UNITED ARAB REPUBLIC

THE INSTITUTE OF NATIONAL PLANNING

Memo. No.1156

THE ROLE OF FOREIGN CAPITAL IN LONG-TERM DEVELOPMENT

BY

M. M. EL-IMAM, Ph. D.

CAIRO
SEPTEMBER 1965

UNITED ARAB REPUBLIC

THE INSTITUTE OF NATIONAL PLANNING

Memo. No.1156

THE ROLE OF FOREIGN CAPITAL IN LONG-TERM DEVELOPMENT

BY

M. M. EL-IMAM, Ph. D.

CAIRO
MARCH [illegible]

TABLE OF CONTENTS

Foreword

This study was prepared in response to an invitation to the first Conference of Egyptian Economists which took place on March 25 th 1976. My choice of the subject was decided by two main considerations. The first was my previous research in long term development and the contribution of foreign resources, especially foreign loans to the process of growth. The second was my feeling that the role of foreign capital seemed to be exaggerated to the extent that it may lead to relaxation of other conditions of growth, normally given more weight when foreign resources do not seem forthcoming in sizable amounts.

When I undertook the study I did have some expectations that the outcome would not be quite rosey. However, I did not expect it, either, to be that gloomy. The results were presented to the conference in time in summary form. Owing to the nature of the study, I have prefered to give full details of the models used and the numerical calculations for further reference. The summary in Arabic is attached to this Memo.

At the time this was prepared, I was in the service of the United Nations as a Team Leader of a Project assisting the Council of Arab Economic Unity. Needless to say that the opinions expressed here are strictly my own, and do not necessarily reflect the views of either organization. Further they need not represent the views of the Egyptian Government, whom I came to serve at the

time the conferance was held. This scientific study is meant as a contribution dealing with one important aspect of foreign capital; and does not claim to give a comprehensive account. It is hoped that it will help in initiating further investigation of the subject.

M.M. El-Imam, Ph.D.

March 1976

I. THE PROBLEM:

In a previous series of Memos.(*) I had indicated that foreign loans need not be considered as a purely positive element in fulfilling hopes usually attached to them as a stimulant to long-term development. In fact it was proved that according to conditions familiar to developing countries and normally prevailing in world capital markets (which even became worse since then), the marginal short-term benefits of foreign loans, may turn into absolute losses over the longer run.

There had been a lot of discussion lately as regards the role of foreign capital in supplementing domestic resources for financing substantial developmental efforts. It seems that a number of issues are being confused together. The scarcity of domestic savings and of foreign exchange is one known argument. Another is the so-called transfer of technology, which is considered to be facilitated if technology-bearing capital is imported. Together with the production technology there is also improvement of management and productivity. Still a third argument is that of market extension. It rests on the

---

(*) M.M. El-Imam: Foreign Loans and Economic Development; Memo. 779 (4 Parts): I.N.P., 1967. See also M.M. El-Imam Contribution of Foreign Loans to the Process of Long - Term Development The Vienna Institute of Development, 1968: Confrontation; The First Development Decade, a Preview; The Second Development Decade, a Preview.

assumption that greater chances of invading new foreign markets may be secured through foreign partners whose exporting machinery and world reputation are already established. If there is clear need to diversify markets and to enter new exporting fields, this factor should receive some attention.

If the limited burden of debts (confined to interest charges) were that unfavourable, we are justified in questianing the impact of foreign capital which expects profits over and above interest yields. On the other hand, if we follow the I.B.R. D. approach, we may consider a cycle similar to the debt cycle, and investigate under which conditions it may be expected to explode. In other words, what are the boundaries of reliance on foreign capital.

Brezil is often quoted as an example of a country which has given foreign capital all temptations to assist in its development. It has the advantage of being a large country with abundant natural resources. It has turned out that the flow of capital is under one billion dollars per annum . Moreover, about half that amount is merely ploughing back of profits generated within the country. This draws our attention to the effects of income accruing to foreign capital on domestic income distribution and on the command on exportable surpluses.

II. THE APPROACH:

A full treatment of the role of foreign capital in economic development deserves a more exhaustive study than what we claim to present here. Our approach is to develop a series of models which simulate movements over time under alternative patterns of capital inflow.

The first model starts by giving the economic accounts of a country at a base year. It is assumed that those accounts reflect as much as possible present structure of Egypt with one major difference. This is the assumption that government consumption is equal to government current income less investment of the public administration sector. On the other hand total investment is put equal to savings so that imports could be put equal to exports. This involved a contraction of all macro variables to ensure this hypothetical equilibrium.

In a second round of the base year, allowance was made to additional economic activity to bring about a desirable increase in the rate of investment. This helps to estimate the initial investment multipliers, and the corresponding foreign trade gap, which may be taken as an initial inflow of foreign capital.

With the help of a 9-sectors input-output table and sectoral growth rates, investment needs and derived incomes and demand, the movement

ever time is estimated. So long as there is a foreign deficit, it is added to previous capital flow. Surpluses are assumed to represent an antflow which pays out income due to foreigners and later an as repayment of outstanding capital. The year 25 was then used to estimate the parameters of a macro model which represents average changes ever time as calculated above.

This model was then used in a limited number of simulations to indicate the outcome under certain alternative assumptions. Another model was estimated under the assumption of a zero foreign trade gap stcrting from the low base - year equilibrated values. Comparison of results helps to throw same light on some aspects of the problem stanted above.

III. TOTAL EFFECTS OF INVESTMENT:

1. Initial Interflow:

Let us assume an economy planned to be in a state of balance at a low rate of investment. Table (1) represents the interflow table of the economy in the base year, with value added in the business sector = £ 1000 millions (at factor cost). Nine production sectors are distinguished:

Sector 1: Agriculture

Sector 2: Extractive industries (including crude oil).

Sector 3: Agricultural industries; i.e., manufacturing industries relying mainly on agricultural materials; including food, drinks, tobacco, spining & weaing, clothes, footwear, wood, paper and products.

Sector 4: Non-Agricultural industries; including other manufacturing industries; chemical, mineral, metallic and engineering.

Sector 5: Energy, including petroleum industries and electricity.

Sector 6: Construction.

Sector 7: Transportation, communications and storage.

Sector 8: Trade and Finance.

Sector 9: Services, including housing and other services of the private sector.

Imports by origin and destination are indicated. Incomes are distributed among wage incomes, private non-wage and public non-wage. Indirect taxes on production are indicated, leading to sectoral value added and production at market price. Final demand is broken down by type of demand and structure from domestic and foreign sources. Import duties are given separately, to arrive at values c.i.f., after allowing for trade margins. This helps to give the initial base year macro - variables.

2. Adjusted Investment:

The initial situation leaves some unutilized capacities in the domestic economy. It is assumed that exports only have reached their full capacity utilization. Further investment and the related final demand (through multiplier effects) would lead to the expansion of domestic production, as well as imports. Three adjustments are required at this stage. The first is to adjust the investment column itself. At a low investment rate and under limitations on importation, the structure of investments differs from that related to a higher rate with a different sectoral structure. To adjust for this element the following steps were taken:

1- The technical matrix was calculated from table (1), and the inverse obtained.

2- Direct and inirect effects of initial investment could thus be estimated, and deducted from the initial interflow.

3- Sectoral capital/output ratios were obtained through analysis of recent data and current plan estimates. These were found to be

Agriculture	3.3	Transportation	7.1
Extractive	3.6	Trade	0.4
Agro Industry	4.2	Housing	16.8
Other Industry	4.6	Private Services	0.6
Energy	5.2	Public Administration	0.7
Censtruction	0.7	Public Services	6.5

Table (1) Base Year, Initial Interflow Matrix

Part I (Left) Intermediate Demand

Delivering Sectors	Receiving Sector									Total Intermediate Demand
	Agriculture	Extractive	Agro-Industry	Other Industry	Energy	Construction	Transportati	Trade	Services	
Agriculture	95.9	-	265.1	0.8	-	-	0.4	-	0.5	362.7
Extractive Indus.	0.1	0.1	0.1	2.9	4.3	1.7	-	-	-	9.2
Agro-Industries	8.5	0.2	135.1	5.3	-	3.5	0.7	2.2	4.1	159.6
Non-Agro Indus.	13.6	3.6	12.5	55.4	0.6	25.4	6.7	0.4	4.7	122.9
Energy	5.8	1.3	6.3	17.4	3.5	0.9	5.2	1.9	1.9	44.2
Construction	0.4	0.1	0.9	0.8	0.4	-	2.4	0.3	1.7	7.2
Transportation	2.2	0.4	9.2	5.2	1.5	1.1	1.9	9.3	4.1	34.9
Trade	4.9	0.5	23.0	6.3	1.4	11.6	3.2	0.4	0.7	52.0
Services	2.1	0.2	8.2	3.2	0.6	4.4	3.1	1.8	2.4	26.0
Domestic	133.5	6.4	460.4	97.3	12.3	48.6	23.6	16.5	20.1	818.7
Agricuture	0.4	-	70.1	-	-	-	-	-	-	70.5
Extractive	-	-	0.1	1.9	7.9	0.4	-	-	-	10.3
Agro-Industries	1.4	0.1	17.0	7.4	-	1.8	0.3	4.0	4.1	36.1
Non-Agro Indus.	16.3	2.4	8.3	33.2	1.5	7.6	5.6	0.2	3.9	79.0
Energy	0.4	0.3	1.5	2.5	3.2	0.2	2.9	0.1	0.3	11.4
Construction	-	-	-	-	-	-	-	-	-	-
Transportation	-	-	-	-	-	-	4.0	-	-	4.0
Trade	-	-	-	-	-	-	-	17.6	-	17.6
Services	-	-	-	-	-	-	-	-	-	-
Imp.Commodities	18.5	2.8	97.0	45.0	12.6	10.0	8.8	4.3	8.3	207.3
Imp.Services	-	-	-	-	-	-	4.0	17.6	-	21.6
Total Inputs	152.0	9.2	557.4	142.3	24.9	58.6	36.4	38.4	28.4	1047.6
Wages	111.3	5.3	50.0	27.0	9.4	29.0	38.3	63.0	43.9	377.2
Private Non-wage	256.9	13.9	32.4	11.8	-	6.1	9.0	18.9	76.8	425.8
Public Non-wage	0.4	10.8	48.4	54.3	27.7	15.0	10.5	29.9	-	197.0
Indirect Taxes	-	9.7	20.1	2.7	26.5	-	-	-	-	59.0
Value Added	368.6	39.7	150.9	95.8	63.6	50.1	57.8	111.8	120.7	1059.0
Production at M.P.	520.6	48.9	708.3	238.1	88.5	108.7	94.2	150.2	149.1	2106.6

Table (1) , Cont.
Part II (Right) Final Demand

	Final Demand						Total	Indirect	Value at
	Public Consum.	House-hold	Invest-ment	Change in Stocks	Exports	Total	Demand	Taxes	F.C.
Agriculture	3.0	135.0	-	2.0	17.9	157.9	520.6	-	520.6
Extractive	-	0.8	-	-	38.9	39.7	48.9	9.7	39.2
Agro-Industry	17.6	397.2	0.7	7.1	126.1	548.7	708.3	20.1	688.2
Non-Agro.	13.0	54.1	20.9	10.0	17.2	115.2	238.1	2.7	235.4
Energy	9.8	30.4	-	0.1	4.0	44.3	88.5	26.5	62.0
Construction	35.3	-	66.2	-	-	101.5	108.7	-	108.7
Transportation	11.0	43.4	-	-	4.9	59.3	94.2	-	94.2
Trade	6.3	67.7	10.0	-	14.2	98.2	150.2	-	150.2
Services	20.6	82.5	-	-	20.0	123.1	149.1	-	149.1
Domestic	116.6	811.1	97.8	19.2	243.2	1287.9	2106.6	59.0	2047.6
Agriculture	-	1.8	0.1	-	-	1.9	72.4	44.8	27.6
Extractive	-	-	-	-	-	-	10.3	1.1	9.2
Agro-Indust.	11.4	22.6	0.2	-	-	34.2	70.3	17.3	53.0
Non-Agro.	22.4	2.3	30.7	-	-	55.4	134.4	27.3	107.1
Energy	6.4	0.5	-	-	-	6.9	18.3	6.4	11.9
Construction	-	-	-	-	-	-	-	-	-
Transportation	-	-	-	-	-	-	4.0	-	4.0
Trade	-	-	-	-	-	-	17.6	-	17.6
Services	12.5	0.3	-	-	-	12.8	12.8	-	12.8
Imports : Commodities	40.2	27.2	31.0	-	-	98.4	305.7	96.9	208.8
" Services	12.5	0.3	-	-	-	12.8	34.4	-	34.4
Total Inputs	169.3	838.6	128.8	19.2	243.2	1399.1	2446.7	155.9	2290.8
Wage Incomes	193.8	-	-	-	-	193.8	571.0	-	571.0
Non-Wage Private	-	-	-	-	-	-	425.8	-	425.8
Non-Wage Public	-	-	-	-	-	-	197.0	-	197.0
Indirect Taxes	-	-	-	-	-	-	59.0	-	59.0
Value Added	193.8	-	-	-	-	193.8	1252.8	-	1252.8
Total at M.P.	363.1	838.6	128.8	19.2	243.2	1592.9	3699.5	155.9	3543.6

4- The structures of investment in these sectors were obtained from analysis of recent plans estimates.

5. Given sectoral growth rates, estimates of sectoral investments were obtained through multiplication by the capital/output ratios.

6. Multiplying these investments into corresponding investment structures, we obtained overall investment structure.

7- Using this adjusted structure the interflow matrix was reconstructed, assuming that the initial investment (128.8) follows the adjusted structure.

Appendix (II) summarizes the main steps. Table (II.1) gives direct and indirect effects of the original investment; while (II-2) gives the same under adjusted structure, with the total standardized to 1000.0. Adjusting it to 128.8, we add the result and subtract the data in Table (II.1) to obtain the adjusted interflow table, and the corresponding macro - variables.

The second adjustment is to expand investment within the limits permitted by unutilized capacities of all domestic sectors. Let us assume that an additional £ 70.0 m. can be thus added to original investment. We can apply the original technical coefficients; hence the original inverse giving total direct and direct effects.

The third adjustment is to add another expansion of investment, within limits of capacities of internal sectors, assuming that commodity

sectors have reached their capacity limits. This is represented by relying more on imports both for final and intermediate demands generated by another £ 30.0 m. investments. The effects of such changes are shown in Table (II.6).

Besides the allowance for indirect effects, we have to take account also of multiplier effects. As may be seen from Tables of Appendix (II), the total (direct and indirect) effects can be analyzed to give indirect taxes T_i and the ratios by which the resulting value added are subdivided among the factor shares. Using equations (22) - (27) of the Model given in part(IV) we can obtain the breakdown of disposable income into G and H, as functions of the given I and the unknown J, C_g and C_h. But public consumption follows an equation of the form (28)

$$C_g = 0.9431\ G$$

and household consumption:

$$C_h = 0.964\ H + 15.344$$

Change in stocks is

$$J = 0.0142\ Y$$

With X = 0 and M (imports) calculated as functions of the demand variables, we obtain Y. Hence we have a sufficient number of equations to calculate derived final demand C_g, C_h and J corresponding to the given I in each round.

Table (2) Adjustment of Sectorial Iuputs and Imports

	Iuitial Values		First round Effects					Second Round	
	Original	Adjusted	Investment	Stock Change	Household	Public Cons.	Total	Effects	Total
Agriculture	520.6	523.3	2.9	0.8	46.5	1.9	575.4	2.0	577.4
Extractive Industries	48.9	48.7	0.9	0.1	0.7	0.2	50.6	0.2	50.8
Agro-Industry	708.3	708.7	3.2	1.5	59.8	3.1	776.3	5.0	781.3
Non-Agro. Industries	238.1	226.7	20.1	1.3	14.5	3.9	266.5	3.8	270.3
Energy	88.5	87.6	2.2	0.2	7.0	1.8	98.8	1.6	100.4
Construction	108.7	102.6	32.9	0.0	0.6	4.4	140.5	15.5	156.0
Transportation	94.2	94.0	1.6	0.1	9.0	1.8	106.5	2.5	109.0
Trade	150.2	151.8	11.1	0.1	11.7	1.6	176.3	6.9	183.2
Services	149.1	148.7	1.9	0.1	12.1	2.9	165.7	3.7	169.4
Domestic Production	2106.6	2092.1	76.8	4.2	161.9	21.6	2356.6	41.2	2397.8
Imports :									
Consumption	27.2	27.2	-	-	3.3	-	30.5	9.1	39.6
Investment	31.0	39.1	21.2	-	-	-	60.3	11.8	72.1
Intermediate	247.5	244.9	8.3	0.6	15.5	8.7	278.0	12.0	290.0
Services	34.4	34.5	1.4	-	1.7	0.3	37.9	1.4	39.3
Total Imports	340.1	345.7	30.9	0.6	20.5	9.0	406.7	34.3	441.0
Indirect Taxes	59.0	58.5					64.6	0.8	65.4
Import Duties :									
Consumption	6.3	6.3					7.0	2.2	9.2
Investment	6.7	7.8					12.0	2.6	14.6
Intermediate	83.9	83.5					90.3	3.4	93.7
Total Taxes	155.9	156.1					173.9	9.0	182.9
Values at F.C.	2290.8	281. 7					2589.4	66.5	2655.9

Table (2) given the solutions for these values in the adjustment and two round processes. Table (3) gives the list of adjusted base - year macro - variables. Symbols are explained. in Annex I.

3. The Investment Multiplier

The data given in Table (2) enable us to estimate the investment multiplier on the assumption of availability of certain unutilized domestic capacities. Thus, apart from induced increase in stocks, no other induced investment is allowed. On the other hand, both household and public consumption do increase, bringing a new set of equilibrum values

Autonomous Investment = 70.0

Increase in stocks = 2.4

Household consumption =102.0

Public Consumption = 44.3

∴ Total increase in Domestic Demand = 218.7

Thus the initial demand multiplier is $\frac{218.7}{70} = 3.12$

Part of demand is met by imports = 49.3

While the rest is an increase in G.D.P = 169.4

The import leakage reduces the value of the multiplier to $\frac{169.4}{70} = 2.42$, which is the income multiplier. In the second round of investment the multiplier values are reduced as a result of the higher

Table (3) Adjustment of Base - Year Macro Variables

Variable	Initial Values		Adjustment For £ 70 m Investment		Adjusted For £ 30 m Investment	
	Original	Adjusted for Investment Structure	Adjustment	Adjusted Values	Adjustment	Final values
W_b	377.2	375.2	52.3	427.5	10.5	438.0
W_g	193.8	193.8	23.6	217.4	7.2	224.6
W	571.0	569.0	75.9	644.9	17.7	662.6
V_h	351.3	351.6	38.4	390.0	4.4	394.4
Y_h	922.3	920.6	114.3	1034.9	22.1	1057.0
V_b	187.8	185.9	24.9	210.8	4.1	214.9
V_g	83.7	82.2	12.4	94.6	2.4	97.0
T_i	155.9	156.1	17.8	173.9	9.0	182.9
Y_g	239.6	238.3	30.2	268.5	11.4	279.9
T_h	68.3	68.2	8.5	76.7	1.6	78.3
T_b	62.1	61.5	8.2	69.7	1.3	71.0
G	370.0	368.0	46.9	414.9	14.3	429.2
H	854.0	852.4	105.8	958.2	20.5	978.7
S_b	125.7	124.4	16.7	141.1	2.8	143.9
S_g	6.9	4.9	2.6	7.5	0.9	8.4
S	148.0	143.1	23.1	166.2	4.4	170.6
Y_f	1193.8	1188.7	151.6	1340.3	28.6	1368.9
Y	1349.7	1344.8	169.4	1514.2	37.6	1551.8
C_h	838.6	838.6	102.0	940.6	19.8	960.4
C_g	363.1	363.1	44.3	407.4	13.4	420.8
I	19.2	19.2	2.4	21.6	0.5	22.1
V	128.8	128.8	70.0	198.8	30.0	228.8
U	622.8	619.7	75.7	695.4	10.9	706.3
M_c	1000.0	994.9	128.0	1122.9	21.4	1144.3
M_v	20.9	20.9	2.6	23.5	6.9	30.4
M_d	30.5	31.3	17.0	48.3	9.2	57.5
M_s	157.4	161.4	26.3	187.7	8.6	196.3
M	34.4	34.5	3.4	37.9	1.4	39.3
X	243.2	248.1	49.3	297.4	26.1	323.5
F	243.2	243.2	-	243.2	-	243.2
	0	- 4. 9	-49.3	-54.2	-26.1	-80.3

propensity to import. The increase in domestic demand is:

$30.0 + 0.5 + 19.8 + 13.4 = 63.7$

with a demand investment multiplier = $\frac{63.7}{30} = 2.12$.

The increase in G.D.P. gives an income investment multiplier of $\frac{37.6}{30} = 1.22$

The impact on imports is evident. In the initial state, the import (c.i.f.) component of investment was $\frac{31.3}{128.8} = 0.243$. This ratio was preserved in the first (70 m.) round.

But the increased domestic production and demand have led to extra (final and intermediate) imports raising the ratio to $\frac{49.3}{70} = 0.704$. In the second round it was assumed that owing to limitation on domestic capacities, more direct investment goods are imported $\frac{9.2}{30} = 0.307$.

Total imports are still higher: $\frac{26.1}{30} = 0.870$.

This means that, in spite of expansion of domestic output, some 75.4% of the increase in investment is eventually to be met through imports. This fact, though familiar to economists, is often neglected by technicians who cannot see the process of transition from the micro - project - level to the macro - national level. At best they allow for imports of construction materials in the direct effect stage. Both indirect and multiplier effects are neglected.

To sum up, the additional investment has led to the following needs for imports:

Direct need of investment goods	=	26.2%
Direct need of construction sector	=	6.7%
Other indirect and multiplier needs	=	42.5%
Total import requirements	=	75.4%

Total imports are thus about three times as much as the original direct needs. Since exports were held constant, the increased imports lead to an equivalent deficit. We assume that all deficit is financed through accomodation of foreign capital. In other words, an inflow of £ 80. 3m. in the shape of foreign capital is invited to finance a part of the 250.9 investments. Domestic savings have increased from 148.0 to 170.6 to finance the rest. Since the initial values did not involve any preceding indebtedness, we can start our calculations with the 80.3 as the initial capital inflow. Other import needs are met by export proceads.

IV. THE MODEL:

1. The G.D.P.

Grose domestic product at market prices and factor costs are given by :

$$Y = Y_f + T_i \qquad (1)$$

$$Y_f = U + W_g \qquad (2)$$

Where:

$$Y_f = (1 + r)\, Y_{f-1} \qquad (3)$$

$$= Y_{f-1} + \frac{1}{k}\, I_{-1} \qquad (3')$$

and $W_g = w_g C_g$ (4)

which gives imputs in public consumption as:

$$B_g = (1 - w_g)\, C_g \qquad (5)$$

Indirect taxes are the sum of taxes on domestic production and an imports:

$$T_i = T_p + T_m \qquad (6)$$

If we assume given rates per sector, we may express

$$T_p = \sum_{j=1}^{9} t_j P_j$$

This has been adopted in the first version of computations. It could be later approximated by

$$T_p = t_p \cdot U + t_{po} \qquad (7)$$

where t_{po} is a factor, representing the change in output structure over time. Import duties were initially obtained as rates per group of output for each type of use:

Table (4) Import duties per type of use for output groups

Imports of	Intermediate Consumption	Public Consumption	Household Consumption	Investment
Agricultural	0.6284	—	0.2778	0.2000
Extractive	0.1068	—	—	—
Agro - Indus.	0.2576	0.2632	0.2212	0.2500
Non - Agro	0.1975	0.1964	0.2609	0.2182
Energy	0.3421	0.3594	0.4000	—

These rates are calculated from plan estimates as raties to values at market price. The high rate for intermediate agriculatural goods reflects the duties on tobacco. The results of first version computations could then be approximated by

$$T_r = t_r U + t_g C_g + t_{ro} \qquad (8)$$

$$T_c = t_c C_h + t_{co} \qquad (9)$$

$$T_v = t_v I + t_{vo} \qquad (10)$$

giving :

$$T_m = T_r + T_c + T_v \qquad (11)$$

These 11 equations explain 11 out of the twelve varialbes involved (for C_g , see equation 28).

2. Distribution of G.D.P.

Wage incomes are estimated from the output structure. Thus, wages in the business sector are:

$$W_b = \sum_{j=1}^{5} w_j P_j$$

This was later approximated by

$$W_b = w_b U + w_o \qquad (12)$$

Given wages in public consumption, the total wage - bill is:

$$W = W_b + W_g \qquad (13)$$

It follows that non - wage income in the business sector is:

$$V = U - W_b = (1 - w_b) U - w_o \qquad (14)$$

This is distributed, in each sector, among private, public and business (retained profits) sectors. If foreign - owned capital is K_e, then we have also to account for its share:

3 a. K_{e-1} . In the absence of policy directives as regards the redistribution of economic activity, we assumed that non - wage income is first distributed among domestic sectors in the same proportions. Out of each share, one third of income due to foreign capital is then deducted:

$$V_g = v_g U - a. K_{e-1} + v_{go} \qquad (15)$$

$$V_h = v_h U - a_o K_{e-1} + v_{ho} \quad (16)$$

$$V_b = V - V_g - V_h - 3a K_{e-1} \quad (17)$$

$$\therefore V_b = (1 - w_b - v_g - v_h) U - a_o K_{e-1} + v_{bo}$$

and $v_{bo} = -(w_o + v_{go} + v_{ho})$

Hence nonwage incomes accruing to nationals & foreigners are:

$$V_n = V - V_e = V_g + V_h + V_b \quad (18)$$

$$V_e = 3a_o K_{e-1} \quad (19)$$

This means that domestic distributed shares are allocated among the government and household sectors as follows:

$$Y_g = T_i + V_g \quad (20)$$

$$Y_h = W + V_h \quad (21)$$

It is clear that:

$$Y_g + Y_h + V_b + V_e = V_g + V_h + V_b + V_e + W + T_i$$

$$= V + W_b + W_g + T_i = U + W_g + T_i = Y$$

3. Redistribution of G.D.P.

As a result of fiscal policy (direct taxes, net) income is redistributed among the given sectors. We assume that V_e represents the share of the external sector, net of taxes. Therefore we account for taxes thereon within the corresponding income shares. Thus:

$$T_h = t_h (V_h + a_o K_{e-1}) \quad (22)$$

$$T_b = t_b (V_b + a_o K_{e-1}) \quad (23)$$

Total direct taxes are:

$$T_d = T_b + T_h \quad (24)$$

leading to government disposable income.

$$G = Y_g + T_d = T_i + T_d + V_g \quad (25)$$

On the other hand, personal disposable income is

$$H = Y_h - T_h \quad (26)$$

Undistributed income after tax, respresents business gross savings:

$$S_b = V_b - T_b \quad (27)$$

It is assumed that current transfers among non-government sectors even out to zero. Thus:

$$G + H + S_b + V_e = Y_g + T_d + Y_h - T_h + V_b - T_b + V_e$$

$$= Y_g + Y_h + V_b + V_e = Y$$

Thus, we have the redistribution of G.D.P.

4. Disposal of Income:

It was mentioned before that public consumption could be represented as a function of government disposable income:

$$C_g = c_g G + c_{go} \quad (28')$$

However, it would be assumed that C_g would grow at a rate g:

$$C_g = (1 + g) C_{g-1} \quad (28)$$

This rate is equal to 6% whenever $r \geq 7\%$ and $\frac{.06}{.07}\ r$ for values of $r < 7\%$. This ensures that public consumption will grow at a lower rate than G.D.P., with a ceiling 6%. On the other hand, household consumption follows the linear consumption function

$$C_h = c_h \cdot H + c_o \qquad (29)$$

Thus final consumption is:

$$C = C_g + C_h \qquad (30)$$

We can then calculate savings:

$$S_g = G - C_g \qquad (31)$$

$$S_h = H - C_h = (1 - c_h) H - c_o \qquad (32)$$

National savings are:

$$S_n = S_b + S_g + S_h \qquad (33)$$

If we add to these incomes accruing to foreign capital (considered to be all of it saved) we obtain domestic savings.

$$S_e = V_e \qquad (34)$$

$$S = S_n + S_e \qquad (35)$$

Hence:

$$C + S = C_g + C_h + S_g + S_h + S_b + V_e$$

$$= G + H + S_b + V_e = Y$$

If we define G.N.P. as:

$$Y_n = Y_f - V_e \qquad (36)$$

then,

$$Y_m = Y_n + T_i = Y - V_e \qquad (37)$$

$$Y_m = C + S_n$$

Savings are used to finance investments. Change in stocks is determined as a ratio of G.D.P.

$$J = j \cdot Y \qquad (38)$$

Fixed investment is determined in either of two ways:

$$I = (1 + i)\, I_{-1} \qquad (39)$$

Alternatively:

$$I = S - J \qquad (39')$$

Which assumes a zero savings - investment gap.

5. The Rest of the World:

During the first version of computations, the values of imports (hence import duties) were colculated by means of technical and demand coefficients related to sectors. The results were later approximated by equations similar to (8) - (10):

$$M_r = m_p U + m_g C_g + m_{ro} \qquad (40)$$

$$M_c = m_c C_h + m_{co} \qquad (41)$$

$$M_v = m_v I + m_{vo} \qquad (42)$$

Besides these commodity imports, there are imports of services, which form a part of both consumption and production needs:

$$M_s = m_{sp}\, U + m_{sg}\, C_g + m_{sc}\, C_h + m_{so} \qquad (43)$$

Hence total imports are:

$$M = M_r + M_c + M_v + M_s \qquad (44)$$

Using demand equations and adjusted technical coefficients given in Tables(5) and (6) exports could be obtained as residuals (exportable surpluses). These can be grouped into:

X_a = Exports of agricultural goods

X_r = Exports of industrial goods

X_s = Exports of services.

adding up to

$$X = X_a + X_r + X_s$$

These relations indicated in the first version calculations that the agricultural sector will soon run into deficit. This puts a limit to the growth of agro - industries unless heavy imports are envisaged. On the other hand, the sectoral export surpluses help to determine further sectoral growth rates (especially in services). However, for our model, we need only total exports. We first equate the foreign trade gap to the savings - investment gap:

$$F = S - I - J \qquad (45)$$

$$X = M + F \qquad (46)$$

Table (5) - Sectoral Expenditure Equations

	Household Consumption		Public Consumption	Change in Stocks	Fixed Capital Formation
	Initial (£838.6 m)	Increments			
Agriculture	135.9	.1347	.0081	.0400	.0147
Extractive	0.8	.0018	-	.0250	-
Agro-Indus.	397.2	.4133	.0476	.5000	.0101
Non-Agro.	54.1	.0659	.0350	.4000	.0954
Energy	30.4	.0366	.0269	.0350	. -
Construction	-	-	.0972	. -	.4670
Transportation	43.4	.0620	.0303	. -	-
Trade	67.7	.0820	.0173	. -	.0980
Services	82.5	.1016	.0567	. -	. -
Total Domestic	811.1	.8979	.3191	1.0000	.6852
Agriculture	1.8	.0183	.0002	-	.0093
Extractive	-	.0002	-	-	-
Agro-Ind.	22.6	.0707	.0323	-	.0199
Non-Agro	2.3	.0111	.0625	-	.2856
Energy	0.5	.0014	.0177	-	-
Construction	-	-	-	-	-
Transport.	-	-	-	-	-
Trade	-	-	-	-	-
Services	0.3	.0004	.0344	-	-
Imports	27.5	.1021	.1471	-	.3148
(Imp.Duties)	(6.3)	(.0242)	(.0271)	-	(.0692)
Total Goods	838.6	1.0000	.4662	1.000	1.0000
Value Added	-	-	.5338	-	-
Total	838.6	1.0000	1.0000	1.000	1.0000

Table (6) - Adjusted Technical Coefficients

Sector	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1)	1838	-	3727	34	-	-	41	-	33
(2)	2	20	1	121	482	148	-	-	-
(3)	163	41	1900	221	-	303	73	144	271
(4)	260	734	175	2307	67	2198	702	26	311
(5)	111	266	89	729	394	81	549	125	126
(6)	8	20	13	34	67	-	255	33	114
(7)	42	82	130	218	170	101	201	619	275
(8)	94	102	385	264	158	1067	340	27	47
(9)	40	41	116	134	68	405	329	120	161
Domestic	2558	1306	6476	4062	1384	4303	2490	1094	1338
(1)	12	-	1006	-	-	-	1	-	1
(2)	-	-	2	81	897	45	-	-	-
(3)	27	21	247	313	-	185	33	269	279
(4)	314	493	118	1414	170	838	604	14	266
(5)	8	61	21	107	363	20	311	8	21
(6)	-	-	-	-	-	-	425	-	-
(8,9)	-	-	-	-	-	-	-	1172	-
Imports	361	575	1394	1915	1430	1088	1374	1463	567
W	2138	1084	706	1134	1062	2668	4066	4194	2944
V_g	3	938	290	969	1330	587	474	846	-
V_h	4071	2345	377	408	-	463	788	1038	4250
V_b	869	1768	473	1399	1800	891	808	1365	901
T_p	-	1984	284	113	2994	-	-	-	-
Value Added	7081	8119	2130	4023	7186	4609	6136	7443	8095

If $F = 0$, we obtain (36') and $X = M$.

The total stock of foreign capital is given by:

$$K_e = K_{e-1} + V_e - F \qquad (47)$$

$$K_{eo} = - F_o \qquad (48)$$

In other words, the base year stock is equal to that years flow as given by the corresponding deficit. For any other year, the last years' stock is increased by the income accruing to it ($V_e = \beta$ a. K_{e-1}) and by the current deficit (or reduced by a surplus). In other words the income generated is either repatriated and an equivalent amount imported (no costs involved) or it is reinvested totally.

6. Summary:

The model just decribed aims at simulating long-term developments in the economy as a result of an attempt to invite foreign capital to assist in achieving national objectives. Four main aspects are considered:

(a) Factor shares

$$Y = W + V_d + V_e + T_i$$

(b) Income distribution

$$Y = Y_h + Y_g + V_b + V_e$$

and larger dependence on foreign capital. The need to invest and export more would, however, leave narrower margins for final consumption.

11. The impact may be milder if the capital/output ratio is smaller. But it is because of the need to go into more capital intensive (technologically advanced) activities that there will be more readiness to invite foreign capital. The odds are that the capital/output ratio would rise and the situation becomes less favourable.

12. If the rate of return on foreign capital drops substantially, many of the above drawbacks may become less pronounced. This is in conformity with the findings of our previous study of foreign loans. But it is doubtful that what could be considered admissible from the national point of view may attract foreign capital at all. If the argument is that this is the only way of transfering technology and having access to world markets, there should be a carsful cost-benefit analysis to justify going to such fantastic limits of indebtedness.

Unless competitiveness in world markets is ensured, this may lead to either desertion of foreign capital and draining of export earnings; or to quich ploughing back of foreigners incomes and a rapid command on domestic income.

7- The rate of investment becomes excessively high in relation to national income. This is not due to the contribution of foreign capital; it is in fact a result of its existence and the need to invest in export sectors in order to meet its committments .

8- The higher the income accruing to foreigners the smaller is income going to nationals. Household consumption may be adversely affected.

9- However, when comparing the behaviour of the economy with and without foreign capital, it may be found that the net gain, if any, is in the possibility to attain higher levels of consumption in earlier periods. However, national income; and eventually consumption could rise much faster in the self-reliance case.

10- A faster target rate of growth would lead to faster

calculations show that even at moderate rates of admission of foreign capital, this may not be the case. The political as well as economic consequences would be quite serious.

4- The share of foreigners in nonwage incomes would gradually increase. This would turn the bulk of the society into wage-earners in the service of foreign capital.

5- It was assumed that foreign investors will not add to the problems of the receipient economy by directing a part of their income to consumption within the economy. If this happens, and if their consumption pattern is directed towards luxurions goods, this may have negative effects on the balance of payments, thus reducing the ability to pay them off.

6- In an economy with limited resource base, the case for foreign capital rests on the argument of combining it with the surplus (cheap) labour. The propensity to import would be high, which forces exports up to pay for imports and for the cumulated foreign investments.

1- So long as the rate of return expected by foreigners exceeds the national rate of discount, there will be a net outflow of capital measured at present values.

2- If the maximum rate of surplus (F/Y) does not exceed the share of G.D.P. going to foreign capital, there will be no way out of indebtedness. Thus if that maximum is

$$\hat{F} = b.\ \hat{X}$$

and if the yield on foreign capital is A, then,

$$b\,\frac{\hat{X}}{Y} \geqslant A\ \frac{K_{e-1}}{Y}$$

which means:

$$\hat{K}_{e-1}/Y \leqslant \frac{b}{A}\ \hat{x}$$

where $\hat{x} = \hat{X}/Y$. For values of $x < \hat{x}$, this condition may be relaxed provided this does not violate the ultimate situation.

3- However, it should be also observed that at intermediate points, the ratio of foreign capital to domestic capital should remain below 50% of those activities which attract foreign capital (mainly modern industrial sectors). Our

effects, and to indicate that even if such capacities did exist, the bulk of additional investments had to be financed from abroad.

The Model used assumed that national savings would rise substantially, mainly as a result of increased government savings, and through neglecting the income distribution effect in favour of wage incomes against national nonwages. Further, it allowed the propensity to import to remain above unity. While it may be argued that this should be curbed through import substitution policies, the detailed first version model, observing the limits of growth of the majore sectors, has indicated that our estimates were in fact on the lower side. This results from the limitations on the rate of growth of agricultural production, and the paucity of mineral resources. In any case, exports were estimated as exportable surpluses, and any reduction in importation would have been reflected on exports to the same extent. Still the resulting exports could have risen substantially, leaving eventually a sizable surplus. In any case the admission of high growth rates of exports is taken for granted as another element favourizing the invitation of foreign capital.

A number of findings are worth consideration:

The rise in public consumption leaves a smaller share for the output of the business sector, since G.D.P. is the same in both cases. The main difference lies in the fact that k_g goes on increasing up to year 30, instead of vanishing as happened in 1 - 3. This leads to the persistent rise in the share of income accruing to foreign capitalists. Again the share of national nonwage income continues to fall. The rapid rise in public consumption leads to a decline in the ratio of household to total consumption. However, total consumption follows more or less the same pattern when compared to G.D.P. But it does not drop as much when related to G.N.P. The larger share of consumption leads to a slightly smaller propensity to import, hence export ratio.

XII SUMMARY AND CONCLUSIONS:

The purpose of the present study was to investigate the impact of foreign capital on the development of an economy with an initial low capacity to grow. The deficit assumed to be covered by external resources enabled the fixed capital formation to nearly double in the base year. Through assuming underutilization of capacities we were able to investigate the multiplier

Table (14) Main Results of Model III

	0	5	10	15	20	25	30
Basic Varaibles:							
Y_f	1368.9	1797.2	2516.8	3529.8	4950.9	6945.4	9737.7
U	1144.3	1503.7	2114.4	2972.4	4173.1	5854.5	8203.1
C_g	420.2	549.7	753.8	1043.9	1456.4	2042.8	2873.4
I	228.8	436.7	629.7	883.2	1238.7	1737.4	2436.8
K_{o-1}	0	655.5	1916.7	3581.7	5755.3	8587.5	12269.4
Main Rations:							
K_e/K_t	35.1	44.3	46.8	46.2	44.6	42.7	40.6
V_e/V	0	10.6	21.9	29.1	33.2	35.3	36.0
V/U	61.7	61.9	62.1	62.2	62.3	62.3	62.4
V_n/U_n	61.7	59.2	56.1	53.8	52.4	51.7	51.5
X/Y	15.7	18.2	25.0	29.8	33.0	35.0	36.3
M/Y	20.8	23.9	25.4	26.3	27.0	27.4	27.8
C/Y	89.0	83.2	77.5	73.8	71.4	69.9	69.1
C/Y_n	89.0	87.7	85.9	84.7	83.7	82.9	82.2
I/Y	14.7	21.1	21.4	21.3	21.1	21.1	21.0
I/Y_n	14.7	22.2	23.8	24.4	24.8	25.0	25.0
C_h/C	69.3	68.1	66.9	65.9	65.2	64.6	64.2

and nonwage income. Neverthelss this could be only achieved through taxing the capabilities of the economy, and observing no limits to the admission of foreign capital. If such limits were observed, and the consumption function adjusted as above, the contribution would be much less, and the growth potentials more limited.

XI THE FOURTH VERSION, MODEL III:

The common feature of the previous models is the high propensity to save (0.39) of the government sector. This has been due to the limit (6%) put to the growth public consumption, while the income of government went up steadily, especially as a result of the growing rates of indirect taxes. It would be more realistic to allow public expenditure to rise more rapidly with public revenue. We introduce therefore a consumption function for the government sector, in the form of equation (26) with $C_g = 0.7583$. This still leaves a high propensity to save, but it is much lower than what was assumed in preceding models.

Model III is similar to model I-3, except for this amendment. The results are represented in Table (14) which can be compared with Table (11).

Table (13) Main Results of Model II

	0	5	10	15	20	25	30
Basic Variables							
Y_f	1193.8	1583.1	1980.3	2603.4	3593.8	5208.8	8001.4
U	1000.0	1336.0	1680.7	2224.3	3093.7	4539.5	7105.7
C_g	363.1	463.0	561.2	710.2	936.9	1253.8	1677.9
I	128.8	275.0	429.3	678.2	1087.8	1827.6	3276.3
Main Ratios							
V/U	62.3	62.3	62.4	62.4	62.4	62.4	62.4
X/Y	18.0	21.5	23.6	25.6	27.4	29.0	30.7
C/Y	89.0	83.5	79.9	76.4	73.1	69.3	64.7
I/Y	9.5	15.1	18.6	22.1	25.5	29.3	33.9
C_h/C	69.8	69.6	69.5	69.7	70.0	71.0	73.2
Ratios of II to I.1:							
V_h	88.2	103.3	110.6	119.4	128.4	137.2	147.1
V	88.2	90.3	81.8	76.8	75.7	78.7	87.3
U_h	87.4	98.0	97.7	98.8	101.8	107.2	117.0
U	87.4	91.4	82.5	77.2	76.0	78.9	87.5
Y_f	87.2	91.1	82.5	77.3	76.1	78.6	86.1
Y_m	87.0	95.6	92.5	91.6	93.2	97.8	106.6
Y	87.0	90.9	82.1	77.1	76.1	79.0	87.0
X	108.0	110.2	80.7	64.8	59.4	59.8	65.7
M	75.2	81.3	74.6	73.4	75.7	81.9	94.0
C_h	87.3	93.0	89.0	86.7	87.1	90.2	97.3
C	87.0	92.0	86.8	83.8	83.6	85.8	90.8
E	56.3	61.4	61.3	69.0	79.0	94.6	120.9

second was to adjust the constant terms of the equations so as to let them fit the low base year. Model II is given in Annex V.

Table (13) shows that consumption falls steadily, as a proportion of G.D.P. This is due to the steady rise in the rate of investment from the low base year level of 9.5% to a level exceeding that required by the growth rate of Model I-1. In fact the relative volume of investment more than doubles when compared to Model I-1. As a result, the value added in business which regains its relative situation when compared at the domestic concept (87.5%) stands higher at the national concept. Consequently, the G.D.P. which could regain its initial relative position, implies a G.N.P. surpassing the level attained under I.1. in year 30. The impact on national nonwage income is quite obvious, while the pressure on the export surplus is seen to be much less.

To sum up, it looks as if the main impact of foreign capital is to allow final consumption (especially that of households) to grow faster. This may be even strengthened if our consumption function allowed for different propensities with respect to wage

of external balance. This leaves underutilized capacities, and they are to be gradually absorbed over the following five years. This is tantamount to working at a lower capital/output ratio which brings Y_f to the level obtainable if its initial value were at the level assumed in Models I(the second version). The ratio was found to be 2.2877; slightly above 50% of the ratio assumed in Model I.1, namely 4.1667. This latter value was maintained for the rest of the period.

The inmediate effect of the above assumptions was to bring the levels of the main income and consumption variables from the 87% level of the base year, much closer to the values obtained through Model I-1 in the fifth year. The rate of growth which could be raised close to 7%, falls back as a result of the rise in the capital/output ratio, but by the end of the period, it becomes as high as 10%.

The computations were done by adjusting the model used above in two respects. The first was to require the balance condition:

$$F = 0$$

and utilize the investment function (39') rather than (39). The

One clear outcome is that K_e reaches an absolute maximum in year 19 and vanishes 10 years later, to leave the country with a net surplus in year 30. Imports are a little bit higher as a result of the effects of the relatively higher household consumption. But exports rise at a slower rate leaving a larger deficit up to year 13, then a smaller surplus up to the end of the period. The total deficit is 1292.5 and it is repaid by a total surplus of 4989.7, about four times as much. But if we assume a rate of discount of 7.5%, we find that both flows have a present value of 888.5, which means that the national economy is indifferent with respect to the overall net flow. It has to be shown that other aspects of the economy do give extra benefits to justify getting into debt.

X THE THIRD VERSION: MODEL II:

Suppose now that it was decided to let the economy grow using its own means; i.e., observing a zero foreign balance. We have first to adjust the initial period accordingly, and at the same time, ensure utilization of available productive capacities. We shall make the stringent assumption that the base year would remain at the low level obtained before for the case

Table (12) Main Results of Model I-4

	0	5	10	15	20	25	30
Y_e	1368.9	1738.2	2401.2	3367.8	4723.5	6625.0	9291.9
U	1144.3	1462.4	2036.9	2880.3	4071.1	5752.0	8123.7
C_g	420.8	516.8	682.4	913.2	1222.1	1635.4	2188.5
I	228.8	448.2	700.4	982.3	1377.8	1932.4	2710.3
K_{e-1}	0	578.0	1554.7	2418.4	2785.1	2216.3	24.3
K_e/K_t	35.1	37.8	35.0	27.3	18.0	8.1	(-1.9)
V_e/V	0	4.8	9.2	10.1	8.2	4.6	0.0
V/U	61.7	61.9	62.1	62.2	62.3	62.3	62.4
V_n/U_n	61.7	60.7	59.7	59.6	60.2	61.2	62.4
X/Y	15.7	17.5	23.1	28.5	31.9	34.0	35.2
M/Y	20.8	24.0	26.0	27.0	27.8	28.3	28.8
C/Y	89.0	82.7	76.5	72.4	69.9	68.5	67.8
C/Y_n	89.0	84.5	79.8	75.9	72.6	70.0	67.8
I/Y	14.7	22.4	24.9	24.7	24.5	24.4	24.3
I/Y_n	14.7	22.9	26.0	25.9	25.5	24.9	24.3
C_h/C	69.5	68.8	68.2	68.3	68.9	69.8	71.0

results where all other features of Model I.1 are maintained. It may be obvious that since the pattern of investment and the capital/output ratio are not affected, then the other basic set of variables would be the same. The only variable affected by such a change is K_0. Accordingly all other variables of a national character will be affected. In particular household consumption, hence exports and imports will be adjusted for effects of income distribution on national shares;

that the ratio of V_n/U_n drops more mildly and regains its initial level by the end of the period. On the other hand the pressure to raise exports is much less, although imports would move along the same lines as in Model I-1. However, total consumption, in spite of its maintaining a higher share of G.D.P., falls to similar proportions with respect to G.N.P., the latter approaching the former and exceeding it by the end of the period. The rate of investment is naturally lower, owing to the smaller capital/output ratio. But if the invitation of foreign capital is moti ated by the desire to enter more technologically advanced activities, it is doubtful that further improvements could be achieved through resorting to structures working at low capital/output ratios.

II THE SECOND VERSION: MODEL I-4:

Another basic parameter in our Model is the rate of return (3a) on foreign capital. It may be claimed that a 15% rate is on the higher side, and foreign capital could be tempted to enter at much lower rates. Let us for the sake of orgument assume that it did accept a rate as low as 7.5%, or half that assumed in previous calculations. This leads to another set of

In this case, the needed inflow is only 731.4. In year 10, a surplus could be realized, and by year 29 a total 9150.2 could pay it back, or 12.5 times the total deficit. By year 9 the foreign -owned capital exceeds double the total deficit (amounting to 1637.3) as a result of ploughing back profits. On the other hand if we compare present values at base year, the total exported surplus, 2041.3 is three and half times the imported deficit, 580.2, if both are discounted at 7%.

In years 29 and 30, K_e becames negative. This means a cumulation of capital by nationals abroad leading to income from abroad (V_e negative). In fact K_e and bence V_e are <u>net flows</u>; in the sense that at any point of time after year 20, when K_e reaches the maximum level of 3329.0, foreign capital could be maintaimed at equally high levels, the difference being made good by nationals exporting a part of the surplus in the shape of investments abroad. In fact this could be done at earlier years, but it would have implied higher levels of foreign capital. It is assumed, for the sake of simplicity, that both types of investments yield the same rate of reveune, namely 15%.

Comparing the results with those of Model I-1, we observe

Table (11) Main Results of Model I-β

	0	5	10	15	20	25	30
Basic Variables:							
Y_f	1368.9	1797.2	2516.8	3529.8	4950.9	6945.4	9737.7
U	1144.3	1513.3	2137.5	3022.3	4271.7	6036.4	8521.3
C_g	420.8	531.8	710.5	950.8	1272.4	1702.8	2278.7
I	228.8	436.7	629.7	883.2	1238.7	1737.4	2436.8
K_{e-1}	0	607.9	1637.3	2666.1	3306.9	2760.0	-552.0
Main Ratios							
K_e/K_t	35.1	40.5	39.2	33.0	23.7	11.0	(-5.5)
V_e/V	0	9.7	18.5	21.3	18.7	11.0	(-1.5)
V/U	61.7	61.9	62.1	62.2	62.3	62.3	62.4
V_n/U_n	61.7	59.5	57.1	56.4	57.3	59.6	62.7
X/Y	15.7	19.2	26.4	31.7	35.1	37.1	37.8
M/Y	20.8	23.9	25.4	26.3	27.0	27.6	28.1
C/Y	89.0	82.2	76.1	72.0	69.4	68.1	68.0
C/Y_n	89.0	86.0	83.0	79.7	75.8	71.7	67.5
I/Y	14.7	21.1	21.4	21.2	21.1	21.0	20.9
I/Y_n	14.7	22.0	23.4	23.5	23.0	22.1	20.8
C_g/C	69.5	68.8	68.2	68.3	68.8	69.8	71.2

The behaviour of foreign capital flow follows the same pattern, though in more pronounced terms. Over the first 14 years a total deficit of 2347.5 has to be imported; over the remaining 12 years a total surplus of 21416.0 still leaves a net indebtedness of 21808.6 in years 30. As a result of the excessive government savings rate, the above is done at a rather high cast. Consumption drops from 89% to 50%, implying a 50% savings rate which is untenable. Even when related to G.N.P., the national savings rate has to grow as high as 41%. This occurs while the rapid rise of income causes a quicker decline in the share of foreign capital's income. On the other hand investment has to receive a higher share, than in previous versions. The same applies to exports, and to a less extent, to imports. As a result of the restricted growth of public consumption, the household consumption gets a higher share in the rapidly falling total consumption. However it amounts to 40% only of G.D.P. as compared to 42.3% in Model I-1, in year 30.

VIII THE SECOND VERSION: MODEL I-3:

It may be argued that the previous awkward results are due to the high capital/output ratio. Let this ratio be 3.571, implying an output/capital ratio of 0.28. The ultimate growth rate is taken as in Model I-1, equal to 7%. Starting with a rate of growth of investment 15%, it could be gradually decreased to reach 7% in the year 7.

Table (10) Main Results of Model I-2.

	0	5	10	15	20	25	30
Basic Variables.							
y_f	1368.9	1777.6	2700.3	4345.5	6998.5	11271.1	18152.2
U	1144.3	1496.3	2323.9	3841.8	6324.5	10369.1	16945.1
C_g	420.8	526.9	705.1	943.6	1262.7	1689.8	2261.4
I	228.2	559.9	1115.8	1810.6	2916.0	4696.2	7563.4
K_{e-1}	0	812.2	3213.8	7232.1	12386.2	17947.9	21676.4
Main Ratios							
K_e/K_t	35.1	50.5	58.7	57.6	51.2	41.2	28.1
V_e/V	0	13.2	33.4	45.4	47.1	41.6	30.7
V/U	61.7	61.9	62.1	62.2	62.3	62.4	62.4
V_n/U_n	61.7	58.5	52.2	47.4	46.7	49.2	53.5
X/Y	15.7	15.1	21.8	32.2	38.9	43.0	45.1
M/Y	20.8	25.2	28.5	29.6	30.2	30.6	31.0
C/Y	89.0	81.5	70.4	61.2	55.3	51.9	50.3
C/Y_m	89.0	86.7	82.9	77.3	71.0	64.7	59.0
I/Y	14.7	27.2	34.9	34.8	34.5	34.3	34.2
I/Y_m	14.7	28.9	41.1	44.0	44.2	42.7	40.1
C_h/C	69.5	68.6	68.7	70.4	73.0	76.2	79.7

We start again by letting investment grow first at 20% up to year 4, then follow a decreasing trend: 18, 17, 16, 15, 14, 12 and 10.85 to rest at 10% together with G.D.P. as from year 12. The capital output ratio is kept at its level of the preceding versions. Further, we have allowed public consumption to grow at a rate not exceeding 6% p.a. This allows the government sector to raise its rate of savings much faster than before. With the same set of parameters we obtain the following results:

If at such level the outstanding indebtedness is to be ever paid back we have to make sure that imports would leave a (maximum) surplus of

$$\hat{F}_m \; b. \; \hat{X}$$

which exceeds the yield of outstanding foreign capital

$$b \hat{X} \geqslant 3 \; a. \; K_{e-1}$$

This means that

$$\hat{K}_{e-1} / Y \leqslant \frac{b}{3a} \; \hat{x}$$

For $\hat{x} = 0.36$, $a = 0.05$ and $b = 0.25$

$$\hat{K}_{e-1} / Y \leqslant 0.6$$

This is clearly much lower than the ratios exhibited by the model. Even if we allow exports ratio to be as high as 0.48, the upper limit would be 0.8, compared with 1.47 in year 30.

VII - THE SECOND VERSION: MODEL I-2

In the previons case we assumed that the target growth rate was 7%. The question is: how would this compare with a higher rate of growth, 10% say. Would this add to the burden owing to the increased inflow during the (higher) deficit period; or would the higher levels of income help to pay back the outstanding indebtedness?

The main ratios are in line with those given in table (8), since the parameters of the model satisfy the two end points of the first version. The differences are due to the fact that the overall linear relationships do not take full account of minor changes obtained through the working of the adjustments of sectoral growth rates and their implications to the input-output relationships. The results are presented for the sake of comparison with those resulting from changes in the values of some parameters.

The deficit, which ends in year 11, totals 1145.9. Up to year 25 the surplus totals 5061.3 giving a net outflow of 3915.4, with outstanding indebtedness of 10828.4 in year 25. In the following five years, another outflow of 5657.4 occurs; in the meantime indebtedness increases to 14359.0. It is clear that so long as

$$F < V_e$$

K_e will go on increasing. Suppose that the ratio of exports to G.D.P. is assumed to rise steadily to a maximum target of:

$$\overset{*}{X} = \max. \; X/Y \qquad (e.g. = 0.36)$$

Table (9) Main Results of Model I-1.

	0	5	10	15	20	25	30
Basic Variables:							
Y_f	1368.9	1738.2	2401.2	3367.8	4723.5	6625.0	9291.9
U	1144.3	1462.4	2036.9	2880.3	4071.1	5752.0	8123.7
C_g	420.8	516.8	682.4	913.2	1222.1	1635.4	2188.5
I	228.8	448.2	700.4	982.3	1377.8	1932.4	2710.3
K_{e-1}	0	657.8	2106.5	4190.9	6877.4	10128.2	13699.8
Main Ratios							
K_e/K_t	35.1	44.4	49.5	50.3	48.8	45.4	40.2
V_e/V	0	10.9	25.0	35.1	40.7	42.4	40.5
V/U	61.7	61.9	62.1	62.2	62.3	62.3	62.4
V_n/U_n	61.7	59.1	55.1	51.6	49.5	48.8	49.7
X /Y	15.7	17.7	24.0	30.4	35.1	38.4	40.6
M /Y	20.8	24.0	25.9	26.9	27.5	28.0	28.4
C /Y	89.0	82.5	75.6	70.3	66.5	63.8	62.0
C/Y_n	89.0	86.8	85.2	83.5	81.5	78.9	76.0
I /Y	14.7	22.4	24.9	24.7	24.6	24.4	24.4
I/Y_n	14.7	23.5	28.1	29.4	30.1	30.3	29.8
C_h/C	69.5	68.8	67.8	67.3	67.2	67.6	68.3

13%, 12%, 10.5, 8% and 7.25% in year 10. This brings both growth rates to 7% as from year 11.

With these rates we could estimate the series of investments over the period. Using the capital/output ratio, we could calculate also Y_f. Up to year 10, the rate of growth of public consumption was taken as 6/7 of the rate of G.D.P. growth; after that it was put constant at 6%, to allow business to grow much faster. These are in conformity with the first version.

Knowing Y_f and C_g we could obtain U, substituting in (2). Starting by (48) we could also obtain K_e, using (47). All other variables can be expressed in terms of this basic set, as shown in Annex IV. The results are summarized in Table (9):

hand we assumed that foreigners save their whole income. If they start spending a part of their income on domestic consumption (usually on high-class types of goods) this may mean a transfer of their earnings to domestic sectors; but at the same time it reduces exportable surpluses and increases consumption expenditure. This reduces savings and retards the process of paying back foreign capital.

VI THE SECOND VERSION: MODEL I-1.

The results of the first version help us to derive estimates of the parameters of the model described in Part IV. The estimates are given in Annex III, from which the remaining variables could be similarly expressed through substitution in the identities defining them. The first step was to estimate the constant terms, using the data for first version relating to year 25 and year 0* (adjusted base year). The capital/output ratio was similarly derived and equated to 4.1667 (1/0.24). The initial rate of growth was found to be 4%; hence it was assumed that investment should increase by 15% at the beginning. When the growth rate reaches 7%, both G.D.P and investment would be growing at the same rate. Therefore the rate of growth i of investment was put equal to 15% falling in year 4 to 14%; then to

ed to national rather than domestic output, there should be a drop in the average propensity to consume. This cannot be considered as resulting from the lower rate of growth of public consumption assumed in our calculations. In fact, household consumption grows slower than total, hence public, consumption. This is due to the decreasing share of households in disposable income. It is this drop that enables savings to rise quite fast to account for the rising share of both investment and exports. The complementary of C/Y is S/Y, which rises from 11% to over 37%.

(8) The above remarks indicate how stringent our assumptions are. In spite of the transformation of the national economy into a wage-earners economy, and the dwindling of non-wage incomes shares, our consumption function allowed for an increasing propensity to save. Further, the public sector becomes rapidly a major saving sector. This is in contradiction to the actual observations which indicate that as more foreign resources become available, government usually relaxes its obligation to adopt a more thrifty pattern. On the other

not a symptom of the flow-of-capital process, but it is due to the given features of the economy under consideration. In fact this need to finance increasing imports may be one of the arguments used in favour of inviting foreign capital.

(5) If the process is to be feasible, export surpluses should materialize. This means that the rate of exports would more than double. If we allow imports to increase by another 8%, this would require exports to rise to as high as 47% of G.D.P. In spite of that the economy has to pay back more than 4 times the inflow it needs and still owe another amount 10 times as much.

(6) The inflow was necessitated by the need to raise the rate of investment from 15% to 25% in order to reach a rate of growth of 7%. In fact the initial rate of investment was 9.5% in the original state of the base year. If investment is related to G.N.P. it would eventnally exceed 31%. This rate would be still higher when related to output at factor cost, giving an output/capital ratio of abont 0.24.

(7) In spite of the substantial indebetedness, the rate of consumption should drop by abont 20% over the period. Even when relat-

(1) The ratio of foreign to domestic new capital formation mounts up rapidly to exceed 50%. If we assume that foreigners should not hold more than 50% of capital of those sectors to which they are admitted (manily industry), it is clear that this situation is in fact untenable.

(2) Year after year, the share of foreigners in non-wage incomes increases, approaching 50% . Even when the participation in new capital takes a downswing, that share goes on rising.

(3) While the share of non-wage incomes in the value added in the business sector remains practically stable, the national share declines by one-quarter. The national non-wages V_n declines from 62% to 47% of the national value added in business ($U_n = U - V_e$).

(4) The assumption of fixed import coefficients, coupled with the change in production structure leads to an increase in the average propensity to import from 21% to 28%. However, if we maintain rates of growth in industries based on agricultural materials, higher than that (3%) assumed for agriculture, imports may rise still faster to be as high as 36%. This is

Anual data show that the deficit increases gradually to reach a peak of 141.1 in year 6, and turns into an increasing surplus as from year 13. The sum-total of deficits over the first half of the period is 1271.1, while the sum-total of surpluses over the second half is 5235.5 This indicates a net direct outflow of 3964.4. Nevertheless, the invitation of the 1271.1 to cover the total deficit, still leaves an outstanding indebtedness of 12081.9 in year 25. Some other interesting features may be observed:

Table (8) Income and Expenditure Ratios (%), First Version

	0*	5	10	15	20	25
K_e/K_t	35.1	44.1	50.5	52.2	51.4	48.4
V_e/V	0	10.7	25.3	36.6	43.3	46.1
V /U	61.7	60.9	60.7	61.0	61.6	62.3
V_n/U_n	61.7	58.2	53.6	49.8	47.6	47.2
X /Y	15.7	17.1	22.5	29.4	34.7	39.3
M /Y	20.8	23.5	25.4	26.4	27.3	28.0
C /Y	89.0	82.9	76.3	70.4	66.0	62.7
C/Y_m	89.0	87.0	85.9	84.2	82.0	79.2
I /Y	14.7	22.1	25.2	25.2	25.2	24.6
I /Y_m	14.7	23.2	28.3	30.0	31.3	31.1
C_h/C	69.5	69.4	68.9	68.5	68.1	67.6

Table (7) - Summary of the First Version.

	0	0'	5	10	15	20	25
Y_f	1193.8	1368.9	1791.3	2495.3	3508.1	4910.1	6784.3
T_i	155.9	182.9	275.7	422.3	627.2	918.8	1317.4
U	1000.0	1144.3	1511.1	2126.0	3018.7	4254.0	5906.3
W	571.0	662.6	870.4	1205.1	1666.9	2289.2	3103.4
V_d	622.8	706.3	822.8	964.4	1166.7	1485.0	1985.7
V_e	-	-	98.1	325.8	674.5	1135.9	1695.2
Y_g	239.6	279.9	387.5	546.1	775.0	1120.1	1628.9
Y_h	922.3	1057.0	1316.8	1709.5	2237.5	2946.7	3872.9
G	370.0	429.2	585.8	827.9	1180.1	1698.8	2443.8
H	854.0	978.7	1216.8	1574.8	2055.0	2700.3	3544.1
C_g	363.1	420.8	524.9	691.8	916.8	1229.1	1644.8
C_h	838.6	960.4	1188.3	1533.5	1996.4	2618.4	3431.9
S_b	125.7	143.9	166.3	189.1	225.7	293.9	418.6
S_n	148.0	170.6	255.7	366.5	847.6	845.5	1329.8
I	128.8	228.8	455.9	734.5	1040.5	1467.7	1995.1
F	0	-80.3	-131.5	-83.6	122.9	430.9	914.9
X	243.2	243.2	353.6	657.4	1216.5	2024.0	3185.5
K_{e-1}	0	0	653.9	2172.3	4497.4	7573.1	11301.6
K_e	0	80.3	883.5	2581.7	5049.0	8278.1	12081.9
K_t	—	228.8	2002.1	5113.3	9663.8	16094.9	24976.9
Y_m	1349.7	1551.8	1968.9	2591.8	3460.8	4693.0	6406.5

to earn an income (net of taxes) equal to 15% of its value. This ratio is justified on the assumption that the investor expects a gross income composed of some 7 to 8% interest and a similar amount as a share in depreciation calculated on the basis of 15-years life of capital. It may be obseved that if this is taken to represent the share of non-wage income, it may be estimated that value added is less than 25% of the value of capital. This is derived from consideration of the sectors to which foreign capital may be attracted. In such sectors, non-wage incomes are about two-thirds of value added. This implies a capital/output ratios of 4:1 or more.

If this income is repatriated, an equivalent sum is assumed to be imported (without any additional cost). To this we add the deficit of the foreign balance or subtract the surplus, to obtain the net flow of capital. A positive balance means a new net flow to be added to the previous cumulation. A negative balance is an outflow to be subtracted. This follows the definition of K_e with the coefficient = 0.15. And the process is carried up to year 25, as shown in Table (7)

V THE FIRST VERSION:

As mentioned before the first version starts by adjusting the base year 0 to 0* as indicated in part III/2. This initiates a foreign deficit of 80.3, considered as the initial capital inflow. For each subsequent year, we determine sectoral growth rates, and estimate the investments needed using the sectoral capital/output ratios. Until a rate of growth of 7% (chesen as target) is reached we keep construction growing at 15%. The other sectors are then adjusted proportionately to equate the needed investment to that realized in the praceding year.

From the adjusted base year, we have calculated a new set of technical coefficients (Table 6). These coefficients were assumed to remain constant for the rest of the period. They are assumed to represent the performance under full-capacity utilliza-tion. The derived incomes and outputs determine the sectoral final demand, thus leading to exportable surpluses. These were used as a guide for determining further sectoral growth rates.

The flow of capital follows the following pattern. Each year foreign capital cumulated up to the preceding year is assumed

(c) Income redistribution

$$Y = G + H + S_b + V_e$$

(d) Expenditure:

$$Y = C + S_n + S_e$$

If E_d represents domestic expenditure:

$$E_d = C + J + I \qquad (49)$$

then:

$$Y = E_d + F$$

which is the familiar income - expenditure equation:

$$Y = C + J + I + X - M$$

or,

$$Y = E_t - M$$

Where,

$$E_t = C + J + I + X \qquad (50)$$

is total expenditure. These equations indicate the effects of incomes due to foreign capital on income distribution, redistribution and national and domestic expenditures.

ANNEXES

Annex I

List of Variables

Equation	Symbol	Variable
5	B_g	Inputs (goods & services) in public consumption
30	C	Total final consumption
28	C_g	Public consumption
29	C_h	Honsehold consumption
49	E_d	Expenditure on final domestic uses
50	E_t	Total expenditure (domestic plus exports)
45	F	Balance of external operations (goods & services)
25	G	Government disposable income
26	H	Honsehold disposable income
39	I	Fixed capital formation (gross)
38	J	Change in Stocks
47	K_e	Outstanding foreign capital
48	K_{eo}	Initial foreign capital inflow
51	K_t	Cumulation of fixed capital formation
44	M	Imports of goods and services
41	M_c	Imports of consumers goods
40	M_r	Imports of intermediate goods
43	M_s	Imports of services
42	M_v	Imports of investment goods
33	S	Total domestic (gross) savings

Equation	Symbol	Variable
27	S_b	Savings in the business sector
34	S_e	Savings of foreign - capital owners
31	S_g	Savings in the government sector
32	S_h	Savings in the households sector
33	S_n	Savings in the national sectors
23	T_b	Direct Taxes on business (net)
9	T_c	Import duties on imports of consumers goods
24	T_d	Total direct taxes
22	T_h	Direct taxes on individuals (net)
6	T_i	Total indirect taxes (net)
11	T_m	Total import duties
7	T_p	Indirect taxes on domestic production (net)
8	T_r	Import duties on intermediate goods
10	T_v	Import duties on investment goods
2	U	Value added at factor cost in business sector
14	V	Total non-wage incomes
17	V_b	Retained gross revenue, business sector
19	V_e	Gross (non-wage) income to foreginers (net of tax)
15	V_g	Share of government in public sector surplus
16	V_h	Non-wage income distributed to households
18	V_n	Share of nationals in non-wage incomes
13	W	Total wage bill (before tax)
12	W_b	Wages generated in the business sector

Equation	Symbol	Variable
4	W_g	Wages generated in public consumption
46	X	Total exports of goods and services
1	Y	Gross domestic product at market prices
3	Y_f	Gross domestic product at factor cost
20	Y_g	Government income from indirect taxes and surpluses
21	Y_h	Gross income distributed to households
37	Y_m	Gross national product at market prices
36	Y_n	Gross national product at factor cost.

Annex II

Changes in Base Year Values

Table (II-1) Direct and Indirect Effects of Original Investment

Sector	Components of Investment			Total Effects		Input Requirements			Value Added F.C.
	Total	Imports	Domestic	Intermediate	Production	Domestic	Imports goods	Imports services	
Agriculture	0.1	0.1	-	2.7	2.7	0.7	0.1	-	1.9
Extractive	-	-	-	1.8	1.8	0.2	0.1	-	1.1
Agro-Industry	0.9	0.2	0.7	4.7	5.4	3.5	0.7	-	1.0
Non-Agro.	51.6	30.7	20.9	27.6	48.5	19.8	9.2	-	19.0
Energy	-	-	-	4.9	4.9	0.7	0.7	-	2.0
Construction	66.2	-	66.2	0.4	66.6	29.8	6.1	-	30.7
Transportation	-	-	-	3.2	3.2	0.8	0.3	0.2	1.9
Trade	10.0	-	10.0	8.9	18.9	2.1	0.5	2.2	14.1
Services	-	-	-	3.9	3.9	0.5	0.2	-	3.2
Total	128.8	31.0	97.8	58.1	155.9	58.1	17.9	2.4	74.9
Indirect Taxes		6.7			2.6		2.3		

Distribution of value Added:

W = 35.4 ; V_g = 11.3 ; V_h = 10.6 ; V_b = 17.6 ;

Notes to Tables (II)

(1) Direct demand is broken down in first 3 columns. In Table (1) total demand (investment) = original value (128.8). In the other tables it is 1000 as a standard.
(2) Total direct and indirect effects are given in the following 2 columns. Production = domestic components + intermediate demand; for each sector.
(3) Total production is broken down into inputs and value added at factor cost. Any difference in line totals represents indirect taxes, whose sum is given below the production columns. Import duties are calculated per type of import; totals given below respective columns. Sum-total inputs=Sum-Total intermediate demand.
(4) Value added is broken down by type per sector; totals are given at bottom of table.

Table (II - 2) Direct and Indirect Effects of Adjusted Investment

Sectors	Components of Investment			Total Effects		Iuput Requirements			Value Added
	Total	Imports	Domestic	Intermediate	Production	Domestic	Imports Goods	Imports Services	F.C.
Agriculture	24.0	8.0	16.0	25.8	41.8	10.7	1.5	-	29.6
Extractive	-	-	-	12.4	12.4	1.6	0.7	-	7.6
Agro-Industries	30.0	19.0	11.0	34.2	45.2	29.4	6.2	-	8.3
Non-Agro	381.0	276.0	105.0	182.7	287.7	117.6	54.4	-	112.4
Energy	-	-	-	31.0	31.0	4.3	4.4	-	13.0
Construction	467.0	-	467.0	2.7	469.7	210.0	43.2	-	216.5
Transport.	-	-	-	23.5	23.5	5.9	2.2	1.0	14.4
Trade	98.0	-	98.0	61.5	159.5	17.6	4.5	18.7	118.7
Services	-	-	-	27.0	27.0	3.7	1.5	-	21.8
Total at M.P.	1000.0	303.0	697.0	400.8	1097.8	400.8	118.6	19.7	542.3
Indirect Taxes		60.2			16.4		14.9		
W= 259.1;	V_g= 76.6;				V_h= 84.9;			V_b= 121.7	

Table (II - 3) Direct and Indirect Effects of Changes in Stocks

Sectors	Components of Changes in Stocks			Total Effects		Iuput Requirements			Value Added
	Total	Imports	Domestic	Intermediate	Production	Domestic	Imports Goods	Imports Services	F.C.
Agriculture	40.0	-	40.0	306	346.2	88.7	12.3	-	245.2
Extractive	25.0	-	25.0	11.6	36.6	4.8	2.1	-	22.5
Agro-Industries	500.0	-	500.0	142.2	642.2	417.4	88.0	-	118.6
Non-Agro	400.0	-	400.0	157.0	557.0	227.7	105.2	-	217.8
Energy	35.0	-	35.0	57.2	92.2	12.8	13.1	-	38.7
Construction	-	-	-	4.6	4.6	2.1	0.4	-	2.1
Transport.	-	-	-	27.6	27.6	6.9	2.6	1.2	16.9
Trade	-	-	-	42.3	42.3	4.7	1.2	4.9	31.5
Services	-	-	-	19.0	19.0	2.6	1.0	-	15.4
Total at M.P	1000.0	-	1000.0	767.7	1767.7	767.7	225.9	6.1	708.7
Indirect Taxes		-			59.3		55.9		
W= 232.1;		V_g= 93.6;			V_h= 211.5;			V_b= 171.5	

Table (II-4) Direct and Indirect Effects of Marginal Housebold Consumption

Sectors	Components of Marginal Consumption			Total Effects		Iuput Requirements			Value Added F.C.
	Total	Imports	Domestic	Intermediate	Production	Domestic	Imports goods	Services	
Agriculture	153.0	2.0	151.0	304.5	455.5	116.7	16.2	-	322.6
Extractive	2.0	-	2.0	5.3	7.3	1.0	0.4	-	4.5
Agro-Industris	484.0	26.1	457.9	128.2	586.1	380.9	80.3	-	108.2
Non-Agro	77.0	3.1	73.9	67.9	141.8	57.9	26.8	-	55.5
Energy	38.0	0.6	37.4	31.4	68.8	9.6	9.8	-	28.8
Construction	-	-	-	5.9	5.9	2.6	0.6	-	2.7
Transport.	62.0	-	62.0	26.1	88.1	22.1	8.2	3.8	54.0
Trade	82.0	-	82.0	32.7	114.7	12.6	3.3	13.4	85.4
Services	102.0	0.4	101.6	17.5	119.1	16.1	6.6	-	96.4
Total at M.P.	1000.0	32.2	967.8	619.5	1587.3	619.5	152.2	17.2	758.1
Indirect Taxes		7.1			40.3		39.6		
W= 283.5;		V_g= 55.0;			V_h = 284.8;			V_b = 134.8	

Table (II - 5) Direct and Indirect Effects of Public Consumption

Sectors	Components of Public Consumption			Total Effects		Iuput Requirements			Value Added F.C.
	Total	Imports	Domestic	Intermediate	Production	Domestic	Imports goods	Services	
Agriculture	8.3	-	8.3	35.1	43.4	11.1	1.6	-	30.7
Extractive	-	-	-	4.6	4.6	0.6	0.3	-	2.8
Agro-Industries	79.9	31.4	48.5	22.0	70.5	45.8	9.7	-	13.0
Non-Agro	97.5	61.7	35.8	51.7	87.5	35.8	16.5	-	34.2
Energy	44.6	17.6	27.0	13.5	40.5	5.6	5.8	-	17.0
Construction	97.2	-	97.2	2.5	99.7	44.6	9.2	-	45.9
Transport.	30.3	-	30.3	9.5	39.8	10.0	3.7	1.7	24.4
Trade	17.3	-	17.3	18.1	35.4	3.9	1.0	4.1	26.4
Services	91.1	34.4	56.7	9.3	66.0	8.9	3.7	-	53.4
Total at M.P.	466.2	145.1	321.1	166.3	487.4	166.3	51.5	5.8	247.8
Indirect Taxes		26.7			16.0		8.8		
W = 106.1 + (533.8);		V_g =27.0;			V_h = 64.4,			V_b = 50.3	

Table (II - 6) - Direct and Indirect Effects of Second Round.

	Fixed Capital		Stock Change		Household Cons.		Public Cons.	
	Direct	Indirect	Direct	Indirect	Direct	Indirect	Direct	Indirect
Agriculture.	6.0	2.3	40.0	75.9	50.3	30.4	2.5	3.5
Extractive	-	4.4	25.0	4.5	1.0	1.3	-	1.6
Agro-Indus.	4.0	9.1	500.0	47.0	183.2	18.2	19.4	4.4
Non-Agro.	32.0	53.0	400.0	49.1	24.4	9.7	10.7	13.8
Energy	-	11.2	35.0	35.5	32.4	11.1	23.0	5.9
Construction	467.0	1.6	-	3.6	-	4.2	97.2	2.0
Transp.	-	17.4	-	21.8	62.0	14.9	30.3	6.8
Trade	98.0	54.1	-	33.4	82.0	12.8	17.3	14.2
Services	-	23.2	-	14.9	101.6	9.0	56.7	7.5
Domestic Inputs	607.0	176.3	1000.0	285.7	536.9	111.6	257.1	59.7
Agriculture	18.0	5.9	-	206.1	102.7	80.7	5.8	9.3
Extractive	-	7.9	-	14.6	1.0	5.5	-	4.8
Agro-Indus.	26.0	29.0	-	99.4	300.8	39.5	60.5	12.3
Non-Agro.	349.0	126.8	-	150.9	52.6	32.9	86.8	36.0
Energy	-	5.7	-	18.3	5.6	7.8	21.6	4.3
Transp.	-	0.7	-	0.9	-	3.3	-	1.6
Services	-	17.8	-	3.9	0.4	11.1	34.4	3.7
Imports:								
Goods	306.7	136.3	-	296.6	351.7	95.8	134.0	48.6
Services	-	18.5	-	4.8	0.4	14.4	34.4	5.3
Duties	86.3	39.0	-	192.7	111.0	70.6	40.7	18.1
Wages: W	-	216.7	-	153.2	-	144.9	533.8	82.7
Non-Wages: V_g	-	51.7	-	75.7	-	27.1	-	17.3
V_h	-	57.1	-	104.8	-	105.5	-	42.7
V_b	-	82.1	-	124.6	-	59.0	-	32.5
Indirect Taxs	-	5.6	-	47.6	-	19.6	-	9.9
Production	1000.0	783.3	1000.0	1285.7	1000.0	648.5	1000.0	316.8

Annex III

The Basic Model

The model decribed in Part IV of the text includes besides definitional and balance equations, a number of behaviouristic, institutional and technical equations, as follows:

(3) $Y_f = Y_{f-1} + \frac{1}{k} I_{-1}$

The capital/output ratio k is put equal to 4.1667 unless otherwise stated.

(4) $W_g = 0.5338 \quad C_g$

(7) $T_p = 0.1098 \quad U + t_{po}$

(8) $T_r = 0.0830 \quad U + 0.0271 \quad C_g + t_{ro}$

(9) $T_c = 0.0124 \quad U + 0.0115 \quad C_g - 0.0[illegible]3 \quad a.K_{e-1} + t_{ro}$

(10) $T_v = 0.0692 \quad I + t_{vo}$

(12) $W_b = 0.3753 \quad U + w_o$

(15) $V_g = 0.1637 \quad U - a.K_{e-1} + V_{go}$

(16) $V_h = 0.1975 \quad U - a.K_{e-1} + V_{ho}$

(19) $V_e = 3 \; a.K_{e-1}$

(22) $T_h = 0.0741\ (Y_h + a.\ K_{e-1})$

(23) $T_b = 0.3307\ (V_b + a.\ K_{e-1})$

(28) $C_g = (1+g)\ C_{g-1}$ $\qquad (g = \frac{6}{7} r \leqslant .06)$

(29) $C_h = 0.9640\ H + c_o$

(38) $J = 0.0142\ Y$

(39) $I = (1+ i)\ I_{-1}$ $\qquad$ (i predetermined)

or equal to savings less changes in stocks

(40) $M_r = 0.2248\ U + 0.0856\ C_g + m_{ro}$

(41) $M_c = 0.0775\ C_h + m_{co}$

(42) $M_v = 0.2448\ I + m_{vo}$

(43) $M_s = 0.0220\ U + 0.0344\ C_g + 0.0004\ C_h + m_{so}$

The constant terms are to be estimated from the results of the first version. We have left the rate of return on foreign capital to be determined in each case. In the no-foreign - capital version we put $a = 0$. All other equations of the model can be estimated by substituting the above parameter values.

Annex IV
Model I

1 - The G.D.P.

(1) $Y = 1.2052\ U + 0.5724\ C_g + 0.0692\ I - 0.0012\ K_{e-1} - 83.984$

(2) $U = Y_f - 0.5338\ C_g$

(3) $Y_f = Y_{f-1} + 0.24\ I_{-1}$

(4) $W_g = 0.5338\ C_g$

(5) $B_g = 0.4662\ C_g$

(6) $T_i = 0.2052\ U + 0.0386\ C_g + 0.0692\ I - 0.0012\ K_{e-1} - 83.984$

(7) $T_p = 0.1098\ U - 60.244$

(8) $T_r = 0.0830\ U + 0.0271\ C_g - 12.681$

(9) $T_c = 0.0124\ U + 0.0115\ C_g - 0.0012\ K_{e-1} - 9.829$

(10) $T_v = 0.0692\ I - 1.233$

(11) $T_m = 0.0954\ U + 0.0386\ C_g + 0.0692\ I - 0.0012\ K_{e-1} - 83.984$

2 - Distribution

(12) $W_b = 0.3753\ U + 8.544$

(13) $W = 0.3753\ U + 0.5338\ C_g + 8.544$

(14) $V = 0.6247\ U - 8.544$

(15) $V_g = 0.1637\ U - 0.05\ K_{e-1} + 90.322$

(16) $V_h = 0.1975\ U - 0.05\ K_{e-1} - 168.401$

(17) $V_b = 0.2635\ U - 0.05\ K_{e-1} - 86.623$

(18) $V_n = 0.6247\ U - 0.15\ K_{e-1} - 8.544$

(19) $V_e = 0.15\ K_{e-1}$

(20) $Y_g = 0.3689\ U + 0.0386\ C_g + 0.0692\ I - 0.0512\ K_{e-1} - 174.306$

(21) $Y_h = 0.5728\ U + 0.5338\ C_g - 0.05\ K_{e-1} + 176.922$

3 - **Redistribution:**

(22) $T_h = 0.0424\ U + 0.0396\ C_g + 13.118$

(23) $T_b = 0.0871\ U - 28.669$

(24) $T_d = 0.1295\ U + 0.0396\ C_g - 15.551$

(25) $G = 0.4984\ U + 0.0782\ C_g + 0.0692\ I - 0.0512\ K_{e-1} - 189.857$

(26) $H = 0.5304\ U + 0.4942\ C_g - 0.05\ K_{e-1} + 163.804$

(27) $S_b = 0.1764\ U - 0.05\ K_{e-1} - 57.954$

4 - **Expenditure**

(28) $C_g = \left(1 + \frac{6}{7}\ r\right) C_{g-1} \qquad (r \leqslant 0.07)$

(29) $C_h = 0.5113\ U + 0.4764\ C_g - 0.0482\ K_{e-1} + 174.850$

(30) $C = 0.5113\ U + 1.4764\ C_g - 0.0482\ K_{e-1} + 174.850$

(31) $S_g = 0.4984\ U - 0.9218\ C_g - 0.0692\ I - 0.0512\ K_{e-1} - 189.857$

(32) $S_h = 0.0191\ U + 0.0178\ C_g - 0.0018\ K_{e-1} - 11.046$

(33) $S_n = 0.6939\ U - 0.9040\ C_g + 0.0692\ I - 0.1030\ K_{e-1} - 258.857$

(34) $S_e = 0.15\ K_{e-1}$

(35) $S = 0.6939\ U - 0.9040\ C_g + 0.0692\ I + 0.0470 K_{e-1} - 258.857$

(36) $Y_n = U + 0.5338\ C_g - 0.15\ K_{e-1}$

(37) $Y_m = 1.2052\ U + 0.5724\ C_g + 0.0692\ I - 0.1512\ K_{e-1} - 83.984$

(38) $J = 0.0171\ U + 0.0081\ C_g + 0.0010\ I - 1.105$

(39) $I = (1 + i)\ I_{-1}$ (where i starts at 15% and decreases to 7%)

5 - The Rest of the world

(40) $M_r = 0.2248\ U + 0.0856\ C_g - 96.959$

(41) $M_c = 0.0396\ U + 0.0369\ C_g - 0.0037\ K_{e-1} - 30.442$

(42) $M_v = 0.2448\ I + 1.490$

(43) $M_s = 0.0222\ U + 0.0346\ C_g - 0.663$

(44) $M = 0.2866\ U + 0.1571\ C_g + 0.2448\ I - 0.0037\ K_{e-1} - 126.574$

(45) $F = 0.6768\ U - 0.9121\ C_g - 0.9318\ I + 0.0470\ K_{e-1} - 257.752$

(46) $X = 0.9634\ U - 0.7550\ C_g - 0.6870\ I + 0.0433\ K_{e-1} - 384.326$

(47) $K_e = -0.6768\ U + 0.9121\ C_g + 0.9318\ I + 1.1030\ K_{e-1} + 257.752$

(48) $K_{eo} = 80.3$

(49) $E_d = 0.5284\ U + 1.4845\ C_g + 1.0010\ I - 0.0482\ K_{e-1} + 173.745$

(50) $E_t = 1.4918\ U + 0.7295\ C_g + 0.3140\ I - 0.0049\ K_{e-1} - 210.581$

(51) $K_t = \sum_{j=0}^{t} I_j$

Annex V

Model II

In this model, self - reliance is assumed: Hence we do not need equatieus relating to forign capital and its yield, while national and domestic revenues are the same. Further the foreign balance is always zero, and the rate of growth of income changes according to the change in the rate of investment.

(1) $Y = 1.2555\ U + 0.5047\ C_g - 89.057$

(2) $U = Y_f - 0.5338\ C_g$

(3) $Y_f = Y_{f-1} + 0.24\ I_{-I}$ (apart fram first five years)

(4) $W_g = 0.5338\ C_g$

(5) $B_g = 0.4662\ C_g$

(6) $T_i = 0.2555\ U - 0.0291\ C_g - 89.034$

(7) $T_p = 0.1098\ U - 50.8$

(8) $T_r = 0.0830\ U + 0.0271\ C_g - 38.234$

(9) $T_c = 0.0124\ U + 0.0115\ C_g - 19.018$

(10) $T_v = 0.0503\ U - 0.0677\ C_g - 19.018$

(11) $T_m = 0.1457\ U - 0.0291\ C_g - 38.234$

---

(12) $W_b = 0.3753\ U + 1.9$

(13) $W = 0.3753\ U + 0.5338\ C_g + 1.877$

(14) $V = 0.6247\ U - 1.9$

(15) $V_g = 0.1637\ U - 80.0$

(16) $W_h = 0.1975\ U + 153.8$

(17) $V_b = 0.2635\ U + 75.7$

(20) $Y_g = 0.4192\ U - 0.0291\ C_g - 169.034$

(21) $Y_h = 0.5728\ U + 0.5338\ C_g + 155.677$

---

(22) $T_h = 0.0424\ U + 0.0396\ C_g + 11.521$

(23) $T_h = 0.0871\ U - 25.0$

(24) $T_d = 0.1295\ U + 0.0396\ C_g - 13.479$

(25) $G = 0.5487\ U + 0.0105\ C_g - 182.513$

(26) $H = 0.5304\ U + 0.4942\ C_g + 144.156$

(27) $S_b = 0.1764\ U + 50.7$

---

(28) $C_g = (1 + \frac{6}{7} r).\ C_{g-1}$ $\quad (r \leqslant 0.7)$

(29) $C_h = 0.5113\ U + 0.4764\ C_g + 154.319$

(30) $C = 0.5113\ U + 1.4764\ C_g + 154.319$

(31) $S_g = 0.5487\ U - 0.9895\ C_g - 182.513$

(32) $S_h = 0.0191\ U + 0.0178\ C_g - 10.163$

(35) $S = 0.7442\ U - 0.9717\ C_g - 243.376$

(38) $J = 0.0178\ U + 0.0072\ C_g - 1.214$

(39) $I = 0.7263\ U - 0.9789\ C_g - 242.061$

---

(40) $M_r = 0.2248\ U + 0.0856\ C_g - 98.481$

(41) $M_c = 0.0396\ U + 0.0369\ C_g - 32.098$

(42) $M_v = 0.1778\ U - 0.2396\ C_g - 60.301$

(43) $M_s = 0.0222\ U + 0.0346\ C_g - 0.363$

(44) $M = 0.4644\ U - 0.0825\ C_g - 191.244$

(45) $F = 0$

(46) $X = 0.4644\ U - 0.0825\ C_g - 191.244$

Annex VI
Model III

This model is the same as model I except for assumung a marginal propensity to consume in the Gevernment sector equal to 0.7583.

(1) $Y = 1.1817\ Y_f + 0.0659\ I + 0.0012\ K_{e-1} - 80.907$

(2) $U = 0.8234\ Y_f - 0.0245\ I + 0.0181\ K_{e-1} + 22.753$

(3) $Y_f = Y_{f-1} + 0.24\ I_{-1}$

(4) $W_g = 0.1766\ Y_f + 0.0245\ I - 0.0181\ K_{e-1} - 22.753$

(5) $B_g = 0.1542\ Y_f + 0.0214\ I - 0.0159\ K_{e-1} - 19.781$

(6)) $T_i = 0.1817\ Y_f + 0.0659\ I + 0.0012\ K_{e-1} - 80.907$

(7) $T_p = 0.0904\ Y_f - 0.0027\ I + 0.0020\ K_{e-1} - 57.731$

(8) $T_r = 0.0773\ Y_f - 0.0008\ I + 0.0006\ K_{e-1} - 11.933$

(9) $T_c = 0.0140\ Y_f + 0.0002\ I - 0.0014\ K_{e-1} - 10.010$

(10) $T_v = 0.0692\ I - 1.233$

(11) $T_m = 0.0913\ Y_f + 0.0686\ I - 0.0008\ K_{e-1} - 23.176$

---

(12) $W_b = 0.3090\ Y_f - 0.0092\ I + 0.0068\ K_{e-1} + 17.115$

(13) $W = 0.4856\ Y_f + 0.0153\ I - 0.0113\ K_{e-1} - 5.638$

(14) $V = 0.5144\ Y_f - 0.0153\ I + 0.0113\ K_{e-1} + 5.638$

(15) $V_g = 0.1348\ Y_f - 0.0040\ I - 0.0471\ K_{e-1} - 86.613$

(16) $V_h = 0.1626\ Y_f - 0.0048\ I - 0.0464\ K_{e-1} + 172.915$

(17) $V_b = 0.2170\ Y_f - 0.0065\ I - 0.0452\ K_{e-1} - 80.664$

(18) $V_n = 0.5144\ Y_f - 0.0153\ I - 0.1387\ K_{e-1} + 5.638$

(19) $V_e = 0.15\ K_{e-1}$

(20) $Y_g = 0.3165\ Y_f + 0.0619\ I - 0.0459\ K_{e-1} - 167.520$

(21) $Y_h = 0.6482\ Y_f - 0.0105\ I - 0.0577\ K_{e-1} + 167.277$

---

(22) $T_h = 0.\ .80\ Y_f + 0.0009\ I - 0.0005\ K_{e-1} + 12.387$

(23) $T_b = 0.0718\ Y_f - 0.0022\ I + 0.0016\ K_{e-1} - 26.784$

(24) $T_d = .1198\ Y_f - 0.0013\ I + 0.0011\ K_{e-1} - 14.397$

(25) $G = 0.4363\ Y_f + 0.0606\ I - 0.0448\ K_{e-1} - 181.917$

(26) $H = 0.6002\ Y_f + 0.0096\ I - 0.0572\ K_{e-1} + 154.890$

(27) $S_b = 0.1452\ Y_f - 0.0043\ I - 0.0468\ K_{e-1} - 53.880$

---

(28) $C_g = 0.3308\ Y_f + 0.0459\ I - 0.0340\ K_{e-1} - 42.534$

(29) $C_h = 0.5786\ Y_f + 0.0093\ I - 0.0551\ K_{e-1} + 166.227$

(30) $C = 0.9094\ Y_f + 0.0552\ I - 0.0891\ K_{e-1} + 123.693$

(31) $S_g = 0.1055\ Y_f + 0.014?\ I - 0.0108\ K_{e-1} - 139.382$

(32) $S_h = 0.0216\ Y_f + 0.0003\ I - 0.0021\ K_{e-1} - 11.337$

(33) $S_n = 0.2723\ Y_f + 0.0107\ I - 0.0597\ K_{e-1} - 204.600$

(34) $S_e = 0.15\ K_{e-1}$

(35) $S = 0.2723\ Y_f + 0.0107\ I + 0.0903\ K_{e-1} - 204.600$

(36) $Y_n = Y_f - 0.15\ K_{e-1}$

(37) $Y_m = 1.1817\ Y_f + 0.0659\ I - 0.1488\ K_{e-1} - 80.907$

(38) $J = 0.0167\ Y_f + 0.0009\ I - 0.967$

(39) $I = (1 + 1)\ I_{-1}$

---

(40) $M_r = 0.2134\ Y_f - 0.0016\ I + 0.0012\ K_{e-1} - 95.457$

(41) $M_c = 0.0448\ Y_f + 0.0007\ I - 0.0043\ K_{e-1} - 31.087$

(42) $M_v = 0.2448\ I + 1.490$

(43) $M_s = 0.0297\ Y_f + 0.0010\ I - 0.0008\ K_{e-1} - 1.585$

(44) $M = 0.2879 Y_f + 0.2449\ I - 0.0039\ K_{e-1} - 126.639$

(45) $F = 0.2556\ Y_f + 0.9902\ I - 0.0903\ K_{e-1} - 203.633$

(46) $X = 0.5435\ Y_f - 0.7453\ I + 0.0864\ K_{e-1} - 330.272$

(47) $K_e = -0.2556\ Y_f + 0.9902\ I + 1.0597\ K_{e-1} + 203.633$

(48) $K_{eo} = 80.3$

(49) $E_d = 0.9261\ Y_f + 1.0561\ I - 0.0891\ K_{e-1} + 122.726$

(50) $E_t = 1.4696\ Y_f + 0.3108\ I - 0.0027\ K_{e-1} - 207.546$

- End -

ويترك بعد ذلك فائضا في الميزان الخارجي للدولة بعد مواجهة اى توسع مقبول في الطلب المحلى ، فان الدولة تجد حافزا قويا لقبول هذا النوع من الاسهام الخارجي . غير أنه عندما ينكمش هذا الفائض تصبح الدولة في وضع اكثر حساسية لان أى قرار من المستثمر الاجنبى بتغيير مستوى الانتاج (حتى ولو امكن تبريره اقتصاديا) يضع الدولة في موقف حرج بالنسبة لتوازناتها الداخلية والخارجية ، وتبرز نواحى التعارض بين المصالح الاقتصادية القومية والاجنبية . وكل هذا يشير الى اهمية اجراء دراسة شاملة لكافة جوانب استخدام رأس المال الاجنبى والظروف الموضوعية التى تجعل منه عنصرا ايجابيا لا سلبيا في التنمية بعيدة المدى .

هذه الخلاصة تبرز اهم النتائج التى توصلت اليها الدراسة المرفقة ، والتى أقتضى استخدامها لنماذج رياضية متوسطة الحجم ان نعرضها باللغة الانجليزية ، ولعل في هذا مايفسح مجالا اوسع لمناقشة نتائجها ، على النحو الذى حدث بالنسبة للدراسة السابقة حول القروض ، هذا وسوف يضمن مجلد ابحاث المؤتمر ملخص واف باللغة العربية ، حتى تكون عناصر البحث متاحة لكافة المهتمين بشئونه .

فان اقصى مايمكن تدبيره كفائض للسداد لايتجاوز على أحسن تقدير ٢٥٪ من قيمة الصادرات ، وبالتالى يعتبر شرط امكان سداد الالتزامات أن تكون نسبة الالتزامات الاجنبية الى الناتج المحلى اقل من ربع نسبة الصادرات الى الناتج مقسومة على معدل العائد . فاذا كان معدل العائد ١٥٪ وأقصى نسبة للتصدير هى ٣٦٪ ربعها ٩٪ فان نسبة الالتزامات الى الدخل عند هذه النسبة الاخيرة يجب الا تتجاوز ٩ ÷ ١٥ = ٦ر٠ . فاذا كان معدل العائد ٧ر٥٪ فقط فان النسبة لايجب ان تتجاوز ٢ر١ . وبالتالى اذا كان معامل رأس المال حوالى ٤ فان هذا يعنى ان اسهام رأس المال الاجنبى لن يتجاوز ١٥٪ أو ٣٠٪ على الترتيب من الناتج المحلى النهائى . ويعتبر هذا حدا أعلى يتجاهل كافة الضغوط الاخرى التى صادفناها عند حساب آثار الالتزامات دون التقيد بواقعيتها .

٢١ـ الخلاصة ان مساهمة رأس المال الاجنبى على أهميتها يجب أن تحدد فى ضوء دراسة وافية للحاضر والمستقبل ، تأخذ فى اعتبارها العوامل الاخرى التى لم نشأ أن نتعرض لها هنا ، مثل الاثر على النظام الاقتصادى فى مجموعة ، بل والاوضاع الاجتماعية والسياسية . وعالم تصحبها سياسة ادخارية تصديرية جادة فسوف يفوق ضررها نفعها ، بل قد يدرك رأس المال الاجنبى هذه الحقيقة فيقلع عن الدولة تاركا اقتصادها أفقر مما كان . وقد يكون من المفيد ان نعيد الى الاذهان تجارب الدول التى التجأت الى رأس المال الاجنبى فى استغلال مواردها المعدنية وفى مقدمتها البترول ، وارتضت قاعدة المناصفة فى العائد ، الذى يكون معظمه فى شكل عوائد حقوق ملكية . فطالما ان العائد الكلى مرتفع يقفز بالناتج المحلى والقومى قفزة كبيرة تسمح بارتفاع التصدير الى الحد الذى يغطى الخروج المباشر لعائد رأس المال الاجنبى

والاستثمار وفي نفس الوقت يؤدي الى مستلزمات مستوردة ، خاصة اذا تميز هذا الاستهلاك باتجاهه الى الكماليات.

١٨- وحتى اذا امكن تحقيق معدلات التصدير المرتفعة دون تأثر نسب التبادل فان الحسابات تظهر ان مايرده المجتمع يفوق اضعاف مايحصل عليه ، ويمضي الجيل التالي في تحمل الاعباء . وحتى اذا حسبنا القيمة الحالية لما يدخل الاقتصاد ومايخرج منه مستقبلا بسعر خصم مناسب فان الفرق يظل كبيرا بعدة اضعاف . فاذا كان مؤدى رأس المال الاجنبي هو زيادة الدخل والاستهلاك للسنوات الاولى ، فان معنى هذا أن المجتمع يعطي وزنا ضخما لاستهلاكه الحالي على حساب ماتناله الاجيال التالية . وطالما ان معدل العائد الذي يطلبه رأس المال الاجنبي اكبر من سعر الخصم الذي يقبله المجتمع ، فان الناتج النهائي مقاسا بالقيم الحالية هو خسارة صافية .

١٩- وبعبارة اخرى فلو أن المجتمع قرر أن يواجه التنمية معتمدا على موارده الذاتية فسوف يحصل على دخل واستهلاك اكثر تواضعا في البداية ولكنه في أواخر الفترة يتمكن من الوصول الى مستويات اعلى تستمر بعد ذلك محققة نموا أفضل وأسرع . وقد لايكون من السهل سياسيا اقناع الجيل الحالي بمثل هذا الاوضاع ، غير انه من غير المقبول اجتماعيا ان يتصور الجيل الحالي ان مايحصل عليه يمكن رده مستقبلا دون أن يتأثر الاقتصاد الذي يكون قد نما ، وذلك توهما بأن النمو سيكون أسرع من نمو العبء .

٢٠- من المتوقع أن يقف نمو الصادرات عند مستوى مرتفع لنسبتها الى الناتج المحلي ، ومن المفروض طبعا أن تصل الواردات الى نسبة أدنى لايتصور انها تقل عن نسبة الصادرات بأكثر من ربع قيمة هذه الاخيرة . وبعبارة أخرى

١٦ - وبالرغم من افتراض معاملات ثابتة للاستيراد ، فان التغير فى هيكل الانتاج لصالح الصناعات غير الزراعية وفى هيكل الطلب لصالح الاستثمار والتصدير يؤدى الى تزايد الميل المتوسط للاستيراد مما يعنى أن الميل الحدى يفوق الواحد الصحيح . ويشير النموذج الاول الى أنه نظرا لمحدودية الامكانيات الزراعية والموارد المعدنية فان الارجح ان يزيد الميل للاستيراد عما افترضناه فعلا . ومعنى هذا انه لابد من زيادة الطاقات التصديرية بمعدلات عالية حتى يمكن مواجهة الواردات المتزايدة وفى نفس الوقت مواجهة الالتزامات المترتبة على استيراد رأس مال اجنبى . ولذلك نجد ان نسبة الصادرات الى الناتج المحلى تتجاوز فى بعض الاحيان ٤٠٪ بل وقد تصل ٤٧٪ من أصل نسبة لاتتجاوز ١٨٪ . وهذا يعنى انه مالم تتحقق هذه المقدرة التصديرية العالية (التى افترض انها لاتتعرض لتدهور فى نسب التبادل) فسيكون من العسير على الاقتصاد القومى تحمل الالتزامات النهائية التى تتراكم عليه .

١٧ - فاذا سمحنا للميل الحدى للاستهلاك فى القطاع الحكومى بأن يرتفع من حوالى ٦ر٠ الى ٧٥ر٠ (وهو معدل يعتبر فى الواقع منخفضا) فان الوضع يسوء مرة اخرى رغم أن مثل هذا الفرض يعنى هبوط نسبة الاستهلاك الكلى الى الناتج المحلى من ٨٩٪ الى ٦٩٪ . وبالتالى فانه من غير المرجح فى الظروف التى تسود الدول النامية أن يتمكن الاقتصاد من توليد المدخرات التى يمكن توجيهها الى سد الالتزامات التى تترتب عليه . فاذا وجه اصحاب الاموال الاجانب جانبا من دخلهم المتزايد الى استهلاك فى الدخل فسوف يزداد الوضع تعقيدا . فمثل هذا الانفاق وان اعتبر بمثابة تصدير (نوع من السياحة) فانه يولد ضغطا على الموارد المتاحة للتصدير

١٤- ومع هذا التصاعد في نصيب رأس المال الاجنبي ، يحدث تصاعد في نصيب الاجانب من الناتج ، في شكل حصة متزايدة في عوائد حقوق الملكية . ويحدث هذا تغييرا ملحوظا في توزيع الناتج القومي حيث أن الاحتفاظ بنسبة الاجور الى الناتج المحلي وانخفاض عوائد حقوق الملكية المستحقة للمواطنين ، يتحولان بالاقتصاد القومي شيئا فشيئا الى اقتصاد أجرى يسيره مالكو رأس المال الاجنبي . وفي نفس الوقت فان هذه العوائد التي تعتبر مصدرا أساسيا للادخار القومي تؤدي بتناقصها الى تضاؤل فرص تكوين رؤوس اموال وطنية تستطيع أن تحل تدريجيا محل رأس المال الاجنبي . فاذا صحب ذلك اعفاءات لعوائد رأس المال الاجنبي من الضرائب بدعوى تشجيعه فسوف تقل مقدرة القطاع الحكومي على الادخار وعلى تمويل المشاريع الاساسية ضعيفة العائد الامر الذي يحد بقدر متزايد من امكانية توسع قاعدة الاقتصاد القومي لاستقبال مزيد من رؤوس الاموال الانتاجية ، أجنبية كانت أم محلية ، ويحفز على رفع معدلات الضرائب على الوطنيين مما يحد من مدخراتهم .

١٥- وتتضح اهمية الملاحظات السابقة في المراحل الاولى لنموذج يفترض معدلا للنمو اعلى مما افترضناه في النماذج الابتدائية . فارتفاع معدل النمو الى ١٠٪ يرتفع سريعا باسهام رأس المال الاجنبي بما يصل الى حوالي ٦٠٪ من الاستثمارات وينخفض بحدة نصيب عوائد الملكية الوطنية بحوالي الربع بينما يشترط معدلا للادخار يتزايد حتى يصل حوالي ٥٠٪ وهو أمر غير مقبول . وتتضح خطورة هذه النتائج من أنه بالرغم من قيام المجتمع على مدى ١٢ عاما الاخيرة بسداد حوالي ٢١٤١٦ مليونا كنتيجة لاستجلابه ٢٣٤٧٫٥ فقط في السنوات الاولى ، فانه يظل مدينا بحوالي ٢١٨١٠ في السنة الثلاثين .

وحتى اذا كان الداعي الى اغراء رأس المال الاجنبي بالاستثمار محليا هو توفر ورخص الايدي العاملة ، فان هذا يعني انه حتى في الصناعات المعتمدة على العمل سوف يؤدي الانخفاض النسبي لمعدلات الاجور الى ابقاء معاملات رأس المال مرتفعة . وبالتالي فانه لايتوقع ان يتحقق تحسين يذكر عن طريق تخفيض جوهري في معامل رأس المال .

١٣- تشير الحسابات الى أن مجمع رأس المال الاجنبي تتزايد قيمته بالنسبة الى مجمع الاستثمار المحلي وتتجاوز النسبة ٥٠٪ . فاذا اعتبرنا ان المجمع خلال ١٥ عاما أو اكثر يمثل في الواقع رأس المال القومي ، فان معنى هذا أن الاحتياجات التي تبدو متواضعة الى موارد اجنبية تؤدي الى تغلغل غير مقبول لهذه الموارد في الاقتصاد القومي . فالنموذج الاول يشير الى استجلاب اموال من الخارج تعادل ١١٤٦ مليونا يتولد عنها ناتج اجمالي يبلغ ٢٧٥ مليونا او اقل قليلا من ١١٪ من الناتج المحلي في السنة الحادية عشر (سنة انتهاء العجز) . ومع ذلك فان مجمع الاستثمار الاجنبي يصل الى حوالي ٥٠٪ من مجمع الاستثمار المحلي . فاذا لاحظنا ان جانبا من الاستثمارات المحلية يتم في قطاعات لايتجه اليها رأس المال الاجنبي ، فان هذا يعني أن هذا الاخير يتولى ملكية اكثر من ٥٠٪ من رؤوس اموال القطاعات التي يقبل عليها ، وهي القطاعات الرائدة تكنولوجيا وتصديريا . وحتى اذا امكن السماح بهذا الوضع الشاذ فانه سوف يعني تحكما اجنبيا في الاقتصاد القومي لايستبعد ان يصحبه تحكم سياسي واجتماعي .

التزامات الاقتصاد القومى ، سواء بالسداد المباشر او بالاستثمار فى الخارج وحساب الرصيد الذى تدان به الدولة ، فان الاقتصاد القومى يظل مدينا فى السنة الاخيرة (الخامسة والعشرين) بمبلغ ١٢٠٨٢ . وهذا أمر يفوق فى أحجامه مايمكن أن يطلق عليه الربا الفاحش .

١١ - من النتائج السابقة امكن حساب معاملات نموذج خطى للخمسين متغيرا اجماليا حتى يمكن استخدامه فى دراسة اثر التغيرات فى بعض المعاملات الرئيسية . وبطبيعة الحال فان النتائج رغم تقاربها مع النموذج المبدئى التفصيلى ، فهى لاتتطابق معها بالضرورة نظرا لان العلاقات الخطية تتجاهل الاختلافات السنوية التى تترتب على التعديل المستمر فى الهيكل القطاعى . ومن جهة أخرى فان النموذج يمكن استخدامه لدراسة اثر بعض التعديلات على المعالم الاساسية ، سواء من حيث تعديل معدل النمو أو معامل رأس المال أو الميل الحدى للادخار . كما أنه امكن حساب نموذج بديل لبيان تطور الاقتصاد القومى لو أنه تقرر البدء من المستوى التوازنى المنخفض لسنة الاساس واحداث نمو يتزايد مع الزمن بالموارد الذاتية للاقتصاد القومى ، دون اعتماد على رأسمال مستورد . ومقارنة نتائج هذه النماذج المختلفة امكن الوصول الى عدد من الملاحظات الهامة التى نوردها فيما يلى :

١٢ - يؤدى افتراض قيم اصغر لمعامل رأس المال الى تحسين العائد على الاقتصاد القومى ، وزيادة فرص سداد الالتزامات الخارجية . غير أنه اذا كان الداعى الى استجلاب رؤوس اموال اجنبية هو الرغبة فى ادخال صناعات متطورة تكنولوجيا ، واذا كانت الالتزامات الاجنبية تفرض توسعا اكبر فى التصدير للسوق العالمى حتى يمكن مواجهة اعبائها ، فان المتوقع ان يرتفع معامل رأس المال لا أن ينخفض .

الفائض يوجه الى سداد جانب من المديونية السابق تراكمها . على أنه يجب اعتبار هذا بمثابة تدفقات صافية ، بمعنى أنه فى أى سنة يمكن أن تخرج اموال من الدولة اما لسداد جانب من الالتزامات او لتستثمر فى الخارج ويدخل مقابلها مقدار مماثل . والفرض الوحيد الذى التزمنا به هنا هو أن عائد الاستثمار فى الخارج على رؤوس اموال وطنية مصدرة يساوى معدل العائد المحلى على استثمارات اجنبية فى الداخل . وقد اعتبر هذا المعدل ١٥٪ ، باعتبار أن الحساب يتم وفقا للناتج الاجمالى ، حيث يغطى نصف هذا المبلغ صافى الفوائد بينما الباقى يمثل ارباحا اجمالية بما فى ذلك قسط استهلاك رأس المال . وسوف ندرس فيما بعد اثر انخفاض هذا المعدل على سير المتغيرات المختلفة . ومن جهة أخرى فان معامل رأس المال يتحدد فى النهاية بالهيكل القطاعى ومستوى معاملات رأس المال للقطاعات المختلفة . وتشير نتائج الحسابات الى أنه على مدى ٢٥ عاما كان المعامل المتوسط حوالى ٢ر٤ . وسوف نعود فندرس اثر افتراض قيمة اصغر لهذا المعامل .

١٠ ـ ابتداء من العجز فى سنة الاساس يجرى حساب اجمالى رأس المال الاجنبى المستثمر فى الدولة وذلك باضافة العائد على اجمالى السنة السابقة (١٥٪ منه) وكذلك العجز الجديد (أو استبعاد الفائض) . ويلخص الجدولان ٧ ، ٨ من البحث اهم النتائج سواء من حيث مدى اسهام رأس المال الاجنبى فى رأس المال القومى أو اثر الدخل العائد على رأس المال الاجنبى على توزيع الدخل والطلب المحليين . فوفقا للتطور على مدى ٢٥ سنة نجد أن العجز الكلى الذى يحققه المجتمع يبلغ ١٢٧١ مليونا ، وهو مبلغ أقل من اجمالى الناتج المحلى فى سنة الاساس قبل تصحيحها ، بينما يتولد فائض فى باقى المدة حوالى ٣٩٦٤ . ورغم افتراض أن هذا الفائض سيستخدم كله لسداد

٨ - للسنوات التالية افترض أن الاستثمار سينمو بمعدلات اعلى من معدل النمو المستهدف للدخل (وهو ٧٪) حتى يتزايد معدل النمو تدريجيا . ولذلك حددنا معدل نمو قطاع التشييد عند ١٥٪ في البداية ثم يتناقص الى المستوى المطلوب لتحقيق النمو المستهدف . وأعطيت القطاعات معدلات مناسبة للنمو حسبت على أساسها الاستثمارات اللازمة ثم عدلت هذه المعدلات والاستثمارات بما يساوى بين حجم الاستثمار وبين الطاقة الاستثمارية المتاحة . وباستخدام جدول المدخلات والمخرجات أمكن تقدير الناتج المحلى وتوزيعه ومنه حساب الاستهلاك والتغير في المخزون واحتياجات الاستيراد والضرائب بأنواعها ، وبالتالى الفوائض المتاحة للتصدير . والملاحظة الجديرة بالذكر أن محدودية نمو قطاع الزراعة تؤثر على امكانيات نمو الصناعات المعتمدة على خامات زراعية ، مالم يتزايد الاعتماد على استيراد تلك الخامات . ومن جهة أخرى فان سرعة نمو الصناعات غير الزراعية (المعدنية والكيماوية) يزيد بدوره من الاعتماد على الاستيراد ويرفع الاهداف التى يجب أن تحققها تلك الصناعات بالنسبة الى التصدير بما يغطى احتياجات الاستيراد المتزايده وفي نفس الوقت يوجد فائضا يستخدم في مواجهة الدخل المستحق لرأس المال الاجنبى ثم في امكان سداد قيمته في النهاية . أما بالنسبة للخدمات فكان لابد من مراعاة توازن جانبى العرض والطلب فيها لانها لايمكن تخزينها او توجيهها للتصدير فيما عدا الخدمات التصديرية . ونظرا لافتراض ثبات المعدلات الضريبية فقد أدت هذه الفروض الى تزايد تدريجى للضرائب غير المباشرة الى اجمالى الناتج المحلى .

٩ - بهذه الاعتبارات امكن المضى في تقدير المتغيرات الاجمالية سنة بعد الاخرى وتحدد دور رأس المال الاجنبى على النحو التالى : في كل سنة يقدر رصيد الميزان الجارى ويعتبر العجز بمثابة طلب جديد على رأسمال اضافى بينما

مقدرة الاقتصاد المحلى على الاستجابة للزيادات فى الطلب المحلى الكلى ، استثماريا كان أو استهلاكيا . وما لم تتوفر طاقات عاطلة تواجه هذه الزيادات فسوف تنعكس الزيادات على مستوى الاسعار المحلى دون حدوث تغير فى القيم الحقيقية (بالاسعار الثابتة) وهو أمر تفرضه بديهيات التحليل الاقتصادى ، ومع ذلك لايجد صداه المناسب لدى المسئولين عن القطاعات ، والذين يقف تحليلهم عند مستوى المشروع واحتياجاته المباشرة من التمويل المحلى والاجنبى .

٧- لايعتبر الاسلوب السابق هو الاسلوب الوحيد لمعالجة التوسع المبدئى فى الاستثمار . فمن الممكن تصور البدء بتوزيع للطلب المحلى بين الاستهلاك والاستثمار يحقق توازنا مبدئيا ثم احداث اعادة توزيع لهذا الطلب بما يرفع معدل الاستثمار للحدود المرغوبة ، وحساب مايعنيه ذلك بالنسبة الى الدخل والاستهلاك . غير أن مثل هذا الاسلوب يمكن أن يقودنا الى اختيارات لانهائية بالنسبة الى السياسات الاقتصادية المتعلقة بتوزيع الدخل وتعديل معدلات الادخار ، الامر الذى يثير جدلا جانبيا ليس هذا مجال الخوض فيه . ومن جهة اخرى يمكن اعتبار الصورة النهائية لسنة الاساس هى الصورة الممكن تحقيقها . وهى تفترض انه عند البدء بها لايكون الاقتصاد محملا بأعباء من الماضى كما أن الناتج المحلى يتطابق مع الناتج القومى ، حيث لاتوجد استثمارات خارجية او اجنبية تؤدى الى دخول لعوامل الانتاج فى الخارج تؤثر على حساباتنا المستقبلة . ومن جهة اخرى فان الاسلوب الذى اتبعناه يوضح انه لايمكن فى سنة واحدة تعديل النمط الاستثمارى بما يقفز بمعدل النمو الى مستوى مرتفع ، اذ ان اقصى ماسمحت به امكانيات المجتمع مع كل التعديلات التى اجريناها كان هو رفع معدل النمو فى السنة الاولى الى ٤٪ فقط .

قطاع الاعمال بحد أقصى ٦٪ . وواضح أن التوازن عند مستوى منخفض للنشاط يسمح بتواجد طاقات عاطلة يمكن تشغيلها ، مع أخذ أثر التشغيل الاضافي على الزيادة في الاستيراد في الاعتبار . وقد افترضنا انه بعد قدر معين من هذا التشغيل الاضافي تبدأ القطاعات الداخلة في نطاق التبادل العالمي في الوصول الى التشغيل الكامل للطاقات ، فيصبح المحدد لمزيد من التوسع هو القطاعات ذات الطابع المحلي البحت وهي قطاعات البنيان الارتكازي والخدمات . وبالتالي افترضنا مزيدا من التوسع في التكوين الرأسمالي مع مزيد من الاعتماد على الاستيراد للقطاعات السلعية . وبذا أمكن زيادة الاستثمار بحوالي ٨٠٪ عن مستواه الابتدائي ، يتم الجزء الاكبر (٧٠٪ منها) بنفس المعاملات الفنية السائدة ، والباقي (٣٠٪) يتم بمعاملات معدلة ، يراعى فيها تزايد الاستيراد من السلع النهائية والوسيطة .

٦- وخلال الجولة الاولى التي تمت بالمعاملات الاصلية امكن حساب قيمة المضاعف ، ووجد أنه بالنسبة للطلب = ٣ر١٢ وبالنسبة للدخل ٢ر٤٢ ، حيث الفرق يمثل أثر الواردات . وحتى يمكن تقدير هذه القيم روعيت التغيرات في الدخل وتوزيعه وأثرها على الاستهلاك النهائي بشقيه . وخلال الجولة الثانية التي تزايد فيها الاعتماد على الاستيراد وجد أن قيمة المضاعف انخفضت الى ٢ر١٢ بالنسبة للطلب والى ٢٢ر١ بالنسبة للدخل . كذلك أمكن تقدير الاحتياجات المباشرة وغير المباشرة من الواردات ، وتشير النتيجة النهائية الى أنه بالرغم من استجابة الناتج المحلي (بسعر السوق) بحوالي ٢٠٢ مليون نتيجة قرار رفع مستوى الاستثمار بمبلغ ١٠٠ اضافية ، فان هذا اقتضى رغم كل شيء زيادة الاستيراد بحوالي ٣ر٨٠ . وبعبارة اخرى فان قرار الاستفادة من رؤوس اموال اجنبية لتمويل زيادة في الاستثمار المحلي يجب أن يراعى فيه

الى اجتذاب رؤوس الاموال من الخارج بشتى الطرق مستفيدة بقاعدتها المتسعة من الموارد الطبيعية . ومن المعلوم أن ماتحصل عليه البرازيل لايكاد يبلغ البليون دولار ، ونصف هذا المبلغ لايأتي من الخارج فعلا ، بل هو اعادة استثمار ارباح اجنبية تولدت في الداخل .

٤- وحتى يكون للبحث مغزاه بالنسبة لما يمكن أن يواجهه الاقتصاد المصرى فى المرحلة المقبلة حاولنا امرين : الاول هو البدء بنقطة أساس تعكس بقدر الامكان الهيكل الاقتصادى الحالى ، بما فى ذلك جدول للمدخلات والمخرجات (اختصرالى ٩ قطاعات) ، والثانى هو تعديل المعاملات الحكومية والخارجية بما يكفل التوازن فى الناحيتين عند نقطة الاساس . والهدف من هذا التعديل هو عزل المشاكل الموروثة عن الماضى ، وتصور موقف يواجه فيه الاقتصاد طاقات استثمارية ذاتية محدودة فيسعى الى التوسع معتمدا على مزيد من الموارد الرأسمالية يأتيه من الخارج ، ثم نتتبع آثار هذه الموارد سنة بعد أخرى على كافة المتغيرات الاجمالية (والبالغ عددها ٥٠ متغيرا عدا التشابكات القطاعية) للاقتصاد القومى .

٥- ولذلك فقد بدأنا بفرض هذا التوازن على الاقتصاد القومى فى سنة الاساس ، متخذين كقاعدة للمعايرة دخلا فى قطاع الاعمال = ١٠٠٠ مليون . وبطبيعة الحال فان انخفاض معدل الادخار وبالتالى معدل الاستثمار يعنى بالضرورة تواضع معدل النمو . ولذلك بدأنا بتحريك الاستثمار الى أعلى ، مع تعديل فى هيكله بما يحقق أهدافا مناسبة لمعدلات نمو القطاعات التسع ومعدل نمو الاستهلاك الحكومى الذى أخذ مساويا لستة أسباع معدل نمو

أن تبلغه لو أنها ارتضت معدلات متواضعة للنمو تتحدد بامكانياتها الذاتية مهما كانت محدودة . وقد أظهرت تحليلاتنا السابقة أنه حتى يمكن ان تتحقق فائدة ولو هامشية فان سعر الفائدة على القروض يجب أن يكون أقل من معدل النمو في الاقتصاد المقترض. وبعبارة أخرى فان الاقتراض بسعر ٧٪ مثلا في دولة تنمو بمعدل ٦٪ ينتهي بالدولة بعد سداد القروض الى رأسمال قومي أقل مما لو لم تقترض اطلاقا . وكأن الدولة بذلك مولت زيادات حالية في الدخل والاستهلاك على حساب خسارة مستمرة فيهما في المستقبل .

٣- فاذا كان هذا هو الحال بالنسبة للقروض التي تستخدم مقابل عائد يساوي الفائدة على رأس المال ، فان المنطق يقضي بالتساؤل حول مايمكن ان يحدث عند استجلاب رأسمال أجنبي ، ينتظر عائدا يفوق الفائدة بمقدار الارباح وعائد المخاطرة ، خاصة اذا كان رأس المال هذا سوف يغوى بالتوجه الى الدولة في سوق عالمي تتنوع فيه فرص الاستثمار ومعدلات الفوائد والارباح . وهو كما يتخير التوجه الى الدولة عندما يجد الاغراءات المناسبة فلابد وأن يتطلع الى الخروج منها في اللحظة التي يشعر فيها أن هناك فرصا أخرى اكثر اغراء في الخارج . ولن نحاول هنا الدخول في جدال حول التاريخ الماضي لحركة رؤوس الاموال التي تركزت بالأساس في يد الدول الاوروبية توجهها الى المستعمرات في مشروعات تفيد الاقتصاد المالك لرأس المال . فالقرار بالاستثمار هنا ملك للدولة المستفيدة ، وعلى هذه الاخيرة ان تحدد الحجم المقبول ومجالات الاستثمار المناسبة بما يخدم عملية التنمية فيها . ومن هنا كان موضوع بحثنا هذا ، خاصة وأن لدينا امثلة حية في الوقت الحالي ، في مقدمتها البرازيل التي سعت

دور رأس المال الاجنبي في التنمية طويلة الأجل

١ــ عند مناقشة امكانيات التنمية لاقتصاد نامي ، يقوم المخطط بمقارنة المـــــوارد الادخارية للاقتصاد القومي التي يتوقع تحقيقها في فترة مستقبلـــة بالمتطلبـــات الاستثمارية الواجب توفيرها حتى يمكن الوصول الى معدل مستهدف للنمو. ونظـرا لما تتصف به الدول النامية بوجه عام من ضعف مقدراتها الادخارية الذاتيـــة ، فان التحليل يظهر في أغلب الحالات فجوة يجب تغطيتها من موارد خارجيـــة. وتصبح القضية الاساسية هي تحديد حجم هذه الاخيرة بما يحقق النمـــــو المستهدف دون تعريض الاقتصاد القومي للدخول في مديونية خارجية تستمر فيمـا بعد الفترة التي يخطط لها بصورة تؤثر في مقدرة الاقتصاد على المضي في التنميـة بمعدلات مقبولة. وقد اظهرت الدراسات التي قام بها كثير من الكتاب ، وخاصـة خبراء البنك الدولي ، أن هناك احتمال بأن يلجأ الاقتصاد النامي الى الاقتراض بحدود تتجاوز امكانيات السداد ، ومن ثم جرت محاولات لتحديد الشروط الـــتي يجب مراعاتها حتى يكون الاقتراض مأمونا .

٢ــ وقد سبق لنا أن تناولنا في دراسة حول القروض* معالجة هذه الشروط. وأوضحنـــا ان الامر لايتعلق فقط بامكان خروج الدولة المقترضة من الحلقة الانفجاريـــــة للاقتراض ، اذ أن هذا أمر يعني الدائن بالدرجة الاولى (البنك الدولي مثلا). فمن الممكن ان تتحقق شروط الاقتراض " المأمون " بهذا المعنى ، ومع ذلك تخرج الدول النامية من الحلقة المفرغة للقروض فاذا بها في وضع أسوأ مما كانت تستطيـــع

(*) M.M. El-Imam; Foreign Loans and Economic Development ; Memo.779, I.N.P., 1967.

الجمهورية العربية المتحدة

معهد التخطيط القومي

مذكرة رقم (١١٥٦)

دور رأس المال الاجنبى فى التنمية طويلة الاجل

دكتور محمد محمود الامام