encouragement? We believe that in addition to keeping down future debt services, a slowing down of foreign private borrowings would take much of the steam off the monetary pot. This, coupled with price stabilization, should make it possible for the monetary authorities to relax liquidity and credit controls and bring down somewhat the interest rates on the highest end of the scale. Simultaneously, some of the lowest interest rates, especially on loans from the fiscal funds could be raised. A better financial balance thus achieved would be favorable for mobilizing domestic finance and developing domestic capital markets.

## VI. PERSPECTIVES OF EXTERNAL TRADE AND FINANCING

115. The preceding review of investment requirements and savings prospects points to the need for considerable net foreign capital inflow in the future. Our analysis leads to a modestly larger resource gap than estimated by the Korean Government in the ORB. We will now briefly review foreign trade prospects in order to assess the foreign capital requirements from the viewpoint of the probable deficit of the nation on goods and services account ("external" gap) and compare it with the resources gap estimated independently. We shall then try to trace the paths of foreign debt servicing obligations under different assumptions regarding the composition of the inflow in order to see the probable magnitudes of Korea's problems of development financing.

### A. External Trade Prospects

#### 1. Commodity Exports

116. Korea's export prospects are reviewed in a study undertaken at the request of the Bank by a special GATT Mission to Korea. The GATT Mission takes a favorable view of demand conditions for Korean products in importing countries and foresees very rapid growth of exports in the remaining years of the Second Plan. In the ORB the Government has raised the export target for 1971 from \$550 million to \$750 million. The Ministry of Commerce and Industry has gone a step further and formulated a more ambitious detailed program to raise exports to \$1 billion by 1971. It is not yet clear to what extent the Government has adopted this program. However, there are indications that the Government intends to accelerate export promotion beyond the targets of the ORB.

117. Our own assessment is that the \$1 billion export program is probably unfeasible from the macro-economic point of view. The emphasis in the export program is on manufacturing products. The anticipated rapid growth of the economy (GNP growth of 10 percent a year) would lead to a sharp increase in demand for manufacturing products to satisfy domestic consumption needs or to be used in production as intermediate or investment goods. An overall check indicates that the ratio of GNP growth to the increase in domestic availability of manufactured goods under the \$1 billion export program would be almost the same as in the past. Domestic availability would grow 1.20 times faster than GNP during the Second Plan, as compared to 1.16 times faster during the First Plan. But in view of the increasing importance of inter-industry relations and the concentration of final demand increase on manufactured goods, this would almost certainly be insufficient, unless domestic consumption is restrained more severely than

is now planned by the Government or imports are increased more. The latter, however, would detract from the objective of gradually closing the trade gap. Admittedly this is a very rough check; a full study of supply and demand relationships would be needed for a more conclusive answer.

118. The GATT Mission has made a detailed study on a commodity basis of the feasibility of the \$1 billion target with respect to supply and demand conditions in Korea and demand conditions in foreign markets. As far as the latter are concerned, conclusions are on the whole favorable and exports approximating \$1 billion in 1971 would be possible. However, analysis of supply and demand by commodity indicates that manufacturing industries will face serious problems in attempting to expand their exports to the proposed magnitudes. Problems common to firms in the export field are: insufficient finance for the required build-up of larger inventories needed to react promptly to market opportunities; lack of large export trading firms with world-wide knowledge of trade channels. A further important difficulty that will be felt increasingly in years to come is the cost structure of Korean export firms. Much of the success in recent years has been achieved through a mixture of incentives and coercion. Generally, exporters are selling abroad at prices much lower than those prevailing in the domestic market. Even when the various export incentives are taken into account, exporting is usually much less profitable to Korean entrepreneurs than selling in the domestic market. The 1964 devaluation put exporters in a more advantageous position, but since then domestic prices and production costs have risen substantially while the exchange rate has been almost constant and export prices were generally stable. Continuing price rise in future years would further erode the profit position of exporters and reduce their competitive strength.

119. While credit and tax incentives and eventually perhaps overall exchange rate adjustment would make it possible to restore the relationship between domestic and foreign prices to a level attractive to exporters, a part of Korean industry is beset by a more fundamental difficulty, stemming from the establishment of a number of high-cost enterprises, especially in the field of intermediate products. Recent re-emphasis on import substitution of some basic materials raises the fear that Korean exporters may be burdened to a certain extent with unduly expensive inputs, especially during the first several years of domestic petrochemicals production. In spite of expensive domestic inputs, export subsidization may make it possible to continue stimulating exports to new high levels, but at a certain sacrifice to the economy as a whole. These incentives have been useful to achieve a breakthrough in the export field and to create economies of scale which would otherwise have been unattainable. However, now that export industries are becoming more firmly established and export activity is beginning to account for a large part of the nation's resources, a gradual reduction of the incentive system in order to stimulate production efficiency should be attempted. This is rightly recognized in the Second Plan as part of Government's stated policies (para 205), but as yet Government has not begun to implement this policy. The Mission suggests that the incentive system should be revised on a selective basis emphasizing new exports, new markets and domestic value added rather than gross export earnings.

120. The GATT team's analysis of demand prospects in commodity markets abroad leads to favorable conclusions. Provided diversification of markets is attempted and resistance in importing countries avoided by preventing undue flooding of markets, Koreans should be able to approximate and perhaps achieve the \$1 billion target. The major restraint on export increase is thus the domestic supply and demand situation. As a working hypothesis we shall therefore assume that exports by 1971 will reach \$750 million, i.e. the revised target given in the ORB 1968. This implies a 21 percent annual growth rate of exports as compared to a 42 percent rate during 1963-67.

## 2. Current Invisible Earnings

121. Foreign exchange earnings from services are at present swollen by the Viet Nam conflict. Encouraged by the ability of Korean entrepreneurs to make use of the opportunities in the Viet Nam situation, the Korean planners expect invisible earnings during the rest of the Second Plan to remain at approximately the present level of \$325 million per year. This expectation is based on the assumption that Koreans will also be able to participate considerably in the reconstruction of Viet Nam when the conflict is over. It is also based on the expectation of substantially increased foreign exchange earnings from merchant shipping, international aviation and international tourism. The Mission thinks however that these expectations are over-optimistic. Earnings from participation in Viet Nam's reconstruction once the conflict is over will most likely be far outweighed by the loss in earnings from military construction and procurement. Regarding international transportation and tourism recent progress was certainly promising, but further expansion will probably be slower than anticipated by the planners. Reasons are lack of experience in international transportation (see Volume IV Transportation) inadequate tourist facilities, and the relatively unfavorable geographical location of the country. On the other hand, services payments are bound to rise somewhat faster than forecast, in view of the anticipated sharp increase in commodity trade and the need of the fast growing economy for foreigners' services in the production process. The ORB forecasts a net surplus in services of \$150 million in 1971, almost as high as the current level. But we expect it will drop to slightly below \$50 million by 1971.<sup>1/</sup>

---

<sup>1/</sup> Our estimate excludes investment income receipts and payment which will be considered later together with gross foreign capital inflow. Therefore, our estimate is not fully comparable with the Korean planners' estimate.

### 3. Imports and Import Policy

122. The ORB expects that the import hump of recent years will be followed by much slower growth of imports during the rest of the Second Plan period at 8 percent a year. This would bring imports to 21.4 percent of the GNP in 1971 as compared to 18.1 percent accorded by the original plan. The higher level is due to higher GNP growth rate and higher export targets implied in the ORB. We have tried to project imports of various categories of commodities--fuels, intermediate goods, capital goods and consumption goods, on the basis of recent macro-economic analysis <sup>1/</sup> and obtained a slightly lower import estimate than is shown in the ORB. Recent simulation of the sectoral model for Korea <sup>2/</sup> leads to the same conclusion. While this model has taken into account only the input-output relation of the manufacturing and mining sector, the results obtained are reasonably good and can be taken as our working hypothesis.

123. A difficulty in the assessment of import prospects is the fact that imports in the past decade have not shown a well defined relation to the growth of the economy but have fluctuated quite widely for various reasons, particularly the frequent changes in trade and exchange policy measures and large year-to-year changes in the amounts of foreign aid. At present, the Government's intention is to continue to liberalize import restrictions following the recent improvement in the over-all balance of payments. Meanwhile, a comprehensive tariff revision <sup>3/</sup> was introduced with the intention to shift the emphasis in protection of domestic industries from import restrictions to import tariffs. In designing the tariff revisions, the Government originally also intended to take the opportunity to rationalize the protective rate structure by lowering the high tariff rates on finished products and removing some intermediate goods from the exemption list or raising somewhat the rates on them, wherever comparative advantage exists for Korea. However, this feature did not come out quite clearly in the revised schedule. It is hoped

---

<sup>1/</sup> By Professor Irma Adelman and Dr. Alan Strout under the auspices of the U.S. Agency for International Development.

<sup>2/</sup> Undertaken by Dr. David Cole of the Harvard Development Advisory Services on behalf of the Korean Government. Here we take the variant with \$750 million commodity exports in 1971 and 8 percent annual growth of private consumption. The simulation of the model projects imports in four categories of commodities: imports competing with Korean products, imports that do not (mainly intermediate goods), capital goods to be used in the manufacturing and mining sector (endogenous to the model) and capital goods for other sectors (exogenous to the model).

<sup>3/</sup> For detailed analysis, see Appendix on Fiscal Reform.

that in the implementation of the new tariffs, particularly because of the flexible rate system incorporated there, the Government would take this again into consideration. The improvement of the protective structure thereby will go a long way to increase the efficiency in the finished goods industries, spread industrialization more broadly and stimulate more domestic value-added. In the long run, of course, the over-all level of protection has to come down gradually too.

124. As far as the general import level in the near future is concerned, the transition from import restrictions to tariffs may result in some net import increase. But how much it will be depends also on how speedy import liberalization will be carried out. At this moment, the Government seems not to want to push liberalization too hard. If this is the case, there would be more ground to believe that the ORB import projection is slightly on the high side.

#### 4. Prospects of Trade Deficits

125. Pulling the preceding estimates together, a tentative picture arises of the likely magnitudes of Korea's external balance on goods and services accounts under the various assumptions mentioned above. The trade deficit amounted to \$374 million in 1967, and would slightly decline to \$345 million in 1971. For the five-year period, the total deficit would be \$1.73 billion, which is only slightly smaller than the resource gap estimated in Chapter V. In the analysis, we shall follow the estimated "external gap", the minimum estimate of external finance needed by Korea.

Table 17  
Trade Prospects  
(in millions of dollars)

	1967 <sup>1/</sup>	1968	1969	1970	1971
Exports of goods	350	470	550	640	750
Export of services <sup>2/</sup>	288	325	250	198	212
Total exports	638	795	800	838	962
Import of goods	880	951	1,007	1,053	1,140
Import of services <sup>3/</sup>	132	133	147	156	167
Total imports	1,012	1,084	1,154	1,209	1,307
Trade gap	374	289	354	371	345
Trade gap as % of GNP	9.9	6.9	7.7	7.3	6.2
Trade gap 1967-1971					
Mission estimate:	\$1,733 million				
ORB estimate:	\$1,587 million				

<sup>1/</sup> ORB estimates.

<sup>2/</sup> Excludes investment income receipts.

<sup>3/</sup> Excludes investment income payments.

Source: Mission calculation.

B. Foreign Assistance: Needs and Prospects

126. Grant aid from the United States, for many years virtually the only source of foreign economic assistance to Korea, has become smaller but will probably still be important in the future. For 1968, U.S. grant aid is expected to be \$83 million. According to the general intention of the U.S. Government, "supporting assistance" may be phased out by the end of the Second Plan period, but depending on the availability of agricultural commodities in the United States, it is possible that grants of surplus agricultural commodities under PL 480 may still be of significant magnitude by 1971. Development loans granted by U.S. AID to Korea have been large in recent years and the undisbursed amount of these loans is also sizeable. There is no possibility, however, of making a reliable prediction of the size of future U.S. development loans to Korea.

127. Prospects for inflow of funds from Japan were discussed in para. 55. Altogether Japanese commitments of various nature add up to \$1,000 million to be disbursed during 1966-1975. Actual inflows of grant and soft loan funds under the agreement have been relatively small to date, chiefly because of pipeline problems. The bulk of the funds thus will arrive during the next eight years. There is no certainty about the prospects for financial assistance from other countries.

128. The amount of disbursed and undisbursed funds under foreign loan agreements is given in Table 18.

Table 18  
Status of Foreign Loans  
As of Sept. 1, 1967  
(\$ million)

	<u>Loan Amount</u>	<u>Disbursed</u>	<u>Undisbursed</u>
Government loans	418.0	207.3	210.8
Suppliers' credits	<u>380.0</u>	<u>245.0</u>	<u>135.0</u>
Total	798.0	452.3	345.8

129. In order to obtain a full picture of Korea's foreign capital requirements, estimates of net inflow of foreign resources have to be supplemented by estimates of foreign funds needed (a) for debt servicing and (b) for gradual build-up of foreign exchange reserves in line with growing foreign

trade. The size of the total foreign exchange requirements thus calculated would vary with the terms and conditions of the inflow. If interest rates are high and repayment periods short, as is frequently the case with foreign suppliers' credits, then gross capital requirements would be much higher than the net inflow. But, if a large part of the inflow were on concessional terms or in the form of grants, gross requirements would be only slightly bigger than net requirements.

130. To illustrate these alternatives we have traced out as in our previous report <sup>1/</sup> the debt servicing implications of two hypothetical patterns (Variants I and II) of external financing. Table 19 and Charts IV and V summarize these calculations. Both variants assume a drastic decrease in the relative role of grants and private remittances, which until the mid-1960's have accounted for over 80 percent of the total inflow of foreign resources. They also assume continued increase in low-interest long-term Government loans. However, the assumptions in Variant I for these forms of concessional assistance are somewhat less optimistic than in Variant II. The assumption in Variant I concerning the contribution of long-term loans at conventional interest rates is also less optimistic than in Variant II and the contribution of suppliers' credits has been assumed to be correspondingly larger. Regarding the terms of financing, we assume for both variants for soft loans 2.5 percent interest rate, 8 years grace and 22 years of repayments period, which are approximate averages of the U.S. AID loans and the Japanese soft loans. For suppliers' credits, the terms are the averages of a sample of loan contracts.

131. As far as the management of the external financial situation is concerned, it appears likely that Korea, barring exceptional unfavorable developments, would be able to meet her debt service obligations without undue difficulty. Under Variant II, debt servicing obligation would remain below 15.1 percent of prospective exports of goods and services up to 1978 and under Variant I below 24.8 percent. In both cases, there is a hump in 1970 (21.8 percent under Variant II and 25.9 percent under Variant I) because of the present large amount of three-year foreign loans. Korea's export prospects are relatively good, for the export basket is reasonably diversified as to market and commodity composition and contains few products subject to sudden market reversals. Also, Korea has built up in recent years a sizeable cushion of foreign exchange reserves, now standing at about 3 - 4 months of imports. This should help to reduce the likelihood of service payments difficulties.

132. Under our assumptions, Korea's long-run external financial prospects appear to be reasonably favorable. The gross capital inflow required under

---

<sup>1/</sup> FE-55a.

Table 19  
Gross Foreign Capital Requirement  
and Debt Service

A. Composition of Gross Inflow and Typical Terms

	Variant 1 <u>(% of Total)</u>	Variant 11 <u>(% of Total)</u>	Interest Rate <u>(%)</u>	Grace Period <u>(Years)</u>	Repayment Period <u>(Years)</u>
Grants & private remittances	25	30	0	Infinity	
Soft loans	25	30	2.5	8	22
Conventional loans	5	20	6	4	21
Suppliers' credits	40	15	7	1	6
Direct investment	5	5	10	- 1/	- 1/

B. Amount of Gross Inflow

	<u>1968</u>	<u>1971</u>	<u>1976</u>
	<u>(Million dollars)</u>		
Deficit of nation on Goods and Services Account <sup>2/</sup>	289	345	70
Increase in Foreign Reserves	18	22	33
Debt service on Present Debts	51	58	46
Debt service on New Inflow: Variant 1	-	139	361
Variant 11	-	77	197
Gross Inflow Required: Variant 1	358	564	510
Variant 11	358	502	346
Percentage of debt service to Exports of Goods and Services: Variant 1	6.4	20.5	21.8
Variant 11	6.4	14.0	13.0

<sup>1/</sup> Dividend remittances; no repatriation of equity.

<sup>2/</sup> Excludes investment income receipts and payments.

Source: Mission calculations.

both variants would, in the next few years, remain at levels of around 40 percent of total capital formation and then the percentage would decline gradually--somewhat more slowly under variant I. The absolute amounts of the inflow would start to fall slowly with a lag of a few years. By the end of the next decade, the gross capital inflow under both variants would not be very large anymore compared to total capital formation (15 percent and 7 percent by 1978). Declining dependence on foreign capital is an important objective of Government's development strategy. Our analysis appears to confirm that given favorable general growth conditions, the objective is attainable and that Korea can eventually become independent of foreign aid, although probably not until the early 1980's. The important proviso is that the domestic savings rate has to rise continuously in order to finance an increasing proportion of capital formation. This points to the need for the Government to continue, with undiminished strength and for many years, the recent policies favoring savings, public and private.

133. The calculations under Variants I and II are intended as illustrations. They are based on rough, somewhat arbitrary assumptions of the growth of GNP, investments, and foreign trade. Different assumptions on these magnitudes are possible and they would have led to different magnitudes of the foreign financing problem. The purpose of the exercise is to highlight the scope of Korea's foreign financing problems, rather than to predict the likely course of events.

134. The imbalance in Korea's foreign trade is still large--exports of goods and services account for only 63 percent of imports of goods and services in 1967--and it will take considerable time to close the gap. Meanwhile, foreign aid will be needed. In order to prevent the build-up of a large debt service burden, which tends to reduce net capital inflow, most of the external aid should be obtained on concessional terms. But if these funds were to become increasingly scarce, then certain substitution by conventional loans would be appropriate. Korea's debt service burden is not yet high (expected to be 6.4 percent of exports and goods and services in 1968) and Korea can stand some hardening of the terms and conditions of her capital inflow as shown by the alternative patterns for capital inflow we have used. But an increase of suppliers' credit to over two-fifths of total capital inflow would bring Korea into a difficult position. Because of this and other difficulties created by the recent large inflow of suppliers' credit, it would be wise to keep such inflows at a steady rate. At the same time, the Government would want to examine from time to time further possibilities of mobilizing domestic savings for productive investment in order to sustain continuously the growth rate of the economy.

## APPENDIX ON FISCAL REFORM

(Prepared by Shu-Chin Yang)

1. The Korean Government took a bold step in late 1967 to reform comprehensively internal taxes and tariffs. When the Second Plan was formulated, it was assumed that required revenue increases could be obtained from improved tax administration and expansion of the tax base. The Bank's 1966 economic report 1/, however, recommended a number of tax revisions. Subsequently, the Korean Government became convinced of the need for tax reform, and several bills of tax and tariff revisions were proposed to and passed by the National Assembly. These revisions aim not only to increase revenue but also to obtain more equity in the tax burden, to achieve a higher marginal rate of taxation and to encourage healthier business finance. In connection with the revisions in indirect taxes, prices of cigarettes were also raised in order to increase revenues from government's monopoly profits. The tariff reform aims at increased revenue and at rationalization of the tariff structure along with trade liberalization for protection of domestic industries. The expected revenue effect of these changes is summarized in Table.1.

---

1/ FE-55a, Volume I para 137 and Volume VII, Public Finance.

Table 1

Estimated Revenue Changes in 1968 Resulting  
From Fiscal Reform  

---

  
(in million won)

	<u>Original Proposal</u>	<u>Amended by National Assembly</u>
A. <u>Internal Taxes</u>	11,820	5,301
<u>Direct Taxes</u>	<u>2,901</u>	- <u>1,013</u>
1. Income taxes	1,445	- 2,469
a. Salary and wage incomes		(- 4,236)
b. Business incomes		(- 130)
c. Dividend and interest incomes		( 1,316)
d. Global system		( 581)
2. Corporation tax	1,391	1,391
3. Inheritance and gift tax	-140	- 140
4. Registration tax	165	165
5. Capital gains tax	40	40
<u>Indirect Taxes</u>	<u>8,919</u>	<u>6,314</u>
1. Alcohol taxes	2,943	2,314
2. Commodity taxes	3,068	1,821
3. Petroleum product taxes	2,069	1,286
4. Telephone tax	839	809
5. Business tax	-	84
B. <u>Monopoly Profits</u>	<u>5,800</u>	<u>5,800</u>
C. <u>Customs Duties</u>	<u>6,200</u> <sup>1/</sup>	<u>6,200</u> <sup>1/</sup>
 <u>Total Fiscal Reform</u>	 <u>23,820</u>	 <u>17,300</u>
% of Domestic Revenue from all sources in 1968	9.4%	6.8%
% of Expected Increase in Domestic Revenue from all sources	42.9%	31.2%

---

<sup>1/</sup> Estimate by Mission.

A. Internal Taxes

2. The original government proposal for internal tax reform was, under various political pressures, changed substantially. The net expected result of the reform will be a revenue increase of won 5.3 billion instead of won 11.8 billion in the original proposal.

I. Personal Income Taxes

3. Personal income tax in Korea is at present on a schedular basis. Different taxes and different tax rates apply to each type of income. The tax reform introduces a limited switch-over to a global income tax system. For the time being, however, the bulk of personal income tax revenue will continue to come from the various schedular taxes. The changes in these taxes are discussed in the following paragraphs.

4. Wages and Salaries Tax. The original proposal attempted to improve equity of this tax without sacrifice of revenue. However, in its final version the reform will lead to a net revenue loss in the first year of operation. This reform includes a slightly stronger rate progression but the revenue increase from this source will be offset, initially, by raise in the exemption limit (from 6,000 to 8,000 won per month) and introduction of a tax credit system. The latter is designed to alleviate the sudden large increase in marginal tax burden of taxpayers with income just over the exemption limit. The rate structure is given below. The "Revised proposed schedule" was again changed by the Assembly, but the final schedule is not known to the Mission.

Table 2

Wages and Salaries Tax

<u>Present Schedule</u>			<u>Revised Proposed Schedule</u>		
	<u>Income</u>	<u>Rate</u>	<u>Income</u>	<u>Rate</u>	
Below	5,957	Exempted	Below	7,000	Exempted
Below	20,000	7%	Below	15,000	7%
Over	20,000	15%	Over	15,000	9%
			Over	20,000	16%
Over	40,000	25%	Over	30,000	18%
			Over	40,000	30%
Over	80,000	40%	Over	60,000	40%
			Over	80,000	50%

5. Tax on Net Income of Unincorporated Business. This tax suffers from similar defects as the tax on wages and salaries: excessive marginal tax on income immediately above the exemption limit and lack of progression on low incomes. In addition, the rate structure is not properly coordinated with rates on corporate, wage and salary incomes. Therefore the Government proposed (a) to raise the exemption level from won 10,000 of semi-annual income to won 20,000, (b) to introduce a tax credit in order to introduce a modest degree of progression on lower incomes, and (c) to add slightly more progressive rates on high incomes. The present and proposed rate structures are compared below. The net result, from the revenue point of view, will be a small net increase in tax receipts (won 0.13 billion).

Table 3

Tax on Net Income of Unincorporated Business  
(income in won for six months)

<u>Present system</u>			<u>Proposed system</u>		
Below	10,000	exempted	Below	20,000	exempted
Over	10,000	20%	Over	10,000	20%
Over	25,000	30%	Over	25,000	25%
Over	60,000	40%	Over	60,000	40%
Over	200,000	50%	Over	150,000	50%
			Over	250,000	55%

6. Interest Income. The present tax provisions exempt bank deposit interest income from income taxation, but impose a 10 percent income tax on interest income from private loans, attempting thereby to encourage the flow of private savings into financial institutions. However this practice, together with the deductibility of interest expense in computing business income, had a highly undesirable effect on business finance. Owners of enterprises have found it more profitable to supply their firms with capital in the form of "loans" than with equity investment. For if they deposit their money with the banks and then borrow the same amount from them, they enjoy receiving tax-free interest income (as against taxable profit income), and a deduction of interest expenses from their gross profits. The result is a smaller base for corporation taxation. Alternatively, entrepreneurs may lend their money privately to some firms and at the same time borrow from others. This is also profitable because interest on private loans is generally high, and the tax rate on interest income from private loans (10 percent) far below the average tax rate on business income or corporate income. Since in Korea a large part of private investment occurs in closely held enterprises and many of them are inter-connected, this kind of arrangements can be made easily. These lending-borrowing activities will be more flourishing the higher the interest rates.

Presumably activities of this nature have intensified since the interest rates of banking institutions were sharply raised in 1965 and contributed to the sharp increase in time and savings deposits since then. Thus the attempt at increasing savings at modern financial institutions without corresponding fiscal measures may tend to bring about a lopsided structure in business finance.

7. To remedy this defect, interest income received by enterprises on bank deposits should be made taxable and the tax rate on interest income from private loans raised. The Government, nonetheless, decided to continue the tax exemption on income from bank deposit interest and proposed only an increase of tax rate on private loan interest from 10 to 20 percent.

7. Tax on Dividends. Meanwhile, for the purpose of encouraging the growth of "open corporations" and widespread ownership of equity shares, the Government decided to continue to exempt from income tax, dividends declared by "open corporations", but imposed a 15 percent income tax on dividends received by individuals from "closed corporations".

8. Global System. The schedular personal income tax system of Korea has the common defects of such a system. Since the tax rate on each type of income is different and progressive, tax liabilities vary depending on whether income is derived from one or several sources. Thus taxpayers find incentive to arrange their affairs in such a way that their incomes are received from different sources and in different locations in order to make them subject to the lowest rate of taxation. This causes revenue loss to the Government and reduces efficiency in resource allocation. While a global system would avoid these defects, it is not feasible to switch to it overnight, because of the considerable administrative difficulties of such a change. A modest beginning will be made in 1968 when global income tax will be applied to individuals with aggregate income over won 5 million. As administrative capacity develops, globalization will be extended. For 1968, it is estimated that this would involve only 1,500 taxpayers.

## II. Corporate Income Tax and Investment Tax Credit

9. The present corporate tax provisions impose the same rates on "open" and "closed" corporations. As a further measure to encourage the growth of open corporations <sup>1/</sup>, such corporations are granted 50

---

<sup>1/</sup> These are defined as corporations selling shares through the stock exchange or by public auction by the Government or the Korean Reconstruction Bank, with one-tenth or more listed and traded on the exchange and less than 50 percent of the shares held by any one family.

percent reduction in the tax on that proportion of their net income which is allocable to an increase in equity capital for a period of five years after equity capital is obtained. The tax proposals moreover impose higher tax rates on "closed" corporations as follows:

Table 4

Tax Rates on Closed and Open Corporations

Income brackets (Annual income)	<u>Present rates</u> applicable to all		<u>Proposed rates</u>	
	<u>corporations</u>	<u>Open corporations</u>	<u>Closed corporations</u>	<u>Closed corporations</u>
Under 1,000,000 won	20%	20%	25%	
Over 1,000,000 won	30%	30%	35%	
Over 5,000,000 won	35%	35%	45%	

10. An important new instrument for promoting industrial development in Korea is the newly introduced device of providing investment credit as a more effective means of encouraging investment into desirable fields of the economy. Under the present system, exemptions and reductions of corporate income tax are granted to corporations with fixed assets above one million won in selected industries. For "basic" industries such as petroleum refining, electric power, iron and steel, ship-building, chemical fertilizer, etc., full exemption of the tax for the first four years, two-thirds reduction of the tax for the next one year and one-third reduction for the following year are granted. For another group including mining industries, straw pulp manufacturing, machinery industries, bicycle and automobile manufacturing, full exemption for the first two years, two-thirds reduction for the next one year and one-third reduction for the following year are granted. This arrangement favors relatively short-term investment whose returns come largely in the early period. Also it has no precise relation with the amount of fixed investment in each individual enterprise, except a general minimum amount. The investment credit system now introduced gives a credit against corporate income tax liability equal to 12 percent of the value of investment in depreciable assets with a life of five years and over. Unused credits of any one year can be carried over for a five-year period. The 12 percent investment credit is roughly equivalent to the amount of exemption granted under existing provisions. Firms which do not have sufficient earnings at the outset will be able to carry the credit forward and obtain the benefits later on. Also, since the amount of the credit is related to investment in depreciable assets, it tends to induce more precisely the type of capital outlays which raise productivity. In order to make the investment credit system to conform with the general development policy, tax benefit is limited to basic

industries and an eligible project must have high priority in the development plan. Meanwhile the existing tax exemptions and reductions for export industries will be maintained.

### III. Other Direct Taxes

11. A new tax included in the reform is the tax on capital gains from real estate. Since 1960, prices of urban land and buildings have risen sharply and it has become difficult to obtain sites for factories and residential housing. There are indications that the price rise has been largely due to speculation and most of the speculative gains are received by the rich. A tax on the capital gains from real estate transactions will therefore not only restrain future speculation and redirect savings into productive channels, but also improve tax equity and yield additional income to the Government. The capital gains tax is applied when the property is being transferred, by sale, bequest, or gift. The tax base is the standard market price at the time of property transfer minus the sum of original purchase price, and improvement outlays, deflated by the rise of the wholesale price index. A flat rate of 50 percent will be applied to the taxable gain. The use of a flat rather than a progressive rate is to avoid the possibility of splitting property into small units subject to the lower rates in a progressive schedule. One important exemption from the tax is residential houses occupied by owners and land site up to ten times the size of the house.

12. Adjustments have also been made in the inheritance, gift, and registration taxes on revenue and equity considerations.

### IV. Indirect Taxes

13. The largest revenue increase will come from indirect taxes on commodities, including liquors and petroleum products. The coverage of the commodity tax will be substantially enlarged from 46 to 79 items (including some splitting of items in the present list). Tax rates on luxury items will also be increased. The extension and the rate increase of the commodity tax has been designed in such a way as to minimize the regressive effect usually arising from indirect taxes. Most of the commodities covered are consumed typically by families in the upper 30 percent of the income range.

14. The reason of the slow increase in revenue from the liquor tax in the past is that it was levied by volume rather than value. The adjustment of the tax rates always lagged far behind price increases. In the tax reform the tax was changed into an ad valorem tax, and at the same time the rates were increased. Some petroleum products are not taxed under the present tax system. The next tax law imposes a 30 percent tax on kerosene and 5 percent on Bunker C oil. Both are previously tax exempt. Kerosene has been

used largely in the rural areas. The revenue listed from kerosene tax will be used for financing the rural electrification program. A new telephone tax is introduced with a flat rate of 10 percent on the telephone bills. As telephones are used chiefly by the relatively high income earners in Korea, the tax will not only bring in additional revenue but also contribute to tax equity.

#### B. Monopoly Profits

15. Akin to indirect taxation are profits of government monopoly sale of tobacco and cigarettes and ginseng. These profits have been low in Korea compared with most other countries and did not rise with the increases of national income and general price level. In October 1967 Government raised the prices of three popular brands of cigarettes respectively by 12.5, 20 and 40 percent. This will add 5.8 billion won to the revenue from monopoly profits, a 40 percent increase over 1967.

#### C. Tariff Reform

##### I. Need for Reform

16. Tariff reform was urgently needed for several reasons. First, the recent improvement in the balance of payments made it possible for Korea to continue its trade liberalization program started in 1965. Further trade liberalization will help industrial development by providing a smooth supply of raw materials and parts and enabling industry to follow a more rational inventory policy. While trade liberalization is taking place, tariffs will assume a more important role in rendering protection to domestic industries and influencing import level and composition. The special customs duties, introduced in 1964 as a device to mop up excessive profits from imports of restricted items, will lose their function as trade is liberalized. These special duties need to become integrated with the normal customs duties.

17. Secondly, existing tariffs impose high rates on luxury items with the intention of curbing domestic consumption of luxury goods. However, these high rates incidentally afford protection to domestic production of substitutes in contradiction to the purpose of restraining luxury consumption. Since the commodity was to be revised, some coordinated revision should also be made on tariffs, for these two taxes are closely interrelated.

18. Thirdly, the existing tariff structure contains features of doubtful value, considering the present stage of Korean development. In order to encourage domestic industrial development and maintain low cost of living, over one-half of imports is exempt from customs duty. The total amount of tariff exemptions is even larger than the

tariffs revenue collected. <sup>1/</sup> Not only is revenue lost in this way but the zero tariff rate applied to a large number of items of industrial materials and machinery is also discouraging development of producer goods industries. Other features of the protection structure are the high protective rates imposed on finished goods and very low rates on imports of their components. The existing tariff structure thus tends to encourage "finishing touch" type of industries which use a large proportion of imported materials but contribute much less to real domestic "value-added" than intermediate industries.

19. Fourthly, the general level of the existing tariffs is low and the government needs funds to implement the Second Plan. The revenue from custom duties as a proportion of the total import value was below 9 percent immediately before the 1964 devaluation. When the devaluation took place, a "special customs duty" was introduced. Serving as a kind of excess profits surtax, it applies a 70 percent rate (for articles bearing a tariff rate below 40 percent) on the amount of excess profits, calculated as the difference between the domestic market price and the total import value. Including the special custom duty, customs revenue collection ratio rose to 10.2 percent of total import value in 1965, but fell again in 1966 to slightly over 9 percent. For 1967, a ratio of 8.6 percent is derived from the revenue estimated in the second supplementary budget and the import value estimated in the ORB. This will be the lowest ratio in the past decade, due presumably to a considerable expansion of imports along with trade liberalization while the tariff rates have been remaining more or less the same and exemption gained somewhat in importance.

20. A major tariff reform was recently proposed by the government and reportedly passed by the National Assembly. In the formulation of the tariffs revision, factors such as protection of domestic industries, revenue yield to the government, and welfare of consumers were taken into consideration. As information on the final amendments by the Assembly is not yet available, we shall state briefly below the major features in the government's proposal.

## II. Main Features

21. The revised tariff structure divides commodities into four categories: those on which tariff should be imposed for protection of domestic industry; those on which customs duties should be levied chiefly for obtaining revenue; those which should be exempt from customs duty in

---

<sup>1/</sup> The total value of tariff exemptions in 1966 was 20.3 billion won as compared with a total tariff revenue of 17.6 billion won which included 5.4 billion won from special customs duties.

Table 5  
Imports and Customs Revenues

	Imports (in million \$)	Imports (in billion won)	Customs <sup>1/</sup> revenue (in billion won)	Customs collection rates(%)
	(A)	(B)	(C)	(D) = $\frac{(C)}{(B)}$
1964	404.4	91.4	8.2	9.0
1965	463.4	123.0	12.5	10.2
1966	716.4	194.4	17.6	9.1
1967 <sup>2/</sup>	961.3	260.8	22.3	8.6
1968 <sup>3/</sup>	1,085.4	294.5	31.4	10.7

<sup>1/</sup> Including special custom duties.

<sup>2/</sup> Estimated.

<sup>3/</sup> Projected

Source: Ministry of Finance: Foreign Trade of Korea, 1966, and EPB data.

view of national policy or international convention; and non-essential luxury commodities whose import should be discouraged. For the last two categories there have been no important changes. The idea of relying more on commodity tax for restraining consumption of luxury goods, but lowering import duties in order to reduce incidental protection to domestic production of luxury goods seems somewhat lost in the reform. The commodity tax has been expanded but tariffs on non-essentials were not substantially reduced.

22. For the second category, the revenue type duties, the rate structure was greatly simplified. A range of 10-20 percent rates is applied to all industrial raw materials and major industrial machines, and a uniform rate of 20 percent (much lower than the existing rates) to all other items. The latter group accounts for one-third of the total number of customs articles. This will simplify customs administration and tend to reduce tax evasion.

Table 6  
Current and Revised Tariff Rates  
(In Percentage of Import Value)

<u>Major Tariff Category</u>	Number of <sup>1/</sup> <u>Articles</u>	<u>Raw Materials</u>		<u>Semi-finished Goods</u>		<u>Finished Goods</u>	
		<u>Current</u>	<u>Revised</u>	<u>Current</u>	<u>Revised</u>	<u>Current</u>	<u>Revised</u>
I. Protection Tariff	1,300	10-60	25-60	40-80	40-80	45-100	50-150
II. Revenue Tariff:							
(1) Industrial raw materials and major industrial machines	283	5-25	10-20	15-35	10-20	5-25	10-20
(2) Others	1,002	25-35	20	50-60	20	58-80	20
III. Tax-Exempt Articles <sup>2/</sup>	148	0	0	0	0	0	0
IV. Non-Essential Imports	287	60-80	60-80	100-120	100	100-250	100-250

---

<sup>1/</sup> Total 3,120 articles.

<sup>2/</sup> Articles receive special treatments for reasons of national policy and international convention.

### III. Questions on Protection

23. The rate setting for articles which are afforded tariff protection is more complicated. Prof. Ronald MacKinnon of Stanford University, advising the Ministry of Finance on this subject, suggested that the protective tariff rate on any given product should be set according to the degree of real domestic "value-added" of the industry concerned, by computing the industry's output in world prices and deducting imported materials used by the industry at world prices. The higher the Korean real value-added, the higher the protective tariff rate (within the determined range) should be set, because such industry contributes more to the domestic economy than the industry which bears a low real value-added ratio. Apparently, this point has been taken into consideration in the revision of the tariff rates; high value-added industries will be given rates of tariff protection towards the higher end as shown in the table and low value-added industries, rates at the lower end.

24. However, it is not clear whether in the actual calculation of the real value-added figures the original idea of using the world market prices has been adhered to. In the illustrations in the "Proposed Adjustment of Tariff Rates" (in Korean) prepared by the Ministry of Finance it seems that the value of the industry's output is calculated on the base of present domestic market price instead of the world market price. If this is the case, the resultant value-added portion can be very high simply because existing import restrictions on the product (or its substitutes) are so severe and tariff rate on them so high that its domestic price is unduly high. High value-added ratio does then not reflect any real achievement of the industry but rather the consequence of the artificial price relation. The correct way of calculating the real value-added ratio is to use the world market prices for both the product and imported materials. If the new protective rate is set according to the domestic value-added ratio calculated on the basis of domestic prices then it would simply mean heavy protection for those industries which were already heavily protected by import restrictions and existing tariffs.

25. The "Proposed Adjustments" also appears to take the internal-external price differential as a factor in setting up the new protective tariff rates. The formula is as follows:

$$\text{Price Differential} = \frac{\text{Domestic Factory Delivery Price} - \text{c.i.f. price of imported commodity}}{\text{c.i.f. price of imported commodity}}$$

It was not explained how this formula is used. If it means that the higher the price differential the higher will be the protective tariff rate, the result may well be to protect inefficient production unless a program of gradual tariff reduction can be worked out between the government and the industries concerned.

26. It is understood that the exact protective tariff rates on each of the 1,300 individual articles have not yet been finally decided. The "Proposed Adjustments" contains only the range of rates for major tariff categories. (See Table 6) On the whole, the level of protection appears increased which is understandable in conjunction with trade liberalization. But considering also the internal tax incentives and cheap credits offered to industries, the over-all level of protection and subsidies appears too high. Structure-wise, the new set of rates seems still to maintain the feature of emphasizing the encouragement of import-substitution in industries producing finished goods.

27. Another very important feature of the tariff reform is the introduction of substantial discretionary power of the Government to make optional changes under certain circumstances, within the limit of the tariff law. Among the instances in which government may wish to use these discretionary powers are possible abrupt changes in commodity imports following trade liberalization; possible need for price controls; need for anti-dumping or anti-monopoly action, special protection and adjustments of rates because of rapid changes in industrial structure. Under certain specific conditions the government can vary the tariff rates 50 percent up or down or introduce a combination of tariff and quota.

28. By passing the tariff reform proposals, the Assembly has given the government enormous power to set tariff rates on individual items. We hope that in using this power, particularly in the fixation of the protective rates on individual items, the government will adhere to the principal of real value-added calculated on the base of world market prices and scarcely use the price differential as a determinant. Meanwhile, consideration should be given to the possibilities of domestic production of intermediate goods on which tariff rates should not be too low as compared with those on related finished products.

#### IV. Effects on Revenue

29. As a result of the tariff reform the number of dutiable items will increase from 2,063 to about 3,200 items. The average tariff rate as calculated from the tariff table will remain almost unchanged at 39.3 percent. Meanwhile, special tariffs on certain items will be reduced in order to offset the increases in ordinary tariff rates. On the whole, the revision contains much more expansion in the coverage of customs duties than increases of the tariff rate. Taking into account these changes and the projected increase in imports, the 1968 budget estimates that customs revenue will increase 41 percent over estimated revenue in 1967. As import value is projected to increase by only 13 percent during the same period, the tariff revision may contribute an increase of revenue in the order of won 6.2 billion. On the basis of the projected customs revenue and the projected imports, the collection ratio for 1968 will be 10.7 percent which is substantially higher than the estimated ratio for 1967. However, it is still far below the average tariff rate of 39.3 percent. This large discrepancy indicates that the scope of duty-exemptions is still wide and that a large proportion of imports is of a non-dutiable nature. Assuming exemptions can be reduced, it will be possible to raise the collection ratio much further.

## STATISTICAL ANNEX

- Table 1. - Korea - External Medium - and Long-Term Public Debt Outstanding Including Undisbursed As Of December 31, 1966 with Major Reported Additions January 1, 1967 to September 30, 1967
- Table 2. - Estimated Contractual Service Payments Due In Future on External Medium- and Long-Term Public Debt Outstanding Including Undisbursed As Of December 31, 1966 with Additions Contracted January 1, 1967 to September 30, 1967
- Table 3. - Expenditure on GNP
- Table 4. - Industrial Origin of GNP
- Table 5. - Composition of Gross Domestic Capital Formation
- Table 6. - Composition of Gross Domestic Capital Formation
- Table 7. - Percentage Shares of GNP by Industrial Group
- Table 8. - Rate of Growth by Industrial Group
- Table 9. - Farm and Non-Farm Per Capita Income
- Table 10. - Public Revenues and Expenditures, 1961-1967
- Table 11. - Functional Classification of Central Government Expenditures
- Table 12. - The Capital Accounts of the Balance of Payments
- Table 13. - Composition of Exports
- Table 14. - Composition of Imports
- Table 15. - Exports by Country
- Table 16. - Money Supply and Principal Factors Affecting It.
- Table 17. - Foreign Exchange Assets and Liabilities of the Bank of Korea
- Table 18. - Wholesale Price Index

Table 1

1/  
Korea - External Medium- and Long-Term Public Debt  
Outstanding Including Undisbursed As Of  
December 31, 1966 With Major Reported  
Additions January 1, 1967 to September 30, 1967

Debt Repayable in Foreign Currency

(In thousands of U.S. dollar equivalents)

<u>Item</u>	<u>Debt Outstanding</u> <u>December 31, 1966</u>		<u>Major Reported</u> <u>Additions</u>
	<u>Net of</u> <u>undisbursed</u>	<u>including</u> <u>undisbursed</u>	<u>Jan. 1, 1967 -</u> <u>Sept. 30, 1967</u>
TOTAL EXTERNAL PUBLIC DEBT	<u>281,328</u>	<u>594,785</u>	<u>193,789</u>
Privately-placed debt	<u>152,746</u>	<u>250,916</u>	<u>127,573</u>
Suppliers' credits	<u>151,208</u>	<u>249,378</u>	<u>57,967</u>
Private Bank credit	<u>1,538</u>	<u>1,538</u>	<u>3,500</u>
Other credits (Maturities one to three years)	-	-	<u>66,106</u>
IDA credit	<u>13,993</u>	<u>13,993</u>	-
U.S. Government loans	<u>81,890</u>	<u>251,486</u>	<u>33,200</u>
Export-Import Bank	-	<u>3,805</u>	-
AID	<u>81,890</u>	<u>247,681</u>	<u>33,200</u>
Loans from Governments of other IBRD members	<u>32,699</u>	<u>78,389</u>	<u>33,016</u>
Germany	<u>18,385</u>	<u>31,180</u>	-
Japan	<u>14,068</u>	<u>45,809</u>	<u>33,016</u>
United Kingdom	<u>246</u>	<u>1,400</u>	-

1/ Debt with an original or extended maturity of one year or more.

Statistical Services Division  
Economics Department  
October 25, 1967

Table 2

Estimated Contractual Service Payments Due In Future on  
External Medium- And Long-Term Public Debt Outstanding  
Including Undisbursed As Of December 31, 1966 With Additions  
Contracted January 1, 1967 To September 30, 1967 1/

Debt Repayable in Foreign Currency

(In thousands of U.S. dollar equivalents)

Year	Debt Outst (Begin Of Period) Undisbursed	Grand Total		
		Amorti- zation	Payments During Period Interest	Total
1967	591,035	23,079	8,540	31,619
1968	761,745	32,786	16,578	49,364
1969	728,958	38,096	18,739	56,835
1970	690,863	100,035	34,413	134,448
1971	590,827	39,562	17,314	56,876
1972	551,265	36,520	15,320	51,840
1973	541,745	35,540	13,395	48,935
1974	479,206	32,760	11,457	44,217
1975	446,446	30,904	10,134	41,038
1976	415,541	35,038	10,484	45,522
1977	380,503	29,331	9,378	38,709
1978	351,173	19,318	8,396	27,714
1979	331,854	18,780	7,839	26,619
1980	313,074	17,747	7,171	24,918
1981	295,328	17,280	6,717	23,997

1/ Includes service on all debts listed in Table 1 prepared October 26, 1967 with the exception of the following: loan from Germany \$3,750,000 (equivalent), for which repayment terms are not available.

Table 2 (Continued)

Estimated Contractual Service Payments Due In Future on  
External Medium- And Long-Term Public Debt Outstanding  
Including Undisbursed As Of December 31, 1966 With Additions  
Contracted January 1, 1967 To September 30, 1967 :

Privately Placed Debt - Total

(In thousands of U.S. dollar equivalents)

Year	Debt Outst (Begin of Period) Undisbursed	Grand Total		
		Amorti- zation	Payments During Period Interest	Total
1967	250,916	21,998	6,069	28,066
1968	356,492	31,300	11,645	42,944
1969	325,193	36,228	12,426	48,655
1970	288,965	98,072	27,721	125,793
1971	190,894	37,004	10,469	47,472
1972	153,891	33,930	8,462	42,391
1973	119,960	31,210	6,547	37,757
1974	88,750	23,570	4,788	28,358
1975	65,180	20,916	3,484	24,399
1976	44,264	20,743	2,293	23,036
1977	23,521	13,873	1,201	15,074
1978	9,648	3,573	484	4,057
1979	6,075	2,429	305	2,734
1980	3,646	1,497	6	1,503
1981	2,149	998	-	998

Table 2 (Continued)

Estimated Contractual Service Payments Due In Future on  
External Medium- And Long-Term Public Debt Outstanding  
Including Undisbursed As Of December 31, 1966 With Additions  
Contracted January 1, 1967 To September 30, 1967

Foreign Governments and IDA - Total

(In thousands of U.S. dollar equivalents)

Year	Debt Outst (Begin of Period) Undisbursed	Amorti- zation	Payments During Period	
			Interest	Total
1967	340,119	1,081	2,471	3,553
1968	405,253	1,486	4,933	6,420
1969	403,765	1,868	6,313	8,180
1970	401,898	1,963	6,692	8,655
1971	399,933	2,558	6,345	9,404
1972	397,374	2,590	6,858	9,449
1973	421,785	4,330	6,848	11,178
1974	390,456	9,190	6,669	15,859
1975	381,266	9,988	6,650	16,639
1976	371,277	14,295	8,191	22,486
1977	356,982	15,460	8,177	23,637
1978	341,525	15,745	7,912	23,657
1979	325,779	16,351	7,534	23,885
1980	309,428	16,250	7,165	23,415
1981	293,179	16,282	6,717	22,999

Statistical Services Division  
Economics Department  
October 26, 1967

Table 3

Expenditure on GNP  
(In billion won)

	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>
<u>At Current Market Prices</u>														
Private Consumption Expenditure	39.86	55.84	100.28	140.63	165.50	170.77	181.49	207.26	245.44	293.79	399.55	585.96	669.08	805.90
General Government Consumption	3.78	6.78	10.10	13.88	21.35	26.15	30.85	35.54	40.06	49.62	54.74	61.95	76.02	104.82
Gross Domestic Fixed Capital Formation	3.46	6.12	11.72	15.68	20.96	20.82	24.09	26.54	34.29	48.62	68.04	80.54	117.64	205.99
Increase in Stocks	4.23	1.66	2.09	-1.27	9.30	5.91	-0.37	0.26	4.50	-3.15	21.64	20.70	0.84	17.12
Exports of Goods & Services	0.95	0.73	1.92	2.11	2.97	4.23	5.88	8.22	15.76	17.98	23.76	42.06	68.61	106.81
Less Imports of Goods & Services	4.67	4.89	11.43	19.98	23.73	22.12	22.40	31.02	43.83	58.88	79.48	96.53	128.93	209.20
Statistical Discrepancy	-	-	-	-	-	-	-	-1.92	-2.18	-2.58	-3.62	-3.14	-5.06	-12.78
Expenditure on GDP	47.61	66.24	114.68	151.05	196.35	205.76	219.54	244.88	294.04	345.40	484.63	691.54	798.20	1,018.66
Net Factor Income from the Rest of the World	0.57	0.64	1.38	1.39	1.43	1.43	1.46	1.81	2.78	3.18	3.33	5.25	7.65	13.38
Expenditure on GNP	48.18	66.88	116.06	152.44	197.78	207.19	221.00	246.69	296.82	348.58	487.96	696.79	805.85	1,032.04
Less Indirect Taxes	1.66	3.29	5.22	6.74	10.42	12.64	16.19	18.73	19.98	28.65	30.94	33.92	47.13	72.31
Plus Subsidies	0.02	0.05	0.78	1.33	1.47	0.30	0.09	0.26	2.07	2.23	0.86	1.06	0.07	0.02
Less Provision for Consumption of Fixed Capital	2.29	3.52	5.50	7.27	9.18	9.99	11.54	12.33	14.27	18.89	26.31	36.93	45.73	57.89
National Income	44.25	60.12	106.12	139.76	179.65	184.86	193.36	215.89	264.64	303.27	431.57	627.00	713.06	901.86
<u>At Constant 1965 Prices</u>														
Private Consumption Expenditure	361.79	381.05	422.89	444.85	471.32	486.05	508.55	523.30	528.38	568.96	587.74	620.44	669.08	716.99
General Government Consumption	60.14	58.81	61.09	65.73	66.34	70.52	69.84	71.13	69.84	70.44	73.84	71.18	76.02	84.76
Gross Domestic Fixed Capital Formation	35.28	41.66	48.98	52.77	61.31	57.79	59.29	61.71	65.26	84.05	105.95	93.33	117.64	190.63
Increase in Stocks	34.28	16.21	12.36	4.52	26.60	19.93	-1.46	0.77	7.69	-6.06	31.32	21.08	0.84	16.75
Exports of Goods & Services	14.52	8.76	10.99	9.79	13.30	16.85	19.53	23.49	32.64	36.71	39.44	48.75	68.61	104.49
Less Imports of Goods & Services	93.50	66.69	89.52	104.57	123.73	107.04	87.66	100.43	91.09	120.20	153.19	114.04	128.93	204.65
Statistical Discrepancy	-	-	-	-	-	-	-	1.72	-4.90	-5.11	1.14	3.04	-5.06	-8.23
Expenditure on GDP	412.51	439.80	466.79	473.09	515.14	544.10	568.09	581.69	607.82	628.49	686.24	743.78	798.20	900.74
Net Factor Income from the Rest of the World	9.42	7.56	7.75	7.38	7.59	7.59	7.75	7.38	5.79	6.48	6.79	6.53	7.65	13.08
Expenditure on GNP	421.93	447.36	474.54	480.47	522.73	551.69	575.84	589.07	613.61	634.97	693.03	750.31	805.85	913.82

Source: Bank of Korea

Table 4

Industrial Origin of GNP  
(In billion won)

	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
<u>At Current Market Prices</u>														
Agriculture, Forestry & Fishery	22.80	26.93	52.00	71.91	89.30	85.35	76.77	91.00	119.05	127.37	205.64	320.27	311.63	372.31
Fishery	(0.43)	(0.77)	(1.02)	(1.76)	(2.05)	(2.15)	(2.51)	(2.72)	(2.04)	(3.50)	(5.12)	(9.54)	(13.62)	(16.66)
Mining	0.53	0.65	1.22	1.76	2.91	3.27	3.86	5.23	5.51	6.98	8.30	12.34	14.73	16.59
Manufacturing	4.28	7.68	12.95	17.26	21.86	26.02	31.03	33.50	39.71	50.67	72.52	108.77	142.81	185.80
Construction	1.04	1.76	3.51	4.43	6.94	6.70	7.65	8.20	9.63	11.65	14.70	20.21	27.64	37.94
Electricity, Gas & Water	0.22	0.32	0.62	0.51	1.31	1.79	1.76	2.01	3.48	4.68	5.12	6.60	10.26	14.13
Electricity and Gas	(0.18)	(0.27)	(0.55)	(0.40)	(1.14)	(1.60)	(1.55)	(1.71)	(3.08)	(4.20)	(4.37)	(5.73)	(9.18)	(12.81)
Transportation, Storage & Communication	0.79	1.44	2.82	3.89	6.68	7.68	9.85	11.33	13.76	17.08	19.90	23.91	32.14	50.73
Transportation & Storage	(0.76)	(1.38)	(2.73)	(3.76)	(5.97)	(6.86)	(8.73)	(9.69)	(12.07)	(14.78)	(17.07)	(19.99)	(27.00)	(40.32)
Wholesale & Retail Trade	5.89	8.62	15.04	18.99	22.45	23.49	27.88	30.46	33.50	43.68	62.20	84.39	119.27	158.16
Banking, Insurance & Real Estate	0.36	0.40	0.87	1.16	2.01	2.78	3.48	3.90	4.29	5.72	7.45	9.93	12.75	16.81
Ownership of Dwellings	6.00	7.80	8.97	10.39	12.48	14.14	15.06	16.29	16.56	18.49	21.78	25.31	27.99	33.42
Public Administration & Defense	2.81	4.85	6.42	7.45	11.95	13.65	16.56	17.42	20.40	26.54	28.08	33.64	39.94	53.84
Other Services	2.89	5.79	10.26	13.30	18.46	20.89	25.64	25.54	28.15	32.54	38.94	46.17	59.04	78.93
Education	(0.51)	(1.97)	(4.00)	(4.55)	(6.73)	(7.52)	(9.34)	(9.51)	(10.01)	(12.11)	(13.30)	(14.49)	(15.81)	(23.69)
Rest of the World	0.57	0.64	1.38	1.39	1.43	1.43	1.46	1.81	2.78	3.18	3.33	5.25	7.65	13.38
GNP	48.18	66.88	116.06	152.44	197.7	207.19	221.00	246.69	296.82	348.58	487.96	696.79	805.85	1,032.04
<u>At Constant 1965 Prices</u>														
Agriculture, Forestry & Fishery	203.38	219.10	224.06	212.23	230.57	246.26	243.66	243.97	268.53	252.37	270.56	314.31	311.63	345.91
Fishery	(5.98)	(5.57)	(5.26)	(7.59)	(9.28)	(8.71)	(8.77)	(7.64)	(9.01)	(9.57)	(11.40)	(12.91)	(13.62)	(15.07)
Mining	3.98	3.21	3.72	3.91	5.18	5.44	6.37	8.22	8.82	10.86	11.86	13.36	14.73	15.67
Manufacturing	32.97	39.81	48.78	57.54	63.95	68.98	74.96	80.59	82.82	95.14	111.63	116.78	142.81	165.76
Construction	8.71	9.90	10.31	9.60	12.38	12.49	14.65	14.36	15.99	18.23	20.69	21.83	27.64	34.84
Electricity, Gas & Water	2.08	2.48	2.50	3.02	3.45	4.23	4.87	5.05	5.20	6.23	7.10	8.47	10.26	12.24
Electricity and Gas	(1.74)	(2.13)	(2.11)	(2.54)	(2.95)	(3.57)	(4.15)	(4.27)	(4.40)	(5.37)	(6.19)	(7.54)	(9.18)	(11.09)
Transportation, Storage & Communication	6.32	8.34	9.57	12.15	12.47	13.85	15.96	17.85	17.95	20.07	23.47	27.15	32.14	37.67
Transportation & Storage	(5.75)	(7.50)	(8.70)	(11.10)	(11.29)	(12.44)	(14.14)	(15.68)	(15.51)	(17.01)	(19.80)	(22.98)	(27.00)	(31.87)
Wholesale & Retail Trade	51.17	53.79	62.02	65.00	75.50	78.48	89.21	94.94	93.15	103.41	113.19	109.97	119.27	139.43
Banking, Insurance & Real Estate	5.79	4.39	6.11	6.03	7.02	8.49	9.15	10.01	9.51	11.08	11.35	12.02	12.75	13.79
Ownership of Dwellings	21.27	21.98	22.54	23.19	23.69	24.13	24.17	24.70	25.32	25.90	26.52	27.32	27.99	28.93
Public Administration & Defense	46.56	43.52	43.03	41.58	39.52	37.06	36.48	36.06	35.70	36.96	38.24	38.88	39.94	42.71
Other Services	30.28	33.28	34.15	38.84	41.41	44.69	48.61	45.94	44.83	48.24	51.63	53.69	59.04	63.79
Education	(7.52)	(8.95)	(9.91)	(10.51)	(10.82)	(11.04)	(11.32)	(11.60)	(12.22)	(12.88)	(13.99)	(14.76)	(15.81)	(17.16)
Rest of the World	9.42	7.56	7.75	7.38	7.59	7.59	7.75	7.38	5.79	6.48	6.79	6.53	7.65	13.08
GNP	421.93	447.36	474.54	480.47	522.73	551.69	575.84	589.07	613.61	634.97	693.03	750.31	805.85	913.82

Source: Bank of Korea

Table 5

Composition of Gross Domestic Capital Formation (At 1965 Market Prices)  
(In billion won)

	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>
<u>A. By Type of Capital Goods</u>														
Fixed Capital Formation	35.28	41.66	48.98	52.77	61.31	57.79	59.29	61.71	65.26	84.05	105.95	93.33	117.64	190.63
Dwellings	8.23	11.49	8.23	8.52	7.92	7.42	9.33	12.92	10.42	10.02	11.14	12.55	13.92	18.41
Non-residential Buildings	11.34	10.01	13.27	10.59	11.54	12.90	16.08	12.33	11.79	17.44	20.72	21.42	32.03	35.07
Other Construction & Works	6.36	7.10	9.91	8.90	14.26	13.48	13.55	11.93	18.98	24.14	30.93	27.88	33.67	48.77
Transport Equipment	3.76	5.97	2.88	4.26	4.37	3.94	5.99	6.04	7.43	9.48	15.42	8.89	11.72	23.81
Machinery & Other Equipment	5.59	7.09	14.69	20.50	23.22	20.05	14.34	18.49	16.64	22.97	27.74	22.59	26.30	64.57
Increase in Stocks	34.28	16.21	12.36	4.52	26.60	19.93	-1.46	0.77	7.69	-6.06	31.32	21.08	0.84	16.75
Gross Domestic Capital Formation	69.56	57.87	61.34	57.29	87.91	77.72	57.83	62.48	72.95	77.99	137.27	114.41	118.48	207.38
<u>B. By Industrial Use</u>														
Fixed Capital Formation	35.28	41.66	48.98	52.77	61.31	57.79	59.29	61.71	65.26	84.05	105.95	93.33	117.64	190.63
Agriculture, Forestry & Fishery	4.04	3.45	4.53	5.07	6.48	5.35	5.99	6.97	8.35	6.72	10.28	10.66	13.67	23.16
Mining & Quarrying	0.08	0.28	0.88	1.46	2.29	1.53	0.83	1.30	0.39	0.75	1.44	0.92	1.49	2.01
Manufacturing	6.99	6.44	12.74	16.71	18.27	16.64	12.77	14.85	13.84	17.76	24.08	22.37	30.46	61.72
Construction	0.06	0.13	0.33	0.51	0.75	1.06	0.61	0.60	0.73	3.17	2.42	1.22	1.44	2.00
Electricity, Water & Sanitary Services	0.84	1.35	2.82	1.73	1.55	2.96	2.11	2.11	5.46	8.81	13.22	7.40	7.10	9.55
Transportation, Storage & Communication	6.21	8.96	7.33	8.67	14.33	12.25	14.51	11.09	14.98	19.59	25.41	19.57	24.06	46.97
Wholesale & Retail Trade	2.79	2.12	3.11	2.59	2.20	3.14	3.78	3.12	2.62	4.55	4.77	4.63	7.84	6.99
Banking, Insurance & Real Estate	0.05	0.06	0.09	0.32	0.30	0.33	0.40	0.27	0.09	0.23	0.21	0.33	0.50	0.87
Ownership of Dwellings	8.23	11.49	8.23	8.52	7.92	7.42	9.34	12.92	10.42	10.01	11.14	12.55	13.92	18.42
Public Administration	0.96	1.81	1.80	1.86	2.04	2.13	2.15	2.16	1.56	1.68	2.32	1.41	1.96	2.28
Other Services	5.03	5.57	7.12	5.33	5.18	4.98	6.80	6.32	6.82	10.78	10.66	12.27	15.20	16.66
Increase in Stocks	34.28	16.21	12.36	4.52	26.60	19.93	-1.46	0.77	7.69	-6.06	31.32	21.08	0.84	16.75
Gross Domestic Capital Formation	69.56	57.87	61.34	57.29	87.91	77.72	57.83	62.48	72.95	77.99	137.27	114.41	118.48	207.38
<u>C. By Type of Purchaser</u>														
Fixed Capital Formation	35.28	41.66	48.98	52.77	61.31	57.79	59.29	61.71	65.26	84.05	105.95	93.33	117.64	190.63
Private & Public Enterprises	31.97	34.69	40.58	43.87	39.72	39.43	40.95	45.49	45.93	58.65	76.83	72.63	91.85	148.58
Government Enterprises	1.52	4.46	4.84	4.97	10.84	7.62	7.45	7.18	7.16	9.67	14.84	11.35	11.45	19.41
General Government	1.79	2.51	3.56	3.93	10.75	10.74	10.89	9.04	12.17	15.73	14.28	9.35	14.34	22.64
Increase in Stocks	34.28	16.21	12.36	4.52	26.60	19.93	-1.46	0.77	7.69	-6.06	31.32	21.08	0.84	16.75
Gross Domestic Capital Formation	69.56	57.87	61.34	57.29	87.91	77.72	57.83	62.48	72.95	77.99	137.27	114.41	118.48	207.38

Source: Bank of Korea

Table 6

Composition of Gross Domestic Capital Formation (At Current Market Prices)  
(In billion won)

	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>
<u>A. By Type of Capital Goods</u>														
Fixed Capital Formation	3.46	6.12	11.72	15.68	20.96	20.82	24.09	26.54	34.29	48.62	68.04	80.54	117.64	205.99
Dwellings	0.74	1.69	2.07	2.68	2.83	2.81	3.79	5.34	4.93	5.81	6.91	18.42	13.92	21.17
Non-residential Buildings	1.08	1.56	3.33	3.44	4.47	5.14	6.78	6.42	6.66	10.94	14.21	10.48	32.03	39.04
Other Construction & Works	0.71	1.24	2.92	3.55	6.72	6.15	6.53	6.27	10.67	14.62	20.59	24.58	33.67	53.38
Transport Equipment	0.31	0.53	0.65	1.14	1.39	1.39	1.99	2.39	3.84	5.18	9.64	7.64	11.72	25.41
Machinery & Other Equipment	0.62	1.10	2.75	4.87	5.55	5.33	5.00	6.12	8.19	12.07	16.69	19.42	26.30	66.99
Increase in Stocks	4.23	1.66	2.09	-1.27	9.30	5.91	-0.37	0.26	4.50	-3.15	21.64	20.70	0.84	17.12
Gross Domestic Capital Formation	7.69	7.78	13.81	14.41	30.26	26.73	23.72	26.80	38.79	45.47	89.68	101.24	118.48	223.11
<u>B. By Industrial Use</u>														
Fixed Capital Formation	3.46	6.12	11.72	15.68	20.96	20.82	24.09	26.54	34.29	48.62	68.04	80.54	117.64	205.99
Agricultural, Forestry & Fishery	0.45	0.64	1.30	1.87	2.94	2.43	2.84	3.40	4.83	4.03	7.01	9.65	13.67	24.83
Mining & Quarrying	0.01	0.02	0.12	0.29	0.48	0.36	0.26	0.35	0.17	0.38	0.87	0.78	1.49	2.11
Manufacturing	0.73	1.07	2.66	4.20	4.66	4.93	4.80	5.31	7.03	10.01	15.17	19.23	30.46	64.94
Construction	0.01	0.02	0.06	0.11	0.21	0.26	0.21	0.25	0.37	1.59	1.40	1.04	1.44	2.10
Electricity, Water & Sanitary Services	0.08	0.19	0.79	0.66	0.66	1.29	0.98	1.08	2.85	5.22	8.63	6.36	7.10	10.48
Transportation, Storage & Communication	0.58	1.08	1.88	2.77	5.89	4.89	5.95	5.07	8.15	11.45	16.28	16.93	24.06	50.80
Wholesale & Retail Trade	0.26	0.35	0.78	0.80	0.76	1.14	1.47	1.53	1.41	2.76	3.20	3.95	7.84	7.81
Banking, Insurance & Real Estate	0.01	0.01	0.01	0.09	0.10	0.11	0.15	0.13	0.04	0.13	0.13	0.28	0.50	0.98
Ownership of Dwellings	0.74	1.69	2.07	2.68	2.83	2.81	3.78	5.34	4.93	5.81	6.91	10.48	13.92	21.18
Public Administration	0.11	0.30	0.45	0.62	0.73	0.85	0.93	1.03	0.77	0.92	1.39	1.21	1.96	2.48
Other Services	0.48	0.75	1.60	1.59	1.70	1.75	2.72	3.05	3.74	6.32	7.05	10.63	15.20	18.28
Increase in Stocks	4.23	1.66	2.09	-1.27	9.30	5.91	-0.37	0.26	4.50	-3.15	21.64	20.70	0.84	17.12
Gross Domestic Capital Formation	7.69	7.78	13.81	14.41	30.26	26.73	23.72	26.80	38.79	45.47	89.68	101.24	118.48	223.11
<u>C. By Type of Purchaser</u>														
Fixed Capital Formation	3.46	6.12	11.72	15.68	20.96	20.82	24.09	26.54	34.29	48.62	68.04	80.54	117.64	205.99
Private & Public Enterprises	3.09	4.98	9.43	12.51	12.91	13.54	15.92	18.34	23.29	33.25	49.38	62.49	91.85	159.95
Government Enterprises	0.17	0.73	1.32	1.77	4.04	3.02	3.32	3.35	3.98	5.75	8.99	9.84	11.45	21.16
General Government	0.20	0.41	0.97	1.40	4.01	4.26	4.85	4.85	7.02	9.62	9.67	8.21	14.34	24.88
Increase in Stocks	4.23	1.66	2.09	-1.27	9.30	5.91	-0.37	0.26	4.50	-3.15	21.64	20.70	0.84	17.12
Gross Domestic Capital Formation	7.69	7.78	13.81	14.41	30.26	26.73	23.72	26.80	38.79	45.47	89.68	101.24	118.48	223.11

Source: Bank of Korea

Table 7

Percentage Shares of GNP by Industrial Group \*  
(In billion won)

	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>
	<u>At Current Market Prices</u>													
Primary industry	47.3	40.3	44.8	47.2	45.2	41.2	34.7	36.9	40.1	36.6	42.1	46.0	38.7	36.1
Secondary industry	12.5	15.5	15.7	15.6	16.6	18.1	20.0	19.7	19.5	21.2	20.5	21.1	24.0	24.5
Tertiary industry	40.2	44.2	39.5	37.2	38.2	40.7	45.3	43.4	40.4	42.2	37.4	32.9	37.3	39.4
GNP	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	<u>At Constant 1965 Market Prices</u>													
Primary industry	48.2	49.0	47.2	44.2	44.1	44.6	42.3	41.4	43.8	39.7	39.1	41.9	38.7	37.9
Secondary industry	11.2	12.3	13.7	15.3	16.2	16.4	17.4	18.2	18.2	20.4	21.7	21.3	24.0	24.8
Tertiary industry	40.6	38.7	39.1	40.5	39.7	39.0	40.3	40.4	38.0	39.9	39.2	36.8	37.3	37.3
GNP	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\* See footnote 1, Table

Source: Bank of Korea

Table 8

Rate of Growth by Industrial Group 1/  
(In billion won)

	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>
	<u>At Current Market Prices</u>													
Primary industry	-	18.1	93.1	38.3	24.2	-4.4	-10.1	18.5	30.8	7.0	61.5	55.7	97.3	19.5
Secondary industry	-	71.8	76.0	30.9	37.7	14.4	17.3	10.3	19.1	26.9	35.9	47.2	32.2	30.2
Tertiary industry	-	52.9	54.9	23.7	33.4	11.5	18.9	6.9	11.9	23.3	23.5	25.8	30.7	35.6
GNP	-	38.8	73.5	31.3	29.7	4.8	6.7	11.6	20.3	17.4	40.0	42.8	15.7	28.1
	<u>At Constant 1965 Market Prices</u>													
Primary industry	-	7.7	2.3	-5.3	8.6	6.8	-1.1	0.1	10.1	-6.0	7.2	16.2	-0.9	11.0
Secondary industry	-	16.1	17.9	13.4	14.8	7.1	10.7	7.3	4.3	15.7	16.0	6.1	21.8	17.0
Tertiary industry	-	1.2	7.1	4.9	6.7	3.5	8.0	2.4	-1.9	8.6	7.5	1.5	8.5	13.6
GNP	-	6.0	6.1	1.2	8.8	5.5	4.4	2.3	4.2	3.5	9.1	8.3	7.4	13.4

---

1/ Primary industry: agriculture, forestry, and fishery  
 Secondary industry: mining and quarrying, manufacturing, construction, and electricity and gas  
 Tertiary industry: industries not included elsewhere

Source: Bank of Korea

Table 9

Farm and Non-Farm Per Capita Income

	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	
GNP <sup>1/</sup> (Current Market Prices)	197.78	207.19	221.00	246.69	296.82	348.58	487.96	696.79	805.85	1,032.04	1,220	
Farm	89.30	85.35	76.77	91.00	119.05	127.37	205.64	320.27	311.63	373.31	410	
Non-Farm	108.48	121.84	144.23	155.69	177.77	221.21	282.32	376.52	494.22	659.73	810	
Total Population <sup>2/</sup>	22,307	22,940	23,611	24,291	25,700	26,432	27,184	27,958	28,670	29,208	29,909	
Farm Population	13,592	13,750	14,126	14,559	14,509	15,097	15,266	15,553	15,812	15,781	15,800	
Non-Farm Population	8,715	9,190	9,485	9,732	11,191	11,335	11,918	12,405	12,858	13,427	14,109	
GNP Per Capita <sup>3/</sup> (Current Market Prices)	8,866	9,032	9,360	10,156	11,549	13,188	17,950	24,923	28,108	35,334		
GNP per Capita "Farm"	6,570	6,207	5,435	6,250	8,205	8,435	13,470	20,592	19,708	23,656	26,000	
GNP Per Capita "Non-Farm"	12,448	13,258	15,206	15,998	15,885	19,516	23,688	30,352	38,436	49,134	57,000	
												<u>Average Rate of Growth 1961-1966</u>
% Increases Over Previous Year												
GNP Per Capita (Current Market Prices)	-	1.9	3.6	8.5	13.7	14.2	36.1	38.8	12.8	25.7	25.1	
GNP Per Capita "Farm"	-	- 5.5	- 12.4	15.0	31.3	2.8	59.7	52.9	- 4.3	20.0	23.7	
GNP Per Capita "Non-Farm"	-	6.5	14.7	5.2	- 0.7	22.9	21.4	28.1	26.6	27.8	25.3	

1/ in billion won

2/ in thousand

3/ in won

Source: Computed by Mission from Bank of Korea Data, Economic Statistics Yearbook 1967.

Table 10

PUBLIC REVENUES AND EXPENDITURES, 1961-1967

(in billion won)

	1961 (Actual)				1962 (Actual)				1963 (Actual)				1964 (Actual)			
	Central General	Govern- ment Enter- prise	Local Govern- ment	Consol- idated Public Sector												
I. <u>Current Revenue</u>	31.7	1.5	4.9	38.1	38.4	2.1	8.0	48.5	43.0	4.0	10.4	57.4	48.1	6.6	13.5	68.2
Tax Revenue	26.8	-	2.6	29.4	32.9	-	5.3	38.2	35.7	-	7.3	43.0	11.8	-	8.7	50.5
(Direct and Indirect)	(23.2)	-	(2.6)	(25.8)	(28.2)	-	(5.3)	(33.5)	(30.9)	-	(7.3)	(38.2)	(37.3)	-	(8.7)	(46.0)
(Monopoly Profits)	(3.6)	-	-	(3.6)	(4.7)	-	-	(4.7)	(4.8)	-	-	(4.8)	(4.5)	-	-	(4.5)
Other Income	4.9	1.5	2.3	8.7	5.5	2.1	2.7	10.3	7.2	4.0	3.1	14.3	6.3	6.6	4.8	17.7
II. <u>Current Expenditure</u>	32.0	...	12.7	44.7	39.0	...	16.5	55.5	40.6	...	19.4	60.0	46.2	...	21.5	67.7
Public Consumption	25.7	...	11.8	37.5	31.6	...	15.8	47.4	32.8	...	18.6	51.4	37.6	...	20.8	58.4
(Wages and Salaries)	(17.5)	...	(8.0)	(25.5)	(23.2)	...	(10.9)	(34.1)	(24.0)	...	(12.4)	(36.4)	(28.9)	...	(14.1)	(43.0)
(Goods and Services)	(8.2)	...	(3.8)	(12.0)	(8.4)	...	(4.9)	(13.3)	(8.8)	...	(6.2)	(15.0)	(8.8)	...	(6.7)	(15.5)
Interest Payments	.5	...	-	.5	.6	...	-	.6	.8	...	-	.8	.8	...	-	.8
Extra-System Transfers	5.8	...	.9	6.7	6.8	...	.7	7.5	7.0	...	.8	7.8	7.8	...	.7	8.5
III. <u>Intra-System Transfers</u>	-8.2	...	+8.2	-	-9.6	...	+9.6	-	-11.8	...	+11.8	-	-12.9	-	+12.9	-
IV. <u>Savings on Current Account</u>	-8.5	1.5	0.4	-6.6	-10.2	2.1	1.1	-7.0	-9.5	4.0	2.9	-2.6	-11.0	6.6	4.9	0.5
V. <u>Counterpart Funds</u>	20.2	-	-	20.2	25.3	-	-	25.3	24.1	-	-	24.1	26.7	-	-	26.7
VI. <u>Utilization of Loans</u>	3.1	3.2	-	6.3	-	.4	-	.4	2.1	3.0	-	5.1	-1.0	6.0	-	5.0
Domestic	3.1	3.1	-	6.2	-	.2	-	.2	2.1	.2	-	2.3	-1.0	.5	-	-0.5
Foreign	-	.1	-	.1	-	.2	-	.2	-	2.8	-	2.8	-	5.5	-	5.5
VII. <u>Other Capital Resources</u>	2.3	1.0	0.4	3.7	8.0	5.4	.9	14.3	3.1	-0.7	-3	2.1	0.6	0.7	-1.5	-0.2
Loan Repayment Received	0.6	-	-	.6	6.6	-	-	6.6	.7	.2	-	.9	0.7	0.2	-	0.9
Depreciation Reserves	0.3	1.4	-	1.7	-	2.4	-	2.4	-	2.4	-	2.4	-	2.4	-	2.4
Use of Cash Balances	0.4	0.4	0.1	0.1	-3.2	2.8	.4	-	-1.7	-3.8	-6	-5.1	-1.7	-2.8	-1.5	-6.0
Other Capital Transfers	1.0	-	0.3	1.3	4.6	.2	.5	5.3	3.1	.5	.3	3.9	1.6	0.9	-	2.5
VIII. <u>Intra-System Capital Transfers</u>	-5.3	+5	+4.8	-	-4.7	+6	+4.1	-	-4.9	+7	+4.2	-	-4.5	0.7	3.8	-
IX. <u>Extra-System Capital Transfers</u>	.6	-	-	0.6	1.3	-	.2	1.5	.2	-	1.2	1.4	0.4	-	.6	1.0
X. <u>Investments</u>	11.2	6.2	5.6	23.0	17.1	8.5	5.9	31.5	14.7	7.0	5.6	27.3	10.4	14.0	6.6	31.0
Gross Capital Formation	3.2	5.6	5.6	14.4	4.8	8.5	5.9	19.2	5.0	7.0	5.6	17.6	3.6	13.9	6.6	24.1
(Fixed Capital Formation)	(3.2)	(3.6)	(5.6)	(12.4)	(4.8)	(4.7)	(5.9)	(15.4)	(5.0)	(8.1)	(5.6)	(18.7)	(3.6)	(7.9)	(6.6)	(18.1)
(Inventories)	-	(2.0)	-	(2.0)	-	(3.8)	-	(3.8)	-	(-1.1)	-	(-1.1)	-	(6.0)	-	(6.0)
Subscription	.5	-	-	.5	2.6	-	-	2.6	3.8	-	-	3.8	1.7	-	-	1.7
Loans	7.3	.6	-	7.9	9.7	-	-	9.7	5.9	-	-	5.9	5.0	.1	-	5.1
Subscription and Loans Abroad	0.2	-	-	0.2	-	-	-	-	-	-	-	-	0.2	-	-	0.2

PUBLIC REVENUES AND EXPENDITURES, 1961-1967 (continued)

(in billion won)

	1965 (Actual)				1966 (Actual)				1967 (budget)			
	Central General	Government Enterprise	Local Government	Consolidated Public Sector	Central General	Government Enterprise	Local Government	Consolidated Public Sector	Central General	Government Enterprise	Local Government	Consolidated Public Sector
I. <u>Current Revenue</u>	65.4	8.7	17.1	91.2	104.9	9.0	23.7	137.6	129.2	11.8	22.7	163.7
Tax revenue (Direct and indirect)	58.0 (54.4)	-	11.2 (11.2)	69.2 (65.6)	94.4 (86.9)	-	15.9 (15.9)	110.3 (102.8)	115.6 (106.6)	-	12.7 (12.7)	128.3 (119.3)
(Monopoly profits)	(3.6)	-	-	(3.6)	(7.5)	-	-	(7.5)	(9.0)	-	-	(9.0)
Other income	7.4	8.7	5.9	22.0	10.5	9.0	7.8	27.3	13.6	11.8	10.0	35.4
II. <u>Current Expenditure</u>	54.3	...	26.5	80.8	76.7	...	35.7	112.4	91.2	...	43.2	134.4
Public consumption (Wages and salaries)	46.1 (34.1)	...	25.4 (17.3)	71.5 (51.4)	65.1 (46.3)	...	34.0 (23.7)	99.1 (70.0)	77.5 (55.2)	...	41.4 (29.8)	118.9 (85.0)
(Goods and services)	(12.0)	...	(8.1)	(20.1)	(18.8)	...	(10.3)	(29.1)	(22.3)	...	(11.6)	(33.9)
Interest payments	0.7	...	-	0.7	1.0	...	0.1	1.1	1.1	...	0.1	1.2
Extra-system transfers	7.5	...	1.1	8.6	10.6	...	1.6	12.2	12.6	...	1.7	14.3
III. <u>Intra-System Transfers</u>	-16.1	-	+16.1	0	-26.1	-	+26.1	0	-37.9	-	+37.9	0
IV. <u>Savings on Current Account</u>	-4.9	8.7	6.7	10.5	2.1	9.0	14.1	25.2	0.1	11.8	17.4	29.3
V. <u>Counterpart Funds</u>	32.9	-	-	32.9	35.5	-	-	35.5	36.0	-	-	36.0
VI. <u>Utilization of Loans</u>	-1.4	-	-0.1	-1.5	-1.2	10.9	1.2	10.9	-0.9	6.3	0.3	5.7
Domestic	(-1.4)	-	-0.1	(-1.5)	-1.3	5.4	1.2	5.3	-0.9	1.5	-0.6	0
Foreign	-	-	-	-	0.1	5.5	-	5.6	-	4.8	0.9	5.7
VII. <u>Other Capital Resources</u>	-5.6	5.9	-1.0	-0.7	7.2	1.9	-5.5	3.6	8.7	6.1	-4.7	10.1
Loan repayment received	0.1	0.1	-	0.2	0.8	0.2	0.1	1.1	4.6	0.1	0.1	4.8
Depreciation reserves	-	2.5	-	2.5	-	3.0	-	3.0	-	4.0	-	4.0
Use of cash balances	-8.3	2.2	-0.6	-6.7	1.8	-3.9	-6.7	-8.8	-0.2	-3.0	-6.5	-9.7
Other capital transfers	2.6	1.1	-0.4	3.3	4.6	2.6	1.1	8.3	4.3	5.0	1.7	11.0
VIII. <u>Intra-System Capital Transfers</u>	-6.4	0.5	+6.0	0	-8.3	-	+8.3	0	-9.1	-	+9.1	0
IX. <u>Extra-System Capital Transfers</u>	0.7	-	0.7	1.4	4.7	-	0.8	5.5	4.4	-	1.1	5.5
X. <u>Investments</u>	13.9	15.1	10.9	39.9	30.6	21.8	17.2	69.6	30.4	24.2	21.0	75.6
Gross capital formation (Fixed capital formation)	5.5 (5.5)	15.1 (9.7)	10.6 (10.6)	31.2 (25.8)	10.5 (10.5)	21.8 (18.6)	17.0 (17.0)	49.3 (46.1)	12.9 (12.9)	24.1 (24.0)	20.4 (20.4)	57.4 (57.3)
(Inventories)	-	(5.4)	-	(5.4)	-	(3.2)	-	(3.2)	-	(0.1)	-	(0.1)
Subscription	3.7	-	-	3.7	6.0	-	-	6.0	1.7	0.1	0.1	1.9
Loans	4.3	-	0.3	4.6	14.1	-	0.2	14.3	15.4	-	0.5	15.9
Subscription and loans abroad	0.4	-	-	0.4	-	-	-	-	0.4	-	-	0.4

Source: Reclassified from economic classification of government transactions published in Bank of Korea, Economic Statistical Yearbook, various issues.

Note: Monopoly profits include only portions of surplus in monopoly which have been transferred to the general account; the remaining portion is included in enterprise revenues.

Table 11

FUNCTIONAL CLASSIFICATION OF CENTRAL GOVERNMENT EXPENDITURES<sup>1/</sup>

1961 - 1967

(in billion won)

	1961			1962			1963			1964		
	Current	Capital	Total									
<u>General Services</u>	23.38	.55	23.93	28.78	.32	29.10	30.21	.66	30.87	34.61	.18	34.79
General Administration	3.15	.40	3.55	3.75	.22	3.97	4.83	.45	5.28	4.92	.16	5.08
Defense	16.66	-	16.66	20.53	-	20.53	20.48	-	20.48	24.93	-	24.93
Justice and Police	3.57	.15	3.72	4.50	.10	4.60	4.91	.20	5.11	4.76	.02	4.78
<u>Community Services</u>	.12	.35	.48	.06	.71	.77	.10	.79	.89	.18	.87	1.04
Water Supply, Sewerage	.03	.32	.36	-	.68	.68	-	.73	.73	-	.54	.54
Other Civic Services	.09	.03	.12	.06	.03	.09	.10	.07	.16	.18	.33	.51
<u>Social Services</u>	9.50	1.96	11.46	12.21	3.94	16.15	15.63	1.63	17.26	17.32	1.42	18.74
<u>Education</u>	6.30	1.14	7.74	8.24	2.14	10.38	9.80	.95	10.75	11.10	1.01	12.11
Primary	5.14	.81	5.95	6.56	1.64	8.20	7.74	.59	8.33	8.36	.13	8.49
Secondary	.60	.18	.78	.72	.20	.92	.95	.21	1.17	.77	.01	.78
Colleges and Universities	.25	.34	.60	.56	.19	.75	.64	.11	.75	.78	.14	.92
Other Education	.31	.10	.42	.40	.11	.51	.81	.05	.86	1.19	.73	1.93
Health	.44	.11	.56	.42	.29	.72	.46	.04	.50	.93	.09	1.02
Social Welfare	2.75	.15	2.90	3.55	.33	3.88	5.03	.06	5.09	5.29	.02	5.31
Housing	-	.26	.26	-	1.17	1.17	-	.56	.56	-	.30	.30
<u>Economic Services</u>	3.40	15.91	19.30	3.99	21.65	25.64	2.70	23.07	25.77	2.94	19.46	22.40
<u>Agriculture and Non-mineral Resources</u>	2.95	4.83	7.78	3.42	6.97	10.40	2.10	5.56	7.66	2.49	3.61	6.10
Agriculture	2.21	3.91	6.12	2.79	5.91	8.70	1.35	3.26	4.61	1.42	2.44	3.86
Forestry	.13	.50	.63	.11	.42	.53	.14	1.10	1.24	.18	.70	.88
Fishing and Hunting	.11	.35	.46	.05	.50	.55	.02	1.19	1.21	.01	.44	.45
Others	.50	.07	.57	.48	.13	.61	.59	.01	.60	.87	.04	.91
<u>Mining, Manufacturing and Construction</u>	.25	3.43	3.68	.52	5.52	6.04	.54	4.69	5.23	.36	3.82	4.18
Manufacturing	.08	3.10	3.18	.06	4.43	4.49	.04	4.39	4.43	.05	3.38	3.42
Others	.18	.33	.51	.46	1.09	1.55	.50	.30	.80	.31	.44	.75
Electric Power	.03	4.13	4.16	.01	2.55	2.56	.03	3.62	3.66	-	3.50	3.50
Transport	.17	2.59	2.76	.03	5.53	5.56	.03	7.85	7.82	.06	5.99	6.04
Communications	-	.93	.93	-	1.08	1.08	-	1.34	1.34	.04	2.54	2.58
<u>Unallocable and Others</u>	2.88	.47	3.35	2.97	.76	3.73	3.09	1.32	4.41	3.27	.90	4.17
<u>TOTAL</u>	39.29	19.24	58.53	48.01	27.39	75.40	51.73	27.46	79.20	58.31	22.83	81.14

<sup>1/</sup> Figures may not add due to rounding.

Source: Bank of Korea.

Table 11 (Cont'd)

FUNCTIONAL CLASSIFICATION OF CENTRAL GOVERNMENT EXPENDITURES<sup>1/</sup>

	1961 - 1967			(in billion won)			1967 <sup>2/</sup>		
	1965			1966			1967 <sup>2/</sup>		
	Current	Capital	Total	Current	Capital	Total	Current	Capital	Total
<u>General Services</u>	<u>42.50</u>	<u>.31</u>	<u>42.81</u>	<u>58.14</u>	<u>1.50</u>	<u>59.64</u>	<u>68.97</u>	<u>2.46</u>	<u>71.43</u>
General Administration	6.40	.19	6.59	7.99	.71	8.70	9.99	1.24	11.23
Defense	29.88	-	29.88	40.59	.08	40.67	48.17	.50	48.67
Justice and Police	6.23	.12	6.35	9.56	.71	10.27	10.81	.72	11.53
<u>Community Services</u>	<u>.20</u>	<u>2.30</u>	<u>2.50</u>	<u>.82</u>	<u>5.06</u>	<u>5.88</u>	<u>1.24</u>	<u>5.64</u>	<u>6.88</u>
Water Supply, Sewerage	-	-	-	.02	1.01	1.03	-	1.27	1.27
Other Civil Services	.20	2.30	2.50	.80	4.05	4.85	1.24	4.37	5.61
<u>Social Services</u>	<u>20.00</u>	<u>2.11</u>	<u>22.11</u>	<u>28.32</u>	<u>7.12</u>	<u>35.45</u>	<u>34.66</u>	<u>8.78</u>	<u>43.44</u>
<u>Education</u>	<u>13.51</u>	<u>1.49</u>	<u>15.00</u>	<u>19.13</u>	<u>6.09</u>	<u>25.23</u>	<u>23.90</u>	<u>6.78</u>	<u>30.68</u>
Primary	9.73	.86	10.59	14.54	5.28	19.82	18.52	5.72	24.24
Secondary	.99	-	.99	1.32	.10	1.43	1.72	.18	1.90
Colleges and Universities	1.01	.46	1.47	1.53	.57	2.09	1.86	.76	2.62
Other Education	1.78	.17	1.95	1.74	.15	1.89	1.80	.12	1.92
Health	.84	.09	.93	1.21	.24	1.45	1.55	.26	1.81
Social Welfare	5.09	.14	5.23	7.47	.08	7.55	8.49	.84	9.33
Housing	-	.36	.36	-	.50	.50	-	.50	.50
Others	.56	.3	.59	.51	.21	.72	.72	.40	1.12
<u>Economic Services</u>	<u>3.73</u>	<u>25.46</u>	<u>29.19</u>	<u>5.59</u>	<u>46.89</u>	<u>52.47</u>	<u>7.11</u>	<u>50.46</u>	<u>57.57</u>
<u>Agriculture and Non-Mineral Resources</u>	<u>2.59</u>	<u>7.07</u>	<u>9.66</u>	<u>3.27</u>	<u>13.36</u>	<u>16.63</u>	<u>4.39</u>	<u>13.67</u>	<u>18.06</u>
Agriculture	1.14	4.92	6.05	1.05	9.09	10.14	1.17	7.22	8.39
Forestry	.05	.73	.78	.34	.86	1.21	.55	1.10	1.65
Fishing and Hunting	.31	1.30	1.61	.54	2.98	3.52	.92	5.07	5.99
Others	1.10	.12	1.22	1.33	.43	1.76	1.74	.29	2.03
<u>Mining, Manufacturing and Construction</u>	<u>.62</u>	<u>5.15</u>	<u>5.77</u>	<u>.91</u>	<u>7.59</u>	<u>8.49</u>	<u>1.35</u>	<u>8.48</u>	<u>9.83</u>
Manufacturing	.07	4.80	4.87	.13	6.99	7.12	.08	7.50	7.58
Others	.56	.35	.91	.78	.60	1.37	1.27	.98	2.25
Electric Power	.02	1.32	1.34	.03	3.09	3.12	.06	2.65	2.71
Transport	.09	8.24	8.33	.66	15.89	16.55	.14	17.48	17.62
Communications	-	3.68	3.68	-	6.96	6.96	-	8.18	8.18
Others	.41	-	.41	.72	-	.72	1.17	-	1.17
<u>Unallocable and Others</u>	<u>3.25</u>	<u>.33</u>	<u>3.58</u>	<u>8.89</u>	<u>.19</u>	<u>9.08</u>	<u>16.02</u>	<u>.10</u>	<u>16.11</u>
<u>TOTAL</u>	<u>69.67</u>	<u>30.51</u>	<u>100.18</u>	<u>101.77</u>	<u>60.76</u>	<u>162.53</u>	<u>128.01</u>	<u>67.43</u>	<u>195.44</u>

<sup>1/</sup> Figures may not add due to rounding.<sup>2/</sup> Primary budget.

Source: Bank of Korea.

Table 12

The Capital Accounts of the Balance of Payments  
(In Millions of U.S.\$)

	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>
<u>Transfer Payments, Net</u>	<u>231.5</u>	<u>236.5</u>	<u>259.5</u>	<u>194.9</u>	<u>203.3</u>	<u>219.6</u>
<u>Private Transfer, Net</u>	<u>24.6</u>	<u>36.5</u>	<u>52.0</u>	<u>53.9</u>	<u>68.7</u>	<u>97.6</u>
Relief Grants	12.0	12.3	22.5	18.4	29.1	42.8
Other Imports without Foreign Exchange	4.1	5.5	16.4	21.3	16.8	17.4
Other Transfer	8.5	18.7	13.1	14.2	22.8	37.4
<u>Government Transfer, Net</u>	<u>206.9</u>	<u>200.0</u>	<u>207.5</u>	<u>141.0</u>	<u>134.6</u>	<u>122.0</u>
United States	206.7	199.8	205.8	138.8	133.2	92.2
Japan	-	-	-	-	-	29.3
Colombo Plan, Technicians	-	-	-	-	-	0.2
United Nations, Technicians	0.2	0.2	1.7	2.2	1.4	0.3
<u>Capital Accounts</u>	<u>- 31.5</u>	<u>57.1</u>	<u>144.3</u>	<u>27.2</u>	<u>- 7.1</u>	<u>99.0</u>
<u>Direct Investment</u>	<u>-</u>	<u>0.6</u>	<u>4.8</u>	<u>- 0.8</u>	<u>0.3</u>	<u>13.4</u>
<u>Disbursement of Loans to Private   Borrowers</u>	<u>0.2</u>	<u>2.2</u>	<u>37.3</u>	<u>12.5</u>	<u>39.4</u>	<u>163.8</u>
U. S. Government	0.5	2.6	20.5	5.4	1.9	36.5
German Government	-	-	0.6	0.8	1.3	2.1
Private Lenders	-	-	17.9	12.4	41.9	134.5
Less Repayments	- 0.3	- 0.4	- 1.7	- 6.1	- 5.7	- 9.3
<u>Private Short-Term Capital</u>	<u>- 2.0</u>	<u>- 7.2</u>	<u>18.9</u>	<u>- 4.4</u>	<u>- 23.1</u>	<u>6.4</u>

(Continue on next page)

The Capital Accounts of the Balance of Payments  
(In Millions of U.S.\$)

	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>
<u>Capital Accounts (cont.)</u>						
Disbursement of Loans to Korean						
Government	1.1	1.7	21.6	9.1	2.0	34.0
U.S. Government	1.2	1.8	6.8	1.8	-	17.6
IDA	-	-	9.9	4.0	-	-
Japan Government	-	-	-	-	-	14.1
Europe OECD Government	-	-	5.1	3.6	2.0	2.6
Less Repayments	- 0.1	- 0.1	- 0.2	- 0.3	-	- 0.3
Release of Counterpart Funds						
Held By United States	1.1	6.0	7.0	- 0.9	- 11.3	- 1.6
Trade Credits	15.6	3.5	6.2	8.4	- 9.5	3.4
Other	- 0.5	- 0.2	- 0.3	- 0.3	-	- 2.8
Use of Monetary Assets	- 47.0	50.5	48.8	3.6	- 4.9	-117.6
Use of Foreign Exchange Reserves	- 50.0	38.4	37.2	0.7	- 9.4	- 97.5
Use of Other	3.0	12.1	11.6	2.9	4.5	- 20.1

Source: IMF Balance of Payments Yearbook, 1967

Table 13

Composition of Exports  
(in millions of US dollars)

SITC CODE	<u>Commodities</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	Jan.-Aug. <u>1967</u>
0	<u>Food &amp; Live Animals</u>	4.1	9.7	8.9	21.8	17.8	26.4	28.2	41.3	26.9
03	Fish & fish preparations	1.2	2.7	4.3	8.3	9.1	15.2	17.8	21.7	17.1
04	Cereals & cereal preparations	.8	3.8	.5	9.0	1.3	2.4	3.6	7.3	.7
	Rice	.8	3.8	.5	8.9	.8	2.4	3.2	6.8	-
05	Fruit & vegetables	1.7	1.4	1.7	2.2	2.2	6.8	5.5	11.2	7.4
	Dried laver	1.2	1.3	.9	.7	1.5	5.5	3.3	8.7	6.9
1	<u>Beverage &amp; Tobacco</u>	.1	.5	.2	.1	.3	.2	.9	6.9	5.0
12	Tobacco	.1	.3	-	.1	.2	.2	.9	6.5	5.0
2	<u>Crude Materials, Inedible (excl. fuels)</u>	11.7	15.8	21.0	19.4	26.4	31.4	37.0	46.7	37.0
26	Textile Fibres (not manufactured)	1.0	1.4	3.4	4.4	5.3	7.1	7.7	12.9	10.5
	Raw silk	.7	1.0	2.8	4.0	4.3	5.4	6.5	11.6	9.4
27	Crude fertilizer & crude materials	1.8	2.5	3.0	2.7	3.0	4.4	4.4	4.7	3.5
28	Metalliferous ores & metal scrap	6.0	7.7	9.6	7.9	10.5	13.2	17.7	21.0	13.6
	Iron ore	2.2	2.5	4.3	3.8	5.9	6.0	6.7	6.1	4.0
	Tungsten ore	3.4	4.7	4.5	3.4	3.1	4.7	6.3	9.5	6.9
29	Crude animal & vegetable material	2.2	3.6	4.2	3.9	7.4	6.4	6.9	7.7	6.9
	Ginseng	.1	.1	.2	.2	.4	1.2	1.9	2.0	1.1
	Agar-agar	.7	.9	1.1	1.3	1.7	2.0	2.3	2.9	4.1
3	<u>Mineral Fuels</u>	.7	.7	2.2	2.8	2.6	2.5	1.9	1.5	.8
4	<u>Animal &amp; Vegetable Oils &amp; Fats</u>	.2	.2	.1	.1	.1	.1	.1	.1	.1
5	<u>Chemicals</u>	.1	.4	.6	1.0	.9	.6	.4	.7	.5
6	<u>Manufactured Goods By Material</u>	2.1	3.9	4.0	6.2	28.1	42.3	66.4	84.2	57.4
62	Rubber manufactures	-	-	-	.1	.5	.9	1.0	1.5	1.4
63	Wood & cork	-	-	1.2	2.3	6.3	11.5	18.2	30.6	19.4
	Veneer sheets & plywoods	-	-	1.2	2.3	5.8	11.4	18.0	29.9	19.4
65	Textiles	1.4	2.4	1.0	2.2	7.8	19.6	26.3	34.5	29.2

(continued on next page)

Table 13 (Cont'd)

Composition of Exports  
(in millions of US dollars)

SITC CODE	<u>Commodities</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	Jan.-Aug. <u>1967</u>
	Cotton Fabrics woven	1.4	2.4	.9	1.8	4.3	11.1	10.5	10.1	8.0
66	Non-metallic mineral manufactures	-	-	-	.1	.9	1.9	2.8	1.6	.6
67	Iron & steel	-	-	.1	.6	11.7	4.5	12.7	8.1	.7
68	Non-ferrous metals	-	-	1.3	.3	.3	2.9	2.9	2.5	.7
69	Manufactures of metal	-	-	.2	.6	.5	.9	2.2	4.2	4.0
7	<u>Machinery &amp; transport equipment</u>	<u>-</u>	<u>.1</u>	<u>.9</u>	<u>1.4</u>	<u>4.1</u>	<u>2.2</u>	<u>5.5</u>	<u>9.6</u>	<u>7.5</u>
71	Machinery, excluding electrical	-	-	.7	.3	1.1	.5	2.5	3.7	2.1
72	Electrical machinery & appliances	-	-	-	1.0	.7	1.0	1.9	5.1	3.5
73	Transport equipment	-	-	.2	1.0	2.2	.7	1.1	.8	1.4
8	<u>Miscellaneous manufactured articles</u>	<u>.1</u>	<u>.1</u>	<u>.8</u>	<u>2.0</u>	<u>6.4</u>	<u>13.2</u>	<u>34.5</u>	<u>59.2</u>	<u>57.1</u>
84	Clothing	-	-	-	1.1	4.6	6.6	20.7	34.4	34.5
85	Footwears	-	-	-	.2	.7	.9	4.1	5.5	5.7
89	Miscellaneous manufactured Human hair & wigs	-	-	.7	.5	.9	5.0	8.9	18.9	15.8
	Human hair & wigs	-	-	-	-	.2	3.7	6.8	15.5	12.9
9	<u>Unclassified</u>	<u>-</u>	<u>1.0</u>	<u>2.2</u>	<u>.1</u>	<u>.1</u>	<u>.2</u>	<u>.2</u>	<u>.2</u>	<u>.1</u>
	<u>Total Exports</u>	<u>19.2</u>	<u>32.8</u>	<u>40.9</u>	<u>54.8</u>	<u>86.8</u>	<u>119.1</u>	<u>175.1</u>	<u>250.3</u>	<u>192.4</u>

Note: - Denotes small magnitude.

Source: Economic Statistics Yearbook; Monthly Statistical Review.

Table 14  
Composition of Imports  
(In Millions of U.S. Dollars)

SITC Code	<u>Commodities</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>Jan. - Aug. 1967</u>
0	Food	27.3	31.6	40.1	48.6	120.6	68.2	63.5	72.4	43.8
04	Cereals & Cereal preparations	17.5	20.6	30.2	40.1	107.2	60.8	54.4	61.3	34.5
	Wheat	14.5	19.4	24.0	26.1	66.5	36.8	35.9	40.5	26.2
06	Sugar & sugar preparations	7.6	8.8	8.3	4.5	4.7	3.8	4.0	6.2	5.2
1	Beverages & Tobacco	-	-	-	.1	.3	.1	.2	.3	.4
2	Crude Material, Inedible (excluding fuels)	62.3	68.5	63.3	89.7	107.1	97.1	110.0	153.9	123.1
23	Crude rubber (incl. synthetic)	6.7	7.6	5.8	6.9	7.9	5.9	8.4	9.4	6.8
24	Wood, lumber & cork	6.5	8.1	7.4	18.1	22.4	18.5	20.8	43.1	32.6
25	Pulp & paper	2.7	3.4	5.0	8.3	9.6	9.4	9.4	12.9	10.7
26	Textile fibres (not manu- tured)	43.9	46.4	42.1	50.2	56.4	52.8	59.7	66.6	48.7
	Raw cotton	30.8	28.6	29.4	34.2	38.2	37.3	40.8	42.8	33.8
27	Crude fertilizer & crude minerals	.3	.6	.5	1.7	3.4	4.3	4.7	5.1	6.8
28	Metallic ores & metal scrap	-	-	-	1.4	4.8	3.9	5.1	13.3	11.9
3	Mineral fuels, lubricants & related materials	38.2	23.0	27.4	30.6	34.4	28.5	31.3	42.4	37.3
33	Petroleum & petroleum products	29.2	22.4	23.1	28.4	32.2	25.9	28.9	40.6	35.5
4	Animal & Vegetable Oils & Fats	2.5	2.5	3.9	3.9	4.8	3.9	3.8	5.5	4.4
5	Chemical	68.7	76.1	61.7	94.3	80.0	84.3	103.4	134.5	57.5
51	Chemical elements & compounds	4.4	5.4	5.6	11.7	13.3	13.7	16.1	20.8	19.9
53	Dyeing, tanning & coloring materials	3.7	3.4	4.0	5.3	3.7	3.7	4.8	4.6	4.1
54	Medicinal & pharmaceutical products	4.1	3.4	5.2	5.8	4.5	3.8	4.9	6.1	4.5
56	Fertilizers, manufactured	48.0	55.4	40.3	62.3	48.0	55.9	65.8	88.9	15.2
58	Plastic materials	3.1	3.7	3.3	4.7	5.4	3.3	6.5	7.9	6.7

(Continue on next page)

Table 14 (Cont'd)

Composition of Imports  
(In Millions of U.S. Dollars)

SITC Code	Commodities	1959	1960	1961	1962	1963	1964	1965	1966	Jan. - Aug. 1967
6	<u>Manufactured Goods</u>	<u>38.1</u>	<u>47.0</u>	<u>39.5</u>	<u>73.1</u>	<u>88.3</u>	<u>46.1</u>	<u>71.2</u>	<u>125.2</u>	<u>109.8</u>
65	Textile yarn fabrics	15.8	18.1	18.8	28.8	29.5	19.6	26.9	45.2	40.7
66	Non-metallic mineral manufactures	1.2	2.2	2.0	4.1	5.6	1.0	1.5	6.1	7.9
67	Iron & steel	8.7	11.6	7.8	21.8	32.5	14.8	24.7	39.5	32.0
68	Non-ferrous metals	3.4	3.1	3.3	7.6	8.5	4.2	9.0	11.2	7.7
	Aluminum	2.0	1.8	1.8	4.4	3.6	1.7	4.0	6.1	4.3
69	Manufacture of metal	1.1	3.0	1.8	4.9	7.7	3.0	7.1	18.8	18.2
7	<u>Machinery, Transport Equipment</u>	<u>41.8</u>	<u>40.1</u>	<u>42.4</u>	<u>69.8</u>	<u>115.6</u>	<u>69.5</u>	<u>73.1</u>	<u>171.7</u>	<u>186.5</u>
71	Machinery (except electrical)	25.5	28.4	22.4	34.5	61.9	38.2	35.3	95.6	80.0
72	Electrical machinery	9.3	10.5	18.7	28.7	22.3	19.7	12.6	26.1	27.7
73	Transport equipment	7.0	1.2	1.3	6.6	31.3	11.6	25.2	50.0	78.8
8	<u>Miscellaneous Manufactured Articles</u>	<u>6.3</u>	<u>6.0</u>	<u>5.7</u>	<u>10.2</u>	<u>8.0</u>	<u>5.3</u>	<u>6.8</u>	<u>10.5</u>	<u>9.2</u>
86	Professional, scientific instruments	3.9	3.9	3.6	6.4	4.8	2.7	3.9	5.4	5.2
9	<u>Not Classified</u>	<u>18.6</u>	<u>48.7</u>	<u>32.1</u>	<u>1.5</u>	<u>1.2</u>	<u>1.2</u>	<u>.2</u>	<u>-</u>	<u>-</u>
	TOTAL IMPORTS	<u>303.8</u>	<u>343.5</u>	<u>316.1</u>	<u>421.8</u>	<u>560.3</u>	<u>404.4</u>	<u>463.4</u>	<u>716.4</u>	<u>572.0</u>

NOTE: - denotes small magnitude.

Sources: Economic Statistics Yearbook; Monthly Statistical Review.

Table 15  
Exports By Country<sup>1/</sup>  
(In Millions of U.S. \$)

<u>Country Destination</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>Jan.-Aug. 1967</u>
Developed Countries	<u>57.5</u>	<u>90.5</u>	<u>131.0</u>	<u>203.8</u>	<u>163.0</u>
United States	24.3	35.6	61.7	95.8	81.7
Japan	24.8	38.2	44.0	66.3	52.5
Sweden	.4	1.6	5.1	9.8	6.0
West Germany	1.3	1.1	3.2	7.0	3.4
United Kingdom	1.6	6.5	3.6	5.1	5.2
Netherlands	1.6	2.7	3.9	4.3	2.4
Belgium	.3	1.8	3.3	4.2	2.3
Canada	.2	.4	2.5	5.8	4.5
Others	3.0	2.6	3.7	5.5	5.0
Developing Countries	<u>29.3</u>	<u>28.6</u>	<u>44.1</u>	<u>46.5</u>	<u>29.4</u>
Viet-Nam	<u>12.1</u>	<u>6.3</u>	<u>14.8</u>	<u>13.8</u>	<u>3.4</u>
Thailand	1.6	2.6	4.3	4.8	3.7
Hongkong	9.1	11.6	10.8	9.5	8.6
Republic of China	.7	1.9	1.9	2.1	2.2
Singapore	.7	2.1	2.2	2.5	2.5
Others	5.1	4.1	10.1	13.8	9.0
Total Exports	<u>86.8</u>	<u>119.1</u>	<u>175.1</u>	<u>250.3</u>	<u>192.4</u>

<sup>1/</sup> The Grouping into developed and developing countries as in International Finance Statistics.

Source: Bank of Korea.

Table 16

Money Supply and Principal Factors Affecting It  
(In Billion Won)

	E n d o f P e r i o d							E n d o f P e r i o d	
	1960	1961	1962	1963	1964	1965	1966	August	August
	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1966</u>	<u>1967</u>
Currency in Circulation	13.9	16.7	18.0	18.3	24.9	31.6	42.9	34.6	47.3
Demand Deposits	8.0	14.5	18.7	19.0	18.1	25.0	26.3	27.7	32.1
<u>Money Supply</u>	<u>21.9</u>	<u>31.2</u>	<u>36.7</u>	<u>37.3</u>	<u>43.0</u>	<u>56.6</u>	<u>69.2</u>	<u>62.3</u>	<u>79.4</u>
Bank Credit:									
To Public Sector (Net)	1.0	5.7	9.3	11.0	7.5	15.7	12.2	13.8	14.6
To Private Sector:									
Gross Credit	24.3	29.9	43.6	51.1	56.1	74.9	104.9	94.3	149.3
Time Savings Deposits	5.7	9.1	16.8	17.3	20.3	39.7	86.7	69.7	140.0
Net Credit	18.6	20.8	26.8	33.8	35.8	35.2	18.2	24.6	9.3
Foreign Sectors	3.4	10.6	6.9	- 6.7	- 2.0	6.4	41.5	25.0	60.6
Other Assets and Liabilities	- 1.1	- 5.9	- 6.3	- 0.8	1.7	- 0.7	- 2.7	- 1.1	- 5.1

---

Source: Bank of Korea.

Table 17

Foreign Exchange Assets and Liabilities of the Bank of Korea  
(In Millions of U.S. Dollars)

	E n d o f P e r i o d								E n d o f P e r i o d	
	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>August</u> <u>1966</u>	<u>August</u> <u>1967</u>
<u>Gross Assets</u>	157.1	164.0	213.7	171.2	128.2	138.9	145.6	250.9	190.6	357.4
<u>Liabilities</u>	77.9	82.9	73.6	64.2	102.9	110.7	99.5	86.7	87.2	108.8
<u>Net External Assets</u>	79.2	81.1	140.1	107.0	25.3	28.2	46.1	164.2	103.4	248.6
Change in Net Assets	-	1.9	59.0	- 33.1	- 81.7	2.9	17.9	118.1	-	145.2

---

Source: Bank of Korea.

Table 18  
Wholesale Price Index  
(1960 = 100)

	<u>Weight</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	Average Jan. - Sept. <u>1966</u>	Average Jan. - Sept. <u>1967</u>
Grains	147.1	100.0	123.9	131.4	208.3	263.1	246.5	259.5	258.4	290.9
All Commodities Except Grains	852.9	100.0	111.3	122.5	139.1	190.4	216.8	234.3	232.7	243.5
<u>All Commodities</u>	<u>1000.0</u>	<u>100.0</u>	<u>113.2</u>	<u>123.8</u>	<u>149.3</u>	<u>201.1</u>	<u>221.2</u>	<u>238.0</u>	<u>236.5</u>	<u>250.4</u>
Producer Goods	418.8	100.0	114.0	125.3	138.9	184.7	217.4	231.7	230.0	234.4
Consumer Goods	581.2	100.0	112.7	122.8	166.8	212.9	223.9	242.5	241.1	262.0

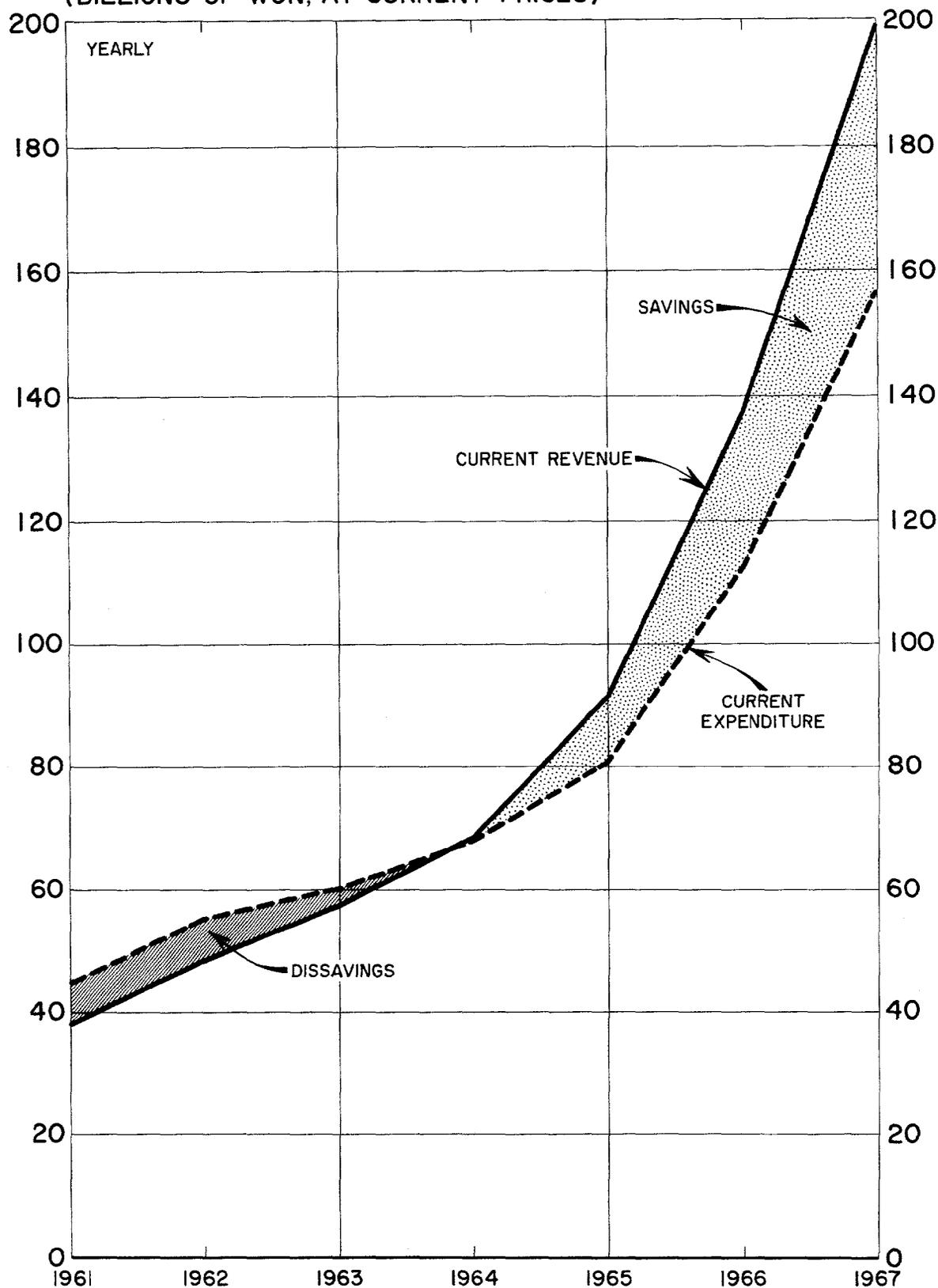
---

Source: Bank of Korea

LIST OF CHARTS

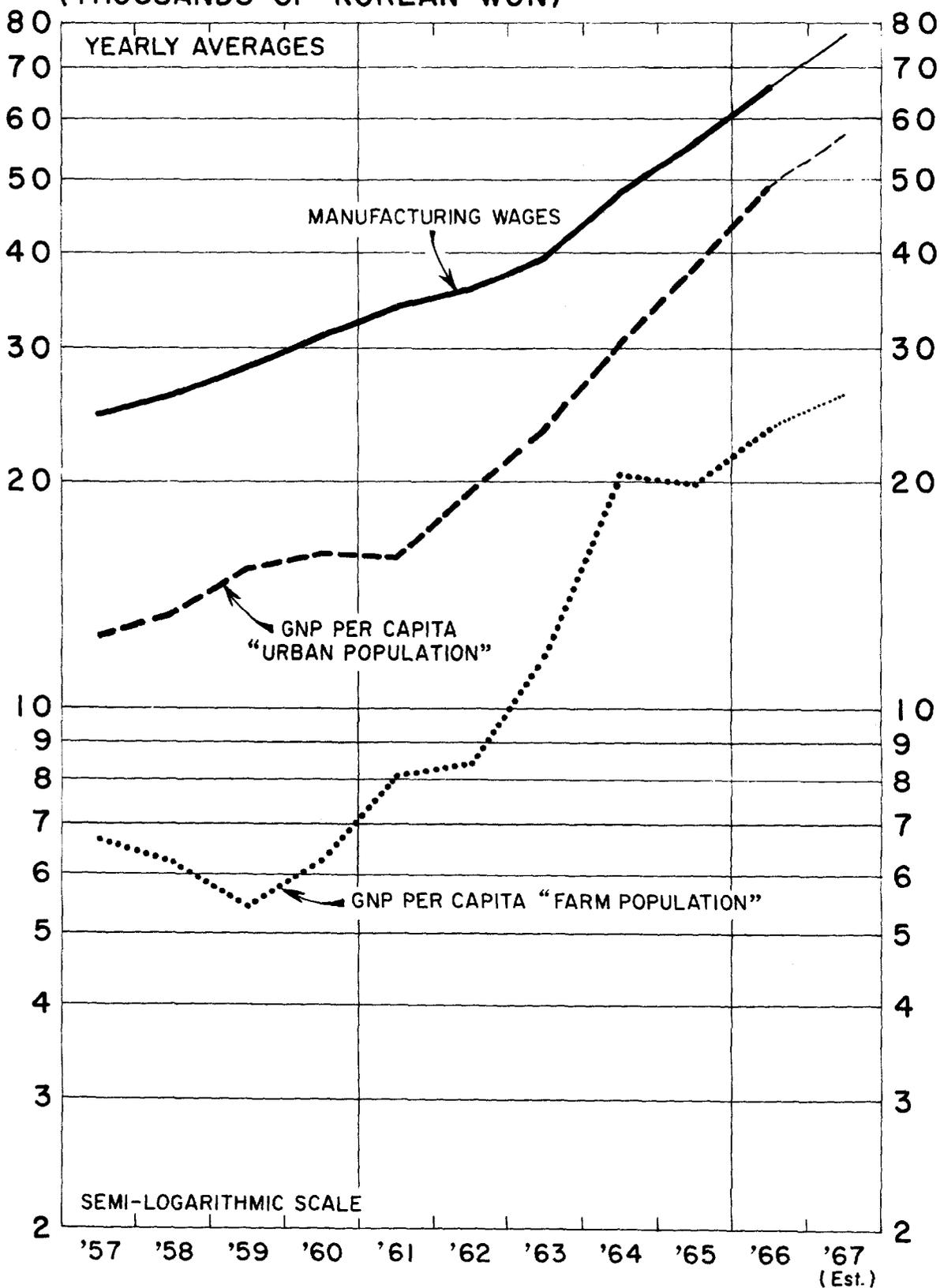
- I. Korea: Government Revenue, Current Expenditure and Public Savings
- II. Korea: Trends of Urban and Rural Income
- III. Korea: Trade Gap (Goods and Services)
- IV. Korea: Required Net and Gross Inflow of Foreign Capital
- V. Korea: Ratio of Debt Service to Exports of Goods and Services

# KOREA: GOVERNMENT CURRENT REVENUE, CURRENT EXPENDITURE AND PUBLIC SAVINGS (BILLIONS OF WON, AT CURRENT PRICES)



# KOREA: TRENDS OF URBAN AND RURAL INCOME

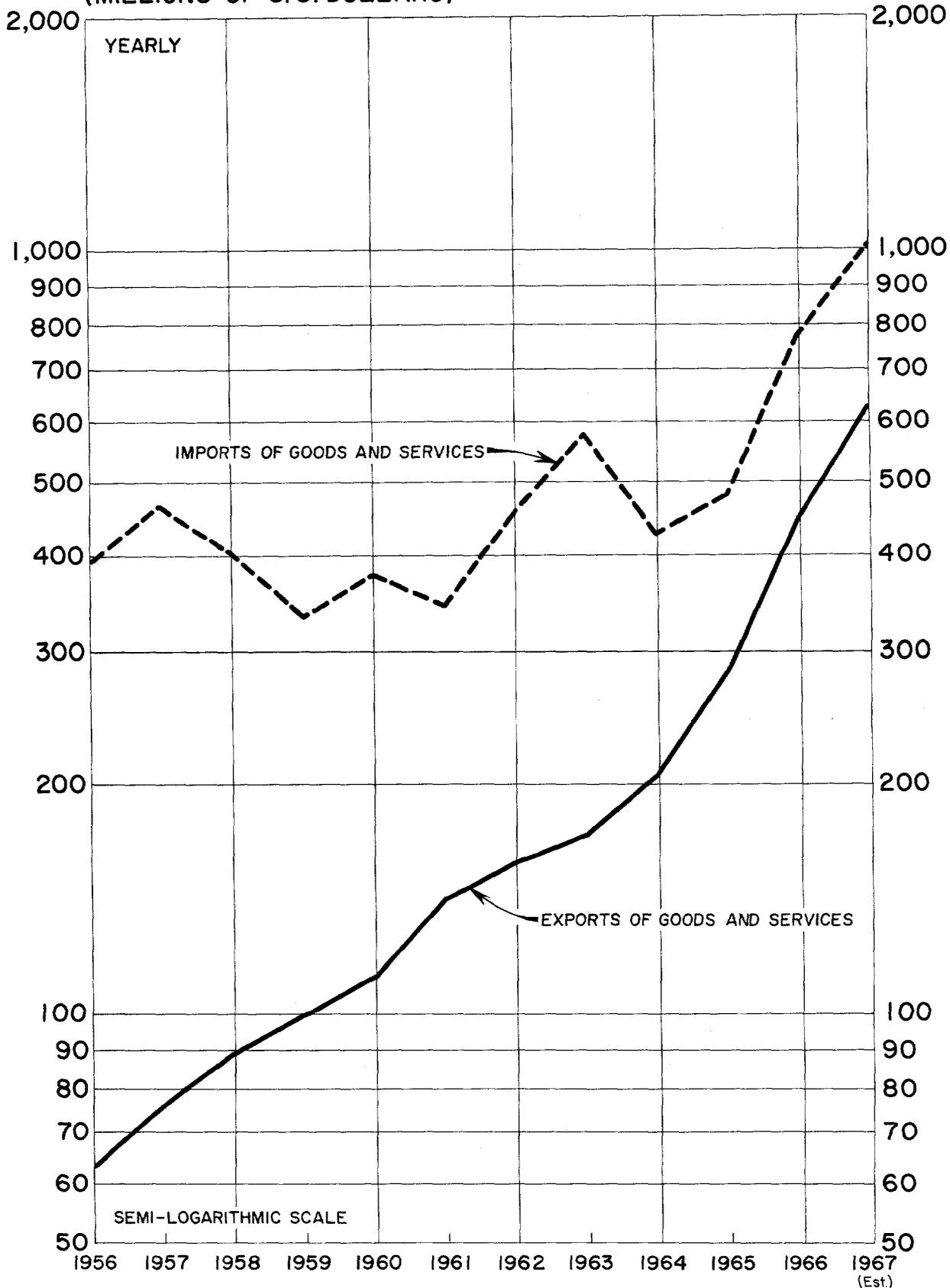
(THOUSANDS OF KOREAN WON)



SOURCE: Mission calculations based on Bank of Korea statistics.

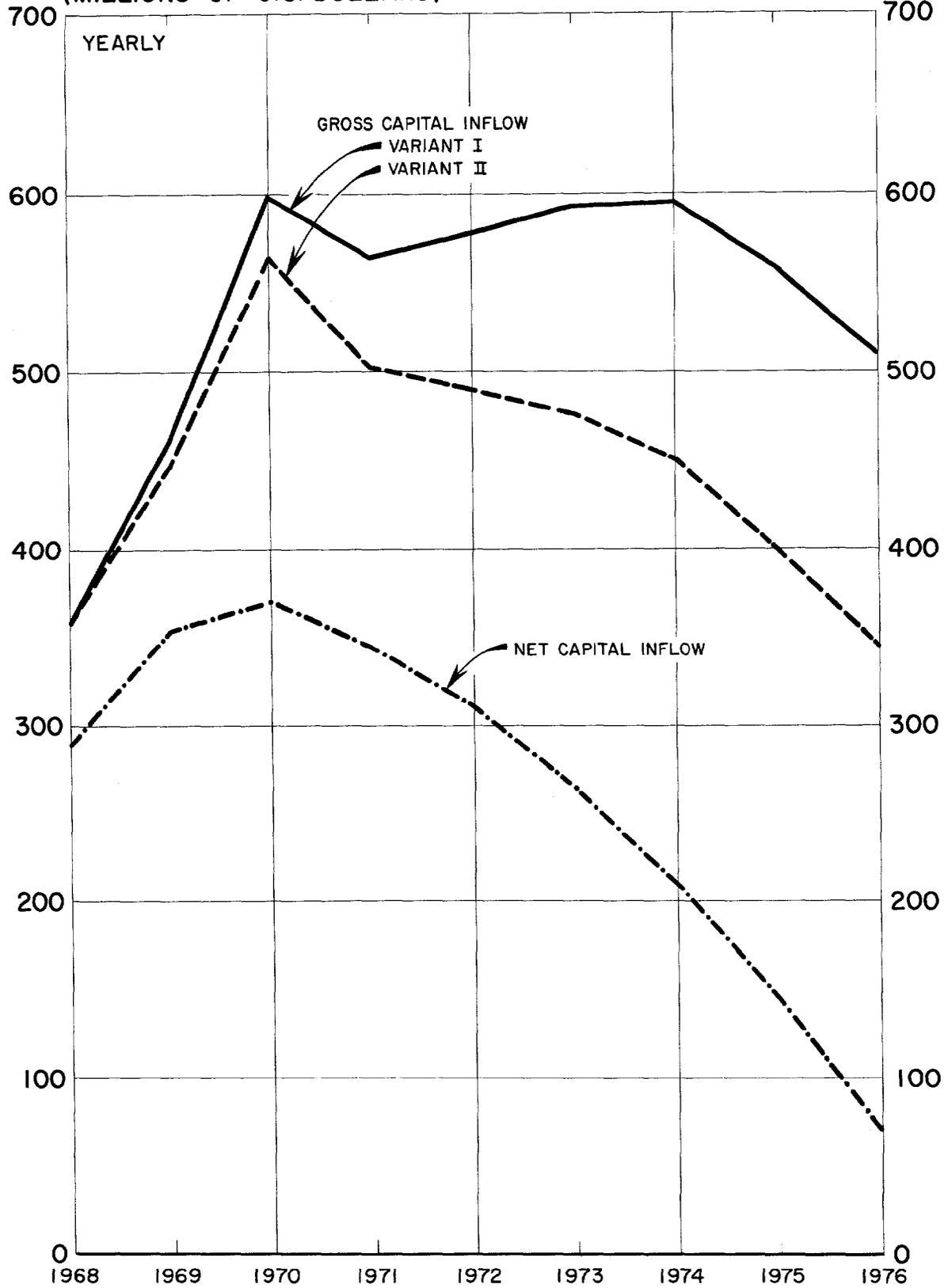
# KOREA: TRADE GAP (GOODS AND SERVICES)

(MILLIONS OF U.S. DOLLARS)



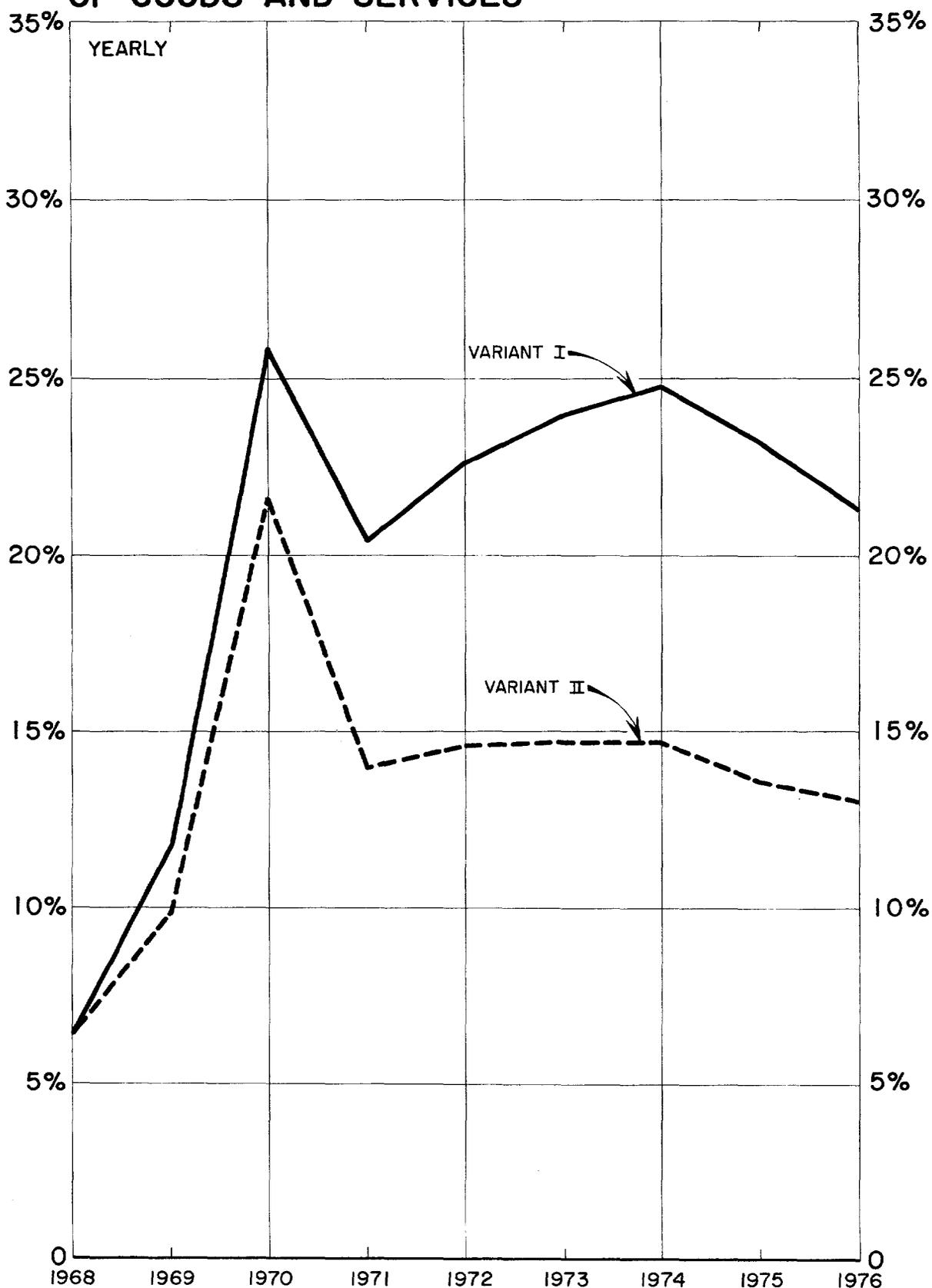
SOURCE: IMF Balance of Payments Yearbook.

# KOREA: REQUIRED NET AND GROSS INFLOW OF FOREIGN CAPITAL (MILLIONS OF U.S. DOLLARS)



SOURCE: Projection by Mission.

# KOREA: RATIO OF DEBT SERVICE TO EXPORTS OF GOODS AND SERVICES



SOURCE: Projection by Mission.

