INTERNATIONAL AID FOR UNDERDEVELOPED COUNTRIES

P. N. Rosenstein-Rodan

CENTER FOR INTERNATIONAL STUDIES
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CAMBRIDGE • MASSACHUSETTS

INTERNATIONAL AID FOR UNDERDEVELOPED COUNTRIES

P. N. Rosenstein-Rodan

Massachusetts Institute of Technology
Center for International Studies
Cambridge, Massachusetts

January, 1961

INTERNATIONAL AID FOR UNDERDEVELOPED COUNTRIES

Contents

		Pages
I	General Principles	1-8
	1. Fundamental Criterion of Aid	1
	2. Absorptive Capacity	3
	3. Capacity to Repay	5
	4. Terminology: What is "Aid"	6
	5. What is not Economic "Aid"	8
II	The Burden of International Aid	9-10
	1. General Principles	9
	2. The U.S. Share	10
III	Degree of Success: Rates of Growth in Underdeveloped Countries	11-23
	1. High- and Low Growth Countries	11
	2. Sustained Growth	21
	3. Self-Sustaining Growth	22
IV	Capital Outflow and Aid into Underdeveloped Countries	23-25
	1. U.S. Aid	23
	2. Other Sources	23
	3. Aid Required in the Future	24
	4. U.S. Total Expenditures on Aid	25
	5. Allocation	25
V	The Method of Computing Capital-Inflow Requirements	26-27
APPENDIX		1-53
Table I-A	World Gross National Product and Population 1961	1
" I-B	World Income Distribution	2
	Explanatory Notes on Tables I-A and I-B	3-4
" II-A-1	Gross National Product Projections in Underdeveloped Countries	5-8
	Explanatory Notes on Table II-A-1	9-12
" II-A-2	The Relation Between Gross National Product and National Income	13-14
" II-B	Population in Underdeveloped Countries	15-19
	Explanatory Notes on Table II-B	20-21
" II-C	Gross National Product Per Head	22-24
" II-D	Summary by Regions	25
" III-A	Investment and Savings in Underdeveloped Countries	26-29
" III-B	Net Investment Minus Savings and Capital Outflow per annum as Percentage of Net and Gross Investment	30-32
	Explanatory Notes on Table III-B	37
" III-C	Summary by Regions	33
	Explanatory Notes on Tables III A and C	34-37
" IV-A	Foreign Capital Inflow Required for Underdeveloped Countries 1961-1976	38-41
" IV-B	Composition of Foreign Capital Inflow per annum	42-44
	Explanatory Notes on Tables IV A and B	45-48

			Pages
Table	V-A	Capital Outflow per annum into Under-developed Countries 1961-1966	49
"	V-B	Capital Outflow per annum into Under-developed Countries 1966-1971	50
"	V-C	Capital Outflow per annum into Under-developed Countries 1971-1976	51
		Explanatory Notes to Tables V-A-B-C	52
"	VI	Sharing the Burden of Aid	53

INTERNATIONAL AID FOR UNDERDEVELOPED COUNTRIES

I. General Principles

1. Fundamental Criterion of Aid: To Maximize Additional Effort in Underdeveloped Countries

The purpose of an international program of aid to underdeveloped countries is to accelerate their economic development up to a point where a satisfactory rate of growth can be achieved on a self-sustaining basis. The function of outside capital in a development program is not directly to raise standards of living in the recipient countries but to permit them to make the transition from economic stagnation to self-sustaining economic growth. The principal element in this transition must be the efforts that the citizens of the recipient countries themselves make to bring it about. Without these efforts, outside capital will be wasted. Thus the general aim of aid (loans, grants, and technical assistance) is to provide in each underdeveloped country a positive incentive for maximum national effort to increase its rate of growth. The increase in income, savings, and investment which aid indirectly and directly makes possible will shorten the time it takes to achieve self-sustaining growth. Economic progress is measured primarily by increases in income per head over a period of time, say one or two five-year periods. The overall aim of development aid is not to equalize incomes in different countries but to provide every country with an opportunity to achieve steady growth. Aid should continue not until a certain income level is reached in underdeveloped countries but only until those countries can mobilize a level of capital formation sufficient for self-sustaining growth.

Ideally, aid should be allocated where it will have the maximum catalytic effect of mobilizing additional national effort or preventing a fall in national effort. The primary criterion is thus to maximize additional effort, not to maximize income created per dollar of aid. If this last were the aim, dollars invested in developed countries might easily show better results. Nor would a

criterion of maximum increase in income suffice even if only underdeveloped countries were considered. At different stages and different phases of development more investment may be required to produce a unit of additional income than in others. This is invariably the case where, for instance, what is called social overhead capital (roads, railways, electric power, etc.) has to be built up first. Such investment in economic infrastructure yields directly only small increases in income. It creates, however, a framework necessary to the profitability of more immediately lucrative subsequent investments. Direct increase in income is less important here than the increase in investment opportunities. Income created per dollar of aid may, therefore, at first be low; far from being an argument for less aid, there are circumstances in which this might well be an argument for more.

Capital aid should be offered wherever there is reasonable assurance that it will be effectively used. A positive incentive to increased national effort will be present only if it is believed that all requests which meet functional critera of productivity will be granted. Knowledge that capital will be available over a decade or more up to the limits of the capacity to absorb will act in many cases as an incentive to greater effort. Assurance of continuity of aid is, therefore, as important as the amount of aid.

The main function of foreign capital inflow is to increase the rate of domestic capital formation up to a level (for instance, 12 per cent, yielding an increase of income of 2 per cent per head per annum) which could then be maintained without any further aid. Additional resources and know-how provided by foreign capital inflow produce an additional product. The proportion that can be saved out of this additional product can be very much higher than average savings at the pre-existing income level. While the average rate of savings is, for instance, 7 per cent in Asia, the marginal rate of savings can be stepped up to 20-25 per cent.

2. Absorptive Capacity

A marginal rate which is much higher than the average rate of savings is the main lever of a development program and should be the principal condition of aid to underdeveloped countries. The extent to which increased investments with a high marginal rate of savings can be realized depend on the country's technical absorptive capacity. The capacity to absorb capital is more limited on a low level of development, where a higher proportion of technical assistance must precede a large capital inflow. With a rising level of development the marginal rate of savings will increase. The habit of plowing back undistributed profits in industry prevails today already and accounts in this sector for a marginal rate of savings of 30-40 per cent in India as well as in the U.S. An effective fiscal policy can also provide increased savings.

Absorptive capacity relates to the ability to use capital productively. While not every single investment project need be "self-liquidating," total investment must not only cover its costs but must also yield a reasonable increase in income. Total investment entails a multitude of projects, a diversified investment program which requires variegated managerial and technical resources. While some single projects may use foreign consultants and experts, the bulk of the administrative and organizing effort must be undertaken by the country's own personnel if it is to develop successfully.

While the capacity to absorb capital is a limiting factor, it can, within a few years, be stepped up in many underdeveloped countries by 20-30 per cent above the presently realized level of investment. There are, however, narrow limits to the pace and extent at which a country's absorptive capacity can be expanded. It is not true to say that absorptive capacity entirely depends on the amount of effort one is willing to put into a massive technical assistance Foreign "experts" and managers may best be used without compromising domestic

control and without stifling the growth of domestic enterpreneurs. Outside skills and knowledge may well supplement but cannot entirely substitute domestic abilities to organize and to administer.

If a country's additional effort ("sufficient" or "deficient") and absorptive capacity could not be measured, assessed or estimated--it could not be the basic criterion of aid. Fortunately no exact measurement is needed, while three indices can be used for an estimate of the absorptive capacity. The first two refer to "objective" verifiable facts, while the third one relies on rough commonsense rules of thumb which may indicate a ranking order of magnitudes. We may first ascertain by how much a country succeeded in increasing her volume of investment during the past five or more years. If a rate of increase of investment could be realized in the past, then a slightly higher rate made possible by technical assistance can be plausibly projected for the future. We may (secondly) also ascertain whether a country succeeded in the recent past to raise her savings, notably to maintain or to widen the deviation between the average and the marginal rate of savings. A similar spread for the next five-year period may constitute the lower limit of a possible savings effort. Judgment on the country's ability to mobilize additional taxes when incomes are rising may justify a projection above the recently realized lower limit of the country's ability to save. A changing composition of output (more industry with high marginal rates of savings) will lead in many cases to foreseeably higher savings rates for the country as a whole. Finally a judgment on a country's overall administrative and developmental organization is by no means as "arbitrary" as it may seem. There is not much difference of opinion on the relative "push" or "potential" of, say, India Ceylon, Indonesia, or Brazil, Guatemala, Paraguay, among businessmen, economists, or even average tourists, although unforeseeable shake-ups, positive or negative, may either lower it or raise it. The longer the time distance the less certain

is the judgment. On the assumption of historical continuity, however, agreement can be obtained on a ranking order of magnitudes. (For a fuller elaboration, see M.F. Millikan and W.W. Rostow, A Proposal: Key to an Effective Foreign Policy, Harper and Brothers, New York, 1957, Ch. V and VI; and The Objectives of U.S. Economic Assistance Programs, Section VI, a Study prepared at the request of the Special Committee to Study the Foreign Aid Program, U.S. Senate by CENIS, M.I.T., January, 1957.)

A rough judgment of the underdeveloped countries' absorptive capacity is shown in those countries' assumed rates of growth 1961-1976 in Appendix Tables II, III and IV.

3. Capacity to Repay

The foreign capital inflow mobilized by international action should be within the limits on the one hand of technical absorptive capacity, on the other hand of the capacity to repay of underdeveloped countries. While the first limit should preponderantly determine the amount of aid, the second limit should largely determine the method of financing it. Where the capacity to repay in low income underdeveloped countries is below their absorptive capacity, a proportion of aid will have to be given in grants, or "soft loans," 40-99 year loans with a ten to twenty years grace period and a low rate of interest, or loans repayable in local currency which will be re-lent for subsequent investment. The capacity to repay should not be assessed by a static projection of the present situation but should take into account the increase in income and the increase in the rate of savings which will result from the adoption of a soundly conceived development program. Nor is it sensible to assume that the whole ("hard") foreign debt of each country should be amortized within twenty or thirty years. It is by no means rational for each country to reduce its foreign indebtedness to zero. The rational question to ask is: "How much

foreign indebtedness can a country maintain in the long run?" After ten to twenty years of aid the net capital inflow to underdeveloped countries will come to a stop. The gross capital inflow, however, will continue, while at the same time old loans will be repayed. In exactly the same way in which any national debt (or corporate debt) need not be reduced if it is within sound limits, the foreign debt of debtor-countries need not be amortized to zero in a sound world economy.

4. Terminology: What is "Aid"

"Foreign Capital Inflow" and "Aid" are not synonymous terms. Aid, properly speaking, refers only to those parts of capital inflow which normal market incentives do not provide. It consists of:

i. Long-term loans repayable in foreign currency. "Long term" conventionally means loans of more than ten years maturity; longer maturing loans (twenty years or more) should preferably constitute the bulk of such loans. The annual burden of amortization of such loans is only a fraction (one-quarter to one-half) of the burden imposed by short- and medium-term loans.

ii. Grants and "soft" loans including loans "repayable in local currency." Soft loans are in fact contingent part grants. There can be many varieties of them, e.g., very long-term (ninety-nine years) loans repayable in foreign currency at a low rate of interest, loans with a long grace period (ten or twenty years) for payment of principal and/or interest, loans repayable in local currency which is then re-lent to the borrower for further domestic investment. According to the future success of development, which is unforeseeable and uncertain for each country separately at the beginning of her development, a part of the local currency loans may be repaid at a later date, while a part will, in fact, have to be written off.

iii. Sale of surplus products for "local currency" payments. (P.L. 480 in the U.S.) Not only "capital" (equipment) goods but also consumption

goods can constitute capital. In fact agricultural products can form an important part of capital in its original sense of a subsistence fund. If sufficient foodstuffs could not be supplied in a country to meet the demand from the additionally employed working on construction or other investments, then either more investment capital ("circulating") would have to be spent for imports, or the amount of additional investment would have to be reduced. It cannot be said in reality, however, that the whole of imported surplus products will be used for additional investment. A good economic development policy can see to it that a major part be used for raising investment, but a part will merely bolster domestic consumption. In practice, therefore, a withdrawal of surplus product sales would lead to a reduction in both consumption and investment. We assume in this study that two-thirds of surplus product sales be considered investment-aid, while one-third goes into increased consumption. Even on that basis up to one-fifth of total aid to underdeveloped countries can be rendered in this form. In the U.S. two-thirds of P.L. 480 sales may form up to 30 per cent of the U.S. "Aid" to underdeveloped countries. We assume an annual surplus products investment-aid figure of $700 million which implies total per annum P. L. 480 sales of $1 billion.

iv. Technical Assistance is undoubtedly a most important part of Aid to Underdeveloped Countries, but it is not counted in our study as "Capital-Inflow." It must form part--and an increasing part at that--of budgetary appropriations for Aid; it should be added to the total amount of Aid required in the wider sense, but it is not included in the Appendix Table IV as "Foreign Capital-Inflow." Estimates of the present national and international public and private expenditure on Technical Aid vary from $250-300 million per annum. In view of its importance, especially for underdeveloped "pre-take-off" countries, it should certainly be increased to, say, $400 million per annum. The U.S. contribution through national and international channels should amount to around $250 million per annum.

5. What is not Economic "Aid"

Economic Aid was defined above (I.4) as that part of capital-inflow which normal market incentives do not provide. Accordingly neither Short- or Medium-term Loans nor Private Foreign Investment should be counted as Aid. They are "Trade not Aid." Short- and Medium-term Loans are mostly selling devices for (tied) exports of equipment goods. They are not included in our estimates of the Foreign Capital Inflow into Underdeveloped Countries; nor are other short-term capital movements. They are not tools of an International Aid policy. Private Foreign Investment is undertaken in response to normal market incentives. In this sense it is not "Aid," but it is included in our estimates of Foreign Capital Inflow required for Underdeveloped Countries (Appendix Table IV). To this rule there is one partial exception. Oil and Mineral Investment into "Foreign Enclaves" in "dual economies" is only counted at half its amount. For that reason Bahrain and Kuwait, for instance, are excluded in the calculation of economic aid; anyway they do not require it. In countries where Foreign Private Investment largely but not wholly flows into extractive industries only one-half of that Investment is counted as Foreign Capital Inflow. This somewhat rough assumption is based on the fact that--although such industries provide important tax and other revenues--their diffusion and complementarity effects are markedly smaller than those of other industries.

"Defense Support" is, in principle, not included in "Economic Aid." Parts of it may well contribute to the receiving countries economic development. To that extent the present U.S. economic aid may be slightly underestimated in our calculation, although 20 per cent of it is counted as economic aid.

II. The Burden of International Aid

1. General Principles of how the burden of International Aid should be divided between developed countries have not yet been agreed upon. The Social Philosophy of the Free World provides nonetheless some clear indications. A tentative proposal may be outlined here:

i. All developed countries--say those with income per head above $600 should contribute to Aid either a proportion of their G.N.P.--perhaps one-half per cent per annum--or preferably their contributions--which should add up to the total Aid required (for instance, for each of the years 1961-1966 $3.8 billion of Capital Aid plus $0.4 billion for Technical Assistance, plus $0.3 billion for emergencies = $4.5 billion) should be computed by applying the U.S. income tax progression to the number of families of each developed country--counting a family as having four times the country's income per head. A "real" G.N.P. indicating the purchasing power of the G.N.P. compared to U.S. prices may be computed (see Table I-A) instead of the nominal one.

Neither Short- or Medium-term Loans nor Private Foreign Investment should be included in "Aid." Long-term loans of the International Bank are certainly aid, but they are treated as Private Foreign Investment, i.e., they are not included in the computation of each country's contribution.

Appropriations for Aid should, if possible, be 33-50 per cent higher than the amount which will probably be disbursed. This would provide an incentive and encouragement for underdeveloped countries' vigorous development efforts. In our calculation in Appendix Tables V only prospective disbursements, not the desirable appropriations, are counted.

ii. All long-term loans and grants should be, in principle, untied (see exception under III and IV)

iii. Up to one-third of each country's contribution to Aid can be tied, however, to the grant or sale of Surplus Products for "Local Currency Repayment." Only two-thirds of each country's total surplus product grants or sales are counted as capital-aid.

iv. During a year of Balance of Payments difficulties, a contributing country may invoke a special clause (analogous to GATT provisions) tying her loans and grants--for other than surplus product sales--during this year.

2. The U.S. Share

Since only high-income countries with G.N.P. per head above $600 should be contributors to Economic Aid, Japan and South Africa should not be included among them. Japan should certainly provide Short- and Medium-term loans, but she is not yet a structural capital-export country.

The total nominal G.N.P. of the contributing developed countries is $855 billion in 1961. The U.S. proportion of it amounts to 60 per cent.

The total "real" G.N.P. of these countries is $953.2 billion. The U.S. proportion of it amounts to 54 per cent.

Applying the progressive income tax principle to the "real" G.N.P. of the rich countries would attribute to the U.S. 65 per cent of the total aid and 35 per cent to Europe and Oceania and Canada (see Appendix Table VI).

We shall accordingly assume that the U.S. should contribute around 65 per cent of the Free World total Economic Aid.

How the burden of aid should be shared among the developed countries is shown in Appendix Table VI.

III. Degree of Success: Rates of Growth in Underdeveloped Countries

1. High- and Low-Growth Countries

The classification of countries is based on their rate of growth per head. "High-growth Countries" have an increase in income per head of 2 per cent per annum or more. "Low-growth countries" have an increase in income per head per annum of 0.6-1.9 per cent. Stationary countries have either no increase in income per head, or an imperceptibly low one of under 0.5 per cent per head per annum. (See Table and Graph on pages 12 through 19)

High growth per head of population--chosen here as the principle of classification--does not always coincide with a high "development potential," which refers to the aggregate rate of growth. Brazil, for instance, has a higher development potential than Chile or Uruguay but Chile has a smaller population and a lower increase in population.

Estimates of African countries are even more speculative than those of other regions. Rhodesia and Nyasaland have a high rate of growth due to an "Enclave" Mineral Investment in a dual economy. Non-economic factors will decide whether a sustained growth--even if on a somewhat lower level--can be reached in the future. Algeria's prospects depend on political developments and a possibly large French Capital Inflow. Libya's temporarily (1961-1966) good growth is due to petroleum investment. Of other countries prospects of good--though neither high nor sustained--rate of growth seems to appear for Tanganyika, Nigeria, Kenya, Uganda, and Ghana.

Latin America with one-sixth of the underdeveloped countries' population has one-third of their income and 37 per cent of their investment. The region consists, however, of three unequal groups. First there are five countries with a high and sustained rate of growth: Argentina, Brazil, Chile, Colombia and Mexico, to which within a few years Uruguay and probably Jamaica can be

HIGH- AND LOW-GROWTH COUNTRIES 1961-1976

(Rate of Growth Per Head)

	High Growth			Low Growth			Stationary		
	1961-66	1966-71	1971-76	1961-66	1966-71	1971-76	1961-66	1966-71	1971-76
AFRICA									
Algeria	2.0				1.5	1.5			
Angola			2.3	1.5	1.9				
British Cameroons				0.6	1.7	1.7			
French Cameroons				0.6	1.7	1.7			
Belgian Congo						1.7	-0.8	0.4	
Eritrea and Ethiopia			2.2	1.2	1.9				
Former Fr. Eq. Africa				1.2	1.2	1.7			
Former Fr. West Africa				0.7	0.7	1.2			
Gambia				1.1	1.0	0.9			
Ghana			2.2	1.1	1.6				
Kenya			2.2	1.5	1.6				
Liberia				1.1	1.5	1.4			
Libya				1.9	0.7	0.5			
Madagascar				0.8	1.5	1.6			
Mauritius					1.1	1.6	0.2		
Morocco							0.2	0.25	0.4
Mozambique			2.3	1.3	1.8				
Nigeria			2.2	1.4	1.75				
Rhodesia and Nyasaland	2.0	2.3	2.5						
Ruanda Urundi				0.5	1.6	1.7			
Italian Somaliland				1.1	1.0	1.9			
South West Africa							-0.6	0.3	0.3
Sudan				1.7	1.9	1.8			
Tanganyika		2.6	2.7	1.6					
Togoland				0.5	1.6	1.7			
Tunisia					0.6	1.4	0 4		
Uganda		2.2	2.7	1.7					

	High Growth			Low Growth			Stationary		
	1961-66	1966-71	1971-76	1961-66	1966-71	1971-76	1961-66	1966-71	1971-76
AMERICA									
Argentina	2.0	2.5*	3.2*						
Bolivia				0.5	0.6	0.7			
Brazil			2.0*	1.5	1.7				
British Guiana							0	0	-0.1
British Honduras							0	-0.2	-0.2
Chile			2.2*	1.1	1.5				
Colombia	2.0	2.2	2.0*						
Costa Rica						0.8	-0.3	0.2	
Cuba				0.8	0.9	1.1			
Dominican Republic							0.3	0.1	0
Ecuador				0.6	1.0	1.2			
El Salvador				0.8	0.5	0.9			
Guatemala					0.6	0.9	0		
Haiti				1.3	1.0	0.7			
Honduras					0.6	1.0	-0.1		
Jamaica				1.9	1.7	1.7			
Mexico		2.0*	2.0*	1.5					
Nicaragua						0.9	-0.2	0.4	
Panama						0.5	0.1	0	
Paraguay				1.1	1.3	1.5			
Peru				1.1	0.8	1.1			
Surinam				1.8	1.5	1.1			
Trinidad and Tobago				0.5	0.5	0.6			
Uruguay		2.5*	2.6*	1.5					
Venezuela				1.0	1.0	0.9			
West Indies (rest)				0.9	0.9	0.9			
ASIA									
Afghanistan		2.2		1.5		1.7			
Bhutan				1.0	0.8	0.8			
Burma	2.4	3.1	2.8						
Cambodia				1.1	0.9	0.8			
Ceylon				0.6	1.8	1.7			
Hong Kong	3.2	2.7	2.3						
India (2.5)	3.0	3.0	3.4*						
Indonesia				0.6	0.9	1.2			
South Korea				1.0	1.5	1.7			
Laos				0.8	0.8	0.8			

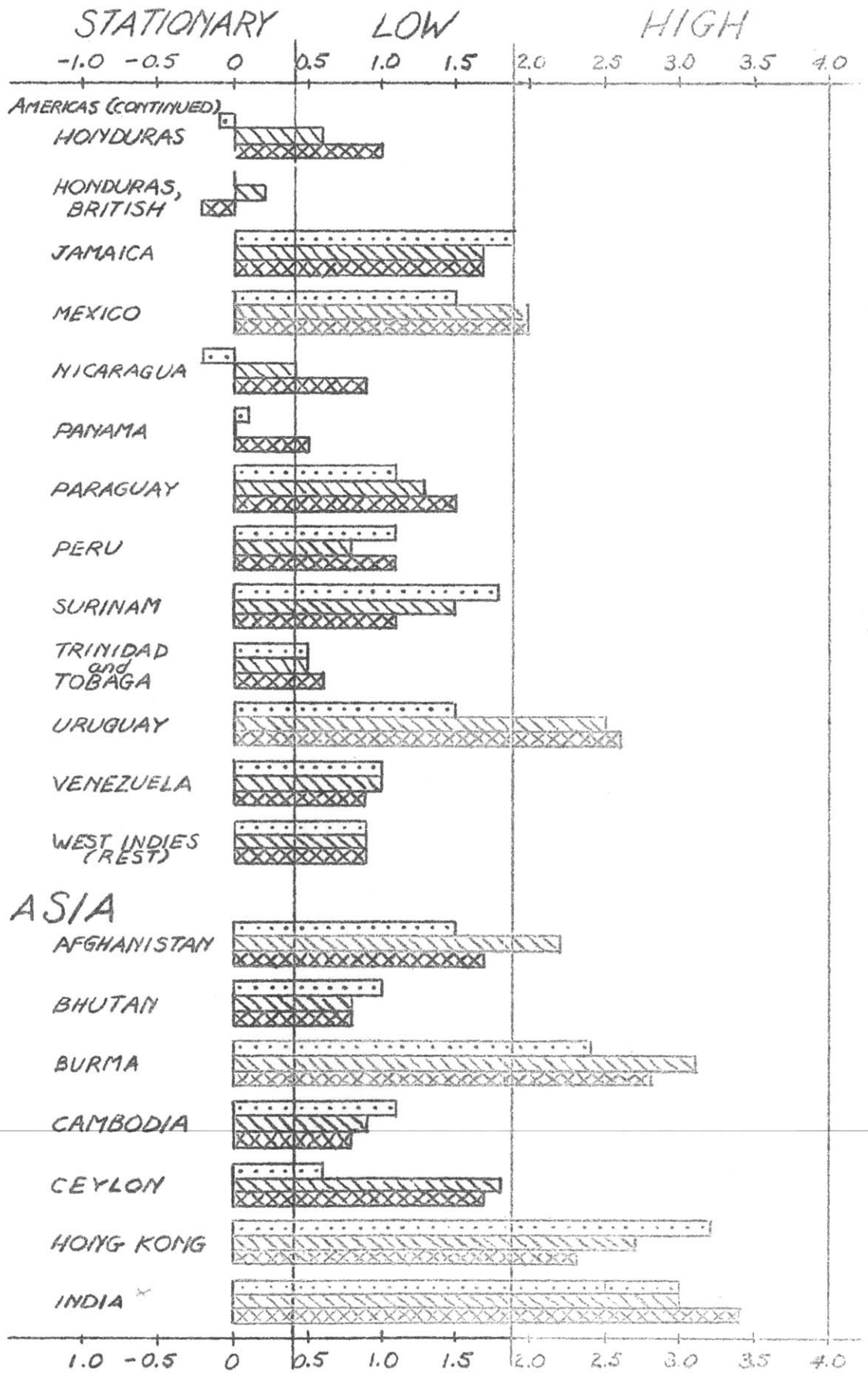
*Countries marked thus are assumed to have sustained growth (see III.2)

	High Growth			Low Growth			Stationary		
	1961-66	1966-71	1971-76	1961-66	1966-71	1971-76	1961-66	1966-71	1971-76
Malaya				1.3	1.4	1.6*			
Nepal		2.0		0.8		1.5			
Pakistan	2.0	2.4	3.0*						
Philippines				1.3	1.8	1.7*			
Ryukyu Islands			2.1	1.5	1.8				
Singapore				1.1	1.3	1.5			
Taiwan					1.0	1.5	0.4		
Thailand				0.8	1.3	1.7			
South Viet Nam				1.4	1.3	1.7			
EUROPE									
Greece	3.0	4.0	4.0*						
Portugal	2.2	2.1	3.0						
Spain	2.2	2.6	3.1						
Yugoslavia	3.8	3.8*	3.9*						
MIDDLE EAST									
Bahrain				1.0	0.8	0.8			
Egypt				1.5	1.9	1.8			
Iran				1.7	1.7	1.6			
Iraq		2.6	2.6*	1.6					
Israel			2.3*	0.7	1.6				
Jordan					0.6	0.7	-0.5		
Kuwait				1.0	0.9	0.7			
Lebanon				1.5	1.5	1.7			
Saudi Arabia				0.6	0.6	0.6			
Syria			2.0		1.3		0.1		
Turkey			2.1*	1.4	1.9				
Yemen				0.9	1.6	1.3			

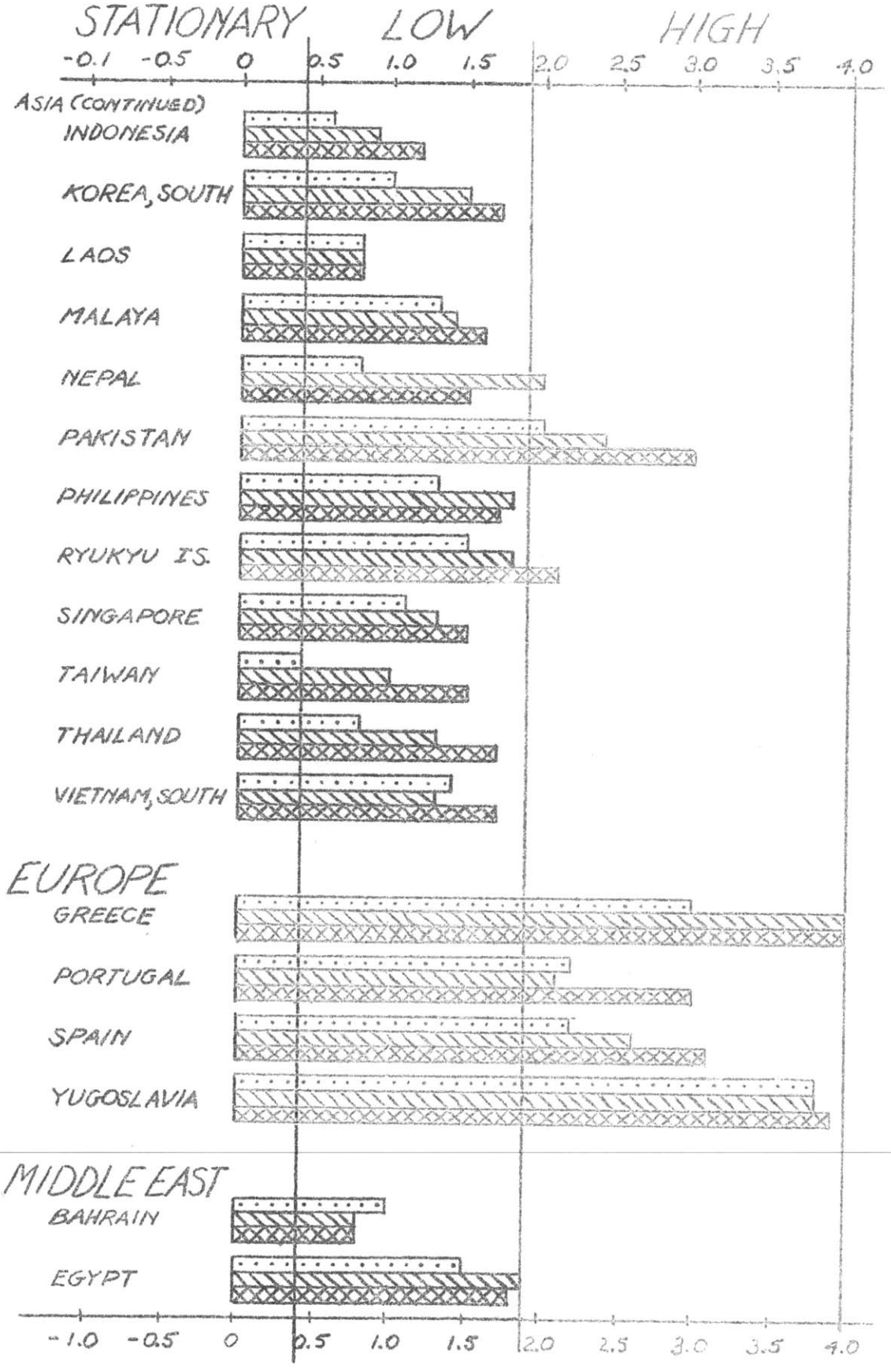
* Countries marked thus are assumed to have sustained growth (see III 2)

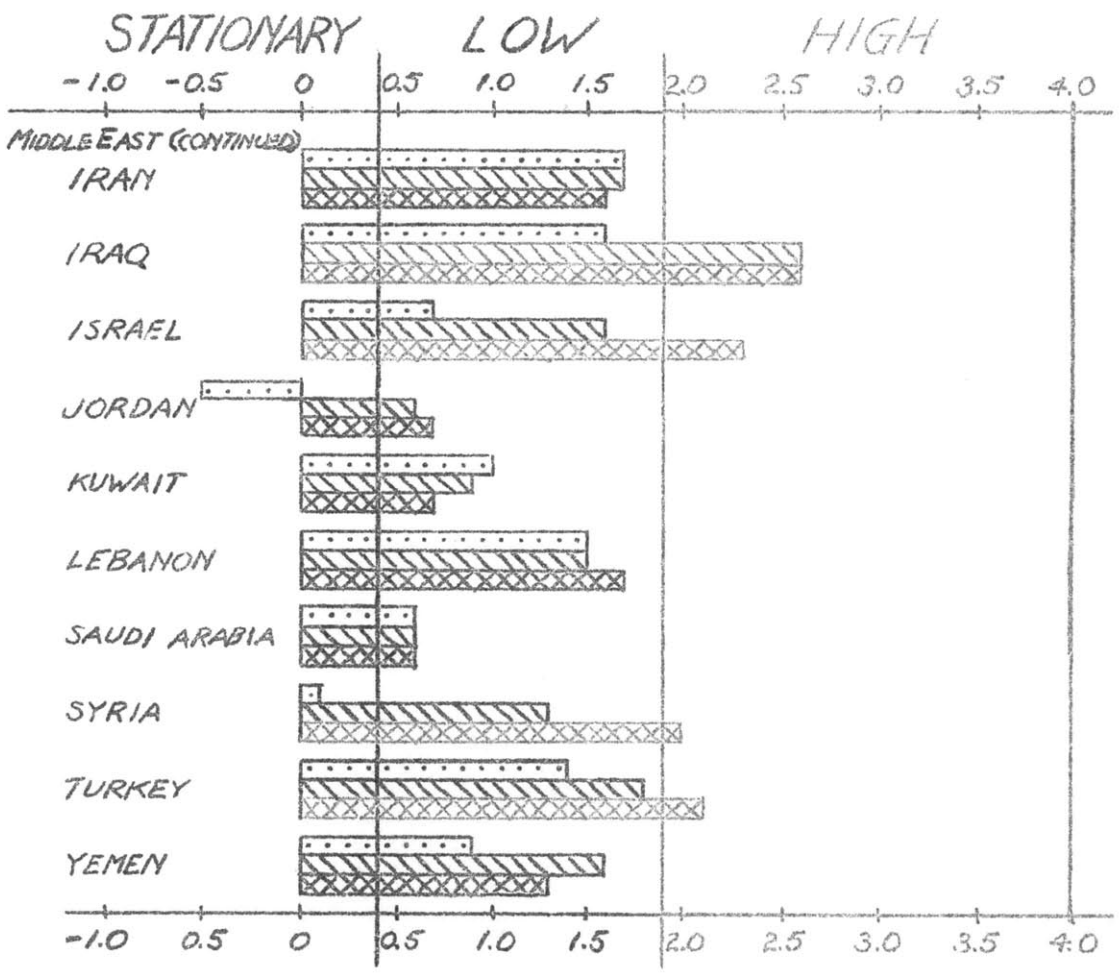
HIGH- AND LOW-GROWTH COUNTRIES
1961-1976
(Rate of Growth Per Head)


STATIONARY
LOW
HIGH
-1.0 -0.5 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0
AFRICA (CONTINUED)
SOMALILAND, ITALIAN
SOUTH WEST AFRICA
SUDAN
TANGANYIKA
TOGOLAND
TUNISIA
UGANDA
AMERICAS
ARGENTINA
BOLIVIA
BRAZIL
CHILE
COLOMBIA
COSTA RICA
CUBA
DOMINICAN REPUBLIC
ECUADOR
EL SALVADOR
GUATEMALA
GUIANA, BRITISH
HAITI
-1.0 -0.5 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0



* 1961-1966 alternate: 2.5 per cent.


STATIONARY
LOW
HIGH
-0.1 -0.5 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0
ASIA (CONTINUED)
INDONESIA
KOREA, SOUTH
LAOS
MALAYA
NEPAL
PAKISTAN
PHILIPPINES
RYUKYU IS.
SINGAPORE
TAIWAN
THAILAND
VIETNAM, SOUTH
EUROPE
GREECE
PORTUGAL
SPAIN
YUGOSLAVIA
MIDDLE EAST
BAHRAIN
EGYPT
-1.0 -0.5 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0


STATIONARY
LOW
HIGH
-1.0 -0.5 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0
MIDDLE EAST (CONTINUED)
IRAN
IRAQ
ISRAEL
JORDAN
KUWAIT
LEBANON
SAUDI ARABIA
SYRIA
TURKEY
YEMEN
-1.0 0.5 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0

added, and within a decade possibly Ecuador (and maybe Cuba). Secondly, there are countries with a satisfactory rate of growth like Peru, Ecuador and Venezuela. Thirdly, there is a large group of Stationary Countries in Central America with very high rates of increase in population, which partly for that reason cannot get off the dead center. It may well be that the population projections are too pessimistic for the later periods (after 1966 or 1971) when the rate of population increase may fall and that in this case our forecast is unduly pessimistic. Costa Rica has a special position among those countries, having a relatively high level of income, but no growth. A high rate of increase in population is a powerful but not an insuperable obstacle to growth. The example of Mexico--and in the future perhaps those of Iraq, Egypt and Turkey--shows that such an obstacle can be overcome. If the absorptive capacity of these could be raised, aid should be provided. Our low estimates of the Aid required for Central America are due to her at present limited absorptive capacity.

In Asia India seems to be in a "take-off" stage, in spite of her low income per head. Her absorptive capacity is higher than her capacity to repay, so that more than one-half of the aid required should be in the form of grants or soft loans. Pakistan's tempo of development appears to be somewhat lower, but it is promising. Burma should be able to initiate a higher rate of growth. The "economic factors" like the rate of savings appear to be favorable--the capacity to organize development may follow soon. These are the only (four) countries in Asia with prospects of a high rate of growth. Ceylon has obstacles of a high increase in population and relatively low capacity to organize development. Indonesia is an example of a limited absorptive capacity.

In the Middle East Turkey, Egypt and Iraq may overcome the obstacle of a high increase in population--the task appears to be most difficult in Egypt because of a high density of population--; there are symptoms of developmental vigor which may show some results in five years' time, and may consolidate the success in the 1970's.

In Southern Europe, finally, Yugoslavia and Greece seem to have reached the stage of high sustained growth, while Spain and Portugal may follow within five and ten years.

(For more details see Appendix Notes to Tables III and IV)

2. Sustained Growth

The distinction between a "once for all" movement and a sustained (cumulative) process is fundamental, but it is not easily applied for purposes of a diagnosis or a prognosis. "Economic factors" are a necessary, but not sufficient condition of sustained growth. For a discussion of the multiple causation and interrelation of social economic and political factors involved we may refer to "Economic, Social, and Political Changes in the Underdeveloped Countries and its Implications for U.S. Policy," a Study prepared at the request of the Committee on Foreign Relations, U.S. Senate by CENIS, M.I.T., March 30, 1960.

At a low stage of technology some "once for all" increases in agricultural productivity may often be obtained without being followed up by further increases in the same sector, and without any "sparking" or catalytic effect on productivity in other sectors. Important symptoms of sustained growth are, on the one hand, the ability to imitate and to absorb other countries' methods of production--frequently referred to as "technological progress"--

and, on the other hand, a differentiated structure of production and investment, notably including a minimum quantum and growth of induatrial production.

None of the countries in Africa have reached or are highly likely to reach this stage during the next decade. In Latin America Argentina, Brazil, Colombia and Mexico have almost certainly reached this stage already, Chile is on the verge of it, while Uruguay may soon reach it. In Asia India almost certainly and Pakistan most probably have reached it, while the Philippines and perhaps Burma may reach it in the 1970's. Malaya's satisfactory but not high growth does not yet show symptoms of being sustained. No other country in Asia appears to be likely to reach the stage within the next decade. In the Middle East Egypt, Turkey, and Iraq are possible candidates in five or ten years' time. In Southern Europe Yugoslavia certainly, Greece most probably have reached the stage. Spain may reach it in a decade.

3. Self-sustaining growth marks a stage where Aid is not required any more for sustained growth, while normal capital imports--Private Foreign Investment--may continue. Countries in this stage are marked with an asterisk in the Table on pages 12 to 14. In Latin America several countries will probably reach this stage in five or ten years' time. Colombia will reach it in 1965, Argentina and Mexico will gradually approach it in the decade 1965-1975 with increasing proportions (more than half) of total Capital Inflow provided through private investment. Chile's progress is less clearly foreseeable--she may need more capital imports than is indicated in Appendix Table IV-A in 1966-71 and less than shown for 1971-76. In Asia India should reach this stage in the early 1970's, if her third and fourth Five Year Plans are implemented. While realization may lag behind the austere and ambitious targets, she may reach the self-sustaining growth

stage with a few years delay, say in 1976. Pakistan may reach this stage three to five years later; Philippines probably only after 1975. None of the countries of the Middle East appear probable to reach this stage within 1960-1975 with the possible exception of oil-rich Iraq. In Southern Europe Yugoslavia should reach it by 1966, Greece towards the end of the 1960's.

IV. CAPITAL-OUTFLOW AND AID INTO UNDERDEVELOPED COUNTRIES

1. U.S. Aid and Capital-Outflow to Underdeveloped Countries amounted in 1959 and 1960 to around $2.75 billion and consisted of the following items:

		$ billion
Development Loan Fund		0.7
Export-Import Bank (gross 0.375)	net	0.275
P.L. 480 (Total Sale 0.9)	2/3	0.6
1/4 of "Defense Support"		0.2
Total Economic Aid		$1.75
Private Foreign Investment		
Gross 1.0 billion		
Net 0.9 "		
Minus ½ oil investment 0.35		0.65
Total Capital Outflow		$2.4

Technical Assistance amounted moreover to $0.2 billion and Emergency Fund to $0.2 billion.

2. Other sources account for a Capital-Outflow of $1.25 billion

International Bank (gross 0.42 net disbursement)	0.35
United Kingdom Public (0.2) and Private Investment (gross 0.6 net 0.52 minus ½ oil investment 0.17)	0.35
France Public (0.50) and Private Investment (gross 0.7 net 0.65 minus ½ oil investment 0.2)	0.45
Other Countries of the Free World	0.1
Total	$1.25

The total Capital Outflow into Underdeveloped Countries amounted therefore to $3.65 billion. Total Expenditure on Technical Assistance to around $0.35 billion. The U.S.S.R. supplied Economic Aid of around $0.5 billion.

The Underdeveloped Countries total Gross Capital Formation is estimated at around $28.7 billion in 1961. The total Capital-Inflow from the Free World is around $3.65 billion. Adding to it one-half of Oil Investments of $0.7 billion and one-third of P.L. 480 sales of $0.3 billion omitted in the above calculations raises the long-term Capital-Inflow to $4.65 billion--and the U.S.S.R. aid raises it further to $5.15 billion. Besides the long-term Capital-Inflow around $2 billion net of short-term Capital-Inflow has to be remembered. The Domestic Gross Capital Formation of Underdeveloped Countries amounts to around $21.6 billion.

3. Aid required in the Future is illustrated in Tables V-A-B-C in the Appendix which, according to our definition, include only one-half of Oil Investments and two-thirds of P.L. 480 sales. The total increase in Capital-Inflow required amounts to $2 billion per annum for 1961-1971 (from $3.65 per annum at present to $5.7 billion per annum for the next decade) and to around $1 billion per annum in 1971-76 (if the more probable Alternative Asia Total II, Appendix Table V-C is considered). Economic Aid should increase by $1.64 billion from the present $2.65 billion to $4.290 billion (See Appendix Table V-A). The U.S. share of it should increase by 0.7 billion (i.e., by 40 per cent) from the present 1.75 billion per annum to $2.46 billion per annum. Economic Aid from other sources should increase by $0.73 billion from the present $1.1 billion to $1.83 billion (i.e. by 66 per cent). Private Investment (excluding one-half of Oil Investments) should increase by $0.45 billion per annum (i.e. by 50 per cent) from the present $0.96 billion to $1.41 billion in 1961-66 and by a further $0.5 billion per annum in 1966-71, thus doubling the present level of Private Investment in Underdeveloped Countries and reaching a flow of $1.91 billion per annum.

4. The U.S. total expenditures on Aid to Underdeveloped Countries may thus amount to:

	1961-66 $ billion	1966-71 $ billion	1971-76 $ billion
Economic Aid	2.46	2.13	1.41
1/3 of P.L. 480	0.34	0.3	0.2
Technical Assistance	0.25	0.25	0.2
"Social Development" (not treated in this Report) possibly	0.3	0.3	0.2
Emergency Fund	0.2	0.2	0.1
	3.55	3.2	2.1

It should consist of around 75 per cent of "soft" and 25 per cent of "hard" loans for 1961-1966,
65 per cent of "soft" and 35 per cent of "hard" loans for 1966-1971, and
50 per cent of "soft" and 50 per cent of "hard" loans for 1971-1976, in order to match the low-income countries' (mainly in Asia) limited capacity to repay. Over 40 per cent of the "soft" loans (i.e., 30 per cent of Economic Aid) will consist of P.L. 480 sales or grants. The criteria of eligibility for soft loans are low income per head and a "foreign exchange gap" which is greater than the "resources gap."

5. The allocation in typical years might be as follows:

	1961-66 $ billion	1966-71 $ billion	1971-76 $ billion
Development Loan Fund	1.5	1.2	0.8
	(1.2 soft)	(0.8 soft)	(0.3 soft)
	(0.3 hard)	(0.4 hard)	(0.5 hard)
Export-Import Bank	0.26	0.33	0.21
2/3 of P.L. 480	0.7	0.6	0.4
	2.46	2.13	1.41

The hard-loan portion of the Development Loan Fund and the Export-Import Bank Development Loans are interchangeable. Expenditures on Technical Assistance, Emergency Fund and "Social Development" as well as 1/3 of P.L. 480 sales will require additional appropriations (see IV-2) of around $1.1 billion per annum in 1961-71 and $0.7 billion per annum in 1971-76.

V. THE METHOD OF COMPUTING CAPITAL-INFLOW REQUIREMENTS

The method of computing the Capital-Inflow requirements of Underdeveloped Countries and the single steps in applying it is shown in the Appendix and its Explanatory Notes (notably those to Tables III and IV). Each underdeveloped country's Gross National Product (Y_o) and its rate of growth (r), --assumed according to its estimated absorptive capacity-- are shown in Appendix Table II-A-1. The Average Savings Rate of the initial year 1961 (S_o/Y_o) as well as Gross and Net Investment are shown in Table III-A. The Marginal Savings Rate (b) is shown in Table IV-A. We assume a Capital-Output Ratio (k) of 3:1 (see Appendix Explanatory Notes to Table IV). The formula for calculating the Foreign Capital-Inflow for a five-year period is:

$$F = (kr - b)\sum Y + 5\, Y_o \left(b - \frac{S_o}{Y_o}\right)$$

The sensitiveness to change of each of the above parameters can be examined by partially differentiating the above expression, keeping everything else constant. With respect to k, b, and $\frac{S_o}{Y_o}$ we get the following expressions:

1) $\frac{\delta F}{\delta k} = r\sum Y$

2) $\frac{\delta F}{\delta b} = -\sum Y + 5\, Y_o$

3) $\frac{\delta F}{\frac{\delta S_o}{Y_o}} = -5\, Y_o$

Capital Inflow is obviously very sensitive to initial Gross National Product, to the initial years Average Savings Rate and to the Capital-Output Ratio. If the Capital-Output ratio were, for instance, 10 per cent lower (2.7 instead of 3)=while the rate of growth was 4 per cent, the Foreign Capital-Inflow would be about 21 per cent lower. The marginal savings rate has a relatively smaller influence over a short period of five years--but the influence is growing the longer the period considered. The assumed marginal savings

rates are relatively high; in some cases they may represent desirable targets rather than present trends (see Appendix Explanatory Notes to Table IV). In spite of their poverty, however, many countries have realized such savings rates. Italy, for instance, with one-fifth of the U.S. income per head had in the last decade the same average savings rate of 14 per cent and a marginal savings rate of 25 per cent. A marginal savings rate considerably higher than the average is the main lever of economic development of underdeveloped countries. Once the level of self-sustaining growth is reached with average savings of 12-15 per cent the marginal savings rate need not anymore be higher than the average rate.

The Capital Inflow required is subdivided between Aid and Private Investment in Appendix Table IV-B.

In view of the nature of the statistical information available the margin of error in our computations may be estimated at $\pm$ 25 per cent.

A P P E N D I X

TABLE I-A

WORLD GROSS NATIONAL PRODUCT AND POPULATION, 1961

	G.N.P. (U.S. $mill.)	% of World Total	Population (thous.)	% of World Total	G.N.P. Real Terms (U.S. $mill.)	% of World Total	G.N.P. Per Head (U.S. dollars)	"Real" G.N.P. Per Head
EVELOPED COUNTRIES:								
Western Europe	284,774	20.6	260,999	8.7	384,898	22.0	1,091	1,472
Oceania	17,781	1.3	16,095	0.5	24,360	1.4	1,105	1,513
United States	515,000	37.3	184,566	6.2	515,000	29.4	2,790	2,790
Canada	37,506	2.7	18,313	0.6	37,506	2.1	2,048	2,048
Japan	36,326	2.6	94,791	3.2	58,122	3.3	383	613
South Africa	6,495	0.5	15,215	0.5	9,093	0.5	427	598
	897,882	65.0	589,974	19.7	1,028,979	58.7		
OMMUNIST BLOC:								
U.S.S.R.	175,960	12.7	214,968	7.2	212,032	12.1	818	986
Eastern Europe	54,745	4.0	99,556	3.3	82,117	4.7	550	825
China	57,844	4.2	693,957	23.2	115,688	6.6	83	167
North Korea	989	0.1	9,418	0.3	1,978	0.1	105	211
North Viet Nam	1,749	0.1	16,661	0.6	3,323	0.2	105	199
	291,287	21.1	1,034,560	34.6	415,138	23.7		
NDERDEVELOPED OUNTRIES:								
Africa	20,565	1.5	205,814	6.9	33,657	1.9	100	164
America	65,292	4.7	210,145	7.0	89,344	5.1	311	425
Asia	65,309	4.7	779,800	26.1	119,765	6.8	84	154
Europe	20,943	1.5	66,845	2.2	33,509	1.9	313	501
Middle East	19,906	1.4	106,136	3.5	29,293	1.7	187	257
	192,015	13.8	1,368,740	45.7	305,568	17.5		
ORLD TOTAL	1,381,184	100	2,993,279	100	1,749,685	100		

TABLE I-B

WORLD INCOME DISTRIBUTION

Countries with G.N.P. Per Head	"money" G.N.P.		"real" G.N.P.	
	% of World Population	% of G.N.P.	% of World Population	% of "real" G.N.P.
$100 or less ($150 or less)	50.1 (57.1)	8.5 (10.2)	0.4 (26.6)	0.1 (6.3)
$101 - $ 300 ($151 - $ 300)	15.7 (8.7)	6.1 (4.4)	59.9 (33.7)	16.6 (10.4)
$301 - $ 600)	10.7	10.1	8.7	6.4
$601 - $1,200	16.7	35.3	15.1	21 9
above $1,200	6.8	40.0	15.9	55.0

EXPLANATORY NOTES ON TABLES I-A AND I-B

The gross national product figures were taken from World Income, 1957 by Mikoto Usui and E. E. Hagen, M.I.T., November, 1959, and from the U.N. Yearbook of National Accounts Statistics 1959, United Nations, New York, 1960.

The gross national product estimates have been calculated as follows:

Western Europe:

Derived from the 1958 figures of the U.N. Yearbook of National Accounts Statistics 1959 with the following growth rates:

Common Market (except Belgium)	5 per cent per annum
Belgium	3½ " " " "
Free Trade Area	3½ " " " "
Rest of Europe	3 " " " "

Oceania:

Derived from Usui and Hagen, op. cit., with a 3 per cent per annum growth rate.

Canada:

Estimate taken from D. E. Armstrong, Canada's Prospects--A Reassessment, Moorgate & Wall Street, London, 1960, giving a 1960 figure. A growth rate of 2 per cent is assumed for 1960-61.

United States:

Direct estimate of $505 billion for 1960 and an assumed 2 per cent growth rate.

Japan:

Usui and Hagen, op. cit., and a growth rate of 7 per cent per annum from 1957 to 1961.

South Africa:

Usui and Hagen, op. cit., and a growth rate of 3 per cent per annum from 1957 to 1961.

China:

Calculated from a direct estimate for 1961 gross national product of $83 per head.

U.S.S.R.:

Calculated from a direct estimate for 1961 gross national product of $813 per head.

North Korea and North Viet Nam:

Calculated from a direct estimate for 1961 gross national product of $105 in both cases.

Eastern Europe:

Calculated on the following direct estimates for 1961 gross national product per head:

Albania	$240
Czechoslovakia	$650
Bulgaria)	
Poland)	$440
Rumania)	
Hungary	$475
East Germany (Including E. Berlin)	$700

"Real" GNP per head (last column) indicates the purchasing power of the GNP compared to United States prices. It is a rough estimate of an order of magnitude. The purchasing power of various countries has been increased by rates varying from 20 per cent to 100 per cent. Western Europe, according to Milton Gilbert & Associates, Comparative National Products and Price Levels, A Study of Western Europe and the United States, Paris, O.E.E.C., 1958. U.S.S.R. +20 per cent, India +100 per cent. For details about the increase of each underdeveloped country, see the last column of Table II-A-1. For an alternative calculation of "Real" GNP estimated globally, see Everett E. Hagen, "Some Facts About Income Levels and Economic Growth," The Review of Economics and Statistics, February, 1960.

TABLE II-A-1

GROSS NATIONAL PRODUCT PROJECTIONS IN UNDERDEVELOPED COUNTRIES

(U. S. Dollar Millions)

	1961 GNP	1961-66 Rate of growth p.a., per cent	1966 GNP	1966-71 Rate of growth p.a., per cent	1971 GNP	1971-76 Rate of growth p.a., per cent	1976 GNP	1961 Real GNP
AFRICA								
Eritrea and Ethiopia	1,149.1	2	1,268.7	3	1,470.8	3.5	1,746.8	1,953.4
Ghana	966.3	2.5	1,093.2	3	1,267.3	3.5	1,505.1	1,449.4
Liberia	113.7	2.5	128.6	2.5	145.4	2.5	164.5	1,819.2
Libya	76.8	4	93.4	3	108.2	3	125.4	122.8
Morocco	1,539.3	2.5	1,741.5	2.75	1,994.3	3	2,312.0	2,308.9
Sudan	847.8	2.5	959.2	3	1,112.0	3	1,289.1	1,356.4
Tunisia	654.0	2.5	739.9	3	857.7	4	1,043.5	981.0
Belgian Congo	1,482.0	1	1,557.5	2	1,719.6	3	1,993.5	2,223.0
Gambia	15.6	2	17.2	2	18.9	2	20.8	26.1
Kenya	624.2	3	723.6	3	838.8	3.5	996.2	998.7
Nigeria	2,920.4	3	3,385.6	3.25	3,967.9	3.5	4,712.6	4,672.6
Rhodesia and Nyasaland	1,341.0	4	1,631.5	4	1,985.0	4	2,415.1	1,877.4
Mauritius	147.3	2.5	166.6	3	193.1	3	223.8	220.9
Uganda	436.0	3	505.4	3.5	600.2	4	730.2	763.0
Algeria	2,063.4	4	2,510.5	4	3,054.5	4	3,716.4	3,095.1
Former French West Africa	2,159.1	3	2,503.0	3	2,901.7	3.5	3,446.3	3,238.6
Former French Eq. Africa	560.1	3	649.3	3	752.7	3.5	893.9	840.1
Madagascar	558.8	2.5	632.2	3	732.9	3	849.6	838.2
Angola	301.8	2.5	341.4	3	395.7	3.5	469.9	528.1
Mozambique	491.0	2.5	555.5	3	643.9	3.5	764.7	736.5
British Cameroons	109.4	2	120.7	3	139.9	3	162.1	185.9
French Cameroons	345.5	2	381.4	3	442.1	3	512.5	552.8
Ruanda Urundi	351.0	2	387.5	3	449.2	3	520.7	596.7
Ital. Somaliland	77.4	2	85.4	2	94.2	3	109.2	139.3
Tanganyika	699.2	3	810.5	4	986.1	4	1,199.7	1,188.6
Togoland	63.0	2	69.5	3	80.5	3	93.3	113.4
South West Africa	58.2	2	64.2	3	74.4	3	86.2	104.7

	1961 GNP	1961-66 Rate of growth p.a., per cent	1966 GNP	1966-71 Rate of growth p.a., per cent	1971 GNP	1971-76 Rate of growth p.a., per cent	1976 GNP	1961 Real GNP
Territories, etc.								
Other British	297.1	2.5	336.1	3	389.6	4	474.0	519.9
Other French	38.2	2.5	43.2	3	50.0	4	60.8	66.8
Other Portuguese	54.6	2.5	61.7	3	71.5	4	86.9	95.5
Spanish	23.9	2.5	27.0	3	31.3	4	38.0	41.8
	20,565.2	2.8-	23,591.0	3.2+	27,569.4	3.5+	32,762.8	33,656.8
AMERICA								
Argentina	11,447	3.75	13,759.3	4.25	16,944.5	4.75	21,383.9	17,170
Bolivia	308	2.5	348.4	3	403.9	3.5	479.7	431
Brazil	18,082	4.25	22,267.9	4.5	27,750.2	5.0	35,417.5	25,315
Chile	2,679	3.25	3,139.7	3.5	3,729.0	4.0	4,537.1	3,483
Colombia	4,170	4.5	5,195.8	5	6,629.8	5	8,461.6	5,421
Costa Rica	330	3	382.5	3.5	454.3	4	552.7	429
Cuba	2,850	3	3,304.0	3.25	3,872.2	3.5	4,599.0	3,562
Dominican Republic	737	3	854.4	3	990.5	3	1,148.2	921
Ecuador	700	3.5	831.4	4.0	1,011.5	4.25	1,245.6	980
El Salvador	513	3	594.7	3.7	713.2	4	867.7	718
Guatemala	715	3	828.8	3.7	993.9	4	1,209.3	1,001
Haiti	356	3	412.7	3	478.4	3	554.6	534
Honduras	360	3	417.3	3.7	500.4	4	608.8	504
Mexico	10,460	4.5	13,033.2	5	16,630.4	5	21,225.4	14,644
Nicaragua	313	3	362.8	3.5	430.9	4	524.3	438
Panama	305	3	353.6	3	409.9	3.5	486.8	396
Paraguay	230	3	266.6	3	309.0	3	358.2	345
Peru	1,952	3.5	2,318.4	3.75	2,786.7	4.0	3,390.5	2,928
Uruguay	1,270	3	1,472.3	4	1,791.3	4	2,179.4	1,587
Venezuela	4,451	4	5,415.5	4	6,589.0	4	8,016.8	4,451
20 L.A. Republics	62,228	4.0-	75,559.3	4.3+	93,419.0	4.6+	117,247.1	85,258
British Guiana	136	3	157.6	3	182.7	3	211.8	204
British Honduras	13.6	3	15.7	3	18.2	3	21.0	20
Falkland Islands	0.2	3	0.23	3	0.26	3	0.30	0.3
Jamaica	621	4	755.5	4	919.2	4	1,118.3	807
Trinidad and Tobago	365	3	423.1	3	490.4	3	568.5	474
West Indies (rest)	190	3	220.2	3	255.2	3	295.8	247

	1961 GNP	1961-66 Rate of growth p.a., per cent	1966 GNP	1966-71 Rate of growth p.a., per cent	1971 GNP	1971-76 Rate of growth p.a., per cent	1976 GNP	1961 Real GNP
AMERICA continued								
French Possessions	94	2.4	105.8	2.5	119.7	2.5	135.4	141
Greenland	3.3	2	3.6	2	4.0	2	4.4	4.9
Netherlands Antilles	32	2	35.3	2	38.9	2	42.9	48
Surinam	48	4	58.4	4	71.0	4	86.3	72
Canal Zone	25	3	28.9	3	33.5	3	38.8	33
Total South and Central America	63,756	3.9+	77,363.6	4.3+	95,552.0	4.6+	119,770.6	87,500
Puerto Rico	1,533	3	1,777.2	3.5	2,110.8	3.5	2,507.0	1,839
Virgin Islands	3.3	3	3.8	3	4.4	3	5.1	4.9
TOTAL AMERICAN UNDER-DEVELOPED COUNTRIES	65,292	3.9+	79,144.6	4.3+	97,667.2	4.6+	122,282.7	89,344
ASIA								
Afghanistan	760.3	3	881.4	4	1,072.3	4	1,304.6	1,520.6
Bhutan	32.5	3	37.6	3	43.5	3	50.4	65.0
Burma	1 276.2	4	1,552.7	5	1,981.7	5	2,529.2	2,552.4
Cambodia	384.8	3	446.0	3	517.0	3	599.3	769.6
Ceylon	1,243.7	3	1,441.8	4	1,754.2	4	2,134.3	2,176.4
Taiwan	1,255.3	3.5	1,490.9	3.75	1,792.0	4	2,180.3	2,196.8
India	29,600.1	5	37,778.6	5	48,216.8	5	61,539.1	59,200.2
Indonesia	9,165.4	2.5	10,369.7	3	12,021.5	3.5	14,277.9	13,748.1
South Korea	2,531.3	3	2,934.5	3.5	3,485.3	4	4,240.5	3,796.9
Laos	93.3	3	108.1	3	125.3	3	145.2	186.6
Malaya	2,614.6	4	3,181.1	4	3,870.4	4	4,709.1	3,921.9
Nepal	444.5	3	515.3	4	626.9	4	762.7	889.0
Pakistan	5,612.6	4	6,828.8	4.5	8,510.0	5	10,861.3	11,225.2
Philippines	4,796.0	3.50	5,696.2	4.0	6,930.5	4	8,432.3	7,194.0
Thailand	2,320.6	3	2,690.2	3.5	3,195.1	4	3,887.4	4,641.2
South Viet Nam	1,515.9	3.5	1,800.4	3.5	2,138.3	4	2,601.6	2,880.2
North Borneo	44.2	3	51.2	3	59.3	3	68.7	88.4
Sarawak	77.7	4	94.5	4	114.9	4	139.7	155.4
Neth. New Guinea	32.4	3	37.5	3	43.4	3	50.3	64.8
Ryukyu Islands	180.9	3.5	214.8	3.5	255.1	3.5	302.9	289.4
Hong Kong	482.7	4.7	607.2	4.5	756.6	4.5	942.8	868.9

	GNP	Rate of growth p.a., per cent	GNP	Rate of Growth p.a., per cent	GNP	Rate of growth p.a., per cent	GNP	Real GNP
ASIA continued								
Singapore	615.0	4	748.2	4	910.3	4	1,107.5	922.5
Macao	35.5	3.5	42.1	3.5	50.0	3.5	59.3	60.3
Port. India	100.4	5	128.1	5	163.4	5	208.5	180.7
Port. Timor	80.5	2.5	91.0	2.5	102.9	2.5	116.4	144.9
/Other	12.8	4	15.5	4	18.8	4	22.8	25.6
	65,309.1	4.1	79,783.4	4.4	98,755.5	4.5	123,274.1	119,765.0
EUROPE								
Greece	3,217.1	4	3,914.2	5	4,995.7	5	6,376.0	5,147.4
Portugal	2,204.2	3	2,555.3	3	2,962.3	4	3,604.2	3,526.7
Spain	9,722.9	3	11,271.7	3.5	13,378.7	4	16,268.9	15,556.6
Yugoslavia	5,799.0	5	7,401.2	5	9,446.1	5	12,056.0	9,278.4
	20,943.2	3.7+	25,142.4	4.4-	30,782.8	4.7-	38,305.1	33,509.1
MIDDLE EAST								
Bahrain	28.1	3	32.5	3	37.6	3	43.5	42.1
Iran	2,526.9	4	3,074.5	4	3,740.7	4	4,551.3	3,790.3
Iraq	1,142.2	4	1,389.7	5	1,773.6	5	2,263.6	1,599.0
Israel	1,710.1	5	2,182.6	5	2,785.6	5	3,555.2	2,394.1
Jordan	214.3	2	236.6	3	274.2	3	317.8	321.4
Kuwait	678.5	3	786.5	3	911.7	3	1,056.9	658.8
Lebanon	536.5	4	652.7	4	794.1	4	966.2	804.7
Muscat and Oman	35.7	2	39.4	2	43.5	2	48.0	71.4
Saudi Arabia	1,154.6	3	1,338.5	3	1,551.7	3	1,798.8	1,731.9
Turkey	6,326.2	4	7,697.0	4.5	9,582.8	4.5	11,929.6	9,439.3
Egypt	4,004.5	4	4,872.2	4.5	6,056.6	4.5	7,539.2	6,006.7
Syria	815.9	3	945.8	4	1,150.7	4.5	1,434.0	1,223.8
(U.A.R.)	(4,820.4)		(5,818.0)		(7,369.0)		(9,370.4)	(7,230.5)
Yemen	243.4	2	268.7	3	311.5	3	361.1	486.8
Aden	106.9	3	123.9	3	143.6	3	166.4	160.3
Cyprus	281.2	3	325.9	3	377.8	3	437.9	393.6
Gaza Strip	19.0	3	22.0	3	25.5	3	29.5	38.0
* Other	82.2	2	90.7	2	100.1	2	110.5	81.0
	19,906.2	3.9	24,079.2	4.5+	29,534.8	4.6-	36,509.5	29,293.2

EXPLANATORY NOTES ON TABLE II-A-1

Unless otherwise indicated the gross national product figures for 1961 have been calculated largely on the basis of the estimates in Usui and Hagen, op. cit. on the basis of an assumed rate of growth in 1957-1961, and the U.N. Yearbook of National Accounts Statistics 1959. For many data on separate national income accounts of African countries and some data on the rate of population increase, the writer had the opportunity of obtaining the use of valuable data contained in Mrs. Ona B. Forrest's Capital Formation and Economic Growth in Africa South of the Sahara, 1950-59, which will be published this year by the Center for International Studies, M.I.T.

National income statistics for Africa are, in many cases, still in the nature of rough "guesstimates." Within the range of various estimates available, we assumed a gross national product per head (see Table II-C) and calculated the aggregate GNP by multiplying by the total population.

Sudan: Department of Statistics, Khartoum, 1958, estimates the gross national product at 1955-56 prices at $61 per head. Our estimate for 1961 assumes $75 per head.

Kenya: Gross national product per head estimate of 1958 in the offical accounts assumes $82 per head compared with ours of $94.

Rhodesia and Nyasaland: Our estimate is taken from the Monckton Report, 1960, based on figures of the Central Statistical Office of the Federation, indicating gross domestic product (GDP) per head of £19 for Nyasaland, £82 for Northern Rhodesia and £89 for Southern Rhodesia.

Libya: The gross national product per head may involve a considerable underestimate. A recent evaluation of the income per head by a mission of the International Bank for Reconstruction and Development is of $90 to $100 per head instead of ours of $63. Libya's gross national product is probably an underestimate. It may easily amount to $100 million for 1961 instead of $76.8 assumed by us.

Latin America:

The figures are calculated on the basis of the U.N. Economic Commission for Latin America Reports for 1958 in "constant dollars" of 1950. If one applied the United States gross national product deflator to one constant dollar of 1950, it would be equivalent to $122 in 1961. We believe, however, that the E.C.L.A. estimates in constant dollars of 1950 are an overestimate and have, accordingly, translated their constant dollar 1950 estimates into a current 1958 dollar by adding 12 per cent. In addition, three modifications have been introduced:

> For Argentina: E.C.L.A. estimate of gross national product for 1958 has been reduced by 18 per cent; for Panama, by 10 per cent; and for Venezuela, by 40 per cent.

Recent country studies all seem to imply that previous Argentine income estimates (as well as the estimate of the rate of gross investment--see remarks to Table III) overvalued the Argentine income. It is also highly probable that Panama's income per head is lower rather than higher than that of Mexico and, accordingly, a 10 per cent reduction appeared indicated. In Venezuela the translation of a gross

national product in national currency at the previously obtaining official rate of exchange would have given Venezuela a gross national product per head of around $1100, which clearly implied a gross overvaluation. The correction for purchasing power is indicated in the estimate for the "Real" GNP. In Venezuela's case, however, the correction was also made for nominal gross national product in order to preserve the proper ranking order of income per head of different countries. The correction of -40 per cent of gross national product applied to the rate of exchange which was valid until the end of 1960. By the end of 1960 a de facto devaluation by 20 per cent took place, so that at the present rate of exchange only half of the reduction which we applied would be necessary.

The gross national product for 1961 has been calculated on the basis of the 1958 E.C.L.A. estimate adjusted as described above and adding to it a rate of growth from 1958 to 1961 (see below). During the last three years these rates of growth in Latin America have been admittedly lower than in previous years due to losses in terms of trade as well as other internal economic difficulties. The E.C.L.A. 1958 estimates in constant dollars are indicated in column one below. Column two shows the three changes for Argentina, Panama, and Venezuela, and indicates, in addition, the +12 per cent conversion from constant 1950 dollars to current 1958 dollars. Column three shows the gross national product of each Latin American country for 1958 in current dollars. Column four shows the rate of growth realized for each country during the years 1958 to 1961.

	1958 ECLA Estimates (constant 1950 dollars)	% addition for transfer to current 1958 dollars	In current 1958 dollars	% addition for growth 1958-61
Argentina	11,628	-18+12	10,679	7.2
Bolivia	260	12	291	5.8
Brazil	14,944	12	16,737	8.0
Chile	2,319	12	2,597	3.2
Colombia	3,385	12	3,791	10.0
Costa Rica	273	12	306	7.8
Cuba	2,413	12	2,703	5.4
Dominican Republic	610	12	683	8.0
Ecuador	563	12	631	11.0
El Salvador	422	12	473	8.5
Guatemala	602	12	674	6.1
Haiti	300	12	336	6.0
Honduras	300	12	336	7.1
Mexico	8,416	12	9,426	11.0
Nicaragua	261	12	292	7.2
Panama	280	-10+12	282	8.1
Paraguay	192	12	215	7.0
Peru	1,599	12	1,791	9.0
Uruguay	1,050	12	1,176	8.0
Venezuela	6,131	-40+12	4,120	8.0

The gross national product for Jamaica has been calculated from the U.N. Yearbook of National Accounts Statistics 1959 of which, however, $18.5 million had to be deducted since undistributed profits of foreign-owned companies were erroneously included in the estimate. The 1959 figure corrected for this error is taken directly from the estimates of the Department of Statistics, Jamaica, to which 9 per cent has been added for estimated growth in 1960 and 1961.

Asia:

The figures for India and Pakistan have been taken directly from the Development Plans of these countries which result in both cases in slightly lower figures than those given in Usui and Hagen, op. cit.

Philippines: The figures have been calculated from the 1958 figure given in the U.N. Yearbook of National Accounts Statistics 1959 and using a rate of exchange of 2.4 pesos to the dollar (instead of the official rate of 2) and a 10 per cent addition has been made for growth in the period 1958 to 1961.

Figures for the following countries have been calculated from the national currency figures given in Usui and Hagen, op. cit., but using the following different exchange rates:

Cambodia	43.75 riel to the U.S. dollar
Taiwan	32.21 NT dollars to the U.S. dollar
Korea	650 hwan to the U.S. dollar
South Viet Nam	50 piastre to the U.S. dollar
Indonesia	12.53 rupah to the U.S. dollar

For the years 1957 to 1961 a very low rate of growth of 1 per cent per annum has been assumed for Indonesia which implies that income per head in Indonesia has been falling by 3 per cent per annum during the last four years. No growth in income per head for the last three years has also been assumed for Ceylon.

Gross national product figures for Hong Kong have been calculated from data given in E. Szczepanik, The Economic Growth of Hong Kong, Oxford, 1958.

Singapore: Figures assuming a gross national product per head the same as that of Malaya.

Middle East:

Iran: The figures for Iran assume a rate of growth of 5 per cent in the years 1957 to 1961.

Turkey: The figure for Turkey assumes no growth in income per head for 1958 and 1959 (3 per cent rate of growth) and a 5 per cent rate of growth for 1960 and 1961.

Egypt and Syria: Our figures are taken from Usui and Hagen, op. cit., and the U.N. Yearbook of National Accounts Statistics 1959. We use them with a slight reservation since the resulting 15 per cent gross national product per head differential between Egypt and Syria seems somewhat exaggerated. No other reliable information is available, however.

Lebanon: Our figures have been calculated from the U.N. Yearbook of National Accounts Statistics 1959 estimate of net domestic product at factor cost (1,325 million Lebanese pounds) to which 17.7 per cent has been added to obtain the gross national product estimate (as indicated in Table II-A-2).

Europe:

The figures are those from Usui and Hagen, op. cit., and the U.N. Yearbook of National Accounts Statistics 1959 to which the following rates of growth have been added for 1960 and 1961:

Greece	4%	per	annum
Portugal	3%	"	"
Spain	3%	"	"
Yugoslavia	6%	"	"

The official gross investment rate for Spain is 17.7 per cent of G.N.P. We consider this to be an overestimate and have reduced it to 16.5 per cent. Similarly we have also reduced the official estimate of gross investment for Portugal (17.2 per cent) to 16 per cent.

TABLE II-A-2

THE RELATION BETWEEN GROSS NATIONAL PRODUCT AND NATIONAL INCOME AS GIVEN IN USUI AND HAGEN, WORLD INCOME, 1957

	GNP - NI / NI
AFRICA	
Eritrea and Ethiopia	10.0
Ghana	11.7
Liberia	13.4
Libya	9.7
Morocco	17.0
Sudan	9.2
Tunisia	13.7
Belgian Congo	27.0
Gambia	7.7
Kenya	13.7
Nigeria	6.3
Rhodesia and Nyasaland	10.0
Mauritius	13.6
Uganda	13.4
Other British	9.2
Algeria	13.6
Fr. W. Africa	13.6
Fr. Eq. Africa	13.4
Madagascar	13.6
Other French	10.0
Angola	8.7
Mozambique	13.1
Other Portuguese	9.1
Spanish Guinea	8.3
Other Spanish	8.3
Br. Cameroons	9.3
Fr. Cameroons	13.6
Ruanda Urundi	13.1
Ital. Somaliland	11.9
Tanganyika	8.7
Togoland	12.2
S.W. Africa	13.0
ASIA	
Afghanistan	12.1
Bhutan	11.5
Burma	18.4
Cambodia	13.4
Ceylon	10.7
Taiwan	26.7
India	14.1
Indonesia	13.9
Korea (South)	5.6
Laos	12.1

	GNP - NI / NI
AMERICA	
Argentina	21.9
Bolivia	17.8
Brazil	22.4
Chile	23.6
Colombia	16.5
Costa Rica	21.4
Cuba	19.1
Dominican Republic	17.7
Ecuador	19.7
El Salvador	17.8
Guatemala	16.6
Haiti	16.8
Honduras	15.4
Mexico	12.8
Nicaragua	13.3
Panama	20.9
Paraguay	14.0
Peru	44.5
Uruguay	17.7
Venezuela	21.2
Br. Guiana	13.1
Br. Honduras	20.0
Falkland Islands (Fed. of W. Indies)	(16.7)
Jamaica	16.1
Trinidad & Tobago	17.8
West Indies (rest)	13.1
Guadeloupe	15.1
Martinique	14.7
Fr. Guiana	25.0
St. Pierre et Miquelon	
Greenland	
Neth. Antilles	15.4
Surinam	13.8
Canal Zone	10.0
Puerto Rico	19.2
Virgin Isles	
MIDDLE EAST	
Bahrain	13.6
Iran	13.6
Iraq	15.2
Israel	20.7
Jordan	17.8

	GNP - NI / NI
ASIA (cont'd)	
Malaya	13.7
Maldive Islands	33.3
Nepal	12.2
Pakistan	11.1
Philippines	13.5
Thailand	9.1
South Viet Nam	15.5
Brunei	16.7
Hong Kong	9.2
North Borneo	14.3
Sarawak	14.3
Singapore	14.3
Neth. New Guinea	
Macao	14.8
Port. India	14.1
Port. Timor	14.1
Ryukyu Islands	14.3
EUROPE	
Greece	16.8
Portugal	13.8
Spain	18.7
Yugoslavia	17.8

	GNP - NI / NI
MIDDLE EAST (cont'd)	
Kuwait	11.5
Lebanon	17.7
Muscat and Oman	13.8
Qatar	12.5
Saudi Arabia	13.4
Trucial Oman	
Turkey	14.8
Egypt	20.1
Syria	13.6
Yemen	11.4
Aden	20.2
Cyprus	17.4
Gaza Strip	13.3

TABLE II-B

POPULATION IN UNDERDEVELOPED COUNTRIES

(thousands)

	1958	Rate of increase (%) 1958-61	1961	Rate of increase (%) 1961-66	1966	Rate of increase (%) 1966-71	1971	Rate of increase (%) 1971-76	1976
AFRICA									
Eritrea and Ethiopia	-	-	15,120.0	0.8	15,733.8	1.1	16,618.0	1.3	17,726.4
Ghana	-	-	6,902.5	1.4	7,399.4	1.4	7,932.1	1.3	8,461.1
Liberia	-	-	1,337.8	1.4	1,434.1	1.0	1,507.2	1.1	1,591.9
Libya	1,153	1.9	1,219.8	2.1	1,353.4	2.3	1,516.4	2.5	1,715.6
Morocco	10,330	2.1	10,995.2	2.3	12,320.1	2.4	13,871.2	2.6	15,771.5
Sudan	11,037	0.8	11,304.0	0.8	11,762.9	1.1	12,423.9	1.2	13,186.7
Tunisia	3,852	2.0	4,087.7	2.1	4,535.7	2.4	5,106.7	2.6	5,806.3
Belgian Congo	13,559	2.0	14,388.8	1.8	15,731.2	1.6	17,029.0	1.3	18,164.8
Gambia	277 (57)	0.7	284.7	0.9	297.7	1.0	312.8	1.1	330.3
Kenya	6,351	1.5	6,641.2	1.5	7,155.2	1.4	7,670.3	1.3	8,181.9
Nigeria	33,052	1.7	34,767.3	1.6	37,635.6	1.5	40,548.5	1.3	43,253.0
Rhodesia and Nyasaland	7,780	2.3	8,329.2	2.0	9,196.2	1.7	10,004.5	1.5	10,778.8
Mauritius	603	2.8	655.0	2.3	733.9	1.9	806.2	1.4	864.2
Uganda	6,356	1.3	6,607.0	1.3	7,047.6	1.3	7,517.6	1.3	8,019.0
Algeria	10,265	1.9	10,860.3	2.0	11,990.8	2.5	13,566.3	2.5	15,348.9
Former French W. Africa	(20,189)	(2.3)	(21,591.7)	(2.3)	(24,156.8)	(2.3)	(27,042.8)	(2.3)	(30,277.5)
Dahomey	1,725	1.8	1,819.8	1.8	1,989.5	1.8	2,175.1	1.8	2,378.0
Guinea	2,508	2.1	2,669.5	2.1	2,962.0	2.1	3,286.6	2.1	3,646.8
Ivory Coast	3,090	2.5	3,327.6	2.5	3,764.8	2.5	4,259.4	2.5	4,819.0
Mauritania	640	3.5	709.5	3.5	842.6	3.5	1,007.5	3.5	1,196.6
Niger	2,490	2.8	2,704.8	2.8	3,105.1	2.8	3,564.6	2.8	4,092.1
Senegal	2,300	2.4	2,469.5	2.4	2,780.4	2.4	3,130.4	2.4	3,524.5
Sudanese Republic	3,700	2.0	3,926.4	2.0	4,335.1	2.0	4,786.3	2.0	5,284.5
Upper Volta	3,736	2.0	3,964.6	2.0	4,377.3	2.0	4,832.9	2.0	5,336.0
Former French Eq. Afr.	(4,971)	(1.8)	(5,235.2)	(1.8)	(5,709.8)	(1.8)	(6,230.5)	(1.8)	(6,802.2)
Central Afr. Rep.	1,177	1.2	1,219.8	1.2	1,294.6	1.2	1,374.0	1.2	1,458.3
Chad	2,580	2.0	2,737.8	2.0	3,022.8	2.0	3,337.4	2.0	3,684.8

	1958	Rate of increase (%) 1958-61	1961	Rate of increase (%) 1961-66	1966	Rate of increase (%) 1966-71	1971	Rate of increase (%) 1971-76	1976
AFRICA continued									
Gabon, Republic of the Congo	420	0.8	430.1	0.8	447.5	0.8	465.6	0.8	484.5
	794	2.2	847.5	2.2	944.9	2.2	1,053.5	2.2	1,174.6
Madgascar	-	-	5,533.1	1.7	6,019.4	1.5	6,485.3	1.4	6,952.2
Angola	4,508	1.0	4,644.5	1.0	4,881.3	1.1	5,155.6	1.2	5,472.1
Mozambique	6,234	1.2	6,460.9	1.2	6,857.5	1.2	7,278.5	1.2	7,725.3
British Cameroons	1,591	1.4	1,658.7	1.4	1,778.1	1.3	1,896.6	1.3	2,023.1
French Cameroons	3,187	1.4	3,322.7	1.4	3,561.9	1.3	3,799.4	1.3	4,052.8
Ruanda-Urundi	4,700	1.6	5,087.7	1.5	5,481.4	1.4	5,876.0	1.3	6,267.9
Italian Somaliland	1,330	0.7	1,358.0	0.9	1,420.1	1.0	1,492.5	1.1	1,576.3
Tanganyika	8,916	1.5	9,323.4	1.4	9,994.6	1.4	10,714.2	1.3	11,428.8
Togoland	1,100	1.4	1,146.8	1.5	1,235.5	1.4	1,324.4	1.3	1,412.7
South West Africa	539	2.6	582.1	2.6	661.8	2.7	756.1	2.7	863.8
Territories, etc.									
Other British	4,399	1.3	4,572.0	1.4	4,901.1	1.5	5,280.4	1.7	5,744.5
Other French	562	1.5	587.9	1.4	630.2	1.5	678.9	1.3	724.1
Other Portuguese	808	1.3	840.2	1.3	896.2	1.3	955.9	1.3	1,019.6
Spanish	359	0.9	368.9	1.1	390.3	1.5	420.5	1.6	456.0
			205,814.3	1.6	222,903.6	1.6	241,818.3	1.6	261,999.3
AMERICA									
Argentina	20,248	2.0	21,487.1	1.7	23,375.8	1.7	25,430.5	1.5	27,398.8
Bolivia	3,369	1.5	3,522.9	2.0	3,889.6	2.4	4,379.3	2.8	5,027.4
Brazil	62,725	2.5	67,548.5	2.7	77,174.7	2.8	88,596.5	3.0	102,709.9
Chile			7,688.1	2.1	8,530.7	2.0	9,418.7	1.8	10,297.4
Colombia	13,522	2.4	14,518.5	2.5	16,426.2	2.8	18,857.2	3.0	21,861.1
Costa Rica	1,076	3.3	1,186.0	3.3	1,394.9	3.3	1,640.6	3.2	1,915.8
Cuba	6,466	2.2	6,902.4	2.2	7,696.1	2.3	8,623.4	2.4	9,709.0
Dominican Republic			2,942.3	2.7	3,361.5	2.9	3,878.1	3.0	4,495.8
Ecuador	4,048	2.8	4,397.3	2.9	5,073.1	3.0	5,881.2	3.0	6,818.0
El Salvador	2,434	3.3	2,682.9	3.2	3,133.0	3.2	3,658.7	3.1	4,262.0
Guatemala	3,546	3.1	3,883.2	3.0	4,501.7	3.1	5,244.0	3.1	6,108.7
Haiti	3,424	1.5	3,580.4	1.7	3,895.1	2.0	4,300.5	2.3	4,818.7
Honduras	1,828	3.1	2,001.8	3.1	2,331.8	3.1	2,716.3	3.0	3,149.0

	1958	Rate of increase (%) 1958-61	1961	Rate of increase (%) 1961-66	1966	Rate of increase (%) 1966-71	1971	Rate of increase (%) 1971-76	1976
AMERICA continued									
Mexico	32,348	2.9	35,246.3	3.0	40,861.0	3.0	47,370.1	3.0	54,916.1
Nicaragua	1,378	3.3	1,518.9	3.2	1,773.7	3.1	2,066.1	3.1	2,406.7
Panama	995	2.7	1,077.7	2.9	1,243.3	3.0	1,441.3	3.0	1,670.8
Paraguay	1,677	2.1	1,784.9	1.9	1,960.8	1.7	2,133.1	1.5	2,298.2
Peru	10,213	2.2	10,902.3	2.4	12,274.8	2.9	14,161.4	2.9	16,338.0
Uruguay	2,700	1.6	2,831.4	1.5	3,050.5	1.5	3,286.6	1.4	3,523.2
Venezuela	6,320	3.0	6,905.8	3.0	8,005.8	3.0	9,281.1	3.1	10,811.5
20 L.A. Republics			202,608.7	2.6-	229,954.1	2.7-	262,364.7	2.8-	300,536.1
British Guiana			576.1	3.0	667.8	3.0	774.1	3.1	901.7
British Honduras			95.7	3.0	110.9	3.2	129.5	3.2	151.2
Falkland Islands			2.0	-	2.0	-	2.0	-	2.0
Jamaica	1,637	2.0	1,737.1	2.1	1,927.4	2.3	2,159.6	2.3	2,419.8
Trinidad and Tobago	789	2.6	852.1	2.5	964.0	2.5	1,090.6	2.4	1,227.9
West Indies (rest)	693	2.1	737.6	2.1	818.4	2.1	908.0	2.1	1,007.5
French Possessions			571.2	1.2	607.5	1.7	662.1	2.2	737.2
Greenland			28.4	1.5	30.5	1.5	32.8	1.2	34.8
Netherlands Antilles	193	2.3	206.6	2.4	232.6	2.4	261.8	2.4	294.7
Surinam	241	1.9	254.9	2.2	284.2	2.5	321.5	2.9	370.9
Canal Zone			59.1	2.0	65.2	2.4	73.4	2.6	83.4
Total So. and Cen. America			207,729.5	2.6-	235,664.6	2.7-	268,780.1	2.7+	307,767.2
Puerto Rico	2,321	0.9	2,384.1	1.3	2,543.1	1.8	2,780.3	2.2	3,100.0
Virgin Islands			31.2	0.8	32.4	1.5	34.9	2.1	38.7
TOTAL AMERICAN UNDER-DEVELOPED COUNTRIES			210,144.8	2.5+	238,240.1	2.7-	271,595.3	2.7+	310,905.9
ASIA									
Afghanistan			12,992.0	1.5	13,997.5	1.8	15,303.4	2.3	17,147.4
Bhutan			702.7	2.0	775.8	2.2	865.0	2.2	964.4
Burma	20,255	1.3	21,055.0	1.6	22,792.0	1.9	25,039.2	2.2	27,918.7
Cambodia	4,740	1.6	4,970.8	1.9	5,460.9	2.1	6,059.4	2.2	6,756.2
Ceylon	9,388	2.6	10,139.9	2.4	11,416.5	2.2	12,729.3	2.3	14,263.1
Taiwan	9,851	3.2	10,827.2	3.1	12,612.6	2.7	14,409.8	2.5	16,303.2

	1958	increase (%) 1958-61	1961	increase (%) 1961-66	1966	increase (%) 1966-71	1971	increase (%) 1971-76	1976
ASIA continued									
India			423,000.0	2.0	467,034.3	2.0	515,652.5	1.6	558,193.8
Indonesia	87,300	2.1	92,922.1	1.9	102,084.2	2.1	113,272.6	2.3	126,921.9
South Korea	22,505	2.1	23,954.3	2.0	26,447.9	2.0	29,201.1	2.3	32,719.8
Laos	1,690	2.0	1,793.4	2.2	1,999.6	2.2	2,229.5	2.2	2,485.8
Malaya	6,515	2.9	7,098.7	2.7	8,110.2	2.6	9,221.2	2.4	10,382.1
Nepal	8,910	1.8	9,400.0	2.2	10,481.0	2.0	11,572.0	2.5	13,092.5
Pakistan			90,000.0	2.0	99,000.0	2.1	110,000.0	2.0	121,000.0
Philippines	24,010	2.0	25,479.4	2.2	28,409.5	2.2	31,676.5	2.3	35,493.5
Thailand	21,474	2.2	22,923.4	2.2	25,559.5	2.2	28,498.8	2.3	31,932.9
Viet Nam (South)	12,900	2.0	13,689.4	2.1	15,189.7	2.2	16,936.5	2.3	18,977.3
North Borneo	409	2.7	467.2	2.6	531.2	2.5	600.9	2.3	673.3
Sarawak	655	2.0	695.0	2.1	771.1	2.2	859.7	2.3	963.2
Neth. New Guinea			721.1	1.0	757.8	0.9	792.5	1.8	866.4
Ryukyu Islands	838	2.2	894.5	2.0	987.6	1.7	1,074.4	1.4	1,151.7
Hong Kong	2,748	1.1	2,839.7	1.5	3,059.4	1.8	3,344.8	2.2	3,729.4
Singapore	1,515	3.3	1,669.9	2.9	1,926.5	2.7	2,201.0	2.5	2,490.2
Macao		1.7	221.4	2.0	244.4	2.1	271.1	2.3	303.7
Port. India	648	1.1	669.6	1.2	710.7	1.6	769.3	2.1	853.6
Port. Timor	490	1.7	515.4	1.9	566.2	2.1	628.2	2.3	703.8
[/] Other	155	0.7	158.1	1.9	173.5	1.7	188.7	2.2	210.9
			779,800.2	2.0	861,099.6	2.1	953,397.5	1.9	1,046,498.8
EUROPE									
Greece	8,173	0.9	8,395.3	1.0	8,823.4	1.0	9,273.3	1.0	9,746.2
Portugal	8,981	0.8	9,198.3	0.8	9,571.7	0.9	10,010.0	1.0	10,520.5
Spain	29,662	0.7	30,287.8	0.8	31,517.4	0.9	32,960.8	0.9	34,470.4
Yugoslavia	18,189	1.4	18,963.8	1.2	20,128.1	1.2	21,363.9	1.1	22,564.5
			66,845.2	0.9+	70,040.6	1.0	73,608.0	1.0	77,301.6
MIDDLE EAST									
Bahrain	139	1.9	147.0	2.0	162.3	2.2	180.9	2.2	201.7
Iran	19,677	2.2	21,005.1	2.3	23,536.2	2.3	26,372.3	2.4	29,692.5
Iraq	6,590	2.5	7,096.7	2.4	7,990.1	2.4	8,996.0	2.4	10,128.5
Israel	1,997	5.3	2,331.6	4.3	2,877.1	3.4	3,400.7	2.7	3,885.2
Jordan	1,580	2.4	1,696.4	2.5	1,919.3	2.4	2,160.9	2.3	2,421.2

[/] Maldive Islands and Brunei

	1958	Rate of increase (%) 1958-61	1961	Rate of increase (%) 1961-66	1966	Rate of increase (%) 1966-71	1971	Rate of increase (%) 1971-76	1976
Kuwait			227.0	2.0	250.6	2.1	278.0	2.3	311.4
Lebanon	1,550	2.7	1,678.9	2.5	1,899.5	2.5	2,149.0	2.3	2,407.9
Muscat and Oman			564.4	0.8	587.3	1.4	629.5	2.0	695.0
Saudi Arabia			6,799.3	2.4	7,655.3	2.4	8,619.1	2.4	9,704.2
Turkey	26,163	2.8	28,420.8	2.6	32,314.4	2.6	36,741.4	2.4	41,367.1
Egypt	24,781	2.5	26,686.6	2.5	30,193.2	2.6	34,329.6	2.7	39,221.5
Syria	4,283	3.2	4,707.4	2.9	5,430.9	2.7	6,204.8	2.5	7,020.1
United Arab Republic			(31,394.0)	(2.6)	(35,624.1)	(2.6)	(40,534.4)	(2.7)	(46,241.6)
Yemen			3,033.0	1.1	3,203.4	1.4	3,434.0	1.7	3,735.8
Aden			658.0	2.5	744.4	2.5	842.2	2.4	948.2
Cyprus	549	1.6	575.7	1.8	629.4	2.0	667.9	2.2	744.7
Gaza Strip	346	2.9	377.7	2.4	425.2	2.4	478.7	2.4	538.9
*Other	124	1.6	130.5	2.0	144.0	2.3	161.6	2.2	179.8
			106,136.1	2.5	119,962.6	2.5	135,646.6	2.5	153,203.7

*Trucial Oman and Qatar

EXPLANATORY NOTES ON TABLE II-B

Unless otherwise stated, population figures have been calculated from the U.N. Demographic Yearbook 1959, New York, 1960, while the rates of increase have been calculated from the U.N. Future Growth of World Population, New York, 1958, (henceforth referred to as Predictions).

The exceptions are as follows:

Africa:

Ethiopia: For Ethiopia a figure of 15 million for population for 1960 has been assumed. The official Ethiopian estimate of population of 20 million for 1958 (reproduced in UN Demographic Yearbook and in other international agencies, like the International Monetary Fund) is widely and reliably believed to be a considerable overestimate. An Italian rough estimate of 1938 put the population at 10 million. Another estimate in 1947 also calculated the figure then as 10 million. The United Nations The Future Growth of World Population assumes 12.2 million for 1960. Our estimate is 15 million and may, if anything, be on the high side.

Ghana: The figures are taken from the latest population census in March, 1959, published in the Ghana Economic Survey 1959, Accra, June, 1960, which is inconsistent with the indications in the U.N. Demographic Yearbook. The rates of increase are from Predictions.

Liberia: The figures are calculated from a starting point of the 1960 figure given in Predictions (the new UN Demographic Yearbook gives no figure for Liberia).

Former French West Africa and constituent countries: The 1958 figures are from the U.N. Demographic Yearbook 1959 except that for Guinea and the Ivory Coast which were taken from a 1958 sample census in La Zone Franc 1958 (Rapport du Comité Monetaire de la Zone Franc) Paris, 1959.

Former French Equatorial Africa and constituent countries: The 1958 figures are from La Zone Franc 1958, ibid. The rates of increase are from the UN Demographic Yearbook. The figure for Gabon has been changed since the U.N. Demographic Yearbook rate of 0.3 per cent, stated to be subject to minimum error of ±0.5 per cent, was obviously too low. 0.8 per cent adopted by us makes it comparable with the lowest rates for Africa.

Gambia: The figures are calculated from the latest figure (1957) in the Demographic Yearbook.

Other British, French and Portuguese: Other British = Sierra Leone (2,120 thous.); Basutoland (651 thous.); Bechuanaland (331 thous.); Br. Somaliland (650 thous.); Zanzibar & Pemba (285 thous.); Swaziland (260 thous.); Seychelles (41 thous.); and St. Helena (5 thous.). Other French = French Somaliland (68 thous.); Comoro Islands (180 thous.); and Reunion (306 thous.). Other Portuguese = Cape Verde Island (182 thous.); Port. Guinea (554 thous.); and São Tomé and Principe (62 thous.).

The figures for these groups are calculated from the 1957 figures in Usui and Hagen. The rates of increase are calculated from Prediction rates for the constituent countries.

Latin America:

Chile and the Dominican Republic: The figures both for population and the rate of increase are taken from the Report of the U.N. Economic Commission for Latin America 1959.

British Guiana, British Honduras, Falkland Isles, French possessions, Greenland, Canal Zone and the Virgin Isles: These figures have been calculated from Predictions.

West Indies (other): The rate of increase was taken from the U.N. Demographic Yearbook.

Other comprises: Falkland Isles, French Guiana, St. Pierre and Miguelon, Greenland, Canal Zone, Virgin Isles.

Asia:

Afghanistan, Bhutan, Netherlands New Guinea: The 1960 figures in Predictions were taken as a basis and the rates were also those in Predictions.

India and Pakistan: The figures for India were calculated in accordance with the assumption of the Third Five Year Plan but for 1971-76 the per annum increase is assumed to be 1.6 per cent while the estimate in the official Indian Third Five Year Plan was 1.4 per cent. The figures for Pakistan are in accordance with the official Pakistan Second Five Year Plan estimates.

Macao: The 1957 figure in Usui and Hagen was taken as a basis and the rates of increase those in Predictions.

Other: Comprises the Maldive Islands and Brunei.

Europe: The figures for Greece, Portugal, and Spain have been taken from U.N. The Future Growth of World Population. They may imply an underestimate for later periods.

Middle East:

Lebanon, Muscat and Oman, Saudi Arabia, Yemen, Aden: The 1960 figures given in Predictions were taken as a basis and the rates were also those in Predictions.

Other: Comprises Qatar and Trucial Oman.

TABLE II-C

GROSS NATIONAL PRODUCT PER HEAD

(U.S. Dollars)

	1961	1966	1971	1976	1961 Real GNP p.h.
AFRICA					
Eritrea and Ethiopia	76	81	89	99	129
Ghana	140	148	160	178	210
Liberia	85	90	96	103	136
Libya	63	69	71	73	101
Morocco	140	141	144	147	210
Sudan	75	82	90	98	120
Tunisia	160	163	168	180	240
Belgian Congo	103	99	101	110	154
Gambia	55	58	60	63	99
Kenya	94	101	109	122	150
Nigeria	84	90	98	109	134
Rhodesia and Nyasaland	161	177	198	224	225
Mauritius	225	227	239	259	337
Uganda	66	72	80	91	115
Algeria	190	209	225	242	285
Former Fr. W. Africa	100	104	107	114	150
Former Fr. Eq. Africa	107	114	121	131	160
Madagascar	101	105	113	122	151
Angola	65	70	77	86	114
Mozambique	76	81	88	99	114
Br. Cameroons	66	68	74	80	112
Fr. Cameroons	104	107	116	126	166
Ruanda Urundi	69	71	76	83	117
Ital. Somaliland	57	60	63	69	102
Tanganyika	75	81	92	105	127
Togoland	55	56	61	66	99
S.W. Africa	100	97	98	100	180
Territories:					
Other British	65	69	74	83	114
Other French	65	69	74	84	114
Other Portuguese	65	69	75	85	114
Spanish	65	69	74	83	114
	100	106	114	125	164
AMERICA					
Argentina	532.7	588.6	666.3	780.4	799.0
Bolivia	87.4	89.5	92.2	95.4	122.3
Brazil	267.6	288.5	313.2	344.8	374.6
Chile	348.4	368.0	395.9	440.6	452.9
Colombia	287.2	316.3	351.6	387.1	373.4
Costa Rica	278.2	274.2	276.9	288.4	361.6
Cuba	412.8	429.3	449.0	473.6	516.0
Dominican Republic	250.6	254.1	255.4	255.3	313.2
Ecuador	159.1	163.9	171.9	182.7	222.7

	1961	1966	1971	1976	1961 Real GNP p.h.
AMERICA continued					
El Salvador	191.1	189.8	194.9	203.6	267.5
Guatemala	184.1	184.1	189.5	198.0	257.7
Haiti	99.5	105.9	111.2	115.0	149.2
Honduras	179.8	178.9	184.2	193.3	251.7
Mexico	296.7	319.0	351.1	386.5	415.4
Nicaragua	206.0	204.5	208.5	217.8	288.4
Panama	283.0	284.4	284.4	291.3	371.0
Paraguay	128.8	135.9	144.8	155.8	193.2
Peru	179.0	188.8	196.7	207.5	268.5
Uruguay	448.7	482.6	545.0	618.5	560.9
Venezuela	644.5	676.4	709.9	741.5	644.5
20 L.A. Republics	307.1	328.6	356.1	390.1	420.7
British Guiana	236.0	236.0	236.0	234.8	354.0
British Honduras	142.0	142.0	140.5	138.8	213.1
Falkland Isles	100.0	115.0	130.0	150.0	150.0
Jamaica	357.5	392.0	425.6	462.1	464.7
Trinidad and Tobago	428.3	438.9	449.6	462.9	556.7
West Indies (rest)	257.4	269.0	281.0	293.5	334.6
French Possessions	164.5	174.1	180.7	183.6	246.7
Greenland	116.1	118.0	121.9	126.4	174.1
Netherlands Antilles	154.8	151.7	148.5	145.5	232.2
Surinam	188.3	205.4	220.8	232.6	282.4
Canal Zone	423.0	443.2	456.4	465.2	549.9
Total South and Central America	306.9	328.3	355.5	389.2	421.2
Puerto Rico	643.0	698.8	759.1	808.7	771.6
Virgin Islands	105.7	117.2	126.0	131.7	158.5
TOTAL AMERICAN UNDER-DEVELOPED COUNTRIES	310.7	332.2	359.6	393.3	425.2
ASIA					
Afghanistan	58.5	62.9	70.0	76.0	117.0
Bhutan	46.2	48.4	50.2	52.2	92.4
Burma	60.6	68.1	79.1	90.5	121.2
Cambodia	77.4	81.6	85.3	88.7	154.8
Ceylon	122.6	126.2	137.8	149.6	214.5
Taiwan	115.9	118.2	124.3	133.7	202.8
India	69.9	80.8	93.5	110.2	139.8
Indonesia	98.6	101.5	106.1	112.4	147.9
South Korea	105.6	110.9	119.3	129.6	158.4
Laos	52.0	54.0	56.2	58.4	104.0
Malaya	368.3	392.2	419.7	453.5	552.4
Nepal	47.2	49.1	54.1	58.2	94.4
Pakistan	62.4	69.0	77.4	90.0	124.8
Philippines	188.2	200.5	218.8	237.6	282.3
Thailand	101.2	105.2	112.1	121.7	202.4

	1961	1966	1971	1976	1961 Real GNP p.h.
ASIA continued					
South Viet Nam	110.7	118.5	126.2	137.1	210.3
North Borneo	94.6	96.3	98.6	102.0	189.2
Sarawak	111.7	122.5	133.6	145.0	223.4
Neth. New Guinea	45.0	49.5	54.7	58.0	90.0
Ryukyu Islands	203.1	217.4	237.4	263.0	324.9
Hong Kong	170.0	198.4	226.2	252.8	306.0
Singapore	368.2	388.3	413.5	444.7	552.3
Macao	160.3	172.2	184.4	195.2	272.5
Port. India	150.0	180.2	212.4	244.2	270.0
Port. Timor	156.1	160.7	163.8	165.3	280.9
/Other	80.9	89.3	99.6	108.1	161.8
	83.7	92.7	103.6	117.7	153.5
EUROPE					
Greece	383.2	443.6	538.7	654.2	613.1
Portugal	239.6	266.9	295.9	342.5	383.4
Spain	321.0	357.6	405.4	472.7	513.6
Yugoslavia	305.7	367.7	442.1	534.2	489.1
	313.3	359.0	418.2	495.5	501.3
MIDDLE EAST					
Bahrain	191.1	200.2	207.8	215.6	286.6
Iran	120.3	130.6	141.8	153.3	180.4
Iraq	160.?	173.9	197.1	223.4	225.3
Israel	733.4	758.6	819.1	915.0	1,026.8
Jordan	126.3	123.2	126.8	131.2	189.4
Kuwait	2,988.9	3,138.4	3,279.4	3,394.0	2,988.9
Lebanon	319.5	343.6	369.5	401.3	479.2
Muscat and Oman	63.2	67.0	69.1	69.1	126.4
Saudi Arabia	169.8	174.8	180.0	185.3	254.7
Turkey	222.5	238.1	261.1	288.8	333.7
Egypt	150.0	161.3	176.6	192.1	225.0
Syria	173.3	174.1	185.4	204.2	259.9
(U.A.R.)	(153.5)	(163.3)	(181.7)	(202.6)	(230.2)
Yemen	80.2	83.8	90.7	96.6	160.4
Aden	162.4	166.4	170.5	175.4	243.6
Cyprus	488.4	517.7	565.6	588.0	683.8
Gaza Strip	50.3	51.7	53.2	54.7	100.6
* Other	629.8	629.8	619.4	614.5	629.8
	187.5	200.7	217.7	238.2	256.9

/ Maldive Islands and Brunei
* Trucial Oman and Qatar

TABLE II-D

SUMMARY BY REGIONS

Gross National Product of Underdeveloped Countries

(Million Dollars)

	1961	1966	1971	1976
Africa	20,565.2	23,591.0	27,569.4	32,762.8
America	65,292.0	79,144.6	97,667.2	122,282.7
Asia	65,309.1	79,791.6	98,756.1	123,178.0
Europe	20,943.2	25,142.4	31,118.3	39,126.8
Middle East	19,906.2	24,079.2	30,063.8	37,614.9
	192,015.7	231,748.8	285,174.8	354,965.2

Population

(thousands)

	1961	1966	1971	1976
Africa	205,814.3	222,903.6	241,818.3	261,999.3
America	210,144.8	238,240.1	271,595.3	310,905.9
Asia	779,800.2	861,099.6	953,397.5	1,046,498.8
Europe	66,845.2	70,040.6	73,608.0	77,301.6
Middle East	106,136.1	119,962.6	135,646.6	153,203.7
	1,368,740.6	1,512,246.5	1,676,065.7	1,849,909.3

TABLE III-A

INVESTMENT AND SAVINGS IN UNDERDEVELOPED COUNTRIES

	($ mill) GNP 1961	% of GNP assumed for gross investment	($ mill) gross investment 1961	proportion of gross invest. assumed for net invest.	($ mill) net invest. 1961	(%) Average Savings Rate 1961	($ mill) Savings 1961
AFRICA							
Eritrea and Ethiopia	1,149.1	9.0	103.4	2/3	68.9	5.0	57.45
Ghana	966.3	11.0	106.2	3/4	79.6	6.0	57.97
Liberia	113.7	10.0	11.3	2/3	7.5	6.0	6.82
Libya	76.8	12.0 m	9.2	2/3	6.1	3.0	2.30
Morocco	1,539.3	10.0	153.9	3/4	115.4	5.0	76.96
Sudan	847.8	9.0	76.3	3/4	57.2	5.5	46.63
Tunisia	654.0	10.0	65.4	2/3	43.5	5.0	32.70
Belgian Congo	1,482.0	5.0 m	74.1	1/2	37.0	1.0	14.82
Gambia	15.6	7.5	1.1	3/4	0.8	3.5	0.54
Kenya	624.2	14.0	87.3	2/3	58.1	7.5	46.81
Nigeria	2,920.4	10.0	292.0	3/4	219.0	6.5	189.82
Rhodesia and Nyasaland	1,341.0	30.0 m	402.3	3/5	241.3	12.0	160.92
Mauritius	147.3	12.7	18.7	3/4	14.0	7.5	11.04
Uganda	436.0	14.0	61.0	3/4	45.7	7.0	30.52
Algeria	2,063.4	16.0	330.1	2/3	220.0	7.0	144.43
Former Fr. W. Africa	2,159.1	12.5	269.8	3/4	202.3	5.5	118.75
Former Fr. E. Africa	560.1	15.0	84.0	3/4	63.0	6.5	36.40
Madagascar	558.8	8.4	46.9	3/4	35.1	4.5	25.14
Angola	301.8	7.5	22.6	3/4	16.9	4.5	13.58
Mozambique	491.0	8.5	41.7	3/4	31.2	5.5	27.00
British Cameroons	109.4	9.0	9.8	3/4	7.3	4.0	4.37
French Cameroons	345.5	11.5	39.7	3/4	29.7	5.0	17.27
Ruanda Urundi	351.0	9.0	31.5	3/4	23.6	4.0	14.04
Somaliland	77.4	9.0	6.9	3/4	5.1	4.0	3.09
Tanganyika	699.2	14.5	101.3	3/4	75.9	7.0	48.94
Togoland	63.0	9.0	5.6	3/4	4.2	4.0	2.52
South West Africa	58.2	10.0	5.8	3/4	4.3	4.0	2.32

m = denotes countries in which extractive industries (oil or minerals) form the preponderant part of investment.

	($ mill) GNP 1961	% of GNP assumed for gross investment	($ mill) gross investment 1961	proportion of gross invest. assumed for net invest.	($ mill) net invest. 1961	(%) Average Savings Rate 1961	($ mill) Savings 1961
Territories, etc.							
Other British	297.1	7.5	22.2	3/4	16.6	4.5	13.36
Other French	38.2	7.5	2.8	3/4	2.1	4.5	1.71
Other Portuguese	54.6	7.5	4.0	3/4	3.0	4.5	2.45
Spanish	23.9	7.5	1.7	3/4	1.2	4.5	1.07
	20,563.1	12.1	2,488.6	69.7	1,735.6	5.9	1,211.74
AMERICA							
Argentina	11,447	18.5	2,117.6	3/5	1,270.6	10.0	1,144.7
Bolivia	308	15.5	47.7	2/3	31.8	6.0	18.5
Brazil	18,082	15.5	2,802.7	2/3	1,868.5	9.5	1,717.7
Chile	2,679	11.0	294.7	3/5	176.8	7.5	200.9
Colombia	4,170	18.0	750.6	2/3	500.4	10.0	417.0
Costa Rica	330	16.5	54.4	2/3	36.3	9.0	29.7
Cuba	2,850	15.0	427.5	2/3	285.0	7.5	213.7
Dominican Republic	737	16.0	117.9	2/3	786.0	7.5	55.3
Ecuador	700	15.0	105.0	2/3	70.0	7.5	52.5
El Salvador	513	15.0	76.9	2/3	51.3	6.5	33.3
Guatemala	715	14.5	103.7	2/3	69.1	6.5	46.5
Haiti	356	9.0	32.0	2/3	21.3	3.0	10.7
Honduras	360	14.2	51.1	2/3	34.1	6.5	23.4
Mexico	10,460	17.0	1,778.2	2/3	1,185.5	11.0	1,150.6
Nicaragua	313	14.9	46.6	2/3	31.1	6.5	20.3
Panama	305	15.0	45.7	2/3	30.5	6.0	18.3
Paraguay	230	12.0	27.6	2/3	18.4	5.5	12.6
Peru	1,952	17.5	341.6	2/3	227.7	8.0	156.2
Uruguay	1,270	15.0	190.5	2/3	127.0	8.0	101.6
Venezuela	4,451	22.0 m	979.2	3/5	587.5	9.5	422.8
20 L. A. Republics	62,228	16.7	10,391.2	64.5	6,701.5	9.4	5,846.3
British Guiana	136.0						
British Honduras	13.6						
Falkland Islands	0.2						
Jamaica	621.0	23.1	143.5	3/5	86.1	10.0	62.1
Trinidad and Tobago	365.0	25.0 m	91.2	1/2	45.6	10.0	36.5
West Indies (rest)	190.0						

m = denotes countries in which extractive industries (oil or minerals) form the preponderant part of investment.

	($ mill) GNP 1961	% of GNP assumed for gross investment	($ mill) gross investment 1961	proportion of gross invest. assumed for net invest.	($ mill) net invest. 1961	(%) Average Savings Rate 1961	($ mill) Savings 1961
French Possessions	94.0						
Greenland	3.3						
Netherlands Antilles	32.0						
Surinam	48.0	16.0	7.7	2/3	5.1	9.0	4.3
Canal Zone	25.0						
Total South and Central America	63,756.		10,633.6		6,838.3		5,949.2
Puerto Rico	1,533.0	20.7	317.3	2/3	211.5		
Virgin Islands	3.3						
TOTAL AMERICAN UNDER-DEVELOPED COUNTRIES	65,292.		10,950.9		7,049.8		
ASIA							
Afghanistan	760.3	14.0	106.4	2/3	70.9	6.0	45.6
Bhutan	32.5	9.0	2.9	2/3	1.9	5.0	1.6
Burma	1,276.2	16.0	204.2	2/3	136.2	8.5	108.5
Cambodia	384.8	12.0	46.2	2/3	30.8	5.0	19.2
Ceylon	1,243.7	11.5	143.0	2/3	95.3	6.5	80.8
Taiwan	1,255.3	18.2	228.5	2/3	152.3	8.0	100.4
India	29,600.1	15.0	4,440.0	2/3	2,960.0	8.5	2,516.0
Indonesia	9,165.4	8.0	733.2	2/3	488.8	5.0	458.3
South Korea	2,531.3	13.8	349.3	2/3	232.9	6.5	164.5
Laos	93.3	9.0	8.4	2/3	5.6	4.0	3.7
Malaya	2,614.6	18.0	470.6	2/3	313.7	11.0	287.6
Nepal	444.5	9.0	40.0	2/3	26.7	5.0	22.2
Pakistan	5,612.6	15.0	841.9	61.7	519.4	7.8	437.8
Philippines	4,796.0	15.0	719.4	2/3	479.6	7.5	359.7
Thailand	2,320.6	13.5	313.3	2/3	208.9	7.5	174.0
South Viet Nam	1,515.9	9.0	136.4	3/4	102.3	5.0	75.8
Ryuku Islands	180.9	15.0	27.1	2/3	18.1	8.0	14.5
Hong Kong	482.7	18.0	86.9	2/3	57.9	10.0	48.3
Singapore	615.0	18.0	110.7	2/3	73.8	11.0	67.6
Other	383.4	14.0	53.7	2/3	35.8	7.5	28.8
	65,289.1	13.9	9,062.1	66.3	6,010.8	7.0	4,591.7

	($ mill) GNP 1961	% of GNP assumed for gross investment	($ mill) gross investment 1961	proportion of gross invest. assumed for net invest.	($ mill) net invest. 1961	(%) Average Savings Rate 1961	($ mill) Savings 1961
EUROPE							
Greece	3,217.1	18.6	598.4	2/3	398.9	9.5	305.6
Portugal	2,204.2	16.0	352.7	0.6	211.6	7.0	154.3
Spain	9,722.9	16.5	1,604.3	0.6	962.6	7.5	729.2
Yugoslavia	5,799.0	23.3	1,351.2	2/3	900.8	12.0	695.9
	20,943.2	18.6	3,906.6	0.63	2,473.9	9.0	1,885.0
MIDDLE EAST							
Iran	2,526.9	20.0	505.4	3/5	303.2	8.0	202.1
Iraq	1,142.2	20.0 m	228.4	1/2	114.2	10.0	114.2
Israel	1,710.1	26.5	453.2	2/3	302.1	12.5	213.8
Jordan	214.3	8.0	17.1	2/3	11.4	3.0	6.4
Kuwait	678.5	16.0 m	108.6	1/2	54.3	10.0	67.8
Lebanon	536.5	14.0	75.1	2/3	50.1	8.5	45.6
Saudi Arabia	1,154.6	14.0	161.6	1/2	80.8	6.0	69.3
Turkey	6,326.2	12.0	759.1	2/3	506.1	7.5	474.5
Egypt	4,004.5	11.5	460.5	2/3	307.0	7.0	280.3
Syria	815.9	10.0	81.6	2/3	54.4	6.5	53.0
(U.A.R.)	(4,820.4)	(11.2)	(542.1)	(2/3)	(361.4)	(6.9)	(333.3)
Cyprus	281.2	15.0	42.2	2/3	28.1	6.5	18.3
	19,390.9	14.9	2,892.8	62.6	1,811.7	8.0	1,545.3

m = denotes countries in which extractive industries (oil or minerals) form the preponderant part of investment.

NET INVESTMENT MINUS SAVINGS (1961) AND CAPITAL INFLOW PER ANNUM (1961-66) AS PERCENTAGE OF NET AND GROSS INVESTMENT

	Net Investment Minus Saving ($ mill)	Column 1 as % of net investment (%)	Column 1 as % of gross invest. (%)	Capital Inflow Yearly Average ($ mill) 1961-1966	Capital Inflow as % of net invest. (%)	Capital Inflow as % of gross invest. (%)
AFRICA						
Eritrea and Ethiopia	11.4	16.6	11.1	10.12	14.7	9.8
Ghana	21.6	27.2	20.4	29.16	36.6	27.4
Liberia	0.7	9.1	6.0	1.64	21.9	14.5
Libya	3.8	62.3	41.3	7.30	119.7	79.3
Morocco	38.4	33.3	25.0	38.16	33.1	24.80
Sudan	10.6	18.5	13.8	15.06	26.3	19.7
Tunisia	10.8	24.8	16.5	16.22	37.3	24.8
Belgian Congo	22.2	59.9	29.9	29.68	80.2	40.0
Gambia	0.3	32.5	23.6	0.40	50.0	36.4
Kenya	11.3	19.4	12.9	8.28	14.2	9.5
Nigeria	29.2	10.0	13.3	71.32	32.6	24.4
Rhodesia and Nyasaland	80.4	33.3	20.0	-	-	-
Mauritius	2.9	21.1	15.8	-	-	-
Uganda	15.2	33.2	24.9	8.46	18.5	13.9
Algeria	75.6	34.3	22.9	17 2	7 8	5 2
French West Africa	83.6	41.3	31.0	75.56	37.3	28.0
French Equat. Africa	26.6	42.2	31.7	14.00	22.2	16.7
Madagascar	9.9	28.4	21.2	25.48	72.6	54.3
Angola	3.3	19.6	14.7	8.98	53.1	39.7
Mozambique	4.2	13.5	10.1	9.70	31.1	23.3
British Cameroons	2.9	40.1	29.9	2.12	29.0	21.6
French Cameroons	12.4	41.8	31.3	3.16	10.6	7.9
Ruanda Urundi	9.5	40.5	30.3	7.02	29.7	22.3
Italian Somaliland	2.0	39.4	29.1	1.54	30.2	22.3
Tanganyika	26.9	35.5	26.6	13.56	17.9	13.4
Togoland	1.7	40.0	30.0	1.26	30.0	22.5
South West Africa	2.0	46.0	34.1	1.16	27.0	20.0
Other British	3.2	19.5	14.6	8.84	53.2	39.8
Other French	0.4	18.6	13.9	1.42	67.6	50.7
Other Portuguese	0.5	18.3	13.7	1.64	54.7	41.0
Spanish	0.1	10.8	7.6	0.72	60 0	42.3
	513.8	29.0	20.6			

	Net Investment Minus Saving ($ mill)	Column 1 as % of net investment (%)	Column 1 as % of gross invest. (%)	Capital Inflow Yearly Average ($ mill) 1961-1966	Capital Inflow as % of net invest. (%)	Capital Inflow as % of gross invest (%)
AMERICA						
Argentina	125.9	9.9	5.9	198.76	15.6	9.4
Bolivia	13.3	41.8	27.9	22.70	71.4	47.6
Brazil	150.8	8.1	5.4	563.40	30.1	20.1
Chile	-24.1	-13.6	-8.2	58.52	33.1	19.8
Colombia	83.4	16.7	11.1	115.50	23.1	15.4
Costa Rica	6.6	18.2	12.1	2.04	5.6	3.7
Cuba	71.3	25.0	16.7	60.36	21.2	14.1
Dominican Republic	23.3	29.6	19.8	10.60	13.5	9.0
Ecuador	17.5	25.0	16.7	22.46	32.1	21.4
El Salvador	18.0	35.0	23.4	12.48	24.3	16.2
Guatemala	22.6	32.7	21.8	17.44	25.2	16.8
Haiti	10.6	49.8	33.1	22.18	104.1	69.3
Honduras	10.7	31.4	20.9	8.80	25.8	17.2
Mexico	34.9	2.9	1.9	198.96	16.8	11.2
Nicaragua	10.8	34.7	23.1	7.60	24.4	16.3
Panama	12.2	40.0	26.7	9.14	30.0	20.0
Paraguay	5.6	30.4	20.3	3.30	17.9	11.9
Peru	71.5	31.4	20.9	79.32	34.8	23.2
Uruguay	25.4	20.0	13.3	9.02	7.1	4.7
Venezuela	164.7	28.0	16.8	100.06	17.0	10.2
20 Latin American Republics	855.0	12.7	8.2			
Jamaica	24.0	27.9	16.7	10.43	12.1	7.3
Trinidad and Tobago	9.1	19.9	10.0	6.66	14.6	7.3
Surinam	0.8	15.6	10.3	1.36	26.7	17.7
ASIA						
Afghanistan	25.3	35.7	23.8	22.80	32.1	21.4
Bhutan	0.3	15.8	10.3	1.30	68.4	44.8
Burma	27.6	20.3	13.5	47.8	35.1	23.4
Cambodia	11.6	37.7	25.1	15.56	50.5	33.7
Ceylon	14.5	15.2	10.1	30.36	31.8	21.2
Taiwan	51.9	34.1	22.7	29.0	19.0	12.7
India	444.0	15.0	10.0	1,677.72	56.7	37.8
Indonesia	30.5	6.2	4.2	172.3	35.2	23.5

	Net Investment Minus Saving ($ mill)	Column 1 as % of net investment (%)	Column 1 as % of gross investment (%)	Capital Inflow Yearly Average ($ mill) 1961-1966	Capital Inflow as % of net invest. (%)	Capital Inflow as % of gross invest (%)
South Korea	68.4	29.4	19.6	63.30	27.2	18.1
Laos	1.9	33.9	22.6	4.86	86.8	57.8
Malaya	26.1	8.3	5.5	17.34	5.5	3.7
Nepal	4.5	16.8	11.2	18.18	68.1	45.4
Pakistan	81.6	15.7	9.7	331.6	63.9	39.3
Philippines	119.9	36.1	24.0	a) 147.78	30.8	20.5
				b) 123.88	25.8	17.2
Thailand	34.9	16.7	11.1	30.74	14.7	9.8
South Viet Nam	26.5	25.9	19.4	86.3	84.3	63.4
Hong Kong	9.6	16.6	11.0	17.44	30.1	20.1
Singapore	6.2	8.4	5.6	4.08	5.5	3.7
Other	7.0	19.5	13.0	0.56	1.6	1.0
	989.5	16.5	10.9			
EUROPE						
Greece	93.3	23.4	15.6	72.32	18.1	12.1
Portugal	57.3	27.1	16.2	41.5	19.6	11.8
Spain	233.4	24.2	14.5	128.92	12.4	8.0
Yugoslavia	204.9	22.7	15.2	143.80	16.0	10.6
	588.9	23.8	15.1			
MIDDLE EAST						
Iran	101.1	33.3	20.0	96.8	31.9	19.2
Iraq	0	0	0	20.0	17.5	8.8
Israel	88.3	29.2	19.5	30.9	10.2	6.8
Jordan	5.0	43.8	29.2	6.6	57.9	38.6
Kuwait	-13.5	-24.9	-12.4	-	-	-
Lebanon	4.5	9.0	6.0	18.8	37.5	25.0
Saudi Arabia	11.5	14.2	7.1	34.0	42.1	21.0
Turkey	31.6	6.2	4.2	231.8	45.8	30.5
Egypt	26.7	8.7	5.8	173.3	56.4	37.6
Syria	1.4	2.6	1.7	19.9	36.6	24.4
(UAR)	(28.1)	(7.8)	(5.2)	(193.2)	(53.5)	(35.6)
Cyprus	9.8	34.9	23.2	6.8	24.2	16.1
	266.4	14.7	9.2			

TABLE III-C

SUMMARY BY REGIONS

Investment and Savings - 1961

($ mill)

	Gross Investment	Net Investment	Domestic Savings
Africa	2,488.6	1,735.6	1,211.7
America (Total South and Central America)	10,633.6	6,838.3	5,949.2
Asia	9,062.1	6,010.8	4,591.7
Europe	3,906.6	2,473.9	1,885.0
Middle East	2,892.8	1,811.7	1,545.3
	28,983.7	18,870.3	15,182.9

EXPLANATORY NOTES ON TABLES III A AND C

Estimates of Gross and Net Investment, as well as those of Savings shown by region in Table III-C, and for individual countries in Table III-A, are taken from the Reports of the U.N. Economic Commissions for Latin America and for Asia and the Far East, from the U.N. Statistical Yearbooks and World Surveys, from Development Plans and Programs of various countries, from some International Bank Reports as well as from individual country studies. The figures are not strictly comparable since both the degree of accuracy and the methods of social accounts vary widely from country to country. Data on Savings are even less reliable than those on fixed capital formation and increase in inventories. Net investment frequently refers, therefore, to "capacity created" rather than "Savings plus Imports minus Exports." In some cases the author's subjective judgment led to the selection of one among several varying estimates mainly guided by a "hunch" about relative orders of magnitude in each region. Even this vague orientation was not possible in the case of Africa where, in spite of many studies in recent years, most figures about the Gross National Product, Investments and Savings, are more or less enlightened "guesstimates." It is hoped nonetheless that the general picture presents on the whole a good perspective of the relative orders of magnitude.

The estimates of Gross Investment and of Savings involve in many cases (some examples follow) an upward bias. Realized Gross Investment and Savings often lag behind planned target estimates. It is felt that the Underdeveloped Countries total Gross Investment of almost $29 billion may involve an overestimate of around 5-6 per cent. Domestic Savings may involve an overestimate of 6-10 per cent.

The estimates of Net Investment as proportion of Gross Investment may also involve a slight overestimate. In many publications Depreciation is estimated as 40 per cent of Gross Investment, extrapolating Kuznets' estimate for the U.S. in mid-XIX Century. We assumed that in countries with a small capital stock and a recent relatively high rate of growth Depreciation may be less--and assumed accordingly in most cases only one-third of Gross Investment for it (see Table III-A). In some very poor and only very recently developing countries of Africa only one-quarter was assumed for depreciation. In countries with a considerable capital stock in extraction industries (oil or minerals) marked "m" like Rhodesia, Belgian Congo, Venezuela, Iraq, Saudi Arabia, as well as in Iran, Argentina, Portugal and Spain, 40 per cent of Gross Investment was assumed for Depreciation. Our judgment is that the overestimate, if any, is less than 5 per cent.

Africa:

Libya: The relatively high Investment is due to recent oil discoveries.

Belgian Congo: In recent years mineral investments from Belgium were exceptionally high (over 30 per cent of G.N.P.) while in the second half of 1960 they were certainly nil. For actual 1961 the estimate is a pure guess. The savings estimate of 1 per cent also applies to this "exceptional" year.

Ghana's and Nigeria's Investment figures are probably too low

while

Uganda's and Tanganyika's Investment figures may be overestimates.

French West Africa and
French Equatorial Africa: refers in all the Tables to territories of former French West and Equatorial Africa.

America:

Argentina: The official Gross Investment estimate is of 23½ per cent scaled down in our study to 18½ per cent which, if anything, seems still to be rather an overestimate. It may be noted that the depreciation rate in Argentina is assumed at 40 per cent of Gross Investment.

Brazil: Brazil's absorptive capacity--if grants besides repayable loans were forthcoming--is higher than her present rate of investment which, owing to losses in terms of trade, may well be a 6 to 8 per cent overestimate.

Chile: had very low investment and savings rates in recent years. The official investment estimate quotes a figure of 10.4 per cent for Gross Investment which is undoubtedly too low. We raised it to 11 per cent which may well be an underestimate by up to 10 per cent. On the other hand, Chile's average savings rate of 7½ per cent--although extraordinarily low at that level of income--may, in spite of it, be a slight overestimate. The presently low rate of investment is partly due to recent monetary stabilization efforts.

Costa Rica: Her published Gross Investment figure (23 per cent) seems to involve a considerable overestimate. We have scaled it down accordingly to 16½ per cent. If a higher investment and savings were possible, Costa Rica could have a rate of growth of higher than 3 per cent, at which level the income per head is not increasing.

Cuba: All estimates about the present situation in Cuba are, in the nature of things, pure guesses.

Haiti: The Gross Investment rate has to be interpreted in conjunction with Table III-B which shows that 50 per cent of her Net Investment is covered by a foreign capital inflow. A great deal of it is "budget support!" The investment figure--although low--may therefore still represent an overestimate.

Jamaica: The investment figure for Jamaica is very high, which is largely due to high foreign alumina investment in recent years. It is not sure whether investment at that rate can or will continue. The quoted figure for 1961 may, therefore, well involve an overestimate.

Peru: The relatively high Gross Investment rate has to be read in conjunction with the great difference between Gross National Product and National Income shown in Table II-A-2.

The total Investment figure for Latin America seems on the whole, however, to be realistic.

Asia:

Burma: The National Accounts of Burma show a consistently high Investment estimate in recent years. It is difficult to believe, however, that they do not involve a considerable (20-25 per cent ?) overestimate. If they were correct, we should have to assume that for some reasons the capital-output ratio in Burma was considerably higher (for instance 4:1) than in other countries. We have reduced the official estimate (21 per cent) of Gross Investment in Burma to 16 per cent.

Ceylon: had a very much higher Investment and Savings rate in the first half of the 1950's. Those have gradually fallen, in consequence of which Ceylon has not been able to increase her income per head in the past three years. The assumed Gross Investment rate of 11½ per cent and the average savings rate of 6½ per cent for 1961 reflects this situation and may be overpessimistic, i.e. may be an underestimate.

Taiwan: Our figure of 18.2 per cent as a rate of Gross Investment is based on the 1958 figures in the U.N. Yearbook of National Accounts Statistics 1959. Other estimates give an even higher figure of 21.1 per cent, which seems to us to be an overestimate.

India: The estimate of Investment and Savings is that of the Third Five Year Plan. It may well be that in actual 1961 the targets will not be fully met, that the average savings rate may well be 8 per cent instead of 8½ and Gross Investment 13½ or 14 per cent instead of 15 per cent. In Table IV-A, the consequences of such an alternative are indicated resulting in a rate of growth for 1961-66 of 4½ instead of 5 per cent.

Indonesia: has a low Investment and Savings rate and has not been able to maintain her income per head in the last three years. Owing to her limited absorptive capacity of capital and her low savings rate, a low rate of growth of 2½ per cent per annum for the next five-year period had to be assumed.

South Korea: The published accounts of this country give a Gross Investment rate of 14.9 per cent. We have scaled this down to 13.8 per cent.

Pakistan: The estimate of Investment and Savings is that of the official Second Five Year Plan. The original Gross Investment figure was 13.4 per cent instead of 15 per cent. The Indus Water Agreement foresees, however, an inflow of $700 million for the five-year period of which 20 per cent ($140 million) constitutes Net Investment while the bulk of it (80 per cent = $560 million) constitutes replacement and maintenance. Accordingly, Net Investment in Pakistan forms 61.7 per cent (instead of 66 per cent) of Gross Investment.

Philippines: have a very low savings rate of 7½ per cent which, moreover, may still involve a slight overestimate. Their Investment and Savings rates could and should be raised considerably by a more vigorous development policy. For a more optimistic alternative for the future, see the notes to Table IV-A.

Thailand: Our Gross Investment percentage figure is 13.5. Other reports for 1959 give 14 per cent and in view of the Mekong River operations, this may be reasonable.

South Viet Nam: Our Gross Investment percentage figure is 9. Our sources give 11 per cent, which does not appear probable.

The Total Investment figure for Asia may well involve a 6 to 10 per cent overestimate.

Europe:

The underdeveloped Mediterranean countries of Europe show remarkably low estimates of increase in population. Even if they were correct for 1961, they may well increase in the future. The Investment figures for Portugal and Spain may well involve an overestimate.

Middle East:

Iran: The figures, although rough estimates, are based on recent reports about the Iranian Development Plan.

Iraq: could well increase its at present very low productivity in agriculture, which might then lead to a successful part-industrialization. An optimistic estimate of her rate of growth is therefore given (see the Reports of the International Bank, Johns Hopkins Press, 1951, and of the Mediterranean Project of the FAO, 1959).

Turkey: Due to her high increase in population and a recently slowed down rate of growth, Turkey has not been able to increase markedly her income per head in recent years (see notes to Table II-A-1). Her savings and investments could be stepped up, however. Even for 1961 the low investment figure may represent a slight underestimate.

Egypt: Information on present Investment and Savings is not sufficient. The investment figure of 11.5 per cent may well be an underestimate.

EXPLANATORY NOTES ON TABLE III-B

The purpose of this table is, first, to check (from column one--Net Investment minus Saving) whether our estimates of domestic savings and domestic investment are compatible with estimates of the capital inflow into each country. The second purpose is to identify those countries in which the capital inflow is, in a very large proportion, "budget support" rather than a direct increase in net investment. Whenever the second column shows very high percentages, as in Libya, Belgian Congo (in the present situation) Former French West Africa and Former French Equatorial Africa, British and French Cameroons, Ruanda Urundi, Togoland, South West Africa, in Africa; Bolivia and Haiti in Latin America; and Jordan in the Middle East; there is prima facie evidence that the high percentage of what appears in the balance of payments account as foreign capital inflow is "budget" and other support rather than investment. The last two columns, on the other hand, where the figures are very high cover two different cases, either those of the "budget support" countries mentioned above or those where the absorptive capacity is so high that capital inflow has to cover both the resources gap and, in some cases, also over and above that, the foreign exchange gap.

FOREIGN CAPITAL INFLOW REQUIRED FOR UNDERDEVELOPED COUNTRIES 1961-1976

AFRICA	Rate of Growth (%)	Average Savings Rate (%)	Marginal Savings Rate (%)	Capital Inflow 1961-1966 ($ mill.)	Capital Inflow Per Annum ($ mill.)	Rate of Growth (%)	Average Savings Rate (%)	Marginal Savings Rate (%)	Capital Inflow 1966-1971 ($ mill.)	Capital Inflow Per Annum ($ mill.)	Rate of Growth (%)	Average Savings Rate (%)	Marginal Savings Rate (%)	Capital Inflow 1966-1971 ($ mill.)	Capital Inflow Per Annum ($ mill.)
	1961-1966					1966-1971					1971-1976				
Eritrea and Ethiopia	2	[illegible]	9	50.6	10.1	3	5.4	12	217.3	43.5	3.5	6.3	16	278.3	55.7
Ghana	2.5	6	10	145.8	29.2	3	6.4	13	129.3	25.9	3.5	7.3	20	157.2	31.4
Liberia	2.5	6	9	8.2	1.6	2.5	6.3	12	6.3	1.3	2.5	6.9	16	39.5	7.9
Libya	4	3	6	36.5	7.3	3	3.5	8	16.2	3.2	3	4.1	10	26.2	5.2
Morocco	2.5	5	8	190.8	38.2	2.75	5.3	12	233.9	46.8	3	6.3	15	234.5	46.9
Sudan	2.5	5.5	8	75.3	15.0	3	5.8	12	145.3	29.0	3	6.6	15	114.1	22.8
Tunisia	2.5	5	8	81.1	16.2	3	5.3	10	134.7	26.9	4	5.9	15	246.5	49.3
Belgian Congo	1	1	5	148.4	29.7	2	6.5	11	no aid	-	3	6.9	14	147.2	29.4
Gambia	2	3.5	6	2.0	.4	2	3.6	9	2.0	.4	2	3.5	12	2.1	.42
Kenya	3	7.5	12	41.4	8.3	3	8.1	15	20.0	4.0	3.5	9	18	39.1	7.8
Nigeria	3	6.5	10	356.6	71.3	3.25	7.5	14	335.0	67.0	3.5	8.4	16	440.7	88.1
Rhodesia	4	12	20	no aid	-	4.0	13.4	20	no aid	-	4	14.6	20	no aid	-
Mauritius	2.5	7.5	10	no aid	-	3	7.8	12	9.0	1.8	3	8.3	16	2.7	.54
Uganda	3	7.0	10	42.3	8.5	3.5	7.4	12	75.4	15.1	4	8.1	16	106.9	21.4
Algeria	4	7	10	85.9	17.2	4	7.5	16	522.7	104.5	4	9.0	20	356.6	71.3
Fr. F.W. Africa	3	5.5	9	377.8	75.6	3	6.0	12	353.6	70.7	3.5	6.7	16	491.0	98.2
Fr. Eq. Africa	3	6.5	9	70.0	14.0	3	6.9	12	62.0	12.4	3.5	7.5	16	156.7	31.3
Madagascar	2.5	4.5	8	127.4	25.5	3	4.9	12	141.7	28.3	3	5.8	15	107.2	21.4
Angola	2.5	4.5	8	44.9	9.0	3	4.9	12	66.8	13.3	3.5	5.9	15	84.7	16.9
Mozambique	2.5	5.5	8	48.5	9.7	3	5.8	12	83.9	16.8	3.5	6.6	15	114.6	22.9
Br. Cameroons	2	4.0	7	10.6	2.1	3	4.3	10	27.6	5.5	3	5.1	14	25.2	5.0
Fr. Cameroons	2	5.0	8	15.8	3.2	3	5.3	10	69.4	13.9	3	5.9	14	60.1	12.0
Ruanda Urundi	2	4.0	6	35.1	7.0	3	4.2	10	92.0	18.4	3	5.0	12	85.7	17.1
It. Somaliland	2	4.0	6	7.7	1.5	2	4.2	8	7.2	1.4	3	4.9	12	18.6	3.7
Tanganyika	3	7.0	10	67.8	13.6	4	7.5	15	171.8	34.4	4	8.8	18	132.8	26.6
Togoland	2	4.0	6	6.3	1.3	3	4.2	8	16.5	3.3	3	4.7	10	17.3	3.5
So. W. Africa	2	4.0	6	5.8	1.2	3	4.2	8	15.2	3.0	3	4.7	13	15.8	3.2
Other British, Other French, Other Port.	2.5	4.5	8	63.1	12.6	3	4.9	12	76.4	15.3	3	5.2	15	209.7	41.9

AMERICA	Rate of Growth (%)	Average Savings Rate (%)	Marginal Savings Rate (%)	Capital Inflow 1961-1966 ($ mill.)	Capital Inflow Per Annum ($ mill.)	Rate of Growth (%)	Average Savings Rate (%)	Marginal Savings Rate (%)	Capital Inflow 1966-1971 ($ mill.)	Capital Inflow Per Annum ($ mill.)	Rate of Growth (%)	Average Savings Rate (%)	Marginal Savings Rate (%)	Capital Inflow 1966-1971 ($ mill.)	Capital Inflow Per Annum ($ mill.)
			1961-1966					1966-1971					1971-1976		
Argentina	3.75	10	18	993.8	198.8	4.25	11.5	23	1029.4	205.9	4.75	13.7	23	822.4	164.5
Bolivia	2.5	6	11	113.5	22.7	3	6.5	14	38.5	7.7	3.5	7.6	18	47.6	9.5
Brazil	4.25	9.5	20	2817.0	563.4	4.5	11.3	22	2065.3	413.1	5	13.5	23	1692.9	338.6
Chile	3.25	7.5	15	292.6	58.5	3.5	10.1	20	220.0	44.0	4	10.4	20	254.4	50.9
Colombia	4.5	10	16	577.5	115.5	5	11.6	18	802.1	160.4	5	12.9	20	490.7	98.1
Costa Rica	3	9	12	10.2	2.0	3.5	9.3	14	36.4	7.3	4	10.1	16	39.6	7.9
Cuba	3	7.5	12	301.8	60.4	3.25	8.1	18	344.9	69.0	3.5	9.5	20	248.5	49.7
Dominican Republic	3	7.5	10	53.0	10.6	3	7.8	16	34.1	6.8	3	8.96	18	no aid	-
Ecuador	3.5	7.5	12	112.3	22.5	4	7.9	14	181.4	36.3	4.25	9.2	18	181.8	36.4
El Salvador	3	6.5	10	62.4	12.5	3.7	7.0	15	109.6	21.9	4	8.4	16	168.2	33.6
Guatemala	3	6.5	10	87.2	17.4	3.7	7.0	15	157.4	31.5	4	8.3	17	177.7	35.5
Haiti	3	3	5	110.9	22.2	3	3.3	10	116.2	23.2	3	4.2	12	115.6	23.1
Honduras	3	6.5	10	44.0	8.8	3.7	6.8	15	81.0	16.2	4	8.2	16	91.6	18.3
Mexico	4.5	11	20	994.8	199.0	5	12.8	22	959.0	191.8	5	14.7	23	no aid	-
Nicaragua	3	6.5	10	38.0	7.6	3.7	7.0	15	68.8	13.8	4	8.3	17	71.4	14.3
Panama	3	6	9	45.7	9.1	3	6.4	15	44.3	8.9	3.5	7.6	16	57.0	11.4
Paraguay	3	5.5	9	16.5	3.3	3	5.8	13	39.6	7.9	3	6.8	15	28.4	5.7
Peru	3.5	8	14	396.6	79.3	3.75	8.9	18	425.9	85.2	4	10.5	18	443.2	88.6
Uruguay	3	8	14	45.1	9.0	4	8.8	18	198.2	39.6	4	10.4	20	83.1	16.6
Venezuela	4	9.5	16	500.3	100.1	4	10.6	20	490.6	98.1	4	12.3	20	36.6	7.3
Jamaica	4	10	16	52.2	10.4	4	11.1	20	14.4	2.9	4	12.6	22	no aid	-
Trinidad	3	10	15	33.3	6.7	3	10.7	16	no aid	-	3	11.4	18	no aid	-
Surinam	4	9	14	6.8	1.4	4	9.8	18	4.9	1.0	4	11.2	18	0.09	.02

ASIA	Rate of Growth (%)	Average Savings Rate (%)	Marginal Savings Rate (%)	Capital Inflow 1961-1966 ($ mill)	Capital Inflow Per Annum ($ mill)	Rate of Growth (%)	Average Savings Rate (%)	Marginal Savings Rate (%)	Capital Inflow 1966-1971 ($ mill)	Capital Inflow Per Annum ($ mill)	Rate of Growth (%)	Average Savings Rate (%)	Marginal Savings Rate (%)	Capital Inflow 1971-1976 ($ mill)	Capital Inflow Per Annum ($ mill)
				1961-1966					1966-1971					1971-1976	
Afghanistan	3	6	9	114.0	22.8	4	6	12	264.5	52.9	4	7	15	254.6	50.9
Burma	4	8	15	239.2	47.8	5	9.6	22	362.6	72.5	5	12	22	225.1	45.0
Cambodia	3	5	8	77.8	15.6	3	5	10	87.9	17.6	3	6	14	70.1	14.1
Ceylon	3	6.5	10	151.8	30.4	4	6.9	15	349.6	69.9	4	8	18	306.6	61.3
Taiwan	3.5	8	13	145.2	29.0	3.75	9.4	15	120.1	24.0	3	10.4	18	98.1	19.6
India	5	8.5	23	8388.6	1677.7	5	10.2	25	5591.0	1118.2	5	14.5	25	no aid	-
	(4.5)	(8)	(18)	(7528.0)	(1505.6)		(9.97)	(20)	(8261.7)	(1652.3)		(12.1)	(23)	(5103.0)	(1020.6)
Indonesia	2.5	5.5	10	861.4	172.3	3	6.2	14	1301.2	260.2	3.5	7.1	18	1759.0	351.8
		(5.0)	(8)	(1134.9)	(226.9)		(5)	(12)	(1983.8)	(396.8)		(6)	(16)	(2453.3)	(490.7)
South Korea	3	6.5	9	316.5	63.3	3.5	6.8	14	503.9	100.8	4	8	18	609.2	121.8
Laos	3	4	6	24.3	4.9	3	4	7	27.5	5.5	3	4.6	10	27.2	5.4
Malaya	4	11	16	86.7	17.3	4	11.8	18	no aid	-	4	13	20	no aid	-
Nepal	3	5	8	90.9	18.2	4	5	10	184.8	37.0	4	6	14	182.9	36.6
Pakistan	4	7.8	15	1667.9*	331.6*	4.5	9.1	20	1668.0*	333.6	5	11.2	23	1732.7	346.5
											(4.5)	(11.2)	(23)	(607.0)	(121.4)
Philippines	3.5	7.5	16	619.4	123.9	4	8.8	20	720.1	144.0	4	10.8	23	95.5	19.1
		(7)		(738.9)	(147.8)		(8.4)		(833.6)	(166.7)		(10.4)		(234.0)	(46.8)
Thailand	3	7.5	12	153.7	30.7	3.5	8.0	18	259.5	51.9	4	9.6	20	276.0	55.1
South Viet Nam	3.5	5	8	431.4	86.3	3.5	5.5	10	453.4	90.7	4	6.2	14	602.3	120.5
Hong Kong	4.7	10	18	87.3	17.4										
Singapore	4	11	16	20.4	4.1										

*$560 mill. added to $1107.9 to obtain the total aid figure.

	Rate of Growth %	Average Savings Rate (%)	Marginal Savings Rate (%)	Capital Inflow 1961-1966 ($ mill.)	Capital Inflow Per Annum ($ mill.)	Rate of Growth (%)	Average Savings Rate (%)	Marginal Savings Rate (%)	Capital Inflow 1966-1971 ($ mill.)	Capital Inflow Per Annum ($ mill.)	Rate of Growth (%)	Average Savings Rate (%)	Marginal Savings Rate (%)	Capital Inflow 1971-1976 ($ mill.)	Capital Inflow Per Annum ($ mill.)
EUROPE			1961-1966					1966-1971					1971-1976		
Greece	4	9.5	15	361.6	72.3	5	10	23	815.7	163.1	5	12.8	23	341.9	68.4
Portugal	3	17	11	207.6	41.5	3	7.5	16	139.8	28.0	4	8.7	20	389.1	77.8
Spain	3	7.5	12	644.6	128.9	3.5	8	18	1114.4	222.9	4	9.5	22	1070.4	214.1
Yugoslavia	5	12	20	719.1	143.8	5	13.7	22	211.67	42.3	5	15.4	23	no aid	-
MIDDLE EAST															
Iran	4	8	14	484.2	96.8	4	9.1	18	383.7	76.7	4	10.7	18	149.0	29.8
Iraq	4	10	15	99.8	20.0	5	10.1	22	296.9	59.4	5	12.7	22	139.2	27.8
Israel	5	12.5	20	154.3	30.9	5	14.1	22	29.7	5.9	5	15.8	22	no aid	-
Jordan	2	3	4	33.0	6.6	3	3.0	6	73.0	14.6	3	3.0	10	81.5	16.3
Lebanon	4	8.5	12	94.0	18.8	4	8.3	20	108.6	21.7	4	10.0	20	52.7	10.5
S. Arabia	3	6	10	169.8	34.0	3	6.5	14	147.9	29.6	3	7.6	18	68.3	13.7
Turkey	4	8	16	1159.0	231.8	4.5	9.4	20	1347.8	269.6	4.5	11.5	23	539.9	108.0
Egypt	4	7.5	14	866.4	173.3	4.5	8.6	18	1092.9	218.6	4.5	10.5	22	673.2	134.6
Syria	3	6.5	10	99.3	19.9	4	7.0	15	224.7	44.9	4.5	8.4	18	269.8	54.0
Cyprus	3	6.5	10	34.1	6.8	3	7.0	12	29.8	6.0	3	7.7	18	14.6	2.9

TABLE IV-B

COMPOSITION OF FOREIGN CAPITAL INFLOW PER ANNUM

("Aid" and Private Foreign Investment)

($ mill.)

	Capital Inflow	Aid	Private Invest.	Capital Inflow	Aid	Private Invest.	Capital Inflow	Aid	Private Invest.
	1961-1966			1966-1971			1971-1976		
AFRICA									
Eritrea and Ethiopia	10.1	7.1	3.0	43.5	31.5	12.0	55.7	37.7	18.0
Ghana	29.2	15.2	14.0	25.9	11.9	14.0	31.4	14.4	17.0
Liberia	1.6	1.0	0.6	1.3	0.7	0.6	7.9	4.9	3.0
Libya	7.3	2.3	5.0	3.2	1.7	1.5	5.2	3.2	2.0
Morocco	38.2	20.2	18.0	46.8	24.8	22.0	46.9	24.9	22.0
Sudan	15.0	10.0	5.0	29.0	18.0	11.0	22.8	12.8	10.0
Tunisia	16.2	10.2	6.0	26.9	15.9	11.0	49.3	20.3	29.0
Belgian Congo	29.7	4.7	25.0	-	-	-	29.4	4.4	25.0
Gambia	0.4	0.3	0.1	0.4	0.3	0.1	0.4	0.3	0.1
Kenya	8.3	5.3	3.0	4.0	1.0	3.0	7.8	3.8	4.0
Nigeria	71.3	55.3	16.0	67.0	47.0	20.0	88.1	58.1	30.0
Rhodesia	-	-	-	-	-	-	-	-	-
Mauritius	-	-	-	1.8	1.0	0.8	0.5	0.5	-
Uganda	8.5	5.5	3.0	15.1	9.1	6.0	21.4	12.4	9.0
Algeria	17.2	15.2	2.0	104.5	84.5	20.0	71.3	51.3	20.0
Former Fr. W. Africa	75.6	57.6	18.0	70.7	50.6	20.1	98.2	62.2	36.0
Former Fr. Eq. Africa	14.0	8.0	6.0	12.4	5.4	7.0	31.3	11.3	20.0
Madgascar	25.5	16.5	9.0	28.3	16.3	12.0	21.4	11.4	10.0
Angola	9.0	6.0	3.0	13.3	8.3	5.0	16.9	9.9	7.0
Mozambique	9.7	5.7	4.0	16.8	8.8	8.0	22.9	11.9	11.0
Br. Cameroons	2.1	1.6	0.5	5.5	3.5	2.0	5.0	3.0	2.0
Fr. Cameroons	3.2	1.7	1.5	13.9	5.9	8.0	12.0	4.0	8.0
Rwanda Urundi	7.0	4.0	3.0	18.4	10.4	8.0	17.1	9.1	8.0
Br. Somaliland	1.5	1.4	0.1	1.4	1.3	0.1	3.7	3.2	0.5
Tanganyika	13.6	9.6	4.0	34.4	24.4	10.0	26.6	14.6	12.0
Togoland	1.3	1.0	0.3	3.3	2.3	1.0	3.5	2.5	1.0
So. West Africa	1.2	0.7	0.5	3.0	2.0	1.0	3.2	2.0	1.2
Other	12.6	8.6	4.0	15.3	10.0	5.3	41.9	21.9	20.0
	429.3	274.7	154.6	606.1	396.6	209.5	741.8	416.0	325.8

	Capital Inflow	Aid	Private Invest.	Capital Inflow	Aid	Private Invest.	Capital Inflow	Aid	Private Invest.
	1961-1966			1966-1971			1971-1976		
AMERICA									
Argentina	198.8	103.8	95.0	205.9	90.9	115.0	164.5	-	164.5
Bolivia	22.7	17.7	5.0	7.7	2.7	5.0	9.5	3.5	6.0
Brazil	563.4	283.4	280.0	413.1	113.1	300.0	338.6	-	338.6
Chile	58.5	32.5	26.0	44.0	15.0	29.0	50.9	10.9	40.0
Colombia	115.5	70.5	45.0	160.4	65.4	95.0	98.1	-	98.1
Costa Rica	2.0	1.5	0.5	7.3	4.3	3.0	7.9	4.0	3.9
Cuba	60.4	30.4	30.0	69.0	30.0	39.0	49.7	9.7	40.0
Dominican Republic	10.6	6.6	4.0	6.8	2.8	4.0	-	-	-
Ecuador	22.5	12.5	10.0	36.3	18.3	18.0	36.4	16.4	20.0
El Salvador	12.5	8.5	4.0	21.9	12.9	9.0	33.6	18.6	15.0
Guatemala	17.4	12.4	5.0	31.5	20.5	11.0	35.5	19.5	16.0
Haiti	22.2	21.2	1.0	23.2	20.2	3.0	23.1	20.1	3.0
Honduras	8.8	5.8	3.0	16.2	11.2	5.0	18.3	10.3	8.0
Mexico	199.0	100.0	99.0	191.8	41.8	150.0	-	-	-
Nicaragua	7.6	5.0	2.6	13.8	8.8	5.0	14.3	7.3	7.0
Panama	9.1	5.6	3.5	8.9	4.9	4.0	11.4	6.4	5.0
Paraguay	3.3	2.3	1.0	7.9	4.9	3.0	5.7	2.7	3.0
Peru	79.3	55.3	24.0	85.2	55.2	30.0	88.6	48.6	40.0
Uruguay	9.0	5.0	4.0	39.6	22.6	17.0	16.6	-	16.6
Venezuela	100.1	45.1	55.0	98.1	38.1	60.0	7.3	-	7.3
20 Latin Amer. Republics	1522.7	825.1	697.6	1488.6	583.6	905.0	1010.0	178.0	832.0
Jamaica	10.4	7.4	3.0	2.9	-	2.9	-	-	-
Trinidad	6.7	3.7	3.0	-	-	-	-	-	-
Surinam	1.4	1.0	0.4	1.0	0.5	0.5	.02	-	.02
TOTAL AMERICAN UNDER-DEVELOPED COUNTRIES	1541.2	837.2	704.0	1492.5	584.1	908.4	1010.02	178.0	832.02
ASIA									
Afghanistan	22.8	20.8	2.0	52.9	44.9	8.0	50.9	40.9	10.0
Burma	47.8	38.8	9.0	72.5	52.5	20.0	45.0	22.0	23.0
Cambodia	15.6	15.1	0.5	17.6	15.6	2.0	14.1	11.1	3.0
Ceylon	30.4	25.4	5.0	69.9	60.9	9.0	61.3	51.3	10.0
Taiwan	29.0	22.0	7.0	24.0	16.0	8.0	19.6	10.6	9.0
India	1677.7	1577.7	100.0	1118.2	988.2	130.0	-	-	-
	(1505.6)	(1425.6)	(80.0)	(1652.3)	(1452.3)	(200.0)	(1020.6)	(800.6)	(220.0)

	Capital Inflow	Aid	Private Invest.	Capital Inflow	Aid	Private Invest.	Capital Inflow	Aid	Private Invest.
	1961-1966			1966-1971			1971-1976		
Indonesia	172.3	142.3	30.0	260.2	190.2	70.0	351.8	251.2	100.6
	(226.9)	(176.9)	(50.0)	(396.8)	(306.8)	(90.0)	(490.7)	(350.7)	(140.0)
South Korea	63.3	55.3	8.0	100.8	85.8	15.0	121.8	95.8	26.0
Laos	4.9	4.7	0.2	5.5	5.0	0.5	5.4	4.6	0.8
Malaya	17.3	8.3	9.0	-	-	-	-	-	-
Nepal	18.2	17.7	0.5	37.0	35.0	2.0	36.6	33.6	3.0
Pakistan	331.6	291.6	40.0	333.6	283.6	50.0	346.5	266.5	80.0
Philippines	123.9	83.9	40.0	144.0	80.0	64.0	19.1	-	19.1
	(147.8)	(87.8)	(60.0)	(166.7)	(96.7)	(70.0)	(46.8)	-	(46.8)
Thailand	30.7	23.7	7.0	51.9	40.9	11.0	55.1	38.1	17.0
South Viet Nam	86.3	66.3	20.0	90.7	65.7	25.0	120.5	85.5	35.0
Hong Kong	17.4	2.4	15.0	-	-	-	-	-	-
Singapore	4.1	1.1	3.0	-	-	-	-	-	-
	2693.3	2397.1	296.2	2378.8	1964.3	414.5	1247.7	911.2	336.5
(alt. India)	(2521.2)	(2245.0)	(276.2)	(2912.9)	(2428.4)	(484.5)	(2268.3)	(1711.8)	(556.5)
EUROPE									
Greece	72.3	45.3	27.0	163.1	123.1	40.0	68.4	18.4	50.0
Portugal	41.5	31.5	10.0	28.0	18.0	10.0	77.8	52.8	25.0
Spain	128.9	98.9	30.0	222.9	142.9	80.0	214.1	114.1	100.0
Yugoslavia	143.8	128.8	15.0	42.3	22.3	20.0	-	-	-
	386.5	304.5	82.0	456.3	306.3	150.0	360.3	185.3	175.0
MIDDLE EAST									
Iran	96.8	66.8	30.0	76.7	40.7	36.0	29.8	-	29.8
Iraq	20.0	10.0	10.0	59.4	29.4	30.0	27.8	-	27.8
Israel	30.9	20.9	10.0	5.9	-	5.9	-	-	-
Jordan	6.6	6.5	0.1	14.6	14.4	0.2	16.3	15.7	0.6
Lebanon	18.8	9.8	9.0	21.7	11.2	10.5	10.5	-	10.5
Saudi Arabia	34.0	24.0	10.0	29.6	18.6	11.0	13.7	2.7	11.0
Turkey	231.8	171.8	60.0	269.6	199.6	70.0	108.0	38.0	70.0
Egypt	173.3	143.3	30.0	218.6	170.6	48.0	134.6	80.6	54.0
Syria	19.9	15.9	4.0	44.9	36.9	8.0	54.0	40.0	14.0
Cyprus	6.8	5.3	1.5	6.0	4.0	2.0	2.9	0.9	2.0
	638.9	474.3	164.6	747.0	525.4	221.6	397.6	177.9	219.7

EXPLANATORY NOTES ON TABLES IV A AND B

Method of calculating capital inflow requirements:

Gross national product is assumed to increase by r per cent over a five year period. Denoting G.N.P. by Y, we get for a five-year period:

$$\sum_{0}^{4} Y_t = Y_0 \left\{ \frac{(1+r)^5 - 1}{r} \right.$$

If the capital-output ratio is assumed to be k, then for a constant rate of growth equal to r per cent we need kr per cent (I) as a ratio of national income at each time period.

$$\text{Thus } \sum I_t = kr \sum Y.$$

The savings function is assumed to have the usual linear shape: $S_t = bY_t - a$.

$$\therefore \sum S_t = b \sum Y_t - \sum a.$$

The marginal savings rate "b" is assumed to be given. "a" is determined by putting $t = 0$.

For $t = 0$, we have

$$S_0 = bY_0 - a$$

$$\therefore a = (b - S_0/Y_0)\, Y_0$$

where S_0/Y_0 is the initial average savings rate.

Hence, total aid requirements

$$= \sum I_t - \sum S_t = kr \sum Y - b \sum Y + \sum a$$
$$= (kr - b) \sum Y + \sum a$$

where k, r, b, a, are all known magnitudes. (The formulae have been worked out by Dr. S. Chakravarty of M.I.T.)

The capital-output ratio "k" is throughout assumed to be 3:1. It should, of course, refer to increased net output obtained by investment, while our data compel us to apply it to gross national product. The difference between G.N.P. and N.N.I. for each country is indicated in Table II-A-2. For most countries the difference is of 10 to 13 per cent and there the true capital-output ratio is around 2.8:1. In those countries in which the difference is 20 per cent or more, our capital-output ratio has been raised. It has been thus assumed to be 3.2 in Argentina, Brazil and Chile, while for Peru it has been calculated at 3.5:1.

The total Capital Inflow required for Underdeveloped Countries in 1961-1966 is determined by each country's G.N.P. and assumed rate of growth (Net Investment)--which in turn reflects absorptive capacity--her initial average rate of savings

and her marginal rate of savings during each five-year period, which determines the initial average savings rate for the subsequent five-year period. The marginal savings rate depends on each country's: a) Capacity to organize development, b) Income level, c) Composition of Investment (for instance, the marginal savings rate is higher when industry absorbs a higher proportion of investment). In the majority of cases the marginal savings rate was assumed as roughly twice as high as the average rate. The assumed capital-output ratio of 3:1 (or rather 2.8:1) involves, of course, an oversimplification. It may well vary in different five-year periods for different countries, so that the projection for many particular periods may have a considerable margin of error. Where the existing railway capacity, as for instance in the case of Indonesia, is not fully utilized, railway investment for another five years may be very small and the capital-output ratio in such cases of excess capacity can be easily 2.5:1 or even slightly lower. The capital-output ratio obviously also depends on each country's capacity to earn foreign exchange. Where this is limited so that the foreign exchange gap is larger than the resource gap, recourse must be had to import savings investments which are costly and which raise the capital-output ratio. In large markets like India, or even Brazil, the increase in the capital-output ratio may not be very large. For small countries it would be very large if each were to substitute imports individually. It is assumed, however, that institutions like the Latin American Common Market will provide for some international coordination of investments. It is only on such an assumption that the "true" capital-output ratio of 2.8:1 can be assumed for the smaller Latin American countries. The margin of error can only be reduced by more detailed specific country studies. It is felt, however, that for a longer run the assumed capital-output ratio will not be far off the mark.

Africa:

Ghana's gross investment figure may be an underestimate. Her rate of growth of 2½ per cent for the next five-year period may also, therefore, understate Ghana's potential. It may well rise to 3 per cent.

Kenya's gross investment in recent years has been somewhat higher than the 11 per cent assumed for 1961. The cautiously lower rate has been assumed in view of the fact that Kenya was able to draw heavily on her sterling balances in recent years which she will not be able to continue at the same rate. She has also suffered during the last two years from a markedly smaller capital inflow and perhaps even some capital flight.

Belgian Congo: Figures for the Belgian Congo are sheer speculation; nothing else is possible in the present political situation. It is assumed that the uncertain and unstable situation will clear up. The average savings rate for the period 1966-71 is, therefore, arbitrarily assumed and not calculated on the basis of her previous average and marginal savings rate.

The territories of Former French West Africa and Former French Equatorial Africa, Madgascar, French Cameroons, Togoland and Other French possessions received ample aid and support from France in 1959-60. Their present assumed investment rates were made possible due to that aid. Since a high proportion of the capital inflow may be of the nature of "budget support" (see Notes to Table III-B) there may be some doubt whether all of them will be able to maintain their average and marginal savings rates if that aid were not to continue at a similar rate.

Due to the nature of the statistical information about Africa the figures assumed in Table IV-A are in many cases "guesstimates."

Latin America:

Chile's average and marginal savings rates assumed in our Table are, to some extent, in the nature of a target figure rather than an actual description of the present situation (see Notes to Table III-A). We assumed, however, that at Chile's level of income a minimum effort of raising the initial savings rate from 7 per cent (or perhaps even slightly under 7 per cent) to 7½ per cent should be possible. Chile's absorptive capacity is assumed to be somewhat lower than that of other Latin American countries due to the low savings and investment rates of recent years. This is the reason why the rate of growth assumed is 3.25 per cent for 1961 and 3.5 per cent for 1966 to 1971.

Cuba: Since detailed information is not available our assumptions are, in the nature of things, speculative.

Jamaica had a very high foreign investment in recent years. The continuance of it at a similar rate cannot be taken for granted. Under circumstances, therefore, a somewhat higher capital inflow and a much higher percentage of aid than private investment (see Table IV-B) might be called for.

Asia:

Ceylon's low average and marginal savings rates reflect her recently reduced investment effort (see Notes to Table III-A). If her development effort and absorptive capacity were to improve, a higher capital inflow might be justified.

India: The first line in our Table reproduces the assumptions of the Third Five Year Plan as far as the rate of growth, of gross and net investment, and of the average and marginal savings rates are concerned. We suspect, however, that underlying assumptions about a lower capital-output ratio may not be fully justified and that the capital inflow required is higher than that assumed in India's Third Five Year Plan ($6.5 billion of aid to which $400 to $500 million for private investment may be added). On our assumptions a 20 per cent higher capital inflow would be required. It is only on those assumptions that India would reach the stage of self-sustaining growth in her Fifth Five Year Plan period of 1971-76. The alternative shown in brackets assumes that at present India's average (8 per cent) and marginal (18 per cent) savings rates may be still somewhat lower than the target figures in the Plan and that, accordingly, the rate of growth in 1961-66 is more likely to be 4½ per cent. On those assumptions the amount of aid required to realize a 5 per cent rate of growth during the Fourth Five Year Plan period would be considerably higher than is shown in the projections of the Third Five Year Plan. In addition, substantial aid will still be required in the Fifth Five Year Plan period of 1971-76.

If India received $6.5 billion aid for the Third Five Year Plan and her average and marginal savings rates were only 8 and 18 per cent respectively, the rate of growth realized would be 4.3 per cent.

Indonesia:

The assumed average and marginal savings rates (however low) may still be slight overestimates. If the present situation were to continue with the lower savings rates shown in brackets in the alternative to Indonesia, a higher capital inflow would be required to secure the low assumed rate of growth. It might then become a question of policy judgment whether the higher capital inflow would not constitute a "negative incentive" instead of being, as it should be, an encouragement for increased development effort.

Pakistan: The average and marginal savings rates are those of Pakistan's Second Five Year Plan. About her gross and net investment, see Notes to Table III-A. The capital inflow computed by us is considerably lower than the assumption of the Plan. Pakistan's Second Five Year Plan postulated foreign aid of $2 billion. Adding to it our assumption of private investment (see Table IV-B) of $200 million, the target for capital inflow would amount to $2.2 billion. We assume instead a total capital inflow of $1667.9 billion. If aid alone without private investment is counted then aid would amount to $1.458 billion instead of $2 billion. The foreign aid assumed in the Second Five Year Plan appears to us to be an overestimate.

Pakistan's rate of growth is assumed to increase to 4½ per cent for the period 1966-71 and 5 per cent for the period 1971-76. It may well be, however, that the capital inflow in 1971-76 required to secure a 5 per cent rate of growth may be too high and also that Pakistan's absorptive capacity may, under circumstances, remain lower than 5 per cent. Amounts of aid for an alternative assumption of a rate of growth of 4½ per cent for 1971-76 are therefore shown in brackets.

Philippines: The assumed average savings rate of 7½ per cent, although low at the Philippines' level of income, may be an overestimate. Some studies suggest that the present rate may not be more than 7 per cent, in which case the higher amounts of aid required to secure a 3½ per cent rate of growth are indicated in brackets. It is, again, a matter of policy judgment whether such a negative incentive to an insufficient development effort should be given. It is in view of this low savings and investment effort that a rate of growth of only 3½ per cent has been assumed for 1961-66. A better development effort could secure a higher rate of growth of 4 per cent for 1961-66 and 4½ per cent for the subsequent decade.

Europe:

Greece may well be able to have a higher rate of growth of 4½ per cent in 1961-66. Our figure may, therefore, involve an underestimate.

Middle East:

Israel: The figures may underestimate the capital inflow since continuation of the presently high flow is taken for granted. Since we were not able to check the capital account, our figures are too low and should be treated with utmost caution.

- - - - - - - - - -

In Table IV-B the foreign capital inflow is tentatively divided for each country between aid and private investment. The figures may have considerable margins of error in many single country's case. It is felt, however, that they add up to a plausible picture for regions as a whole shown in Tables V-A-B-C.

TABLE V-A

CAPITAL OUTFLOW PER ANNUM INTO UNDERDEVELOPED COUNTRIES 1961-1966

($ mill. rounded)

Region	Capital Inflow	"Aid"	Private Investment	U.S. Private Investment	Other Countries Priv. Investment
AFRICA	430	275	155	40	115
LATIN AMERICA	1550	840	710	620	90
ASIA	2695	2395	300	190	110
ASIA (alt. India)	(2520)	(2240)	(280)	(190)	(90)
MIDDLE EAST	640	475	165	100	65
EUROPE	385	305	80	40	40
TOTAL I	5700	4290	1410	990	420
TOTAL II (alt. India)	(5525)	(4135)	(1390)	(990)	(400)
TOTAL III (I minus Europe)	5315	3985	1330	950	380

Total Aid		4290
International Bank		500
Aid to be provided by Governments		3790
U.S. Share	65%	2460
Other Countries Share	35%	1330

Technical Assistance		400
Emergency Fund		300
		700
Total Aid (excluding "Social Development" and Surplus Products for Consumption):		4490
U.S. Share	65%	2920
Other Countries Share	35%	1570

TABLE V-B

CAPITAL OUTFLOW PER ANNUM INTO UNDERDEVELOPED COUNTRIES 1966-1971

($ mill. rounded)

Region	Capital Inflow	"Aid"	Private Investment
AFRICA	605	395	210
LATIN AMERICA	1495	585	910
ASIA	2380	1965	415
ASIA (alt. India)	(2910)	(2430)	(480)
MIDDLE EAST	750	525	225
EUROPE	455	305	150
TOTAL I	5685	3775	1910
TOTAL II (alt. India)	(6215)	(4240)	(1975)
TOTAL III (I minus Europe)	5230	3470	1760

Total Aid		3775
International Bank		500
Aid to be provided by Governments		3275
U.S. Share	65%	2130
Other Countries Share	35%	1145

Technical Assistance		400
Emergency Fund		300
		700
Total Aid (excluding "Social Development," and Surplus Products for Consumption):		3975
U.S. Share	65%	2585
Other Countries Share	35%	1390

TOTAL V-C

CAPITAL OUTFLOW PER ANNUM INTO UNDERDEVELOPED COUNTRIES 1971-1976

($ mill. rounded)

Region	Capital Inflow	"Aid"	Private Investment
AFRICA	740	415	325
LATIN AMERICA	1010	180	830
ASIA	1250	910	340
ASIA (alt. India)	(2270)*	(1710)*	(560)*
MIDDIE EAST	400	180	220
EUROPE	360	185	175
TOTAL I	3760	1870	1890
TOTAL II (alt. India)	(4780)	(2670)	(2110)
TOTAL III (I minus Europe)	3400	1685	1715

*If Pakistan's rate of growth were only 4.5% per annum then the Capital-Inflow in Asia (alt. India) would be reduced by $225 Million per annum.

	I	II
Total Aid	1870	2670
International Bank	500	500
Aid to be provided by Governments	1370	2170
U.S. Share 65%	890	1410
Other Countries Share 35%	480	760

Technical Assistance	300
Emergency Fund	200
	500

Total Aid (excluding "Social Development, and Surplus Products for Consumption):

	I	II
	1870	2670
U.S. Share 65%	1215	1735
Other Countries Share 35%	655	935

EXPLANATORY NOTES TO TABLES V-A-B-C

The total Capital Inflow required for Underdeveloped Countries 1961-1976 consists of both "Aid" and Private Foreign Investment. Those are shown separately in tentative projections in the Tables V-A-B-C which are derived from Table IV-B. Private Investment amounts to around 25 per cent, 30 per cent and 50 per cent of total capital inflow in the successive three five-year periods. It is necessarily unequally distributed between different regions, forming a high proportion in Latin America, Africa and Europe and a low and slowly rising proportion in Asia.

SHARING THE BURDEN OF AID[1]

	Nominal GNP					"Real" GNP				
	GNP per Family (dollars)	Number of families (thous.)	Tax per family (dollars)	Contribution[2] by each (%) With U.S.S.R.	Contribution[2] by each (%) Without U.S.S.R.	Weights for "real" GNP	"Real" GNP per Family (dollars)	Tax per Family (dollars)	Contribution[2] by each (%) With U.S.S.R.	Contribution[2] by each (%) Without U.S.S.R.
Belgium	5392	2303.2	495	1.0	1.1	1.23	6632	729	1.2	1.4
Canada	7954	4578.2	1002	4.1	4.3	1.00	7954	1002	3.4	3.7
Denmark	4774	1152.7	380	0.4	0.4	1.33	6349	676	0.6	0.6
Finland	3573	1128.5	164	0.2	0.2	1.44	5145	449	0.4	0.4
France	4815	11,478.0	389	4.0	4.2	1.20	5778	568	4.8	5.3
W. Germany	4452	14,072.0	326	4.1	4.3	1.43	6366	679	7.0	7.7
Italy	2491	12,385.7	0	0	0	1.44	3587	164	1.5	1.6
Luxemburg	6084	83.0	626	0.04	0.04	1.23	7483	900	0.05	0.06
Netherlands	3815	2910.5	209	0.5	0.6	1.55	5913	594	1.3	1.4
Norway	4895	906.7	398	0.3	0.3	1.29	6315	670	0.4	0.5
Oceania	4419	4023.7	317	1.1	1.2	1.33	5877	585	1.7	1.9
Sweden	6228	1889.7	653	1.1	1.2	1.30	8096	1033	1.4	1.6
Switzerland	6222	1343.5	652	0.8	0.8	1.25	7778	944	0.9	1.0
United Kingdom	5383	13,075.0	493	5.8	6.1	1.30	6998	799	7.7	8.4
U.S.A.	11,161	46,141.5	1728	71.3	75.2	1.00	11,161	1728	58.6	64.4
U.S.S.R.	3274	53,742.0	110	5.3	-	1.20	3928	227	9.0	-

1. On basis of progressive income tax schedule of U.S.A. Also assuming GNP per family as a measure of income and a family as consisting of 4 members. 2. May not equal 100 because of rounding.