Capital Inflows by Type
(million dollars; based on arrivals)

Year	FD	FLPG	FLPR	FLPN	FS
1965	6.0	40.6	-5.0	35.6	-25.5
1966	13.4	118.5	-8.4	110.1	7.5
1967	11.3	123.6	-18.0	105.6	94.5

Year	FLGG	FLGR	FLGN	FGUS	FGJ
1965	5.0	-15.9	-10.9	1.8	
1966	75.2	-4.7	70.5	54.0	14.0
1967	105.7	-10.5	95.2	72.0	25.0

FD = Net direct foreign investment
FLPG = Gross long-term private capital inflows
FLPR = Repayments of long-term private capital
FLPN = Net long-term private capital inflows
FS = Short-term capital inflows
FLGG = Gross long-term government capital inflows
FLGR = Repayments of long-term government capital
FLGN = Net long-term government capital inflows
FGUS = Gross long-term inflows from U.S. government
FGJ = Gross long-term inflows from Japanese government

CAPITAL STOCK

YEAR	KA	KM	KO	KS	K
1955	123.23	52.50	48.28	37.79	74.83
1956	123.37	67.52	56.75	57.33	119.20
1957	124.92	84.03	70.36	74.74	164.73
1958	125.27	97.16	82.76	90.89	216.11
1959	126.25	104.93	96.07	107.22	259.64
1960	128.17	114.78	105.43	127.09	302.88
1961	131.39	122.12	121.65	148.66	345.87
1962	132.85	133.30	145.18	166.44	390.27
1963	137.82	150.82	178.00	191.87	450.56
1964	142.97	165.06	197.85	217.63	528.61
1965	150.92	187.11	221.10	243.51	587.95
1966	168.04	239.61	268.78	277.07	668.34
1967	180.61	281.07	345.58	315.64	817.22

KA = Capital stock in agriculture, forestry, fisheries
KM = Capital stock in mining and manufacturing
KO = Capital stock in social overhead
KS = Capital stock in services
K = Total capital stock

BUDGET VARIABLES

billion 1965 won

YEAR	CUSTOM	TAXIM	NONTAX	REVD	REVF	G	GS	GDEFL
1955						66.96	5.87	
1956			1.26		54.89	94.38	28.65	.237
1957	7.28	37.95	1.21	46.44	43.82	90.26	23.92	.327
1958	8.04	39.60	5.43	53.07	38.70	91.77	21.25	.368
1959	8.18	42.88	5.75	56.81	30.71	87.52	17.68	.435
1960	10.73	41.75	10.22	62.70	36.13	98.83	27.70	.480
1961	9.46	41.29	10.66	61.41	35.29	96.70	26.86	.560
1962	6.84	50.26	10.39	67.49	40.35	107.84	37.40	.661
1963	8.98	52.01	14.25	75.24	36.87	112.11	38.27	.707
1964	9.45	48.79	17.03	75.27	36.18	111.45	40.27	.868
1965	12.54	56.73	20.34	89.61	36.15	125.76	49.74	1.000
1966	14.98	79.01	19.65	113.64	28.65	142.29	57.53	1.174
1967	17.45	100.56	24.37	142.38	28.66	171.04	77.62	1.289

CUSTOM = Customs Duties
TAXIM = Internal Taxes Plus Monopoly Profits
NONTAX = Nontax Revenues
REVD = Total Domestic Revenues
= CUSTOM + TAXIM + NONTAX
REVD = Foreign (Counterpart) Budget Revenues
G = Total Government Expenditure
GS = Government Savings
GDEFL = Government Expenditure Deflator

APPENDIX D

EXOGENOUS DATA (FORECASTING ASSUMPTIONS)

In making the forecasts, a number of variables were extrapolated on the basis of information from outside the model; these are the exogenous variables. The list of exogenous variables includes those given in the description of the model's structure plus two variables for which the econometric equations did not appear to yield reasonable forecasts. The latter are value added in agriculture and imports of grains. The former include all export categories, imports under the MAP transfer program, foreign capital inflows and transfer payments, the tax collection efficiency variable, government savings, prices and the interest rate, and the coal production schedule. For variables which significantly influence the projections, alternative assumptions were made as a sensitivity test. (Some of these assumptions are noted in the discussion of the projections.) In this Appendix all of the exogenous variables are tabulated and the reasoning behind each assumption is noted.

D.1 Commodity Exports

Annual commodity exports through 1971 are taken from the Korean government's revised Second Plan forecasts as given in the Economic Planning Board's Overall Resources Budget: 1969 (issued in September 1968). These figures have been adopted by the USAID Mission to Korea in its FY 1970 Program Memorandum. The forecast growth rate is rather high by international standards - a compound growth rate of 28% per year in 1969, 1970 and 1971 - but there are three reasons for accepting it as a reasonable estimate: (1) the actual compound annual growth rate of commodity exports in the ten years from 1958 to 1968 was 40%, with a slight acceleration in the growth rate registered in the last four years; (2) in recent years the export targets established by the Korean government have been met or exceeded; (3) analyses of export prospects by USAID economists in Korea tend to confirm the Korean forecasts on a commodity basis.

However, the uncertainty increases substantially for the years beyond 1971; a continued expansion of Korean exports will depend on Korea's success in negotiating trade agreements with Japan, on whether or not the United States imposes further import restrictions, on the number of new export products introduced by Korea, and many other such factors which are virtually impossible to predict. In projecting possible future developments in the face of such uncertainty, the usual approach is to postulate alternative export growth paths and examine the consequences thereof. Three alternative cases have been formulated for the dollar value of commodity exports (EXPGD). Although the cases differ by as much as $240 million in 1974, all three are based on the premise that Korea's export performance will continue to be good by international standards. Estimated 1974 export levels range from four to five times the 1967 figure - and forty to fifty times the 1960 figure. (See Table 2-D following.) Regarding the commodity composition of exports, according to the FY 1970 Program Memorandum manufactured goods should continue to rise as a proportion of the total, led by textiles and plywood.

These alternative projections made for commodity exports are the most important exogenous element of the model, both in terms of the impact on the rest

of the economy and the degree of uncertainty surrounding the projections themselves. The role of commodity exports can be seen by the facts that (1) exports in 1974 should constitute more than 20% of GNP, in contrast to 4% in 1960 and 14% in 1967 and (2) commodity exports will be about 80% of total exports in 1971, and more in later years, up from about 25% in 1960 and 65% in 1967. In light of these circumstances, most of the analyses are based on the more conservative export projections.

D.2 Exports of Services

As noted earlier, "service" exports are divided into four components: exports on travel account; i.e., tourism (EXPT); sales of military goods and services on government account (USFK); non-military sales on government account plus a category called "other services", mostly civilian remittances from Vietnam (EGSV); and miscellaneous service exports (EMSC). For some purposes, USFK and EGSV are grouped into a common variable representing exports on government account (EJ).

Exports on travel account were extrapolated with a somewhat slower growth rate than in recent years, because of the possibility that the incidents surrounding the increased infiltration from North Korea will dampen tourist enthusiasm for Korea. The Korean government's own forecast of dollar earnings on travel account during 1969-71 is considerably more optimistic than ours (see Economic Planning Board, Overall Resources Budget: 1969, pp. 56-57), but it was felt that a rather conservative approach to estimating Korea's future foreign exchange resources is appropriate for this exercise.

Similarly, our forecasts of miscellaneous service exports (transportation and investment income) are more conservative than the official Korean forecasts. The ROKG forecasts for EXPTD and EMSCD in 1971 are $45.0 million and $72.7 million, respectively, in contrast to our forecasts of $25.0 million and $46.0 million. However, all these figures represent substantial improvements over the 1967 earnings of $16.3 million and $27.7 million on these two accounts.

The alternative forecasts of USFK and EGSV are based on DOD forecasts of US offshore procurement in Korea under various assumptions about US troop deployment in Korea. Specifically, EJ1 (in Table 3-D following) assumes the withdrawal of two US divisions in FY 1972, and EJ2 assumes the withdrawal of one US division in FY 1972. EJ3, which is not used in the model, is from the Program Memorandum and shows greater foreign exchange earnings than either EJ1 or EJ2.

D.3 Transfer Payments from Abroad

Transfer payments are divided into two categories: those from the US Government (REVF) and those from other governments, mainly Japan and private sources (TRZ). The expected Japanese government contributions and private contributions are shown in the table following as TRJ and TRP, respectively. The

category REVF embraces all forms of supporting assistance and shipments of grains under PL 480 title I. To maintain continuity with the official Korean time series of data, the convention of placing PL 480 title II shipments under private transfer payments has been adopted.

Projections through 1972 of all categories of transfer payments have been taken from the FY 1970 Program Memorandum, p. 95. Figures for 1972-75 were derived by simply extrapolating the earlier trend. The FY 70 PM projections are based on a variety of factors, including expected US aid levels. The Japanese government transfer payments are projected according to the terms of the Japan-Korea normalization agreement. (See Table 4-D following.)

D.4 Net Foreign Capital Inflows

A large number of alternate foreign capital inflow cases were constructed to test the sensitivity of the Korean economy to various external developments. The basic case (F1) is taken from the FY 70 PM, extrapolated to cover the years 1973-75. The PM documents this case with projections for all sub-components, including private long-term loans from the US, Japan and Germany, short-term capital, direct investment, and loans from various governments (see Table 9-D). It is not likely that actual foreign borrowing will be much above the levels in case F1, due to the rapidly increasing debt service burden, so a projected situation in which substantially more foreign capital is required to maintain an acceptable growth rate would be regarded as infeasible. The alternate foreign capital cases have no particular meaning except as devices for testing the sensitivity of the economy; however, it may be pointed out that case F2 represents slightly more borrowing than F1 - but still a feasible amount; F4 represents slightly less than F1, and is probably more realistic than F1 for 1971-75. Thus cases F1, F2, and F4 encompass the most likely range of possibilities. Case F7 represents a crisis of confidence in Korea, which might be induced either by increased North Korean infiltration or an internal political crisis, with net inflows falling to zero in 1973 (which is consistent with positive gross inflows).

Tables 8-D and 9-D following enumerate the various F assumptions. Table 9-D gives the sub-categories of F1 as projected in the FY 70 PM.

D.5 Imports Under MAP Transfer

The current MAP program has no effect on the Korean economy, except insofar as variations in MAP levels reflect variations in spending in the Korean government's defense budget. A renewed MAP transfer program would affect the economy in two ways: (1) by constituting a drain on the country's foreign exchange earnings, and (2) by necessitating increased defense budget outlays for those particular MAP commodities which can be produced in Korea. While a MAP transfer program might stimulate increased domestic production of selected military goods, this would require diversion of funds from non-military capital

formation, given the high degree of capacity utilization in Korea, so the net "production stimulus effect" on the economy would be zero.*

It is beyond the scope of this study to determine budgetary requirements associated with various levels of MAP transfer, so this question is approached indirectly by projecting likely ranges of government revenues and non-defense expenditures, leaving a residual set of revenues for defense needs. (See the discussion of the budget projections.) A brief comparison of these residual revenues with some estimates of defense spending requirements is then made, but since future defense requirements are not very precisely known, further study of this question will be needed.

The foreign exchange impact of MAP transfer is precisely analogous to the impact of reduced foreign capital inflows, so, in order to keep the model analyses as unencumbered as possible, alternate MAP transfer projections have not been incorporated explicitly in the forecasts. Rather, the effects of variations in MAP transfer imports have been investigated by assessing the effects of variations in foreign capital inflows.

D.6 Agricultural Income

As noted in Annex A, the stochastic equations for agricultural production (income) were not very refined and failed to capture the important role of inputs such as fertilizers, new seed varieties, and extension services. Also, the role of marketing and distribution facilities was not incorporated in these equations. Thus it should not be surprising that the equations proved to be poor forecasters, yielding obviously inappropriate estimates. Since the model is not designed for analysis of the agriculture sector per se, it was decided to incorporate the influence of agricultural via exogenous projections, which accord with the views of USAID and Korean government agricultural experts.

In the revised Second Plan projections, the Korean government has reduced the agricultural growth forecasts from 5.0% per annum to slightly more than 4% per annum. The USAID forecasts for 1970, 1971 and 1972, also call for a growth rate of about 4%. (Due to unusually poor rainfall conditions in both 1967 and 1968, the 1969 output is expected to be at least 12% above the 1968 level.) Therefore, in keeping with the conservative nature of our assumptions, agricultural output has been extrapolated at an annual rate of somewhat less than 4% for 1970-74. (See Table 7-D.)

D.7 Imports of Grains

Projection imports of four major grains are presented in the FY 1970 Program Memorandum, pp. 157-167. These form the basis for the exogenous grain import figures used in the model. However, the PM figures were reduced somewhat beginning in 1969, reflecting (1) the expectation that "normal"

* If the capital-output ratios for typical military and non-military goods differ significantly, then, of course, there is a non-zero production stimulus effect, but this effect is too minor to appear in aggregative analysis.

weather is likely to bring a substantial increase in grain production, and (2) the fact that in the past the Korean government grain import forecasts have been more conservative than the PM forecasts. The PM does not translate its projections from physical units to value units for total projections, so prices have been taken from various sources. The following table shows the dollar-equivalent PM forecasts and the revised PM forecast used in the model. The PM figures are for "rice-years" (October-October), but since most grain imports take place in the spring and summer, these figures are accepted as calendar year estimates. Estimates for 1972-75 are simple extrapolations of earlier PM figures.

TABLE 1-D

DERIVATION OF EXOGENOUS GRAIN IMPORT FORECASTS

(in 1000 M/T and million dollars)

	1968	1969	1970	1971	1972	1973	1974	1975
A. Wheat, M/T[1]	804	901	1010	1131	1230	1320	1400	1470
($)[2]	50.8	56.9	63.5	71.0	77.2	83.0	88.0	92.3
B. Rice, M/T[1]	216	278	377	488	600	720	850	1000
($)[3]	38.7	49.8	67.5	87.4	107.5	129.0	152.2	179.1
C. Barley, M/T[1]	105	5	--	--	--	--	--	--
($)[4]	5.7	0.3	--	--	--	--	--	--
D. Corn, M/T[1]	101	114	132	162	190	220	250	280
($)[5]	9.1	10.3	11.9	14.6	17.1	19.8	22.5	25.2
E. Unadjusted Total ($)	104.3	117.3	142.9	173.0	201.8	231.7	262.7	296.6
F. Adjusted Total ($)	104.3	76.0	97.5	126.0	144.0	169.0	194.0	213.0
(won)	27.6	20.0	25.6	33.2	39.0	44.5	51.0	56.0

1/ All physical unit estimates through 1971 are taken from the FY 1970 Program Memorandum, pp. 157-165.

2/ The wheat price is calculated from the quantity and value estimates given in the PM, p. 175. This is somewhat lower than the actual price paid in 1965; See "Foreign Trade of Korea, 1967", Ministry of Finance, Korea.

3/ The rice price is taken from import quantity and value figures for 1967 given in "Foreign Trade of Korea, 1967", Ministry of Finance, Korea.

4/ The barley price is also from the Ministry of Finance figures; the year 1965 was taken as representative.

5/ The corn price is also taken from Ministry of Finance Statistics; 1966 was taken as a representative year.

D.8 Government Savings

Government savings is an elusive variable because it is defined differently in different sources, and because it is very difficult to forecast. Only the Korean government's strong commitment to the Second Plan investment program gives a basis for projecting this variable with any confidence. The projections of government savings in the Second Plan itself now are outdated, as are most of the Plan numbers, due to the very high growth rates. Thus the Economic Planning Board's 1968 Overall Resources Budget (which was more complete than the 1969 edition in its data presentation) has been used to estimate the level of government savings in 1968; and from this base a 10% annual growth rate was applied for 1969-71 and an 8% growth rate for 1972-75. These growth rates are somewhat higher than those in the Second Plan in keeping with the higher growth rates. After these estimates were compiled, the 1968 figure was modified in light of preliminary 1968 budget estimates. (See Table 6-D.)

D.9 Tax Collection Efficiency

As noted in Appendix A (Section 5), increases in "tax collection efficiency" in 1965-67 appear to have been in the range of 10%-20% per annum. The momentum of tax administration improvements appears to be continuing, so continued increments in efficiency are projected at a declining rate. Three alternative cases are shown below for the variable ADMIN, and all are designed to be used with equation (10.20) in Table 8-A. The forecast values of ADMIN start from different levels when different equations from Table 8-A are used.

Given the priority placed on tax improvement by the Pak Chung Hee government, it probably is safe to assume efficiency improvements through 1970, the last full year of his current term. The most reasonable projection is taken to be case 3 for ADMIN, which assumes efficiency increases of 10% in each of 1968 and 1969 and 5% in 1970, followed by no further efficiency increases. (See Table 6-D.) (It is reassuring to note that the revenue increases forecast with case 3 tally closely with tax collections forecast by an entirely different method, as noted in the economic section proper.)

D.10 Prices

The interest rate (defined in Appendix C, Section C.8) was specified to drop from 30% to 26% in 1968, following the government's readjustment of the interest rate structure, and to remain at that level throughout the projection period. The GNP deflator index (VPI) is projected to increase by 10% in 1968, 8% in 1969, 7% in 1970 and 1971, 6% in 1972 and 1973, and 5% in 1974 and 1975, in line with the government's announced goal of a gradually decreasing rate of inflation. It should be noted that a renewal of substantial inflation would invalidate this assumption and possibly would alter some of the structural relationships in Appendix A, thus invalidating many of the projections.

TABLE 2-D

PROJECTIONS OF COMMERCIAL COMMODITY EXPORTS
(million dollars)

EXPGD*	1		2		3	
1968	480	(50%)	480		480	
1969	620	(29%)	620		620	
1970	800	(29%)	800		800	
1971	1000	(25%)	1000		1000	
1972	1200	(20%)	1150	(15%)	1200	(20%)
1973	1416	(18%)	1285	(12%)	1380	(15%)
1974	1657	(17%)	1414	(10%)	1546	(12%)
1975	1906	(15%)	1527	(8%)	1701	(10%)

* Growth rates in parentheses.

TABLE 3-D

PROJECTIONS OF EXPORTS ON GOVERNMENT ACCOUNT
(million dollars)

EJ	1	2	3
1968	296	296	296
1969	268	268	268
1970	246	246	236
1971	167	165	196
1972	64	123	166
1973	66	126	135
1974	67	131	115
1975	67	133	105

D.11 Coal Production

The coal production forecast was taken from the latest Korean government schedule, reproduced in the FY 1970 Program Memorandum, Table C-2.

D.12 Tables

The assumptions discussed in the foregoing paragraphs are embodied in the projected values of the variables listed in the tables following:

TABLE 4-D

PROJECTIONS OF EXPORTS ON TRAVEL ACCOUNT AND EXPORTS OF MISCELLANEOUS SERVICES
(million dollars)

	EXPTD	EMSCD
1968	17.0	31.0
1969	20.0	34.0
1970	22.0	40.0
1971	25.0	46.0
1972	28.0	53.0
1973	32.0	60.0
1974	37.0	68.0
1975	43.0	75.0

EXPTD = Exports on Travel Account
EMSCD = Exports of Miscellaneous Services

TABLE 5-D

PROJECTIONS OF TRANSFER PAYMENTS FROM ABROAD
(million dollars)

	TRP	TRJ	TRZ	PLF	SA	REVF	TR
(1966)	97.6	29.3	127.4	37.4	54.8	92.2	219.6
(1967)	90.7	37.4	121.4	44.2	49.6	93.8	225.2
1968	74.0	30.0	106.0	70.0	44.0	114.0	220.0
1969	76.0	30.0	108.0	60.0	25.0	85.0	193.0
1970	80.0	30.0	112.0	55.0	15.0	70.0	182.0
1971	83.0	30.0	115.0	50.0	5.0	55.0	170.0
1972	81.0	30.0	113.0	50.0	--	50.0	163.0
1973	80.0	30.0	112.0	50.0	--	50.0	155.0
1974	75.0	30.0	107.0	40.0	--	40.0	145.0
1975	75.0	30.0	107.0	30.0	--	30.0	135.0

TRP = Private transfers, including PL 480 titles II and III
TRJ = Japanese government transfers
TRZ = All transfers other than those from the US Government (TRP + TRJ + small transfers from international organizations)
PLF = Transfers under PL 480 title I
SA = Supporting Assistance from AID
REVF = Total US Government transfers
= PLF + SA
TR = Total transfers from abroad
= TRZ + REVF

TABLE 6-D

PROJECTIONS OF GOVERNMENT SAVINGS AND TAX COLLECTION EFFICIENCY

	GS[1/]	ADMIN (1)[2/]	ADMIN (2)[2/]	ADMIN (3)[2/]
1968	105.0	1.98 (10%)	2.16 (20%)	1.98 (10%)
1969	106.8	2.08 (5%)	2.39 (10%)	2.18 (10%)
1970	117.5	2.08	2.51 (5%)	2.29 (5%)
1971	129.3	2.08	2.51	2.29
1972	139.9	2.08	2.51	2.29
1973	151.0	2.08	2.51	2.29
1974	163.0	2.08	2.51	2.29
1975	176.0	2.08	2.51	2.29

1/ GS = government savings, in billion 1965 won.
2/ All ADMIN variables are designed to be used with equation 10.20 in Table 8-A, Appendix A. Growth rates are given in parentheses. ADMIN (3) is the most realistic assumption.

TABLE 7-D

PROJECTIONS OF AGRICULTURAL OUTPUT AND GRAIN IMPORTS
(billion 1965 won)

	VA	IMPG
1968	326.4	27.6
1969	367.2	20.0
1970	385.0	25.6
1971	403.0	33.2
1972	418.0	39.0
1973	433.0	44.5
1974	448.5	51.0
1975	465.0	56.0

TABLE 8-D

ALTERNATE FOREIGN CAPITAL INFLOW ASSUMPTIONS
(million dollars)

F	1	2	3	4	5	6	7	8
1968	284	402	299	299	284	400	284	100
1969	225	299	299	200	224	400	224	100
1970	261	299	299	200	200	400	200	100
1971	238	299	299	200	150	400	150	100
1972	200	250	299	174	100	400	100	100
1973	200	250	299	174	100	400	0	100
1974	200	200	299	150	0	400	0	100
1975	200	200	299	150	0	400	0	100
TOTAL	1808	2199	2392	1547	1058	3200	958	800

TABLE 9-D

DETAILS OF CASE F1 ON FOREIGN CAPITAL INFLOWS*
(million dollars)

	FD	FLPG	FLPN	FST	FLGG	FLGN	F
1968	19	172	136	17	113	112	284
1969	20	200	138	20	90	87	225
1970	23	205	109	49	83	80	261
1971	25	215	92	45	80	76	238

	FUSC	FJC	FGC	FGUS	FJG	FGG
1968	27	80	20	75	25	7
1969	35	90	25	50	20	5
1970	40	100	25	38	20	5
1971	45	110	20	30	20	5

* From FY 1970 Program Memorandum, pp. 94, 115, 117.

FD = Direct foreign investment
FLPG = Gross private long-term capital inflows
FLPN = Net private long-term capital inflows
FST = Net (private) short-term capital inflows
FLGG = Gross long-term government inflows
FLGN = Net long-term government inflows
F = Total foreign capital inflows

FUSC = US commercial loans, gross
FJC = Japanese commercial loans, gross
FGC = German commercial loans, gross
FGUS = US Government loans, gross
FJG = Japanese government loans, gross
FGG = German government loans, gross

TABLE 10-D

PRICES AND COAL PRODUCTION

	INT	VPI	COAL
1967	.30	1.261	15.13
1968	.26	1.387	14.60
1969	.26	1.498	16.18
1970	.26	1.603	16.42
1971	.26	1.715	16.91
1972	.26	1.818	17.39
1973	.26	1.927	17.91
1974	.26	2.023	18.45
1975	.26	2.124	19.01

INT = Highest bank interest rate on deposits
VPI = GNP deflator index
COAL = Total coal production, Daehan Coal Corporation plus private mines, in 1965 billion won.

ANNEX VI

CHAPTER SEVEN: POLITICAL CONSTRAINTS

APPENDIX A

MAJOR COMPONENTS OF KOREAN SOCIETY AND THEIR PROBLEMS

1. Rural/Agricultural Sector
2. Urban/Industrial Sector
3. The Business Community
4. Youth and Students

APPENDIX A

MAJOR COMPONENTS OF KOREAN SOCIETY AND THEIR PROBLEMS

A.1 Rural/agricultural sector

General. Small farmers are the largest single component of Korean society. They and their families, in 2.5 million households concentrated in little villages and small towns, constitute slightly over half the total population. (See population density map on the following page.) Living in some 2,000 villages along the coast are a much smaller group. Still smaller numbers are full-time woodcutters and hunters. The rural gentry, who once dominated the rural areas both socially and economically, have been virtually eliminated as an economic force as a result of sweeping land reform completed over fifteen years ago. However, some of them are still community leaders, small entrepreneurs, and money lenders. Itinerant peddlers and artisans are still active in the countryside; the former have traditionally had some organization of their own, and are a channel for the flow of news. In the small towns, there are the proprietors of simple enterprises, small stores, and inns. School teachers, a few policemen, and small government offices complete the rural picture, except for scattered bits of the industrial economy-mines (see map, next page), isolated factories (about 35 percent of manufacturing is outside cities), and the like. For political purposes, however, farmers and fishermen are the significant rural interest groups.

Farmers. Inequalities among farmers are kept within fairly close bounds by the continuing enforcement of the land reform law, which limits holdings to 3 hectares (about 7.5 acres) of cropland per man actually tilling the soil. Despite some evasion, large concentration of land is rare or non-existent: the problem, rather, is the small average size of holding - about 0.91 hectares per household - often subdivided into 3 or more separate parcels. For 35 percent of all households, the size of holding in 1965 was 0.5 hectares or less, which is not sufficient for subsistence. (See map, next page.) Average holdings are expected to increase to about 1 hectare by 1971 as a result of land reclamation and bench-terracing. Double-cropping in many areas increases land utilization. Korean farmers are moderately efficient, but much remains to be done in making the best use of the rather poor Korean soil; proper fertilization, improved seeds, care of plants, concentration on the most economically useful crops, and so on. Irrigation is available for only about half the paddy area, which makes the country - especially the least irrigated regions - sensitive to weather conditions.

The farmer, and the farming community in Korea's developing industrial economy, seeks to maintain family livelihood in the face of new influences on his welfare, which he finds outside his immediate grasp of control, or often understanding. Growing awareness of man-controlled advancement over his environment has served to extend his expectrations beyond the periphery

of the immediate crop cycle and the year's harvest. Rudimentary education and external village assistance has created interest and demand for more ambitious goals that are designed to better his lot - agricultural market controls, land reclamation, water and flood control, fertilizer purchases and distribution, credit financing and agricultural extension training. Since it is the government, or government-administered agencies that have introduced these services to the rural community, it is back to the government that the farmer focuses his demands and expectations.

Government leaders, along with the responsible economic planners, have directed national development toward industrial modernization. Through the period covered by the First and Second Five Year Plans (1962-66, 1967-71), the benefits of Korea's rapid economic growth are coming more slowly to the rural than to the urban population, particularly in terms of the increasing gap between farm and urban capita income. However, in real terms, the farmer has witnessed significant recent improvements. Despite continuing priorities in the industrial sector, as well as traditional rural conservatism and independence, the vast majority of farmers nonetheless have reason to believe that the Park Administration is trying to help them. Agricultural production has grown at about 5 percent per year since 1960, not withstanding serious droughts in 1967 and 1968. General rural living conditions have improved since the early 1960s, with former annual occurrences of spring hunger in depressed areas virtually non-existent in the present day, although some figures indicate that for half to three quarters of farm households, total real income has decreased from 1964 to 1967. Government investment in overall agricultural development has increased more than two-fold between 1965-68. The number of government agriculturalists providing assistance for farmers has more than tripled in the past ten years. Field extension services, essentially non-existent in 1960, are now offered through 6,500 rural guidance workers administered by the Ministry of Agriculture's Office of Rural Development (ORD), plus 1,500 "pioneer workers" representing the National Agricultural Cooperative Federation (NACF). The gradual upswing in numbers of graduates of agricultural and vocational high schools and colleges in many of the provinces should also help to provide technical expertise.

These people and groups, plus some of the traditional gentry, would most influence the thinking and activities of farmers in the economic and political sphere, particularly if farmers fall on hard times. These are also the groups that the political opposition would attempt to recruit in an effort to gain rural farm support.

The Korean farmer is by nature conservative, independent, suspicious of politicians, as well as anyone outside his village and difficult to organize in support of any political or economic action group. It would be an oversimplification and an inaccuracy to credit the Park regime with a widespread popular base of electoral support in rural Korea, not withstanding the favorable results of the 1967 elections. It is questionable, actually, whether popularity, per se, has been the avowed objective of the political

strategists. The ROKG and the DRP have given ample proof that they have the capability of mobilizing the degree of support that is required to obtain their political and economic objectives. The relative longevity of the regime has further enabled it to create patterns of response and allegiance which, in effect, constitutes the essence of a base of political support.

It is arguable that rural instability may increase with increasing prosperity. Edward J. Mitchell, in a study of the South Vietnamese situation, observed that there are two contradictory theories of rebellion: "According to one, peasants revolt when they are poor; according to the other, when they are better off." In the case of Vietnam, as in eighteenth-century France, Mitchell finds a strong positive statistical correlation between security (freedom from Vietcong influence) and the persistence of traditional peasant control (defined in terms of land tenure, population density, etc.) In other words, in Vietnam social and economic progress seems to correlate with instability. Vietnam is not Korea, but the example provides food for thought.

Korean farmers are still organized, and their attitudes oriented, in traditional ways. There are no organizational groupings of political significance except the National Agricultural Cooperative Federation. This is quasi-governmental in nature; it supplies most of the productive inputs to the farmers, handles an important share of the marketing of farm crops, and can induce changes in cropping and production techniques, but its policies are set at the top, and the members have had little or no say. There are private organizations - mutual benefit groups, irrigation cooperatives, and the like - but they seldom extend beyond village or country levels. The rural base of the National Assembly does give some degree of representation to farm interests at the national level.

"As the countryside continues to participate more actively and by its own volition in the modernizing and commercializing process, there will be an increased need for institutional expression for local needs. Strengthening the responsiveness and effectiveness of local government will provide one very important voice for those needs." (Seoul TOAID A-994). The problem is recognized by the government, although it is loath to implement the local autonomy provisions of the Constitution because of costs, bad past experience, corruption, and political factionalism. There has been a trend in rural areas toward relaxation of direct controls and encouragement of private initiative; one element is growing decentralization of rural administration (under U.S. advisers' and provincial governors' pressure). The new president of the National Agricultural Cooperatives Federation showed awareness of the Federation's problems in his inaugural speech in January, 1969; he said, among other things, that "cooperatives should not rule farmers." The question is whether government awareness, determination, and ingenuity will be able to keep pace with rising demands as modernization reaches its full impact on the countryside.

The problem of agricultural underemployment is of potential political importance both from the standpoint that idleness facilitates dissident

movements, and that inability to work in the face of others' rising living standards is a source of discontent. There are no precise data, and account must be taken of the inherently fluctuating level of agricultural employment during the annual crop cycle. Current estimates of underemployment, however, place it at about 25 percent. There is little or no possibility of increased agricultural employment levels; the solution to the problem, therefore, lies either in continued exodus to the cities or in bringing small industry and handicrafts to the rural areas. The Government, in its forthcoming Five Year Plan, expects to decentralize industry to some extent, but whether its plans will alleviate the underemployment problem remains to be seen.

Fishermen. Since the mid-1960s there has been substantial growth in terms of tonnage and value of the fisheries sector. The domestic fisheries industry, including high seas operations (largely tuna for export), has expanded at approximately a 15 percent annual rate. However, in 1966 fishermen, comprising 4.6 percent of the population, added only 1.2 percent to the gross national product.

Government priorities have emphasized modernization of high seas activity to meet export goals placed on the industry. Thus the benefits of expansion have not all accrued to the small fishing communities. ROK-Japan commercial credits have gone to finance large segments of these modernization requirements, while ROK-Japan grant funds have gone largely to the domestic fleet buildup. A total of $40 million during the Second Five Year Plan is projected for inshore and coastal fisheries.

The government has attempted to redress these developing inequities by a recent reorganization of the ROKG-sponsored fisheries cooperative, making that national organization more responsive to the income interests of the small-scale fishermen. On the technical side, the government plans to further these objectives by new transportation, storage and credit facilities that are designed to aid in reducing income inequalities.

A.2 Urban/Industrial Sector

General. In most countries of East Asia, industrialization and urbanization are still in their early stages. Korea is one of the exceptions. In 1920, under the Japanese occupation, Korea was still almost completely rural and agrarian, with only 3.4 percent of the population classified as urban; but by 1940, 8.6 percent were so classified; in 1944, 12.2 percent. Since 1945, urbanization has proceeded at an accelerating rate - impelled now both by the "pull" factors of growing urban employment and by the "push" factor of limits on the number of people that agriculture will support, as well as by the imperative of inexorable population increase, which until recently was nearly 2 percent per year. By 1960 the proportion of urban dwellers had reached 28 percent. On October 1, 1966, urban population was 9,810,426 - i. e., persons living in cities of over 50,000 - or 33.6 percent of the total population of 29,207,856.

By 1986, the urban population of Korea will probably account for 50 to 60 percent of the total population, or between 22 and 26 million people - an increase, due both to in-migration and natural reproduction, of well over 100 percent, at a rate of 5 percent a year, more or less. This increase probably will be concentrated in the largest centers. Seoul, in particular, has already quadrupled in population since 1945, and may reach as high as 18 million by 1986, compared to its present 4 million; it grew at 6 percent per year from 1960 to 1966. Six cities with over 300,000 population in 1966, including Seoul, grew at an annual rate of 4.7 percent or more from 1960 to 1966 while 16 cities of less than 100,000 grew at 3.3 percent.

A recent sample study of Seoul residents showed that only 13 percent of the respondents' families has lived in the city for over three generations. But the remainder were not fresh from the country; most of them had come from other cities and towns; the few who had come directly from rural areas comprise the lower classes of Seoul. The study concluded that "in general Korean urbanization may be said to be a two-stage process; rural residents migrate first to towns and later move again from towns to cities." It is possible that this phenomenon, if continued, will moderate the social strains of urbanization.

Roughly 65% of manufacturing activity is concentrated in the 32 cities. Manufacturing establishments with more than five workers had a total employment of 566,700 in 1966; 65 percent of this number would represent about 3.8 percent of the urban population. Family members associated with these workers would be at least three times that number. Certain other non-manufacturing employment, such as transportation, communications, and construction, shares some of the socio-economic qualities of manufacturing. Moreover, the proportion of the city population engaged in manufacturing and the enumerated related fields probably will grow somewhat.

Nonetheless, the statistics bear out the observation of the survey already cited: "In Seoul the dominant group is the middle class. Small shopkeepers and salaried workers comprise about two-thirds of the Seoul population, wage employees - or blue collar workers - comprise a little less than one-third of the population, and wealthy entrepreneurs account for only about two percent of the population ...There is every indication that the size of this middle class will continue to increase relative to the other groups." (See, p.2) The same observations probably apply in large degree to other cities.

It seems clear that the two urban groups of primary significance for politico-social equilibrium are the industrial workers, because of their connection with the production process and their potential for organization; and the white-collar middle class, because of their numbers and sophistication. The needs of the two groups differ in some respects and overlap importantly in others, which should be understood in reading the separate sections which follow.

Basic to evolutionary equilibirum in the urban areas is continued economic growth, since otherwise the increase in employment would not keep up with the in-migration resulting from pressure on the land. If industrial growth continues at the rates of the recent past, if natural overall population growth is around 2.5 percent, and if a productivity increase of 4 percent per year is assumed, then the new jobs should absorb the urban growth and permit rural population to stay approximately constant. Significant slackening of economic growth would cause rapidly multiplying unemployment and unrest in the cities, or lead to more population growth in smaller population centers, or augment the pressures on the land, or some combination of all three; but in such circumstances the first centers of unrest and dissent would unquestionably be in Seoul and other large cities, where both expectations and population density are high.

Industrial Labor Force

Patterns of industrial development through 1968 have not given entirely clear indicators on significant social-political trends in the overall labor sector. It would not be inaccurate to comment, however, that the ROKG has essentially succeeded in accomplishing the basic goals of the First and Second Five Year Plans without introducing or creating significant strains of instability in the nation's labor force. Present day conditions, and the expected emphasis in the Third Five Year Plan (1972-76) on social development, would indicate that the government will be sufficiently well alerted and geared to bringing the essential expectations of the expanding industrial labor force into reality.

Through the 1960's, it is clear that government economic planners adhered to a system of priorities that restricted the equitable gains of the industrial workers. The labor force was utilized to facilitate and accommodate, rather than as a planned recipient of the full fruits of industrial advancement. Appropriate government mechanisms were organized to ensure that labor would play out the prescribed role.

In the trade union field, government controls have been accepted policy since 1948, when Communist unions were outlawed. These controls have been exercised in a variety of ways, involving both the vinegar and honey approach. Since the restoration of civilian rule in 1963, controls have been less overt and sophisticated, but nonetheless effective. There is growing resentment at all levels of trade union leadership with government interference in internal union affairs and restrictions on political activities imposed by law.

Most top leaders still have to make accommodations with government administrative and security agencies, as well as employers to retain as well as to be elected to offices. A growing frequency in turnover of elected leadership suggests that these accommodations are resented by subordinates, with few leaders able to develop solid rank and file support. Union leaders increasingly have to be more aggressive in representing worker interests in order to stay in office.

An increase in public demonstrations and strikes in recent years may illustrate this trend. The Social Security Committee noted that "there were 105 cases of dispute in 1967, and the indications are that this number will continue to increase." One of the most politically significant was a demonstration by the Federation of Korean Trade Unions - usually regarded as a government instrument - in front of the National Assembly building in November, 1967, to protest against the size of the income tax exemption in a law sponsored by the government.

Korea's democratic social commitment, plus external "encouragement," mainly from Japanese trade unions but also via a variety of international labor affiliations may encourage and facilitate a more dynamic trade union movement. While continuing to be anti-Communist, unions may seek more improvements for workers via collective bargaining and through legislation. While no serious threat to the ruling party is on the horizon, the national unions may pose as a more effective pressure group than they have in the past. The kind of "personal" accommodation previously made by union leaders with the government and employers may change to one responsive to worker interests as well as the vested interests of leadership. The alternative might mean a return to more open suppression of trade union rights. Union alliances with other groups, such as students, while unlikely, could strengthen opposition political forces, which have never made significant inroads into organized labor since the days of the military junta.

Trade union membership in December, 1967, totalled over 375,000, or 6.5 percent of all workers, organized in the national unions, all belonging to the Korea Federation of Trade Unions (KFTU). Of these, the largest were the textile workers', bus drivers', united workers' (miscellaneous trades), foreign organization employees', railway workers', and mine workers' - each with over 30,000 members claimed. Membership for the Federation as a whole reportedly increased 9.3 percent in 1967. Thus the future political potential of organized labor is not to be overlooked.

The more economic issues of unemployment, underemployment and wages should not be totally ignored, but may be essentially discounted as areas of significant social instability through the mid-1970's. At present, the most sensitive problem is more in the area of underemployment rather than unemployment, per se, and is perhaps more acute in the rural than urban areas. Urban unemployment averaging close to ten percent (10%), is centered mainly, of course, among the young, unskilled, or inexperienced elements of the labor force. Industrial employment should absorb the major share of new entrants into the labor force during the next few years. In 1967, and again in 1968, agricultural employment began to level off. Improved agricultural productivity could lead to the fulfillment of increased output with little if any additional labor inputs. It appears that government action is being taken to direct required capital into new agricultural and fisheries industries, but it is yet difficult to predict how much these ventures will draw down on the rural unemployment. By 1970, it is also possible that greatly increased rates of urban industrialization - more than originally forecasted - will eventually bring both unemployment and underemployment back into acceptable levels.

The income and wage question is difficult to analyze. ROKG figures on real wages have shown substantial drop in recent years marked by heavy inflation. Despite upward trends in 1967 and 1968, there is a clear "sense" of lowering living standards (despite contrary statistical evidence) among many urbanites. All of this arises in the face of annual 20-25 percent wage and salary increases by private industry. Conspicuous "public improvements" undertaken by the ROKG, such as expressways, overpasses, skyscrapers, etc., without commensurate improvements in low-middle class housing, schools, water supply, sewage-disposal, etc., appear to encourage a sense of alienation by low-income groups and confirm their convictions that economic development does indeed make the rich richer, poor poorer, at least relatively. The present political base of the DRP (military, farmers, big business) does induce a pattern of public spending and development not favorable to urban workers and the middle class, both of whom lack political muscle. Growing urbanization in Korea may cause serious political problems as demands for badly-needed, but costly improvements (better housing, water, sewerage, medical facilities, schools, etc.) begin to compete with ROKG and DRP pledges to farmers and big business. This could hasten, or foster political realignments or merely aggravate political factionalism. One answer, if trends are actually there, is more suppression--growth in authoritarianism.

One factor that should be noted that could appreciably enhance political stability of urban labor to an increasing measure in coming years is the developing parental relationship of employer to employee. Where the individual worker may find it extremely difficult to identify himself with the many images of government, he can and readily does identify himself with his employment. Korea is in the first stages of this social phenomenon that has been so finely developed in Japan.

Middle Class

Although some trade unions embrace middle-class elements - for example, the bank and finance workers' union, with 10,000 members - the Korean urban middle class is by-and-large as unorganized as elsewhere. Although there is a hierarchy of local organizations down to the pan of ten to twenty neighboring households, these organizations do not serve to reflect the needs or desires of the people, nor are there any other groups which do, except for informal social affiliations often centering on a common workplace. There is little or no participation in politics, according to the survey of Seoul residents above cited. There is, however, strong interest in politics, and distrust of government.

One of the most serious urban problems ishousing, which began with both rapid city population growth and the destruction of buildings in the Korean War. In Seoul, an average of more than three persons live in one room. "Room sharing and overcrowding are threatening the privacy of citizens' lives." Despite some experimentation, as yet there is no financing system which puts housing within ready reach of the average family. Building is not keeping pace with demand. The Korean preference for individual houses is retarding progress on apartments, which must eventually come as Seoul's population rises.