QUANTIFICATION OF DISRUPTIVE EFFECTS OF EXPORT SHORTFALLS*

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This paper has been prepared in response to paragraph 4 of UNCTAD's recommendation 30 (II) concerning Supplementary Financial Measures.[1] The recommendations states in part:

> "A matter requiring additional attention is how to determine in quantitative terms the disruption which has resulted from export shortfalls and consequently, what are the financial implications of proposals to meet the objectives of Part A of recommendation A.IV.18."

The paper is divided into three sections. *Section I* is devoted to a broad analysis of the economic and social effects of a fall in export earnings of developing countries. *Section II* discusses briefly some of the problems that arise in any attempt to measure quantitatively the disruptive effects of export shortfalls and the bearing of this on the question of estimating the financial implications of the Supplementary Finance Scheme. *Section III* of the paper gives a brief account of the impact of export shortfalls in three developing countries (Ceylon, Colombia and Ghana) in recent years. The purpose of this Section is to illustrate the main arguments presented in Sections I and II by reference to the experience of the three countries, rather than to give a comprehensive account of their economic development during the periods under consideration.

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1. Distruptive effects of export shortfalls

In a large number of cases export shortfalls of developing countries are caused by declines in the world prices of primary products. This was true of all the three countries studied in Section III. Total export earnings may decline despite a rise in the volume of exports if the fall in prices is relatively large. Moreover, when a developing country accounts for a large proportion of world exports of a commodity with an inelastic demand, the fall in export earnings may take place not despite but because of a substantial increase in the volume of exports: this has to some extent been true of Ghana in relation to cocoa exports.

In some cases the shortfalls are caused by a drop in the volume of exports due to such factors as poor harvests, prolonged strikes or natural disasters which affect the production of export commodities adversely. This could happen in countries which provide only a small share of world exports of a commodity, even if the price elasticity of demand for that commodity is very low in world markets.

Throughout this paper the term "export shortfall" is used to indicate a fall in export earnings, whether anticipated or not, caused by a decline in export prices and/or in the volume of exports due to a fall of production in the export sector. Moreover, the discussion is confined to the short - and medium-term impact of export shortfalls during which no significant changes can take place in the structure of production and in the pattern of expenditure which could lead to a major shift in import propensities.

Other things remaining unchanged, the immediate and direct internal effect of a fall in export receipts will be a contraction in the real domestic income of the country affected.[2] If an export shortfall is caused by a fall in the volume of production and of exports (export prices remaining unchanged), both GDP at constant prices and real domestic income will in the first instance suffer an equal decline. If, on the other hand, the export shortfall is due entirely to a fall in export prices, only the volume of domestic income will be adversely affected. Depending largely on the fiscal

system of the countries concerned the contraction of income will be shared in varying proportions between the private and public sectors.

The initial drop in domestic income will be reflected in a reduction in private consumption and private domestic savings; public expenditure may also be reduced owing to a contraction of fiscal revenue. The extent of the decline in private consumption in relation to that in savings will depend largely on the structure of production and the pattern of income distribution in the export sector: generally, the higher the ratio of profits to other factor incomes, the greater will be the adverse impact on savings.

In the absence of compensatory measures to offset the adverse effect of export shortfalls on domestic income and expenditure, the initial fall in income will generate further (or secondary) contractions of income and expenditure through the familiar "multiplier" process: the aggregate shortfall in domestic income will thus be considerably larger than the export shortfall that brought it about. This slackening in demand, if prolonged, may lead to a worsening of business expectations and a scaling down of private investment plans which would in turn generate a further contraction of domestic income.

The adverse effect of a fall in export receipts on national income will be less than that on domestic income discussed above to the extent that it affects profits of foreign owned enterprises operating in the country. In such cases, it is also likely that the amount of profits repatriated will decline and the net loss in foreign exchange earnings will be less than the export shortfall.

Exports are not, of course, the sole determinants of domestic income and production. It is quite possible that a fall in exports may be accompanied by a rise in the other (domestic) components of demand or expenditure - investment and public consumption - which may more than offset the contractionist effect of the fall in exports on internal demand.[3] In such cases aggregate internal demand will expand despite the fall in exports. Moreover, even if there are no spontaneous forces tending to bring about such expansionary

movements in domestic expenditure, it is open to the authorities, if they so wish, to take direct and indirect measures to that end.

The primary constraint on the expansion of domestic expenditure in such cases is the balance of payments or foreign exchange consideration. In the short-run, the volume of imports of a country generally varies directly with the level of its internal demand. The maintenance or expansion of domestic expenditure would therefore result in the maintenance or expansion of imports at a time when export earnings have declined. It is clear that not every country would be in a position to finance its import bill under such conditions.

The role of the balance of payments as a constraint on the expansion of domestic expenditure will vary from time to time and from one country to another depending largely on the following factors:

(a) The magnitude of the drain on foreign exchange reserves, as determined by the size of the export shortfall and by the position of the balance of payments immediately before the shortfall, i.e., whether it was in surplus, in deficit or in equilibrium.
(b) The volume of foreign exchange reserves owned by the country in relation to its normal requirements for such reserves.
(c) External assistance in the form of grants and/or loans available to the country.

While short-term loans or commercial credits may enable a country to overcome the immediate balance of payments constraint on the growth of domestic income and expenditure, it may face serious difficulties in the future owing to the need to service the debts contracted. This emerges clearly from the analysis of the experience of Colombia and Ghana in Section III.

Where the three factors mentioned above operate unfavourably and a country is therefore unable to maintain the level of its imports, an export shortfall will, as explained above, lead to a contraction of domestic income.

The magnitude of this decline in relation to a given fall in imports will vary with its marginal propensity to import:the larger this propensity, the smaller will be the contraction of domestic income. Generally, countries which rely more heavily on foreign trade will suffer a larger decline in income from a given percentage fall in imports.

In many cases the fall in imports which takes place through the operation of market forces as a result of the contraction of income, may not be adequate or rapid enough to offset the adverse effect of export shortfalls on external equilibrium and the authorities may then be compelled to take special measures to reduce the flow of imports. Some of the measures employed in such cases are:

(a) Adoption of deflationary fiscal and monetary policies with a view to accelerating the contraction of domestic expenditure. The measures taken under this heading may include: raising direct and indirect taxes including import duties; introducing new taxes; reducing public expenditure on capital and current accounts including a cut in subsidies and other transfer payments; tightening credit and raising rates of interest.
(b) Devaluation of the currency to promote exports and to discourage imports.
(c) Direct restriction of imports through a licensing system.

Most of the IMF Stabilization Programmes in the past have included the adoption of some, if not all, of the measures mentioned under (a) and (b).

The fiscal measures mentioned above are often intended to serve the purpose not only of discouraging imports but also of keeping the budget balance and the supply of money under control. In other words, it is deemed prudent to offset the contraction of public revenue which results from an export shortfall by increasing rates of taxation and by reducing public expenditure. Regarding the latter, governments usually find it politically more expedient, in the first instance at least, to curtail their investment outlays rather than their expenditure on current account.

The purpose of the restrictive fiscal and monetary measures is to restore external equilibrium by curtailing the volume of domestic expenditure and hence of imports. But the objective in question can be rationally justified only when the external disequilibrium is due to inflationary demand pressures at home, i.e., when domestic expenditure exceeds the productive capacity of the country. A policy of deflation cannot be rationally justified as a cure for the type of balance of payments deficit that is caused by an export shortfall outside the control of the country affected (see page 30).

Resort to measures such as those outlined on page 33 in response to an export shortfall, may in some cases represent no more than a misconceived policy on the part of the authorities. In other and perhaps more frequent cases, such measures are taken because of the pressure of the balance of payments constraint, when the authorities, rightly or wrongly, feel that no alternative policy instruments are available to them. This attitude has at times been encouraged by the knowledge that the availability of external financial aid may be made conditional on the adoption of such measures.

Whatever may in practice motivate the adoption of such measures as those mentioned on page 33 in response to an export shortfall, they will inevitably have the effect of retarding the pace of economic growth and development of the countries concerned. The extent of the setback caused will depend partly on the type of the measures taken and the severity with which they are enforced and partly on a variety of socio-economic factors mentioned in the following paragraph. Some of the more import reasons responsible for the retardation of economic growth are briefly summarized below:

(a) *Fall in investment:* Public investment, including the government's activities in support of development, such as education and health services, may be cut down to save on foreign exchange and to keep the budget deficit under control. Private investment may suffer from restrictions placed on the import of capital goods and from the slackening of internal demand.

(b) *Fall in industrial production and employment:*

Industrial production and employment may be adversely affected by the shortage of imported inputs and by the slackening of demand.

(c) *Inflation:* Prices will initially be pushed up in the event of devaluation, or by some of the fiscal measures mentioned, i.e. by the raising of indirect taxes and of import duties and by the removal of subsidies; quantitative restrictions on the import of consumer goods will have a similar effect on their prices. Should wage and salary earners succeed in raising their money earnings in an attempt to maintain the real level of their income, a further upward push will be given to prices and a wage-price spiral of inflation may set in.[4]

(d) *Social disturbances:* The recession in economic activity and the growth in unemployment, accompanied by inflation, inevitably breed discontent among large sections of the population. Wage claims by the unions, prompted largely by the desire to maintain the purchasing power of their members in a period of inflation, may at times end in disruptive strikes and in labour unrest. An environment conducive to social distrubances and even to political upheavals may thus be generated.

It is clear that the disruptive effects of an unforseen export shortfall will be greater than that of an anticipated shortfall since the former will tend to limit the scope and efficacy of adjustments made by countries. For example, when an export shortfall has not been anticipated, external assistance in the form of loans and credits may be sought and obtained in some haste and therefore not on the best terms that could have been negotiated in the absence of the pressure of time. Moreover, capital outlays and private import programmes may have to be curtailed abruptly and this could leave many investment projects in a state of semi-completion.

The magnitude of damage caused by a cut-back in imports in response to an export shortfall will, as mentioned earlier, vary not only with the type of measures adopted by the authorities and the severity with which they are applied,but

also with a large number of other factors some of the more important of which are noted here. Generally, a given percentage reduction in the volume of imports can be expected to cause greater damage to the economy: (a) the larger is the share of imports in GDP; (b) the smaller is the share of inessential (compressible) imports in total imports; (c) the less diversified is the structure of production and the smaller the mobility of the factors of production; (d) the greater is the share of public revenue earned from foreign trade, and (e) the less efficient is the administrative machinery of the country, in particular the fiscal administration. In addition, if imports are cut down by means of deflationary policy (see page 33), the larger is the proportion of the labour force organized in trade unions and the greater the bargaining power of the unions, the more serious may be the disruption caused by strikes and by price inflation.

II. Quantification of disruptive effects and financial implications of the supplementary finance scheme

It should be clear from the foregoing discussion that the impact of export shortfalls on the economies of developing countries cannot be measured in accordance with a precise formula. In some cases, where no serious balance of payments constraints are encountered, little or no disruption need occur. But in other and more numerous cases, export shortfalls, whether because of balance of payments constraints or for other reasons, eventually lead to a contraction of imports through the ordinary market mechanism and/or through governmental measures. In these cases the shortfalls will inevitably have a detrimental effect on the economic growth and development of the countries concerned. The magnitude of the damage thus caused will, however, usually differ from one country to another at the same point of time, and from one period to another for the same country, depending on the policy adopted by the authorities to deal with the external disequilibrium and on numerous other economic and social factors some of which were mentioned in the preceding paragraph. One cannot therefore expect a close statistical correlation between movements in export earnings and movements in investment or in GDP either in cross-country comparisons or for the same country over a number of years.

Depending on the availability and timeliness of the required data, it would be possible to make a quantitative estimate of the *initial* impact of an export shortfall on such economic variables as national income, private consumption, savings and government taxation revenue. On the assumption that all other things (private investment, public expenditure and the propensity to consume) remain unchanged, it should also be possible to estimate quantitatively the *secondary* changes in the same variables resulting from the operation of the "multiplier".

This does not, however, by any means solve the problem of quantifying the disruptive effects of export shortfalls. To begin with, it would be unrealistic to assume that all other things will in practice remain unchanged: it is, in fact, highly probable that none of the other things will remain unchanged. An export shortfall will produce a variety of reactions in both private and public sectors: the magnitude of disruption in each case will vary not only with the form of these reactions, but also with all the factors listed on page 36. Adequate information on all these matters would be indispensable for any valid estimate of the extent of the damage.

But even if this informational gap were to be filled by a thorough examination of all the circumstances surrounding an export shortfall, there would still remain two serious conceptual and statistical difficulties in arriving at a *quantitative* estimate of the *total* disruption that could logically be attributed to an export shortfall. The *first* arises from the problem of the quantification of certain categories of disruption. For example, apart from the obvious statistical difficulties, there are also serious conceptual ones in quantifying the short and long-term damage caused by such phenomena as inflation, public discontent or social unrest and disturbances when they occur. Similar problems will be encountered in attempting to provide a quantitative measure of the adverse effect on development of a reduction in public expenditure on investment in infra-structure and on expenditure in health, education and other administrative services, when the authorities opt for these measures in response to an export shortfall.

The *second* difficulty is related to the problem of

"imputation" of total damage. As we have seen, the reaction of the government and of the private sector to the initial export shortfall may be such as to magnify the primary drop in production and income due to the shortfall itself.In such circumstances, however, it would not be strictly logical to attribute the entire loss of income to the export shortfall *per se*. On the other hand, there is no way in which the total disruption can be apportioned *quantitatively* between the various factors mentioned, i.e., export shortfall,government policy and the reaction of the private sector. The most that can be done is to make a *qualitative* judgement as to the relative importance of each factor in bringing about the disruption.

Despite the foregoing difficulties, it may at times be useful to provide a quantitative measure of the economic damage attributable to export shortfalls by making a number of simplifying assumptions. Broadly, this would involve ignoring the types of disruption which are not easily quantified. It would also involve abstracting from the role of the public and private sectors in the imputation of the total estimated loss. Subject to these limitations, the difference between the actual level of production after an export shortfall and the estimated level that would have been attained in the absence of the shortfall could be taken as a measure of the loss of production generated by the fall in export earnings.[5] It is clear that this type of exercise, to be meaningful at all, requires plausible projections of the course of the economy, such as those which appear to have existed in Colombia in 1962 under its development plan,so as to provide a standard of comparison with actual developments. Even such an exercise cannot, however, be carried out until data are available on the progress of the economy for some time after the shortfall has occurred. And since by then the disruption would already have taken place, it stands to reason that it would be too late to save the development programme by supplementary finance, although the disruption might, of course, be mitigated or arrested.

The conceptual and statistical difficulties that stand in the way of any valid quantification of disruption should not be regarded as an insurmountable obstacle to the task of estimating the financial implications of a supplementary finance scheme. Inability to quantify disruption does not, of

course, mean that disruption does not exist. Nor does it seem that quantification of the loss caused by export shortfalls is necessary for the purpose of:

(a) Ascertaining the point at which the disruption would be serious enough to undermine the development programmes of the countries concerned, and
(b) Estimating the minimum amount of financial assistance that would be required to prevent such a setback to development.

It may be useful to clarify this point by means of an analogy between the economic disruption caused by export shortfalls and the phenomenon of hunger. Although it is not possible to measure the feeling of hunger, it is clear that this feeling can exist and that it can vary considerably in its intensity. More important, even without a quantitative measure of hunger, it is usually possible for the medical authorities:

(a) To determine the stage of hunger at which it would begin seriously to damage the health of a person, and
(b) To estimate the amount of nourishment, in terms of calories, proteins, etc., that would have to be supplied to the person concerned to prevent serious deterioration in his health.

In the nature of the case, the problem of anticipating and preventing disruption due to export shortfalls requires the exercise of judgement by a responsible authority on the basis of the best information available at the time a determination is required. This does not mean that the potential commitment of a supplementary financing agency need be open-ended. It should be possible, by using some such methodology as that developed by the staff of the World Bank in their publication *Supplementary Financial Measures*,[6] to arrive at a reasonable estimate of the amount of external financial assistance that developing countries are likely to require to prevent a serious disruption of their development programmes by unforeseen export shortfalls.

III. Illustrations of disruption in Ceylon, Colombia and Ghana

Like many other developing countries, the three countries chosen here to illustrate the disruptive effects of export shortfalls rely heavily on the export of one major primary product - tea in Ceylon, coffee in Colombia and cocoa in Ghana. The relative weight of these commodities in total exports is indicated in Table 1, which also shows that in all three countries about 90 per cent of foreign exchange

Table 1. Ceylon, Colombia and Ghana: Weight of merchandise exports in GNP

	1955	1960	1965
CEYLON			
Export as % of GNP	34	27	24
Per cent of total export			
Tea	64	62	63
Rubber	19	21	16
Coconut products	9	9	12
Total	92	92	91
Total exports in Rs. millions	1940	1832	1949
COLOMBIA			
Export as % of GNP	14	15	13
Per cent of total export			
Coffee	84	72	64
Petroleum	11	19	18
Bananas	-	3	3
Total	95	94	85
Total exports in millions U.S. $	584	465	539
GHANA			
Export as % of GNP	26	22	1[illegible]
Per cent of total export			
Cocoa	76	63	66
Timber and logs	9	15	12
Gold	10	11	9
Total	95	89	87
Total exports in millions cedis	208	252	250

Source: United Nations, *Yearbook of National Accounts Statistics* and *Yearbook of International Statistics*; International Monetary Fund, *International Financial Statistics*; Central Bank of Ceylon, *Annual Report 1966*, (Colombo).

earnings is accounted for by the export of only three products. Until 1955, the relative weight of exports in GNP was considerably greater in Ceylon and Ghana than in Colombia, (see Table 1). Since that date, the severe fall in export prices in relation to internal price levels, discussed below, has resulted in a significant decline in the weight of export earnings in both Ceylon and Ghana, in particular in the latter country.

It can be seen from Table 2 that all three countries experienced a pronounced fall in their export prices during the post-Korean War period - in Ceylon after 1955, in Colombia after 1954 and in Ghana after 1958.[7] The fall in export prices was particularly severe in Ghana, and this largely explains the relatively greater fall in the weight of exports in the GNP of that country.

As explained later, the steep fall in export prices of Ghana did not, as in the case of Ceylon and Colombia, result in an absolute decline in the level of foreign exchange earnings, which was generally maintained through a rise in the volume of exports. The adverse impact of the fall in export prices on the economy was, nevertheless, as great in Ghana as in the other two countries, and probably even greater. An important reason for this was the severe contraction of revenue from export taxes in Ghana following the fall in export prices: receipts from these taxes, which varied with price of exports rather than with their value, had accounted for almost one-half of total government tax revenue.

The fall in export prices and, in the case of Ceylon and Colombia, in export receipts, was not accompanied by an immediate contraction of imports in any of the three countries: foreign exchange reserves and external loan and credit facilities were for a time (ranging from two to five years) used to maintain and even to increase imports. During that period economic activity continued to expand, albeit at a slower pace than in the period immediately preceding the export shortfalls.

It was only when the authorities were induced to restrict imports as a result of steadily growing pressure on the balance of payments that disruption took on a serious

Table 2. Ceylon, Colombia and Ghana: Indices of export and import unit values and the terms of trade, 1950 - 1965 (1958=100)

	Ceylon Unit values		Terms	Colombia Unit values		Terms	Ghana Unit values		Terms
	Exports	Imports	of trade	Exports	Imports	of trade	Exports	Imports	of trade
1950	101	95	106	99	99	100	65	92	71
1951	123	116	106	106	104	102	85	110	77
1952	95	127	75	108	102	106	82	116	71
1953	98	114	86	111	97	114	79	105	75
1954	109	107	102	133	97	137	111	99	112
1955	114	99	115	117	99	118	94	97	97
1956	107	102	105	132	101	131	75	100	75
1957	102	114	89	120	102	118	72	101	71
1958	100	100	100	100	100	100	100	100	100
1959	105	100	105	85	100	85	89	103	86
1960	104	101	103	86	99	87	78	106	74
1961	95	104	91	83	99	84	64	106	60
1962	91	101	90	77	99	78	58	102	57
1963	93	110	85	75	94	80	59	99	60
1964	93	113	82	88	93	95	64	103	62
1965	98	120	82	83	92	90	50	101	50

Source: United Nations, *Yearbook of International Trade Statistics*, 1966.

Note: For Ceylon, the unit value indices are computed with base period weights; for imports, the unit value indices are averages of the monthly figures. The indices are switched to the base of 1958 from the original base 1948.

For Colombia, the indices are switched to the base 1958 from the original bases 1937 (for the years 1950-1952) and 1952 (for the years beginning 1952). The unit value indices originally computed in pesos are here shown in terms of U.S. dollars.

For Ghana, data refer to the customs area which, beginning March 5th 1957, comprises Ghana and which, prior to March 6th 1957, comprised of Gold Coast and Togoland under United Kingdom Trusteeship. The indices are switched to the base 1958 from the original base 1948 for the years 1948-1954 and, beginning 1954, from the original base 1954.

character by halting the growth of production and income.The extent of disruption in each country, varied with the different socio-economic factors mentioned on pages 35-6 above, but in particular with the policies followed by governments.

The object of the three country studies that follow is limited to the presentations of a broad outline of the developments in each country following immediately on the fall in its export prices, with a view to providing illustrations of some of the points advanced in Sections I and II of the paper: they are not intended to be a comprehensive analyses[8]

Ceylon

Balance of payments

Export prices of Ceylon, which had fallen sharply in 1952-1953, recovered in the course of the following two years, reaching their post-Korean War peak in 1955.[9] Since 1955, these prices have followed a declining trend, while import prices, having remained relatively stable up to 1962, rose steeply during the following years. The result was a pronounced deterioration in the terms of trade, indicated in Table 2.

The fall in export prices after 1955 resulted in an appreciable contraction of the foreign exchange earnings of the country below the 1955 level (except in 1965). Despite this contraction of export receipts, imports were allowed to grow and the balance of payments on current account to deteriorate until 1960 (see Table 3). The large volume of foreign exchange reserves owned in 1955 - equivalent to the value of eight months imports in that year - were used to finance the deficits incurred on the balance of payments during the years 1957-1960 when the net external reserves of the country shrank from over Rs 1,130 million[10] (about $320 million) to Rs420 million (about $85 million).

It was the severe deterioration in the foreign exchange position of the country in 1959-1960 that eventually induced the authorities to take a number of measures restricting imports in August 1960. These measures included: a requirement

Table 3. Ceylon: Balance of payments on current account, 1954 to 1965 (millions of Ceylon rupees)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
Exports, f.o.b.	1724	1893	1772	1669	1624	1773	1796	1707	1763	1708	1767	1909
Imports, c.i.f.	-1384	-1478	-1576	-1764	-1713	-1958	-2006	-1794	-1906	-1869	-1960	-1922
Trade balance	340	415	196	-95	-89	-185	-210	-87	-143	-161	-193	-13
Services, net	9	-31	-59	-61	-41	-11	-32	-18	-4	-21	-7	32
Current transfers, net	-43	-61	-55	-39	-23	-12	22	-11	7	14	40	40
Balance on current account	306	323	82	-195	-153	-208	-220	-94	-140	-168	-160	59

Source: Central Bank of Ceylon, *Annual Report for 1967*, (Colombo).

Table 4. Ceylon: Sources of government current revenue, selected fiscal years 1954-55 to 1965-66[a] (per cent of total)

	1954-55	1955-56	1959-60	1960-61	1964-65	1965-66
Personal and corporate income tax	21	28	17	22	20	19
Custom duties	61	56	55	52	45	45
(a) Export duties	36	30	21	18	16	14
(b) Import duties	25	26	34	34	29	31
Sales taxes[b]	-	1	10	10	14	14
Other current revenue[c]	18	15	18	16	21	22
Total current revenue	100	100	100	100	100	100
Current revenue (in million rupees)	1019	1091	1188	1272	1529	1532
Total current revenue as per cent of GNP[d]	21	20	19	19	20	19

Source: Central Bank of Ceylon, *Annual Report*, (Colombo), various issues.

a. Fiscal years end on September 30th of the second year stated.
b. Selective sales taxes and general sales and turnover taxes combined.
c. Includes only net income from the government enterprises.
d. The ratio of the current revenue of each fiscal year stated to the GNP of the calendar year within which that fiscal year ends.

for a 50 per cent cash deposit against letters of credit issued for imports; a sharp rise in import duties on a number of goods, such as motor cars, petroleum, textiles, beverages and tobacco, and quantitative controls on the import of textiles and matches. The restrictions on imports were made progressively more severe in the course of 1961-1965: import duties on all goods, other than food, were raised steeply in successive stages, and the range of goods subject to quantitative restrictions through licenses was extended to all private imports other than a few minor items.

The measures in question were responsible for the contraction in the value of imports and for the improvement in the balance of payments on current account after 1960, which, nevertheless, remained in deficit until 1965. These deficits were financed partly by foreign credits and partly by a further running down of foreign exchange reserves which were almost wholly depleted by the end of 1964.

The fall in the volume of imports between 1960 and 1965 was even more pronounced than the fall in their value shown in Table 3 owing to the rise in import prices after 1962. According to the trade indices published by the Central Bank of Ceylon, the magnitude of the contraction in volume amounted to over 30 per cent for total imports,[11] to about 35 per cent for investment goods and to over 40 per cent for consumer goods during that period: only the import of intermediate goods was allowed to grow moderately.

Fiscal policy and government budget

The fall in export prices after 1955 also had an adverse effect on the exchequer revenue. Export duties, which accounted for over one-third of the total current revenue of the government in the fiscal year 1954-55, declined steadily and by 1965-66 amounted to no more than 14 per cent of that revenue. In addition, the contraction of business profits, which was particularly pronounced in the export sector, resulted in a decline in revenue earned from profit taxes after 1955-56 (see Table 4).

To make up for this contraction of revenue, in the 1957-58 budget the tax rate on profits and import duties on a number of items were raised and a new tax was introduced on

bank transactions; in 1959 the export duty on was raised twice. Following these measures, government revenue rose by about 20 per cent between fiscal years 1954-55 and 1959-60. But over the same period public expenditure on current and capital accounts was allowed to grow by almost 80 per cent. As a result, the government budget on current and capital accounts, which was in surplus in 1954-55, showed a deficit in the following year: the size of this deficit increased from year to year reaching a figure of over Rs.450 million (about 25 per cent of total public expenditure by 1959-60).

The government succeeded in containing the budget deficit after 1959-60, partly by introducing drastic new fiscal measures, and partly by curbing the growth of public expenditure. In addition to the increases in import duties mentioned on pages43-4,new taxes were introduced in the 1960 -61 and succeeding budgets and personal and profit tax rates were steeply raised in the 1962-63 budget. As a result of these measures, exchequer revenue rose substantially,and the government was able to maintain its share of current revenue at about 20 per cent of GNP despite the severedecline in receipts from export duties (see Table 4).

Public expenditure on current account continued to rise after the fiscal year 1959-60 but at a much slower rate than in the preceding five years. Considerably more drastic was the restraint on government investment expenditure which was maintained generally unchanged until 1963-64. There was a moderate recovery in public investment during the two succeeding fiscal years: this was made possible by foreign economic assistance received from the IMF and from the Aid Group formed in 1965 to support Ceylon's development effort.

A large part (about 25 per cent) of government current expenditure in the 1960's was accounted for by food subsidies, most of it in the form of subsidies on rationed rice.[12] From April 1960 onwards a ration of two measures (4 lbs.) of rice was allowed to each person of over one year of age at a fixed price of Rs.0.25 per measure: this was, on average, about one-half of the cost of the imported rice to the government. In addition, the authorities helped to maintain stable the prices of certain essential services, such as transport and power, by allowing the government enterprises responsible for furnishing these services to operate at a

loss.

Consumer subsidies amounted, in effect, to a redistribution of income in favour of the poorest section of the population. The subsidy policy has at times been criticised on the ground that it helped to sustain private consumption at the expense of savings after 1960, when, as explained below, total income rose very little. It should, however, be remembered that the same policy was also instrumental in preventing a pronounced reduction in the standard of living of the low income groups which largely explains the absence of serious public discontent and social disturbances, such as those that occurred in Colombia and Ghana during the corresponding phases of economic stagnation. Moreover, the subsidy policy was primarily responsible for maintaing the cost of living index relatively stable and hence for discouraging claims for large wage and salary increases which could have caused serious economic disruption by leading to strikes and to inflation.

Production and income

It is unfortunate that the national accounts data of Ceylon do not permit an accurate assessment of the rate of growth of production throughout the 1950's. But the available economic indicators clearly suggest that economic activity, which had grown rapidly during the post-Korean export boom (1952-1955), continued to expand, though at a somewhat slower pace, until 1960. This is explained, on the supply side, by the fact that, despite the fall in export receipts after 1955, imports were allowed to grow until 1960 (see page 45) and no serious shortages of industrial inputs were encountered in this period. On the demand side, the rapid increase in public expenditure, discussed above, provided a powerful stimulus to the growth of economic activity, counteracting the deflationary influence of falling export revenue.

It was after 1960 that the economy experienced a serious retardation in the pace of its growth. According to United Nations estimates, the annual rate of growth in real GDP which was 5.5 per cent for the two years 1959 and 1960, declined to an average of 3 per cent during the following

five years. Thus the total increase in the volume of domestic production between 1960 and 1965, estimated at 16 per cent, was scarcely larger than the growth of population (14 per cent) over the same period. The rise in real domestic income during this period was even smaller than the rise in production owing to the severe deterioration in the terms of trade indicated in Table 2. The available estimates of national income indicate that *per capita* real income in 1965 was certainly no higher and might have been moderately lower than it had been five years earlier in 1960.

Broadly, the primary reason, on the supply side,for the pronounced decline in the rate of growth of production during the five years 1961-1965 was the severe contraction in the volume of imports mentioned on page . Shortages of industrial inputs (capital goods, raw materials and even spare parts) were encountered after 1960: these shortages became progressively more acute as the import licensing system was extended to a wider range of goods and was made more restrictive. On the demand side, the curbs imposed on public expenditure after fiscal year 1959-60 had the effect of restraining the expansion of aggregate demand. In addition, private investment was adversely affected by the high rates of profit taxes and by a tight credit policy.

It was the realization that the balance of payments constraint presented an insurmountable obstacle to the growth of Ceylon's economy that led some governments to form an Aid Group in 1965 to support the country's development programme. The value of assistance received from the Aid Group during the three years 1965-1967 is estimated at about $90 million,[13] somewhat less than the losses suffered from a deterioration in the terms of trade over the same period.Export prices in 1967 were about 10 per cent lower and import prices some 15 per cent higher than they had been in 1964, resulting in a deterioration of about 20 per cent in the terms of trade: the consequential loss of foreign exchange in the years 1965-1967 is estimated at over $100 million. Despite this fact, the foreign assistance received played a key role in a recovery of investment in the years 1966 and 1967 when the bulk of the aid was received.

In the case of Ceylon, the functions of a supplementary financing scheme were in a sense performed by the IMF and

the Aid Group, which provided the assistance needed for the development programme to be restored. However, since there was no supplementary financing agency as such in existence, the development programme of Ceylon had already been disrupted by the time foreign assistance became available. Moreover, it cannot be assumed that other countries finding themselves in a position similar to that of Ceylon would necessarily have been able to obtain similar assistance.

Colombia

Coffee prices rose steeply in the years 1951-1954, reaching their peak in June 1954: thereafter, except for a temporary recovery in 1956 and early in 1957, they showed a generally declining trend until 1965. Since coffee accounts for the bulk of Colombian exports, movements in coffee prices are clearly reflected in the yearly indices of export unit values shown in Table 2 above. The annual foreign exchange earnings of the country have on the whole followed closely the changes in export prices: these earnings rose rapidly until 1954 and later declined and except for the years 1956 and 1964 have been running at a level considerably lower than the peak attained in 1954 (see Table 5).

As explained later, imports have not always closely followed the changes in foreign exchange receipts from exports during the period under consideration. The government was prepared in some years, such as during 1954-1956 and 1959-1962, to finance a part of the import bill by drawing on its foreign exchange reserves and by external borrowing in the form of loans and commercial credits. In other years, such as in 1957-1958, it had to restrict imports more severely than would have been warranted by the contraction of export receipts in order to repay commercial arrears and to service its external debts.

The economic upswing of 1950-1956

Throughout the period 1950-1965 the rate of growth of economic activity in Colombia was closely correlated with the movement of imports. Between 1950 and 1954 when imports were allowed to increase steeply (by almost 80 per cent in

volume), domestic production also grew at a rapid pace - by about 24 per cent, or at an average rate of 6 per cent per annum. Despite the emergence of a deficit on the current account of the balance of payments in the course of 1954, no serious measures were taken to restrict imports until late in 1956, and production continued to grow, albeit at a somewhat reduced rate of 4 per cent per annum, in 1955 and 1956.

The deficits incurred on the current account of the balance of payments during the years 1954-1956 were covered partly by drawing on the foreign exchange reserves, which declined by about $130 million, and partly by the accumulation of commercial arrears estimated at $390 million at the end of April 1957: this was equivalent to about 70 per cent of the value of exports.[14] The serious deterioration in the country's external reserve position led the government to tighten exchange and import controls at the end of 1956 and early in 1957. The adoption of these restrictive measures, which were accompanied by a steep rise in the cost of living, added to existing public discontent against the government, which was overthrown in May 1957.

The stagnation of 1957-1958

The new government which took office in June 1957 was faced with the difficult tasks of settling the commercial arrears, of restoring balance of payments equilibrium and of keeping the budget deficit and price inflation under control. A large part (about $250 million) of the commercial arrears was consolidated into medium-term credits and the balance was settled largely from surpluses earned on the current account of the balance of payments in 1957 and 1958 (see Table 5).

The improvement in the balance of payments during the two years was brought about by a severe contraction in imports under a Stabilization Programme introduced in June 1957: the value of exports declined substantially in the course of the two years largely because of a fall of about 25 per cent in export prices shown in Table 2 above. The Stabilization Programme aimed at restoring the external and internal equilibria of the country through restrictive fiscal and monetary policies and a devaluation of the currency. Under this programme the public investment programme was

Table 5. Colombia: Balance of payments on current account, 1950-65 (in millions of U.S. dollars)

	1950	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
Exports, f.o.b.	396	657	580	654	590	527	514	480	463	462	474	623	580
Imports, c.i.f.	-336	-622	-620	-599	-451	-384	-403	-496	-531	-537	-498	-582	-430
Trade balance	60	35	-40	55	139	143	111	-16	-68	-75	-24	41	150
Services, net	-73	-75	-87	-69	-63	-85	-53	-69	-74	-101	-122	-184	-173
Current transfers, net	-1	-2	3	2	3	6	3	6	9	14	18	14	12
Balance on current account	-14	-43	-125	-12	80	64	62	-79	134	-162	-128	-129	-12

Source: IMF, *Balance of Payments Yearbook*, (Washington, D.C.) various issues.
Note: Owing to rounding up the components may not add to totals.

severely curtailed; the purchase price of the peso was reduced from 2.50 pesos to 6.10 pesos per U.S. dollar; a tax of 15 per cent was imposed on the export proceeds from coffee, bananas and precious metals and a 2 per cent tax on all other exports. Imports were restricted by direct import controls through a licensing system and by a requirement (after September 1957) for a prior deposit of 100 per cent of the value of imports with the Central Bank. The restrictive monetary policy also provided for an increase in the reserve requirements of the commercial banks and for a raising of rediscount rates and lowering of rediscount quotas.

These measures produced a fall of over 35 per cent in the volume of merchandise imports between 1956 and 1958: it is estimated that the volume of investment goods imported declined by about 45 per cent between the two dates. The contraction of imports and the severe checks imposed on the growth of demand under the Stabilization Programme were responsible for a steep decline (25 per cent) in the volume of fixed investment and for a stagnation of production and income during 1957 and 1958: according to the available estimates, *per capita* real national income declined by over 10 per cent over the two years. But for the fact that the 1956 imports included a high proportion of consumer goods, which were cut down by almost 50 per cent, the contraction of imports would have had an even more severe impact on economic activity. The Stabilization Programme also aggravated the inflationary pressures which had set in during the latter part of 1956: the cost of living index, which had been rising at an average rate of about 5 per cent per annum during 1954-1956, rose by almost 20 per cent between the middle of 1957 and the middle of 1958.

Recovery of economic activity in 1959-1962

The contraction of imports in 1957-1958 resulted in a serious reduction of inventories, including those of raw materials and of spare parts. Special credits of over $100 million were obtained in 1958 and 1959 from the Eximbank and a number of U.S. commercial banks to finance essential imports of equipment and raw materials and import registrations were liberalized in 1959. There was a significant recovery in the inflow of imported goods during the period 1959-1962 despite

a fall in the value of exports (see Table 5). The volume of merchandise imports rose by more than 30 per cent between 1958 and 1961, but declined slightly in 1962 owing to the restrictive measures mentioned below: despite some slackening in the imports of investment goods in 1961 and 1962, their volume in the latter year was still some 40 per cent higher than in 1958.

The recovery of imports after 1958 permitted a resumption of the growth of domestic investment and production.The volume of gross domestic fixed capital investment, which had fallen by about 25 per cent in 1957-1958, increased by more than 35 per cent over the period 1959-1962. During the same period gross domestic product rose at an average rate of more than 5 per cent per year, though the advance in real national income was moderately slower owing to a deterioration in the terms of trade. The revival of economic activity was accompanied by a pronounced weakening of inflationary pressures: the cost of living index which had risen at an average annual rate of 15 per cent in 1957-1958, increased by less than 5 per cent per year during the years 1959-1962.

The main weakness of the economy in 1959-1962 was its external payments position which deteriorated steadily (see Table 5). Imports were allowed to expand during a period of falling export receipts caused entirely by a fall in export prices:[15] these were more than 20 per cent lower in 1962 than they had been in 1958 (see Table 2). Large deficits were incurred on the current account of the balance of payments in the years 1960-61: the deficits were largely covered by foreign trade credits, by drawings from the IMF and by short-term loans from Eximbank and the U.S. Commercial banks. The net external reserves of the country, which stood at $23 million at the end of 1959, fell to minus S56 million at the end of 1961 and to minus $100 million at the end of 1962.

Retardation of growth in 1963

The serious deterioration in the country's external reserve position in 1961 induced the government to adopt a number of measures in the course of 1962 directed at curbing the growth of domestic demand and of imports. The measures in question consisted of: a restraint on public investment and operational outlays; restriction of imports through an

intensification of direct import controls and through increases in import deposit requirements, and an increase in the commercial banks' reserve requirement. These measures were largely responsible for the moderate contraction in the volume of merchandise imports in 1962 noted above.

Considerably more severe were the restrictive measures taken by the new government that took office in August 1962 under a Stabilization Programme introduced in November of that year. The peso was devalued - the selling rate applicable to imports was depreciated by 34 per cent (from 6.70 to 9.00 pesos per U.S. dollar), and the buying rate for coffee exports and for the currency conversions of petroleum companies was raised from 6.50 to 7.10 pesos per U.S. dollar. In addition, *ad valorem* import duties were raised and severe restraints were placed on the growth of bank credits.

Following these measures the volume of total merchandise imports stagnated in 1963. Import of capital goods and investment in fixed capital declined by about 5 per cent owing to the brakes put on the growth of demand and the restriction of imports. The rate of growth of gross domestic product declined sharply from 5 per cent in 1962 to about 3 per cent in 1963. The increase in real national income in 1963 was even smaller than that in gross domestic product because of a pronounced rise in the amount of factor income paid abroad: real national income rose by 2 per cent - about 1 per cent less than the growth of population. There was also a pronounced acceleration in the pace of inflation: the cost of living index rose by about 40 per cent in the course of 1963, compared with a rise of less than 5 per cent during 1962.

According to available information the rate of increase of GDP was closely correlated with the movement of imports in 1964 and 1965 as well. It amounted to over 5 per cent in 1964 when imports were allowed to rise sharply. The growth of imports was financed partly by a substantial rise in export earnings, due primarily to a recovery in export prices, and partly by foreign credits and loans. Imports declined steeply in 1965 in line with a contraction of export receipts brought about by a fall in the volume and in the price of exports: the rate of growth of GDP fell to 3 per cent and total real national income remained almost unchanged

owing to a severe deterioration in the terms of trade: *per capita* real income declined by 3 per cent.

Planned and realized rates of growth of production

In January 1962 the Colombian Government published its "General Plan for Economic and Social Development" which covered the decade of the 1960's. The plan, which was reviewed by the staff of the World Bank, aimed at an annual rate of increase of 5.6 per cent in GDP and provided for target rates of growth of investment in various sectors of the economy.

The growth of production in the three years 1960 - 1962 fell only moderately short of the planned target (see page 53). But after 1962 the pace of expansion of the economy fell far short of the target set by the plan. The chief reason for this was a shortfall in export earnings below the projected levels, due primarily to an unforeseen fall in export prices in 1962-1963. The balance of payments crisis encountered in this period led to the restriction of imports and to deflationary policy measures which severely retarded the growth of investment and production in 1963.

It is possible to estimate the loss of real income sustained by Colombia since 1954 because of the deterioration in its terms of trade. From 1954 to 1958 the loss amounted to about 3.6 billion 1958 pesos - equivalent to over 15 per cent of GDP in 1958: a further amount of about 3.4 billion 1958 pesos (equivalent to over 10 per cent of GDP in 1965) was lost between 1958 and 1965.

It would also be possible to estimate the loss of production and real income suffered as a result of the export shortfall of 1962-1963, by comparing the actual rate of growth of GDP with the 5.6 per cent planned rate of growth. The cumulative loss of production for the three years 1963-1965, computed in this way, would amount to 2.3 billion 1958 pesos: this is equivalent to over 7 per cent of GDP in 1965. This estimate of disruption takes no account of the long-term effects on development of the cuts in investment for health and educational purposes necessitated by the export shortfall. On the other hand, to attribute all this loss of

production entirely to the fall in export receipts, it is necessary as noted on page 38, to abstract from the roles of the public and private sectors during that period.

Here again, there is the case of a country sustaining serious disruption as a result of export shortfalls which, in the absence of supplementary financing, made it necessary to curtail imports and domestic investment. During 1957-1958 the amount of assistance required to sustain the development programme would have been significantly less than the export shortfall, because there were substantial imports of consumer goods that could be - and were - compressed. Part of the effect of the export shortfall could have been absorbed in similar fashion in 1963, though to a lesser extent because the share of less essential goods in imports had already been reduced. Although it is impossible to quantify the disruption precisely, adequate data exist on the basis of which a supplementary financing agency sould have made a reasonable determination on these two occasions.

Ghana

Ghana, like Ceylon, serves as an example of the countries in which the public sector relied heavily on export duties for its revenue before the trend of decline in export prices set in. But as shown in Table 2 above, in Ghana the fall in export prices after 1958 was considerably more severe than in Ceylon during the corresponding period of export shortfall i.e., after 1955: the same was true of the contraction of the exchequer revenue from export taxes.

Moreover, there was a significant difference between the two countries in the policies followed by their governments. These two factors (the exchequer revenue and government policy) go a long way in explaining the differences in subsequent economic and political developments.

Balance of payments

The world price of cocoa which fell sharply after 1954 recovered in 1958 and thereafter followed a declining trend until 1965. This was primarily responsible for a fall in the

unit value of exports and for a severe deterioration in the terms of trade of the country by 50 per cent between 1958 and 1965 (see Table 2).

Unlike Ceylon and Colombia the fall in export unit value in Ghana after 1958 was not accompanied by an absolute decline in the value of merchandise exports which remained generally unchanged until 1965 (see Table 6). The reason for this was an appreciable increase in the volume of exports which rose by over 50 per cent between 1958 and 1965, largely because of a growth in cocoa exports.

Despite stagnation in the value of exports, no serious attempt was made until 1961 to restrict imports, which grew rapidly until that year. This resulted in a pronounced deterioration in the balance of payments on current account during 1959-1961: this account, which was in surplus in 1958, showed a progressively rising deficit in the years 1959-1961. The deficits during this period were covered almost exclusively from the previously accumulated foreign exchange reserves, which fell by about £G100 million, from £G178 million in 1958 to £G74 million in 1961.

The severe contraction of the foreign exchange reserves in 1960 and 1961 was mainly responsible for the drastic measures the government took to restrain imports. These measures consisted of increasing import duties, a process which began in 1960 but was hastened in 1961; the introduction of an import licensing system in 1961, and the extension of exchange control to the sterling area.

The above measures were instrumental in reducing the value of imports after 1961. Most categories of imports were affected, but the largest decline was in the import of consumer goods against which the import duty increases were mainly directed: the fall in the value of these imports amounted to over 40 per cent by 1964. The recovery in imports during 1965 shown in Table 6, was due in part to a rise in purchases of aircraft and ships and probably in part to the government's desire to increase the supply of imported goods at the time of the meeting of the Organization of African Unity conference in Accra in October 1965.

As shown in Table 6, despite the contraction of imports

Table 6. Ghana: Balance of payments, 1958-1965 (in £G millions)[a]

	1958	1959	1960	1961	1962	1963	1964	1965
A. Balance on Current Account	11	-11	-27	-52	-28	-46	-33	-82
Merchandise exports	107	113	117	119	114	110	115	115
(of which, cocoa beans)	(62)	(70)	(67)	(69)	(67)	(68)	(68)	(68)
Merchandise imports	-78	-107	-124	-137	-111	-120	-114	-156
Invisibles, net	-18	-17	-20	-34	-31	-36	-34	-41
B. Balance on Capital Account	-5	4	7	-18	28	24	27	59
Private capital, net	-5	7	3	-	7	11	10	29
Government capital, net	b	-3	4	-18	21	13	17	30
C. Balance on Current and Capital Accounts (A + B)	6	-7	-20	-70	-	-22	-6	-23
D. Changes in Reserves[c]	-4	6	17	75	1	24	9	19
E. Errors and Omissions	-2	1	3	-5	-1	-2	-3	4
Total (D+E)	-6	7	20	70	-	22	6	23

Source: Ghana, Central Bureau of Statistics, *Economic Survey and Statistical Yearbook*, (Accra),various issues.

a. The notation "£G" stands for the Ghanian pound, which was was maintained at par with the pound sterling until its replacement by a new currency (CEDI) in 1966.

b. Included under "Changes in Reserves".

c. Minus sign denotes increase.

after 1961, the balance of payments on current account continued to show a deficit. This was financed partly by the use of foreign exchange reserves, which were completely exhausted by the end of 1965, and partly by public and private loans from abroad, including medium-term suppliers' credits estimated at over $300 million in December 1965.

Public revenue and expenditure

The fall in export price of cocoa had a drastic effect on government tax revenue. It can be seen from Table 7 that during the fiscal year 1957-1958 export duties on cocoa accounted for over one-third of total government revenue and for almost one-half of its tax revenue. Receipts from this source of income, which reached a peak of over £G25 million in the crop year 1958-59, declined steeply thereafter,and by 1964-65 amounted to less than 50 per cent of their peak value. This was despite a doubling of the tonnage of cocoa bean exports, and is explained by the progressive structure of the export duty rates based on export prices.

It was the pressure to replace this source of revenue combined with the need to finance rapidly growing public expenditure on current and capital accounts which were responsible for the introduction of numerous taxation measures, some of which proved to be highly unpopular. These included a reduction of 17 per cent in 1959 in the price paid to farmers by the Cocoa Marketing Board and a further reduction of 10 per cent in 1961. The proceeds of the two price cuts were paid over to the government under the headings of "farmers' voluntary contribution" and "compulsory savings",respectively; compulsory savings were also applied to companies at a rate of 10 per cent in 1961. In addition, the base of personal income tax was broadened by successive steps taken in 1961 and the following years abolishing the personal tax allowance and reducing the exemption levels; at the same time personal tax rates were also raised. No less important were the changes in indirect taxes: in addition to the increase in import duties mentioned above, some indirect tax rates were raised and new taxes were imposed on many domestically manufactured goods including such items as soap, matches and blankets.

These measures resulted in a substantial growth in the

volume of government revenue which more than made good the fall in income from cocoa export duties. As shown in Table 7, the measures in question, in addition to changing the pattern of taxation, also produced a significant shift of income from the private to the public sector between 1960 and 1965: the ratio of tax revenue to GNP, which had declined between the fiscal years 1957-58 and 1960, rose from 11 per cent in the latter year to 16 per cent in 1965.

Table 7. Ghana: Sources of government revenue as a percentage of total revenue

	1957-58[a]	1960[b]	1965
Direct taxes			
Company income tax	8	7	
Personal income tax	1	1	19
Other direct taxes	4	2	2
Total direct taxes	13	10	21
Indirect taxes			
Export duties	38	24	7
(of which, on cocoa)	(37)	(23)	(7)
Import duties	25	29	38
Purchase tax	-	-	1
Excise taxes	3	4	7
Sales tax	-	-	12
Value-added tax	-	-	-
Other indirect taxes	1	2	3
Total indirect taxes	67	59	68
Total tax revenue	80	69	89
Income from foreign investment[c]	4	6	1
Other revenue	10	12	9
Transfers from abroad	1	-	-
Transfers from CMB[d]	5	13	1
Total revenue	100	100	100
Total revenue(in £G mil.)	£60.5	£76.7	£142.0
Total tax revenue as % of GNP	13	11	16

Source: See Table 6.

a. Fiscal year ending June 30th 1958.

b. Average of fiscal years 1959-60 and 1960-61, ending June 30th of the second year stated.

c. Charges and fees for services rendered, including gross Post Office revenue.

d. Cocoa Marketing Board. Includes "Farmers voluntary contributions".

Government expenditure on current and capital accounts, however, increased by much more than the rise in its revenue after the fiscal year 1957-58: by 1965 the level of this expenditure was more than three times higher than it had been in 1957-58. The result was a sharp deterioration in the exchequer position which turned a budget surplus of over £G2 million in 1957-58 into a deficit of about £G40 million in 1965.

National income and production

The momentum of growth in production, though considerably weakened after 1960, continued until 1962 (one year after the contraction of imports occurred) and later gradually faded away. The average annual rate of growth in the GNP which was about 7 per cent in 1957-1960, declined to about 4.5 per cent in 1960-1962, to 3 per cent during 1962 - 1964 and to zero from 1964 to 1965.

The reason for the slowdown in production was, on the supply side, a shortage of raw materials and spare parts due largely to import restrictions. On the demand side, public expenditure was the primary buoyant factor, but the expansionary impact of this component of demand on the economy was largely offset by a contraction in private consumption and investment expenditures. The latter were adversely affected not only by a reduction in real private income, mentioned below, but also by the political and economic uncertainty prevailing in the country.

Developments in real income during 1960-1965 were even less favourable than those in production. The reason for this was the serious deterioration in the terms of trade (about 30 per cent) during the period. It is estimated that *per capita* production remained unchanged and *per capita* real income declined by about 5 per cent between 1960 and 1965. There was an even larger fall in *per capita* private real income owing to the redistribution of income in favour of the public sector, as a result of the fiscal measures taken by the government described above: this was partly responsible for a fall of about 10 per cent in *per capita* consumption during that period.

Prices and wages

Retail prices, which had been relatively stable between 1957 and 1960, rose rapidly thereafter at an average annual rate of about 15 per cent until 1965. This does not seem to have been due to the growth in public expenditure, since, as explained earlier, this was largely offset by a contraction of private expenditure. The main reasons for the rise in prices were: the severe restrictions on the import of consumer goods, the rise in import duties, which were particularly severe in the case of consumer goods including food, and the increases in indirect taxes mentioned above.

The rapid advance in retail prices after 1960 had a pronounced adverse effect on the real incomes of the wage and salary earners, especially those employed in the public sector. It is estimated that between 1960 and 1965 the retail price index in Accra rose by over 70 per cent, whereas the average monthly earnings of wage and salary earners increased by about 15 per cent, largely because of increases granted in the private sector. The authorities not only had direct control over the remuneration of the employees in the public sector, which remained almost unchanged during this period, but also exercised a considerable influence on wage claims in the private sector through their special links with the unions. The result was general dissatisfaction with the government, which was particularly pronounced among the older public servants, both military and civilian.

The dissatisfaction with the government was not confined to wage and salary earners. It must have extended to many cocoa farmers whose real incomes had been drastically curtailed since the 1960-61 crop year, and to the business community which, in addition to resenting growing government interference and rising taxes, had to endure the recession. These developments go a long way towards explaining the political instability of the regime after 1960 and its ultimate overthrow in February 1966.

Concluding note

We have seen that in all three countries examined, the

lack of a source of supplementary finance left the governments concerned with no way of avoiding a cut-back in production and investment as a result of unexpected export shortfalls. The circumstances surrounding the export shortfalls differed in the three countries and the governments and private sectors did not react in the same way in all of them, with the result that the form and magnitude of damage sustained differed from case to case. Because of these differences in reactions, it would be difficult to quantify the disruption resulting from the export shortfalls alone in each of the three cases. On the other hand, it seems clear that had there been a supplementary financing agency in existence at the time, continuously following the development efforts of the three countries in relation to their plans and objectives, the agency could, on the basis of available information, have reached a policy understanding with the countries concerned and made a reasonable assessment of the minimum amount of assistance which would have enabled essential imports to be maintained. The agency could thereby, have helped to safeguard the fundamental purposes of the development programmes and to avoid their disruption.

Notes

1. See TD/L.37, Annex I, page 46.
2. It is clear that in practice other things hardly ever remain unchanged. This assumption is made in order to simplify the presentation of the argument at this stage. We shall later discuss how the adverse effect of a fall in exports on income may be counteracted. (see page 31)
3. A rise in the propensity to consume would also exert an expansionary impact on income.
4. This category of inflation is at times inaccurately attributed to a rise in public expenditure and budget deficit at current market prices and to an increase in the supply of money which generally accompany the process of inflation. But this is misleading: it would be more accurate to say that with such inflations, the growth in public expenditure, in the budget deficit and in the supply of money are the *effect* rather than the *cause* of price increases.

5. To estimate the loss of real income, it will be necessary to take into account also the loss or gain from changes in the terms of trade during the period in question.
6. Published by IBRO, Washington D.C., (December 1965).
7. The 1954 peak in export prices of Ghana, which gained her independence in 1957, is not examined here.
8. The Ghanian study is derived from a previously published work on a related subject. See Eprime Eshag and P.J. Richards, "A Comparison of Economic Developments in Ghana and the Ivory Cost since 1960." *Bulletin of the Oxford University Institute of Economics and Statistics* volume 29, No.4, November 1967, pp.353-372.
9. Tea prices recovered in the latter part of 1954 and the early months of 1955, but later declined; rubber prices rose in the second half of 1955.
10. The symbol Rs. stands for the Ceylon Rupee, which until its devaluation on 21-11-67 was equivalent to $0.21:the devaluation reduced its value to $0.17.
11. The fall in the volume of total imports would amount to only 20 per cent, if the market values of imports are deflated by the index of import unit value given in Table 2.
12. Production of rice was also subsidised by guaranteeing the producers a purchase price appreciably higher than the import price of rice.
13. This is an estimate of the "Arrivals" imports financed by the Aid Group.
14. In addition to the deficits on current account, substantial deficits were also incurred on short-term capital account owing to a flight of private capital.
15. The volume of exports rose by 18 per cent in 1959 and, although it declined slightly in the following years,it nevertheless remained appreciably higher than its 1958 level throughout the period under consideration.