

DOCUMENT OF INTERNATIONAL MONETARY FUND AND NOT FOR PUBLIC USE

MASTER FILES
ROOM C-120
001

Any views expressed in the Departmental Memoranda (DM) Series represent the opinions of the authors and, unless otherwise indicated, should not be interpreted as official Fund views.

DM/83/80

INTERNATIONAL MONETARY FUND

Research Department

Adjustment Policies in Low-Income African Countries:
A Comparative Interpretation of the Kenyan and
Tanzanian Experiences, 1974-78

Prepared by Delphin Rwegasira*

Approved by Anthony Lanyi

November 28, 1983

	<u>Contents</u>	<u>Page</u>
Summary		1
I.	Introduction	2
II.	Economic Policies and Performance: An Overview	3
	1. Economic Structure and Growth	3
	2. Inflation, balance of payments, and financial policies	8
	a. The pre-shock and post-shock records	8
	b. Performance and policies	8
III.	Shocks and Policy Responses	11
	1. The Shocks	11
	2. Policy responses	13
	a. Adjustment perspectives	13
	b. Policy actions	14
	(i) Kenya	14
	(ii) Tanzania	16
	(iii) A recapitulation	18

* The author is grateful for the extensive comments from V. Sundararajan, Mohsin Khan, Toma Gudac, and Rüşdü Saracoglu, and for computational assistance by Dragica Chaffey and Linda Galantin. None of these persons is, of course, responsible for any inadequacies of the paper. The author would like to emphasize that the views expressed are strictly personal and should not be taken to reflect those of the Tanzanian institutions with which he is associated.

	<u>Contents</u>	<u>Page</u>
IV.	Economic Growth	19
	1. Determinants of growth	19
	2. Growth performance	20
	a. Aggregate growth	20
	b. Agricultural performance	23
	c. Non-agricultural growth	24
	d. Growth and energy consumption	27
	e. Investment, saving and interest rates	27
	3. Policy Conclusions	29
V.	Inflation	31
	1. Introductory	31
	2. General evidence	32
	3. Inflation in Kenya and Tanzania, mid-1960s to 1978	33
	a. General framework and data	33
	b. Results and interpretation	34
	c. The role of import-cost inflation	37
	d. Domestic factors	39
	4. Policy conclusions	42
VI.	Balance of Payments	45
	1. Introduction	45
	2. Export promotion and performance	45
	a. Agricultural exports	47
	(i) Kenya	47
	(ii) Tanzania	50
	(iii) Conclusion	52
	b. Agricultural relative-prices and exports	52
	c. Subsidies and manufactured exports in Kenya	58
	d. Primary-export processing in Tanzania	62
	3. External transfers and other capital flows	66
	4. Policy conclusions	67
VII.	Adjustment and External Balance	70
	1. The adjustment perspective	70
	2. Demand-management policies	71
	3. Supply-side policies	72
Text Tables		
	1. Kenya: Selected Performance Indicators	6
	2. Tanzania: Selected Performance Indicators	7
	3. Kenya and Tanzania: Annual Percentage Changes in Trade Indices, and Trade Shares	12

	<u>Contents</u>	<u>Page</u>
Text Tables (Cont'd.)		
4	Kenya and Tanzania: Structure of Growth, 1964-78	21
5	Kenya and Tanzania: Manufacturing Investment, 1969-78	25
6	Kenya and Tanzania: Commercial Energy Consumption, Production and Income Growth	28
7	Tanzania and Kenya: Estimated Regression Equations	35
8	Kenya and Tanzania: Selected Growth Performance, 1964-78	46
9	Kenya: Agricultural Exports, Real Producer Prices and Export Unit Values, 1973-74 to 1978-79	48
10	Tanzania: Agricultural Exports, Real Producer Prices and Export Unit Values, 1972-74 to 1977-79	51
11	Tanzania: Agricultural Producer Prices and Marketed Production, 1973-74 to 1978-79	53
12	Kenya: Marketed Agricultural Production and Prices, 1975-78	54
13	Kenya: Export Quantum Indices, 1975 to 1978-79	59
14	Tanzania: Processed and Manufactured Exports, 1973-78	64
Appendix Tables		
1.	Kenya: Sources of Monetary Financing and Absorption, 1967-1978	76
2.	Kenya: Balance of Payments, 1967-1978	77
3.	Tanzania: Sources of Monetary Financing and Absorption, 1967-1978	78
4.	Tanzania: Balance of Payments, 1967-1978	79

Summary

The first oil-price shock in the mid-1970s had an especially marked impact on low-income developing countries. The task of adjustment required changes in perceptions of economic policymaking and was further complicated in cases where exogenous shocks coincided with internal shocks such as drought. This study examines in detail the adjustment experiences of two low-income countries in Sub-Saharan Africa--Kenya and Tanzania--after the first oil shock. The study focuses on three principle target variables--growth, inflation, and the balance of payments.

It is seen that authorities in both countries pursued what might be termed growth-oriented adjustment policies--essentially by sustaining investment efforts--which led to fairly quick recovery to pre-shock growth performance and, in addition, notable success in reducing dependence on commercial energy. A closer examination of the growth performance, however, reveals that, depending on the country, there were a number of problems related to investment allocation and various policies that were not consistent with continued growth.

The control of inflation and the management of the balance of payments were more problematic in both cases. Over the period 1975-78, unlike most of the pre-shock period, average inflation rates remained higher than in the major trading partners. Export volumes declined, more markedly in Tanzania. The inflation record seems to have been substantially affected by rising import costs in the immediate post-shock period, and by weaknesses in demand management. Balance-of-payments management in both countries stressed import controls and specialized measures aimed at specific exports. Again, the performance differed depending on the export and the country, but the overall record for both countries was poor. A notable result in this regard was the contrasting behavior of agricultural exports and domestic food output in the directions of the shifts in relative agricultural prices in the two countries.

The glaring problem in the adjustment experiences of both countries was the increasing weakness of the external sector, which was inconsistent with a growth-oriented adjustment strategy, given both countries' substantial dependence on imports and the fall in their terms of trade. Depending on the country and the export, that weakening was the result of a combination of the following factors:

weak export incentives; the conflict (in terms of resource allocation) between domestic food and agricultural export production; the conflict between domestic absorption (mainly of manufactures) and exportation; low capacity to adjust relative to more developed economies; and general trade policies. Coping with these problems would have required more consistent demand-management and supply-side policies, as well as prompt, more coordinated, and less project-tied international assistance and cooperation.

I. Introduction

This paper is concerned with adjustment policies and problems in two low-income 1/ countries of Sub-Saharan Africa--Kenya and Tanzania--- after the first oil-price shock of 1973/74. Although the study concentrates on two countries, thus permitting in-depth treatment of country policies and problems, the analysis will be conducted in light of recent broad findings for the Sub-Saharan region as a whole 2/ and, to some extent, for economic stabilization problems in developing countries generally. 3/ The paper will be deliberately restricted to three areas of traditional macroeconomic policy concern--growth, inflation, and balance of payments-- and will relate performance in these areas over the period 1974-78 to the adjustment policies that were taken in 1974/75 and after. 4/

1/ Both Kenya and Tanzania fall under the category of low-income countries in the International Monetary Fund, World Economic Outlook, Occasional Paper No. 9 (Washington D.C., 1982).

2/ As, for instance, presented in International Bank for Reconstruction and Development (IBRD), Accelerated Development in Sub-Saharan Africa, (Washington D.C., 1981).

3/ Recent studies include W. R. Cline, and S. Weintraub (eds.), Economic Stabilization in Developing Countries (Washington D.C.: The Brookings Institution, 1981); S. Dell, and R. Lawrence, The Balance of Payments Adjustment Process in Developing Countries, (New York: Pergamon Press, 1980); and papers by B. Balassa, in the World Bank staff Working Paper Series.

4/ Income distribution is therefore not discussed, but that is by no means an indication of its being a less important consideration.

The objective is to gain greater understanding of the adjustment process in the low-income countries of Sub-Saharan Africa--a region that has recently attracted increased internal ^{1/} and international concern because of its poor growth performance, and to reveal some of the obstacles faced in the process of adjustment.

Section II of the paper outlines the countries' recent economic policies and performance, and Section III describes the shocks in the mid-1970s and the policy responses to those shocks. The subsequent three sections examine in detail policies and outcomes with respect to growth, inflation and the balance of payments. The concluding section reviews the overall process of adjustment in the two countries.

II. Economic Policies and Performance: An Overview

1. Economic Structure and Growth

In discussions of development strategies in African countries, Kenya has usually been classified as a "market-oriented" economy, and Tanzania as "etatist." ^{2/} Beyond generalizations on broad development strategies, however, the role of government in the productive sectors of both economies is quite extensive. In Kenya, public investment averaged over 40 percent of gross fixed capital formation during 1975-78, and was spread over a wide range of activities. In the same period, the corresponding share for Tanzania was about 50 percent, having declined from much higher proportions in the late 1960s and early 1970s (when large infrastructural investments were being carried out). Key prices of capital (credit) and labor in the modern sector, as well as of commercial energy and foreign exchange, are substantially controlled by the government in both countries, as are prices of key commodities and certain services,

^{1/} See, for instance, Organization of African Unity, Lagos Plan of Action for the Economic Development of Africa, 1980-2000. (Geneva: International Institute for Labor Studies, 1981).

^{2/} S. N. Acharya, "Perspectives and Problems of Development in Sub-Saharan Africa," World Development, Vol. 9 (1981); C. Leys, "African Economic Development in Theory and Practice," Daedalus (Spring 1982). The respective official policies are in Kenya, African Socialism and Its Application to Planning in Kenya, Sessional Paper No. 10 of 1963/65; and Tanganyika African National Union, The Arusha Declaration and TANU's Policy of Socialism and Self-Reliance, (Dar es Salaam, 1967).

although the latter prices are controlled much more extensively in Tanzania than in Kenya. In both countries prices of major agricultural commodities are determined within the public sector, either directly through price fixing or indirectly through statutory boards, and industrialization has been fostered through high rates of protection and import controls.

The Kenyan and Tanzanian economies have broadly similar structures, dominated by a high dependence on international trade and the agricultural sectors. Agriculture's share of GDP averaged 31 and 38 percent in Kenya and Tanzania, respectively, over 1974-78. Most exports and many other economic activities are dependent on that sector which employs the bulk of the population.

In relation to energy, both countries do not produce oil, are comparatively very low users of commercial energy, 1/ and continued to decrease relative use after 1973-74. However, they are highly dependent on petroleum imports for commercial energy consumption--in excess of 90 percent of each case, 2/ and because of the dynamic importance of the so-called modern sector, the oil-price shock had a profound impact on the two economies.

The two economies have relatively large semi-monetary or subsistence sectors--with 1977 GDP share of 19 percent in Kenya and 29 percent in Tanzania--dominated by food-production activities. Food and agricultural production generally are strongly dependent on rainfall which is, from time to time, inadequate and unreliable. 3/ As has been remarked in the specific case of Kenya, the uneven distribution of rainfall over the country, its overall inadequacy, and its unreliability are fundamental to the country's economy. 4/ The same is true of Tanzania. Besides rainfall and other natural problems, 5/ however, agricultural performance is also significantly influenced by government policies, discussed in some detail in Sections IV and VI. Apart from agriculture, other relatively large sectors over 1974-78 were manufacturing--constituting 14 percent of GDP in Kenya and nearly 10 percent in Tanzania--trade, public administration and other services, transport and communications, and finance and related services.

1/ See, for instance, IBRD, Accelerated Development-- op. cit., p. 148 for comparative data.

2/ Ibid, p. 148.

3/ For some details see, for instance, Griffiths, J.F., "Climate" in Morgan, W.T.W., (ed), East Africa: Its Peoples and Resources, (Nairobi: Oxford University Press, 1969).

4/ Hazlewood, A., The Economy of Kenya: The Kenyatta Era, (New York: Oxford University Press, 1979), p. 2.

5/ Discussed in detail in A. M. Kamarck, The Tropics and Economic Development, (Baltimore and London: The Johns Hopkins University Press, 1976).

Aggregate growth performance before and after the first oil-price shock is shown in Tables 1 and 2. From the mid-1960s to 1973, real growth was reasonably adequate in the case of Tanzania and impressive in the case of Kenya--in comparison with the record for other non-oil African and low-income countries. 1/ Agricultural output grew well above population in the case of Kenya and kept in line with population in the case of Tanzania. Growth rates of manufacturing output were impressive in both cases.

Aggregate growth before and after the first oil shock was supported by impressive investment records in both countries--annually exceeding 20 percent of GDP on average. The investment efforts were accompanied by domestic saving mobilization which, in relation to investment, was particularly successful in the pre-shock period. Foreign financing of investment (including reinvestment of profits) was significantly high in both cases, but direct private investment was important only in Kenya--mainly for historical but also for policy reasons. 2/ Domestic saving mobilization was not based on high interest rates; indeed these were negative in real terms for most of the 1970s. Efforts were concentrated on building financial institutions, the management of public-sector budgets, and the improvement of the investment climate.

Growth in both countries decelerated sharply following the oil-price shock in 1974, in contrast to performance in similar groups of countries (Tables 1 and 2). Severe droughts, which led to negligible agricultural growth in Kenya and a sharp decline in Tanzania, were partly responsible for the sharp deceleration. The effects of the weather were still apparent in 1975, although there was recovery in Tanzania which had been more adversely affected in 1974. In the two years 1974-75, there was, in both countries, a sharp deceleration in manufacturing-output growth (Tables 1 and 2)--significantly related to substantial reduction in real import capacity.

1/ International Monetary Fund, World Economic Outlook, Occasional Paper No. 4 (June 1981), p. 112.

2/ For some details on Kenya see A. Hazlewood, op. cit. and on Tanzania, J. F. Rweyemamu, Underdevelopment and Industrialization in Tanzania, (Nairobi: Oxford University Press, 1973).
impressive in both cases.

Table 1. Kenya: Selected Performance Indicators

	Mid-1960s to					
	1973	1974	1975	1976	1977	1978
Percentage output growth p.a.	6.7 <u>1/</u>	2.6	2.3	5.6	8.6	6.7
(i) agriculture	4.7 <u>1/</u>	1.4	0.2	0.3	7.5	3.8
monetary	5.9 <u>1/</u>	-0.5	0.0	4.0	12.3	n.a.
(ii) manufacturing	8.4 <u>1/</u>	5.9	-0.2	18.6	15.9	12.6
Current account balance (percentage of GDP)	-3.9 <u>2/</u>	-11.0	-7.0	-2.4	+0.6	-12.3
Gross official reserves (end of period, in weeks of imports)	19.6 <u>2/</u>	9.6	10.2	14.7	20.8	10.7
Consumer prices (annual percentage change)	3.4 <u>3/</u>	17.1	18.2	10.9	14.4	15.2
<u>Memorandum Item 4/</u>						
Percentage output growth p.a. in						
non-oil African countries	4.8 <u>2/</u>	6.6	2.6	4.2	1.8	2.2
low-income countries	3.6 <u>2/</u>	3.0	5.4	4.4	5.2	5.5

Sources: Republic of Kenya, Statistical Abstract for output data; Central Bank of Kenya, Annual Report, and IMF, International Financial Statistics for balance of payments and price data.

1/ 1964-1973.

2/ 1967-1973

3/ 1965-1973 weighted averaging of the Nairobi-based lower and middle income group indices (using weights of 0.78 and 0.22 respectively, suggested by Fund staff). Figures for 1974-78 are weighted averages of the two Nairobi-based indices and the upper-income index also based on Nairobi--the weights are then 0.78, 0.19, and 0.03.

4/ Source: IMF, World Economic Outlook (various issues)

Table 2. Tanzania: Selected Performance Indicators

	Mid-1960s to 1973	1974	1975	1976	1977	1978
Percentage output growth p.a.	5.1 <u>1/</u>	2.5	5.9	6.4	6.6	5.6
(i) agriculture	3.1 <u>1/</u>	-4.1	8.5	10.9	8.1	7.4
monetary	3.0 <u>1/</u>	-6.7	3.4	9.9	6.2	1.2
(ii) manufacturing	9.4 <u>1/</u>	1.4	0.3	6.4	5.8	3.4
Current account balance (percentage of GDP)	-3.3 <u>2/</u>	-12.0	-9.0	-1.4	-2.0	-10.9
Gross official reserves (end of period, in weeks of imports)	14.2 <u>2/</u>	3.9	5.0	9.1	19.4	4.5
Consumer prices (annual percentage change)	4.7 <u>3/</u>	19.2	26.5	6.9	11.6	11.4
<u>Memorandum Item 4/</u>						
Percentage output growth p.a. in						
non-oil African countries	4.8 <u>2/</u>	6.6	2.6	4.2	1.8	2.2
low-income countries	3.6 <u>2/</u>	3.0	5.4	4.4	5.2	5.5

Sources: United Republic of Tanzania, Economic Survey for output data; and Bank of Tanzania, Economic and Operations Report and IMF, International Financial Statistics for balance of payments and price data.

1/ 1964-1973.

2/ 1967-1973.

3/ 1965-1973 simple averaging of the Dar es Salaam-based Retail Price Index for Wage Earners and the cost of Living for Middle-grade Civil Servants. Figures for 1974-78 refer to the rather recent National Consumer Price Index.

4/ Source: IMF, World Economic Outlook (various issues)

For the period after the first oil shock (1975-78), Kenya regained its historical performance while Tanzania exceeded it--according to official statistics (Tables 1 and 2). However, a number of serious structural problems emerged within the apparently satisfactory growth records. In the case of Kenya, there was an extreme weakening in agricultural performance--led by food production--which registered an average annual growth rate well below that of population, in contrast to the enviable pre-1973 record. Growth of manufacturing output remained impressive over 1975-78, but did not help exports which almost stagnated in volume terms. In Tanzania, growth was strongly supported by subsistence agriculture and the service sectors. An impressive recovery in food production was accompanied by a strong decline in export volume and a sharp deceleration in the growth of manufacturing output.

2. Inflation, balance of payments, and financial policies

a. The pre-shock and post-shock records

Growth in the pre-shock period in both countries was, on the whole, accompanied by little price inflation and comfortable external balance (Tables 1 and 2). Over the two years 1974-75, however, the two economies experienced particularly rapid rates of inflation--although that can also be said of the rest of the world--and unprecedented current-account deficits. Inflation rates remained quite high in the late 1970s when they had been reduced in the industrial countries and in some non-oil developing countries--particularly those of Asia. Current-account deficits narrowed considerably over 1976-77--having been substantially influenced by the coffee and tea price-boom on the export side, but then widened back to about 1974-75 levels (in proportion to GDP) in 1978 following expansionary policies and the fall in beverage prices.

b. Performance and policies

The financial stability observed in the pre-shock period in the two countries was, to a significant extent, related to the domestic policies pursued. In addition, however, it also reflected some structural changes in the financially less-developed economies, as well as the relative stability in the international economy at that time. 1/

1/ For a detailed analysis of these two individual cases, see J.R. King, Stabilization Policy in an African Setting: Kenya, 1963-1973, (London: Heinemann, 1979); and D.G. Rwegasira, "Inflation and Monetary Expansion: The 1966-73 Tanzanian Experience," in Papers on the Political Economy of Tanzania, ed. by K. S. Kim, R. Mabele, and M. Schultheis (Nairobi: Heinemann, 1979).

From 1966, when the two countries established central banks, to the late 1960s, domestic credit expansion remained moderate in both cases, and government borrowing from domestic banks was insignificant. The average rates of domestic inflation remained below the industrial countries' average, which was also quite low in comparison to the record of the 1970s. An important structural feature of the two economies at that time was the persistent decline in the income velocity of circulation--that continued until the early 1970s. Narrowly-defined money as a proportion of monetary-sector GNP rose from 20 to 29 percent between 1967 and 1973 in the case of Kenya, and from 23 to 31 percent in the case of Tanzania. ^{1/} This was no doubt a free process as there were few price and exchange controls before 1971. The downward trend in velocity, together with the rise in the demand for money resulting from the relative strong real income growth, reinforced the financial policies pursued in maintaining the comparatively low rates of inflation and strong balance of payments positions. With respect to the latter, it will also be seen ahead that the pre-shock period was, on the whole, characterized by positive growth rates in export volumes in contrast to the declines of the post-shock period.

From the early 1970s, however, governments in the two countries pursued expansionary policies. ^{2/} There was significant upward pressure on domestic prices, but the more noticeable impact--which provoked explicit policy analysis and action in both countries--was on the balance of payments. That experience has been described in crisis terms, ^{3/} and interpreted to be supportive of the monetary approach to the balance of payments. ^{4/} In both cases, beginning in 1971, there was strong reaction to the balance of payments difficulties. Monetary and fiscal, import and foreign exchange, as well as price control measures, were taken. The import and price control measures were seen by the authorities in Kenya

^{1/} This pattern still holds with a broader definition of money on either total or monetary-sector GNP.

^{2/} For a detailed discussion, see King, op. cit.; and Rwegasira, op. cit.

^{3/} For the case of Kenya see King, op. cit., p. 66; for Tanzania see R.H. Green, D.G. Rwegasira, and B. Van Arkadie, Economic Shocks and National Policy-Making: Tanzania in the 1970s, (The Hague: Institute of Social Studies, 1980), p. 12.

^{4/} See King, op.cit.; and H. Grubel and T. Ryan, "A Monetary Model of Kenya's Balance of Payments," (University of Nairobi, 1979) mimeo; and also, to some extent, Green, et.al., op. cit.

as an essentially temporary response to an emergency situation, not as a desirable instrument of economic management in the longer term. ^{1/} By contrast, in Tanzania the minicrisis invoked the strengthening of central control of resources which became institutionalized in the macroeconomic policymaking process. ^{2/} These measures, aided by the relatively buoyant export prices, led to comfortable reserve levels in both countries before the oil-price shock. (Tables 1 and 2.)

Despite the above measures, however, domestic price rises and current account deficits had increased considerably by 1973 relative to previous levels, and the two countries experienced faster rates of inflation than the average for industrial countries. These could be interpreted as the lagged effects of earlier expansionary policies, but in the case of Tanzania--where domestic credit control measures achieved strong results, net long term capital inflows increased considerably, and the continued decline in velocity "absorbed" a significant proportion of domestic liquidity--points to the possibility that the international inflation ^{3/} of that time played a part in the overall outcome. This is an important issue for trade-dependent economies, and will be examined in some detail in Section IV.

In both countries, the immediate post-shock period was characterized by "jumps" in the rates of domestic inflation and the levels of current account deficits (Tables 1 and 2). Although it might be tempting to continue interpreting the balance of payments problems in the two countries as supportive of the monetary approach--as was done for the mini-crisis of the early 1970s--it would be an oversimplification to regard the dramatic increases in the payments imbalances of the 1970s as simply resulting from inappropriate monetary and fiscal policies. ^{4/}

With respect to rates of price inflation, it has already been observed that, in the post-shock period in both countries, they remained higher than in the major trading partners--a trend already noted for the immediate pre-shock period. This points to the role of domestic policies over and above the impact of exogenous shocks. Furthermore, the room for non-inflationary expansionary finance in the two economies had become extremely limited in the post-shock period, when velocity was no longer persistently falling. Inflation and balance of payments performance in Kenya and Tanzania in the post-shock period will be further

^{1/} See King, op. cit., p. 67; and Hazlewood, op. cit., p. 152.

^{2/} For details, see Green, et. al., op. cit.

^{3/} For a detailed treatment of this problem, see S.S. Bhalla, "The Transmission of Inflation into Developing Economies," Chap. 3 in World Inflation and the Developing Countries, ed. by W.R. Cline and Associates (The Brookings Institution, Washington, D.C., 1981).

^{4/} For this view, see T. Killick, "The IMF and Economic Management in Kenya," (London: Overseas Development Institute, 1982) mimeo.

examined in Sections V and VI, in light of adjustment policies pursued in the two countries. The next section first looks at the shocks and the country adjustment policies.

III. Shocks and Policy Responses

1. The Shocks

Some of the important events that affected Kenya and Tanzania between 1973 and 1978 may be seen from Table 3. 1/ Over 1973-75 the two countries experienced sharp deterioration in terms of trade-- which was still substantial even if oil is excluded. Landed fuel prices in the two countries increased by over 200 percent in 1973-74, and net oil-import bills increased from below 1 percent 2/ of 1973 merchandise exports in Kenya to nearly 18 percent in 1974, with corresponding proportions of 13 and nearly 19 percent for Tanzania (Table 3). An estimate by B. Balassa 3/ put the resulting losses due to terms-of-trade changes over the two years 1974-75 at an average of 7.4 percent of GNP in Kenya and 8.3 percent in Tanzania (all expressed in 1972 prices). The slowdown in world demand resulting from the international recession was estimated to have resulted in further income losses averaging about 1.1 percent of GNP in each case. 4/

These strong shocks accompanied by increases in import volumes in 1974 5/ led to the crisis-level increases in current account deficits (Tables 1 and 2)--which also reflected drought-induced declines in exports. Tanzania experienced an especially more serious drought, leading to massive importation of food that claimed over 36 percent of merchandise export receipts in each of the years 1974 and 1975 (Table 3). The effect of food imports--whose landed price had more than doubled between 1972 and 1974, and quantum increased by over 3.5 times by 1973 and 1974--was therefore more adverse than the direct cost of fuel, which

1/ Trade-indices data in Table 3 are not directly comparable as Kenyan data are based on local customs returns while those of Tanzania are based on a mixture of local and international information.

2/ See relevant footnote to Table 3.

3/ For details see Balassa, B., "The Policy Experience of Twelve Less-Developed Countries, 1973-78," World Bank Staff Working Paper No. 449 (April 1981). The analytical framework used is presented in B. Balassa, "The Newly-Industrializing Developing Countries After the Oil Crisis," World Bank Staff Working Paper No. 437 (October 1980).

4/ Balassa, op.cit.

5/ The increase of one percent import volume in Tanzania is very likely an understatement as other sources show significantly higher rates. Import-volume increases, especially in Kenya, must have partly resulted from the comfortable pre-shock foreign exchange position (lagged effect).

Table 3. Kenya and Tanzania: Annual Percentage Changes in Trade Indices, and Trade Shares

	Kenya					Tanzania						
	1973	1974	1975	1976	1977	1978	1973*	1974	1975	1976	1977	1978
Export unit value	15.0	32.2	15.1	36.0	41.6	-14.8	26.8	52.9	-11.5	20.3	39.8	-9.5
Import unit value	19.0	49.6	26.4	16.0	7.7	-0.7	15.9	55.6	8.3	-2.2	10.1	12.2
Terms of trade	-3.4	-11.6	-8.2	16.7	31.9	-14.2	9.4	-1.1	-18.3	22.4	26.9	-19.5
Export volume	17.0	-5.1	-9.0	5.9	3.7	-7.2	-14.3	-26.4	6.9	8.3	-20.5	-3.2
Import volume	-3.0	13.4	-24.8	-3.7	21.5	25.0	4.0	1.0	-4.7	-12.9	3.4	36.3
Net fuel imports as percentage of exports	0.7**	17.6	16.2	11.2	7.5	13.6	13.0	18.7	21.2	19.3	19.0	28.3
Food imports as a percentage of exports	10.2	8.4	5.9	4.6	2.8	5.8	10.7	37.4	36.3	10.6	12.1	13.5

Source: Changes in Trade Indices for Kenya computed from the Statistical Abstract (with base 1972 = 100), and those for Tanzania from World Bank estimates--with unit values given in U.S. dollars--with base 1976-78 = 100. Other data based on balance-of-payments sources as in Appendix Tables A.2 and B.2.

* Based on data from East African Statistical Department, East African Economic and Statistical Review, base 1964 = 100.

** This figure is very likely an underestimate.

averaged 20 percent of merchandise exports during 1974-75. Food imports had averaged less than 11 percent of exports over 1970-73, and fell back to that level with the coming of normal weather in 1976. The situation was therefore much more serious in Tanzania.

In 1976 and 1977, terms of trade improved sharply (Table 3)--led by the strong rises in the prices of coffee and tea, and the effects of external shocks were reduced considerably. Current account deficits were reduced below historical levels and by 1977 gross reserves exceeded the comfortable pre-shock positions. All these, however, were reversed in 1978 when the external shocks according to Balassa's estimates, exceeded 18 percent of GNP in Kenya and approached 17 percent in Tanzania. Barter terms of trade again declined sharply.

2. Policy responses

a. Adjustment perspectives

The responses to the large shocks in both countries were comprehensive. 1/ In both cases it was emphasized by the authorities that policies pursued during the crisis years would seek to avoid across-the-board cuts in expenditures that could weaken the economic and political basis for regaining development momentum. 2/ This was to be achieved by minimizing (the unavoidable) reductions in development expenditure growth rates--both public and private--and, in particular, by restraining growth in recurrent expenditures and raising revenues. Further, a redirection of investment towards directly productive activities would be necessary. Adjustment policies in both countries also emphasized the objective of an improved--or at least not worsened--distribution of income.

The greatly increased balance-of-payments deficits were seen as the most serious problem for the two economies. Reducing deficits to sustainable magnitudes was therefore a key objective. In the short-term, this was to be done by restraining imports and mobilizing external emergency funds. With time, these were to be supplemented by import substitution (recovery of grain output was a very important aspect of

1/ Kenya's reaction was originally outlined in Republic of Kenya, Sessional Paper No. 4 of 1975 On Economic Prospects and Policies, (Nairobi, 1975); and Tanzania's in the Speech by the Minister for Finance Introducing the Estimates of Public Revenue and Expenditure for 1974/75 to the National Assembly (June 1974).

2/ In the words of Kenya's Sessional Paper No. 4, (*ibid.*, p. 7), for example, the economic strategy would "choose policies for our crisis years which in so far as possible reinforce our longer-term objectives of promoting growth, employment and an improved distribution of income."

this in Tanzania), longer-term external assistance, increased exports and other production resulting from broader structural changes.

The preservation of internal monetary stability was also an important objective in the adjustment programs. The 1974/75 and 1975/76 Tanzanian Finance and Credit Plans reaffirmed this objective, 1/ while Kenya's Sessional Paper No. 4 of 1975 specifically stated the disadvantages of inflation. 2/ The principal means of controlling inflation according to that paper were monetary and fiscal policies which, if employed too timidly, would fail to control inflation and, if employed too vigorously, could tip the economy into recession. 3/ Price controls in Kenya were to remain very selective.

The outlook on the control of inflation in Tanzania was more or less similar. However, price controls had been extended earlier with the establishment of the Price Commission in 1973 and so it became necessary in 1974-75 for the Commission to adjust controlled prices upward in order to protect profitability of firms and therefore their ability to invest. At the same time the controls were continued and aimed at restraining profit-margin escalation.

The perceptions of adjustment needs in the two countries were therefore broadly similar. Successful adjustment was seen as the reduction of current-account deficits to sustainable levels while maintaining the long-term development momentum, and as much as possible preserving equity in an atmosphere of internal financial stability. 4/

b. Policy actions

(i) Kenya

In light of adverse external conditions, Kenya, like Tanzania, reduced its planned annual growth rate--from 7.4 percent over 1972-78 to 6 percent for the same period. 5/ Planned government development expenditure--seen

1/ United Republic of Tanzania, Annual Plan, 1974/75 and 1975/76 respectively.

2/ Sessional Paper No. 4 of 1975, op.cit., p. 8.

3/ Sessional Paper No. 4 of 1975, ibid., p. 8.

4/ For definitions of structural adjustment policies, see for instance, B. Balassa, "Structural Adjustment Policies in Developing Economies;" and B. Liebenthal, "Adjustment in Low-Income Africa," World Bank Staff Working Papers Nos. 464 (1981) and 486 (1981) respectively. For definitions specifically stressing the objectives of preserving long-term growth momentum and equity, see P. Hasan, "Growth and Structural Adjustment in East Asia;" and C. Wallich, "An Analysis of Developing Country Adjustment Experiences in the 1970s: Low-Income Asia," World Bank Staff Working Papers Nos. 529 (1982) and 487 (1981) respectively.

5/ Sessional Paper No. 4 of 1975, op. cit., p. 25.

in the two countries as critical to preserving the development tempo--was also scaled down to an annual real increase of 7.8 percent between fiscal years 1975/76 and 1977/78. The development expenditure was to be rechanneled towards directly-productive and quick-yielding activities, especially in agricultural and rural development. Credit and foreign exchange allocations were also to favor the directly-productive activities. Recurrent budgetary expenditure, in real terms, was to grow at a pace slightly lower than that of real GDP, 1/ and additional revenue-raising measures were taken.

As the adjustment strategy explicitly took equity into account, the authorities raised minimum wages so that between September 1973 and 1975 the nominal rural minimum had more than doubled while the urban one had increased by 65 percent. 2/ These increases seem to have been influenced by both past and future distributional considerations. Future wage awards, however, had on the whole to remain below cost-of-living increases. There were also increases in agricultural producer prices partly to compensate rural producers, but mainly to provide incentives. Selective price controls directed mainly at the welfare of those in low-income groups 3/ were to be strengthened.

With respect to domestic inflation the main policy instruments, as already mentioned, were to be monetary and fiscal. The target rate of inflation was put at no more than half the rate of increase of import prices, hoping to bring down the rate to an annual average of 5 percent in the two years 1977-78. Quantitative ceilings in overall commercial bank credit and guidelines on the sectoral allocation, as well as controls on the levels of fiscal deficits, were chosen as the major approaches. Initially, Kenya took a more restrictive stance (relative to Tanzania), by allowing only 12 percent credit expansion to the private sector in 1974-75 and effecting a small upward adjustment in interest rates. Later in the fiscal years 1976/77-1977/78, however, the monetary stance was expansive.

On the balance of payments front, the planned immediate course of action was to restrain imports--mainly through controls instituted, as already noted, in response to the mini-crisis of the early 1970s, and to mobilize emergency external funds. Import volume was envisaged to grow at only 2 percent annually in 1975-78--well below planned GDP growth--in comparison to the earlier Development Plan target of over 6 percent per annum. Direct controls also affected a number of elements in the service account. In relation to oil imports, the approach taken was to pass on increased costs to consumers, and to enhance efforts in long-term substitution and direct economization.

1/ Ibid, p. 27.

2/ Ibid, p. 14.

3/ Ibid, pp. 23-24.

Mobilization of external funds was seen in terms of emergency assistance for bridging the immediate gap before significant results could be achieved through adjustment measures, and long-term aid to continue the development process. With respect to the former, IMF resources and World Bank program loans were seen as particularly suitable, not only because they could be mobilized quickly but also because they would not be project-specific--unlike most long-term aid. Kenya's request in 1975 for use of Fund resources under the new EFF arrangement was the first one to be received and approved. ^{1/} At approximately the same time, the World Bank approved a program loan. Also there were drawings under the Fund's oil facility.

Import substitution and export promotion were seen as key aspects of managing the balance of payments over time. Substitution of domestic energy for imported oil has already been mentioned. With respect to industrial production, Kenya, having reached a relatively more advanced stage and therefore being concerned with exportation, envisaged continued import substitution with greater uniformity in tariff structure and reduced industrial protection, with selected exceptions on infant industries. ^{2/} Duties on capital-goods imports were to be raised not only to control demand and to encourage labor-intensive production methods but also to encourage a domestic capital goods industry.

Export promotion was encouraged mainly through the use of domestic price incentives and subsidies. Agricultural producer prices were revised significantly upwards after 1973, and were biased in favor of export crops and against commercial food staples (cereals). In 1974, subsidies for manufactured exports were introduced. The competitiveness of exports through, among other things, the control of domestic inflation was also emphasized. Kenya aimed at an annual export-volume growth of 8 percent over 1975-78, in comparison with the record of 4.5 percent per annum in 1964-72.

(ii) Tanzania

Short- to medium-term growth targets in Tanzania were also revised downwards. The launching of the Third Five-Year Development Plan (originally to start after mid-1974) was postponed for two years, with the hope, however, of regaining the pre-shock record of about 5 percent per year from mid-1975. Real government development expenditures in the two fiscal years 1975/76 and 1976/77 were budgeted to increase at about 7 percent, and, as already said, prices in both the public and private sectors were adjusted upwards to protect profit levels for investment.

^{1/} More or less under the same policies spelled out in Sessional Paper No. 4, op. cit., with the significant addition of an exchange rate depreciation of 12.4 percent (in terms of foreign exchange).

^{2/} These industries were to enjoy protection for only five years.

Government recurrent expenditures, however, were to be more restrained, with moderate expansion restricted to primary and adult education, agricultural extension and rural health. The 1977/78 budget--both on the development and recurrent expenditure sides--aimed at significant real expansion. Throughout the period 1975/76-1977/78, the recurrent budget was also to contribute to the development budget--through additional taxation and the expenditure restraint, and development expenditure in the public sector was to be shifted in favor of directly productive activities. Budgeted directly-productive investment remained high after the mid-1970s, and the 1976-81 Development Plan envisaged an allocation of over 46 percent (for the public sector) compared to 37 percent in the previous two Plans.

Minimum wages in Tanzania were raised by 40 percent in 1974, with increases at high levels tapering down to 6 percent before tax. This was again followed by small increases in the minimum wage in 1975. There were also major increases in agricultural prices to encourage output but also to aid rural consumption. These measures were also accompanied by food distribution in areas of serious drought and a subsidy on imported maize--both actions having been temporary, to be phased out with the return of normal weather. As already said, the government recurrent budget aimed at maintaining or slightly expanding key public services.

The outlook on domestic inflation differed from that in Kenya in that a higher short-term rate was accepted--to minimize output losses resulting from credit restraint. The target by 1976-78, however, was the same as that in the Kenyan adjustment program, and credit policy was accordingly cautious. Domestic-credit planning--incorporating both government- and nongovernment-sector bank borrowing as part of a broader annual plan, was the major means of monetary control.

With respect to balance of payments, the immediate reaction was similar to that in Kenya--consisting of import and foreign-exchange controls, and the mobilization of emergency external funds. Foreign-exchange planning (again as part of broader Annual Plans) was to be used more actively to give priority to production imports as well as aid movements toward a sustainable external balance. Domestic-substitution and direct-economization efforts were made to contain the volume of oil imports. Substantial amounts of emergency finance were raised under the Fund's low-conditionality facilities, ^{1/} the World Bank program loan as well as other smaller balance-of-payments support sources. Successful efforts were also made to increase the flow of long-term traditional aid to continue the development process.

^{1/} An attempt was made to borrow under the Fund's upper credit tranches, but that was not successful because of the relatively more accommodating financial policies in the immediate post-shock period.

Continued import substitution and, to some extent, export promotion, were seen in Tanzania in the broader context of what came to be called the basic industry strategy finalized in the mid-1970s. Under that strategy, industrialization was to be guided mainly by domestic demand for both producer and consumer goods. Exports in that strategy were seen mainly as an extension of the domestic market. However, the crisis made pre-export processing of primary products part of the strategy. Import substitution also meant reduction in food imports. One policy instrument aimed at this was food producer prices, which were substantially raised. Prices of export crops were also raised but to a much lesser extent--thus giving a strong relative-price bias in favor of domestic food crops.

(iii) A recapitulation

The foregoing brief description of the adjustment policies pursued in the two countries indicates that, first of all, the policies supported a growth-oriented adjustment strategy. Both the growth targets chosen and the planned increases in government development expenditures, though revised downward, clearly indicated determination by the authorities in both countries to maintain the development momentum. That determination partly explains the continued high investment-GDP ratios and, as will be argued later, the fairly quick resumption of pre-shock growth rates. The continued investment efforts, however, were accompanied by widening resource gaps (the difference between gross domestic investment and domestic saving) in both cases. Within the broad strategy, there were significant differences in sectoral performance, as will be further seen in Sections IV and VI, depending on other policies pursued as well on the efficiency with which resources were used.

Second, a significant difference was noted in the financial policies the authorities in the two countries pursued in the period immediately following the exogenous shocks. That difference as well as those that were noted for the 1976-78 period seem to have affected both financial performance and short-run growth as will be seen in some detail in Section V.

Third, it will be noted that in both countries considerable emphasis was given to import and exchange controls in balance-of-payments management, as well as to selected measures aimed at promoting particular exports. Varying successes and failures as well as specific problems resulted from these approaches in external-sector management, as will be seen in detail in Section VI. It might be mentioned at this point that exchange rates were not significantly used in balance-of-payments management in the two countries. The devaluations with the U.S. dollar in 1971 and 1973, and the move away from a pound-sterling peg to the dollar in 1971, were largely caused by the disturbances in the international monetary system at that time. The 1975 devaluation (with the move to peg to the SDR) which seems to have been initiated by Kenyan authorities at the East African Community level is actually said to have been

influenced by the Kenya-Fund negotiations. 1/ Thus, balance-of-payments management in the two East African economies very much depended on monetary and fiscal policies, specialized export-promotion measures, and on import and exchange controls as already indicated.

IV. Economic Growth

1. Determinants of growth

Recent empirical research has shown that economic growth in developing countries has depended not only on the growth and quality of capital and labor, and their allocation among domestic activities, but also on the volume of exports and capital inflows. 2/ The size of foreign exchange receipts, among other things, allows increases in imports, which recent evidence strongly associates with growth in the less-developed countries 3/; conversely, foreign exchange shortages constrain growth in these countries by limiting their import capacity. 4/

1/ Killick, T., "Kenya, the IMF and the Unsuccessful Quest for Stabilization," mimeo, (London: Overseas Development Institute, 1982), p. 7.

2/ For a short review, see M. Goldstein, and M.S. Khan, Effects of a Slowdown in Industrial Countries on Growth in Non-Oil Developing Countries, International Monetary Fund Occasional Paper No. 12 (1982).

See, also S. Robinson, "Sources of Growth in Less-Developed Countries: A Cross-Section Study", Quarterly Journal of Economics, Vol. 85 No. 3 (1971)--includes Kenya and Tanzania; C. Michalopoulos, and K. Jay, "Growth of Exports and Income in the Developing World: A Neo-classical View", AID Discussion Paper No. 38 (1973); papers by B. Balassa, and W. G. Tyler, in the Journal of Development Economics, respectively Vol. 5 (1978); Vol. 9 (1981). Also see M. Selowsky, "On the Measurement of Education's Contribution to Growth", Quarterly Journal of Economics, Vol. 83 (August 1969); and IBRD, World Development Report 1980, (New York: Oxford University Press, 1980).

3/ N. Hicks, "Economic Growth and Human Resources," World Bank Staff Working Paper No. 408 (July 1980). This cross-section study of 83 developing countries--including Kenya and Tanzania--over the 1960-77 period reports that the elasticity of real GDP per capita growth with respect to the growth rate of imports (0.24) is higher than those for the investment rate and alternative measures of human capital.

4/ Goldstein and Khan, op. cit. On the importance of import capacity to growth also see N. H. Leff, "Import Constraints and Development: Causes of the Recent Decline of Brazilian Economic Growth," Review of Economics and Statistics, Vol. 49 (November 1967); and P. Hasan, "Inflationary Financing and Economic Development: The Pakistan Experience," Yale Economic Essays, Vol. 2. (Fall 1962).

In terms of importance, growth of capital and labor have tended to account for a greater part of the change in output in less-developed countries, 1/ relative to the findings on industrial economies 2/. On this basis, it can therefore be said that, ceteris paribus quantitative increases in the factors of production--specifically in the stock of capital, which is a relatively scarce factor in these economies--3/ will be crucial to maintaining or raising rates of growth in the developing countries. Export growth and economic growth in the industrial countries seem to be especially important for the relatively more advanced developing countries, 4/ while for the low-income developing countries the most important link with the international economy may be through imports--financed by a total of export proceeds and capital flows--and therefore import capacity.

It can be concluded that over the medium term--say five years--the most critical factors determining aggregate growth performance in the less-developed countries, are the behavior of the traditional factors of production--in particular the growth of capital--as well as the ability to import. 5/ The behavior of other factors affecting growth e.g., education and other improvements, are likely to operate over a longer period. To this conclusion must be added the importance of production structure--e.g., the role of rain-fed agriculture already pointed out for the two economies, and economic policies--affecting resource allocation and resource-use efficiency. 6/

2. Growth performance

a. Aggregate growth

Aggregate growth and its structure for Kenya and Tanzania is shown in Table 4. From the foregoing brief survey it can be safely stated that one of the important factors explaining the fairly quick recovery in aggregate growth performance after the oil shock was the preservation of investment effort in both countries (Table 4). This was as

1/ Robinson, op. cit., p. 405.

2/ See, for instance, R. M. Solow, "Technical Change and the Aggregate Production Function," Review of Economics and Statistics, Vol. 39 (August 1957); and E. F. Denison, Why Growth Rates Differ, (Washington, D.C.: The Brookings Institution, 1967).

3/ Labor in general may not be a constraint in most non-oil LDCs but of course this cannot be said of skilled labor and entrepreneurship.

4/ M. Michaely, "Exports and Growth: An Empirical Investigation," Journal of Development Economics, Vol. 4 (1977), p. 52. See also Goldstein and Khan, op. cit.

5/ Investment and capacity will, of course, have some relationship in a low-income, aid-receiving country, but the two can still be treated separately, as will be apparent in the next sub-section.

6/ For a brief summary of the issues, see Goldstein and Khan, op. cit.

Table 4. Kenya and Tanzania: Structure of Growth, 1964-78

(annual percentage changes)

	Kenya						Tanzania					
	1964- 1973	1974	1975	1976	1977	1978	1964- 1973	1974	1975	1976	1977	1978
Agriculture	4.7	1.4	0.2	0.3	7.5	3.8	3.1	-4.1	8.5	10.9	8.1	7.4
Monetary	5.9	-0.5	0.0	4.0	12.3	n.a.	3.0	-6.7	3.4	9.9	6.2	1.2
Semi-monetary	3.6	3.0	0.4	-2.8	3.2	n.a.	3.2	-1.9	12.8	11.7	8.3	12.0
Manufacturing	8.4	5.9	-0.2	18.6	15.9	12.6	9.4	1.4	0.3	6.4	5.8	3.4
Non-agricultural material production <u>1/</u>	8.0	1.8	0.3	12.0	12.8	11.6	7.7	1.1	-1.4	2.2	3.0	1.0
Non-material production <u>2/</u>	6.3	2.8	2.8	3.9	7.4	4.0	6.3	9.0	6.5	3.0	5.5	5.5
Total GDP	6.7	2.6	2.3	5.6	8.6	6.7	5.1	2.5	5.9	6.4	6.6	5.6
<u>Memorandum Items</u>												
Investment-GDP ratio	20.2 <u>3/</u>	28.5	18.2	20.2	23.7	29.7	19.2 <u>3/</u>	22.0	21.1	20.4	19.3	19.7
Percentage change in real current import capacity	--	2.5	-12.9	14.8	35.3	-14.0	--	-16.5	20.8	19.4	2.0	-21.8
Percentage change in total import capacity	--	0.6	-18.8	10.3	34.9	1.3	--	-24.5	17.8	3.2	7.3	-14.9

Source: As in Tables 2.1 and 2.2, and Appendix I, Table 2, and Appendix II, Table 2.

1/ Manufacturing, mining, electricity and water, and construction.2/ Sectors other than agriculture and those under 1.3/ 1965-73.

indicated earlier, a result of the official growth-oriented adjustment outlook, outlined in Section III.

The other growth-related variable identified above was import capacity. This is usefully divided between the total and current import capacity--the nonproject-tied portion on which imported production inputs and spare parts and, therefore, domestic capacity utilization depend. The behavior of current and total import capacity (in real terms) in the two countries is also shown in Table 4. As can be seen from the table, current import capacity rose slightly in Kenya in 1974 and declined by 13 percent in 1975. Its level in 1976 was still close to that of 1973. Total import capacity was more depressed through 1973-76. There was a very sharp improvement in both magnitudes in 1977--in line with the terms-of-trade improvement (Table 3)--which was, however, quickly reversed in 1978.

The behavior of import capacity to an important extent affected that of imports--especially those needed for domestic capacity utilization--and therefore economic growth. This is particularly true for those sectors that are more dependent on imports, especially the sector defined in Table 4 as non-agricultural material production. In the case of Kenya, the growth rate of total value-added in those sectors declined from an annual average of 8 percent in 1964-73 to only one percent over 1974-75 (Table 4). Current capacity to import, as already mentioned, declined on the average during the latter period, as did import volume.

The recovery in import capacity over 1976-77 was translated into import growth with a time lag (Table 3). Non-agricultural material production recovered sharply to an annual average growth of over 12 percent over 1976-78. An aspect of that sharp improvement was the very rapid increase in manufacturing production (Table 4) which, however, was not reflected in improved export performance.

In Tanzania, 1974 was a particularly bad year. Current and total import capacity declined by over 16 percent but the situation was worse than that. If food imports (Table 3) are taken into account--in the sense of having first claim on non-tied foreign exchange available--the ability to import declined by a massive 38 percent. The situation remained difficult in 1975 because of continued large quantities of food imports. Current and total import capacity recovered in 1976 and 1977 but the recovery was also reversed in 1978.

Non-agricultural material production in Tanzania was more or less stagnant between 1973 and 1975 in contrast to the annual growth of nearly 8 percent over 1964-73 (Table 4). Import volume declined in the former period with non-food, non-tied imports showing a much sharper decline. Aggregate performance over 1974-75 was to some extent aided by the use of reserves from the comfortable end-1973 levels and the

availability of some emergency funding mainly from the Fund and the World Bank. The recovery in import capacity over 1976-77 was translated into import growth with a more marked time lag, as can be seen from the rapid import-volume growth in 1978 (Table 3)--a year of sharply declining current import capacity. Recovery in non-agricultural material 1976-78, however, remained sluggish--although reversing the 1974-75 stagnation.

It can be concluded that the behavior of import capacity--and therefore import volume--in Kenya and Tanzania shows some consistency with the cross-section evidence which links imports to economic growth. This consistency, however, is weaker in the case of Tanzania over 1976-78, when the recovery in the ability to import did not support reasonable growth in non-agricultural material production. An important aspect in explaining that performance was investment allocation and efficiency as will be seen in the next few pages.

Another important factor influencing growth in the two countries--weather--has already been mentioned, and its effect was marked in 1974-75. To the adverse effects of diminishing import capacity at the same time was therefore added those of drought. The period 1976-78, however, was on average one of reasonably good weather.

As already pointed out, the fairly quick aggregate growth recovery after the first oil-price shock was accompanied by a number of features that are regarded as problem areas with respect to adjustment. These are examined in some detail below.

b. Agricultural performance

One problem area that was noted in Section II was the agricultural sector. The 1974-78 evolution of output structure in both countries--a satisfactory recovery in food output accompanied by a substantial decline in agricultural exports in Tanzania, and the slow-down in overall agricultural growth accompanied by a food-output growth rate below that of population in Kenya--was clearly not intended by policy-makers. The output-growth structure seems to have been substantially influenced by the policy-induced changes in relative prices that were outlined in Section III. Because of the importance of this issue to balance of payments, it is conveniently taken up under agricultural exports in Section VI.

The slowdown in agricultural growth in Kenya from the enviable record of 1964-73 points to further problems. These relate mainly to a need for greater investment of resources (including human skills) into agriculture--necessary for effecting the transition from a subsistence

and resource-based sector to an increasingly commercialized science-based agriculture, and therefore to productivity growth. ^{1/} These issues cannot be examined within the scope of this paper, but the problem noted here is consistent with the expert observation that there has been inadequate resources allocated to agriculture in much of Africa, ^{2/} including Kenya and Tanzania.

c. Non-agricultural growth

It can be seen from Table 4 that while growth outside agriculture over 1975-78 was satisfactory in the case of Kenya, it was not so in the case of Tanzania. In the latter, manufacturing production rose by only 5.2 percent per annum over the three-year period 1976-78 in comparison with the annual growth of 9.4 percent over 1964-73. Growth in nonagricultural material production decelerated to an annual average of only 2 percent from nearly 8 percent over 1965-73. By contrast, manufacturing production growth in Kenya averaged 15.7 percent per annum over 1976-78--exceeding the 1964-73 performance--and non-agricultural material production over 12 percent per annum. In both countries the decisive sector in non-agricultural material production was manufacturing.

An impression of resource use and output response in the manufacturing sectors in the two countries can be had from Table 5. Firstly, it will be seen that in Kenya, the share of manufacturing investment in total monetary-economy capital formation after the oil shock remained at the 1969-73 average level of 15.6 percent, while in Tanzania the shift was dramatic--rising from about 13 percent to 30 percent over the two sub-periods. These trends also characterized directly productive investment generally--whose shares between 1970-73 and 1975-78 rose from 30 percent to 46 percent in the case of Tanzania, but from 35 to only 38 percent in the case of Kenya. Secondly, the incremental capital-output ratio (ICOR)--calculated with a lag to reflect delayed output response (Table 5)--rose very rapidly in Tanzania reflecting the considerable slowdown (Table 4) in output growth when investment was rising rapidly, ^{3/} while in Kenya the ratio declined as a result of a much less rapid increase in investment accompanied by fast output growth.

^{1/} U. Lele, "Rural Africa: Modernization, Equity and Long-Term Development," Science, Vol. 211, No. 6, (1981), p. 548; and IBRD, Accelerated Development in Sub-Saharan Africa, op. cit., Chapter 5.

B. F. Johnston, "Agricultural Production Potentials and Small-Farmer Strategies in Sub-Saharan Africa" in R. H. Bates and M. F. Lofchie, (eds.), Agricultural Developments in Africa: Issues of Public Policy, (New York: Praeger, 1980).

^{2/} Lele, op cit., p. 549; and Johnson, ibid., p. 75.

^{3/} One cannot fully discount elements of exaggeration arising from weakening of national statistics over this period.

Table 5. Kenya and Tanzania: Manufacturing Investment, 1/ 1969-78

	Kenya						Tanzania					
	1969-73	1975	1976	1977	1978	1975-78	1969-73	1975	1976	1977	1978	1975-78
Manufacturing investment as percentage of the total <u>2/</u>	15.6	13.6	15.9	15.8	17.0	15.6	13.3	17.9	26.6	41.5	36.8	30.7
Incremental capital- output ratio <u>3/</u> (ICOR)	2.5	2.6	1.7	1.2	1.7	1.8	4.2	10.8	9.3	11.0	--	10.4 <u>4/</u>

Source: National Accounts.

1/ Refers to fixed capital formation in constant-price (real) terms.

2/ The total in the monetary economy. In the case of Tanzania, current-price manufacturing investment is deflated by the overall implicit deflator for fixed capital formation--available from published National Accounts data.

3/ Three-year moving average of investment divided by three-year moving average of incremental value added, with incremental value added lagged by one year.

4/ Because of moving average method, the ICOR for 1978 turns out to be very high as the negative change in value added in 1979--when there was a decline in manufacturing production--is included in the computation. Thus, the ICOR of 10.4 refers to 1975-77.

The rising ICOR in Tanzania in the 1970s partly reflects the problems of a lower industrial base and effects of structural change. ^{1/} However, the problem which arises in the context of economic adjustment is that manufacturing which took an overwhelming proportion of resources in the directly productive sectors was no longer supporting growth (Table 4). Given the proportions of investment allocated in that sector (Table 5), the considerable slowdown in growth must be seen as a serious problem area in economic adjustment--that pattern of behavior, if continued, would seriously depress growth. Furthermore, the manufacturing sector remained highly dependent on imported inputs and therefore on exports. This was dramatically demonstrated after the second oil-price shock when manufacturing output declined for each of the three years 1979-81. That problem, in the context of the specific difficulties of the 1970s, retrospectively demonstrates a disproportionate shift of resources toward a more energy-intensive and import-dependent sector, thus exacerbating the balance-of-payments constraint to growth.

A further look at Tanzanian manufacturing-sector data indicates a number of other problems. Average value added per worker in large-scale manufacturing declined slightly by 5 percent between 1969-73 and 1976-78 ^{2/}, while capital intensity in production was rising. ^{3/} This to some extent reflects a number of technical and managerial issues that cannot be explored within the scope of this paper, but taken together with the rapidly rising ICOR, also points to problems in coordination and project selection. The industrial investment program after the mid-1970s seems to have overemphasized new projects (capacity creation)--partly in pursuit of structural change as spelled out in the basic-industry strategy--and underemphasized the importance of coordination and installed-capacity utilization. ^{4/} The domestic preference for new projects coincided with that of external donors who financed a substantial part of the program. New projects must have, to some extent, competed both directly and indirectly with established firms for foreign exchange and other scarce resources, leading to capacity underutilization in the established firms.

In conclusion, it can be said that although Tanzania was quite successful in shifting resources to the directly productive sectors in pursuit of higher growth, the benefits were not proportionately realized due to the overemphasis on new capacity creation in manufacturing. On the other hand, Kenya was able to raise its rate of manufacturing-production

^{1/} For some indicators, see S. M. Wangwe, "Industrial Development in Tanzania, 1961-1980", (mimeo, University of Dar-es-Salaam, 1981), p. 11.

^{2/} Data published in Tanzania, Economic Survey (various issues).

^{3/} Capital-labor and capital-output ratios derived from using electricity consumption and depreciation allowances as proxies for capital stock. Basic data from Economic Survey.

^{4/} This point is also emphasized by Wangwe, "Industrialisation and Resource Allocation in a Developing Country: The Case of Recent Experiences in Tanzania", World Development, Vol. 11 No. 6 (1983).

growth by expanding industrial investment at about the same rate as that of total monetary-sector fixed capital formation. The failure of the Kenyan manufacturing sector to export has already been noted, but that problem can be separated from growth per se.

d. Growth and energy consumption

As already indicated, an area of considerable success in the adjustment effort was in domestic commercial-energy consumption and production in both countries. This success was partly a result of 'full-cost' pricing and consumption taxation on energy use. As can be seen from Table 6, the annual rate of increase in consumption in Kenya declined from 11.8 percent in 1970-73 to 5.3 percent over 1973-78, while in Tanzania the corresponding rates were from 18.9 to -5.8 percent. These figures imply changes in growth elasticities from 2 to 1 in Kenya, and from 4 to -1.1 in Tanzania in the two periods indicated. Domestic production of commercial energy, dominated by electricity and led by hydro-electric generation, increased considerably after the first oil price shock (Table 6).

Even with these successes, however, the fact remains that with further economic growth--characterized by increased urbanization, expanded domestic transportation and industrialization--energy demand was likely to grow in line with or even faster than GDP ^{1/}, even assuming continued appropriate pricing and other conservation measures. The negative elasticity for Tanzania, although indicating the serious conservation measures that were taken, can therefore only be regarded as short-term, while Kenya's elasticity of about 1.0 was likely to be the more realistic one. For this reason, another test of adjustment success on the commercial-energy front is the extent to which a low-income, low-technology country has been able, since the oil shock, to reduce the share of its exports devoted to oil imports. Kenya was able to reduce this share from 16.9 percent in 1974-75 to 10.6 percent in 1977-78 while in the case of Tanzania the share rose from 20 to 23.6 percent (Table 3). These results are, to some extent, a reflection of relative export-volume performance in the two countries.

e. Investment, saving and interest rates

As was mentioned in Section III, the growth-oriented approach toward adjustment that was taken in the two countries led to sizable resource gaps (the difference between gross domestic investment and domestic savings), particularly for Tanzania. Over 1975-78, the resource gaps averaged 8.4 percent of GDP in Tanzania and 2.9

^{1/} IBRD, World Development Report 1980, p. 15, implicitly predicts a growth elasticity of 1.14 for developing countries in the 1980s compared to 0.75 for the industrialized countries.

Table 6. Kenya and Tanzania: Commercial Energy Consumption, Production and Income Growth

	Kenya		Tanzania	
	1970-73	1973-78	1970-73	1973-78
Annual percentage change in consumption (1)	11.8	5.3	18.9	-5.8
Annual percentage change (2) in GDP	5.9	5.2	4.7	5.4
Growth elasticity: (1) ÷ (2)	2.0	1.0	4.0	-1.1
Annual percentage change in production	6.9	21.4	-2.5	11.3

Source: United Nations, Yearbook of World Energy Statistics (1979) for energy data; and National-accounts sources for GDP data.

percent in Kenya, from much smaller proportions in 1965-73. An important explanation must be found in the external shocks--drought and deterioration in terms of trade--which reduced real income. In addition, however, interest rate structures turned from being positive 1/ in 1966-73 (on the average) to being substantially negative over 1975-78. These structures to some extent hindered the task of reducing the resource gaps that had emerged, and of efficiently using the limited resources available.

Determining an appropriate interest rate structure and level for a given country is a complex matter. One starting point to judging the appropriateness of a country's interest rate structure, however, is the relationship between domestic saving and investment in the country 2/ which, among other things, depends on interest rates--although the extent of this dependence remains empirically controversial. The relationship between planned saving and investment will also be reflected in macro-economic performance--notably in inflation or deflation and the balance of payments 3/. Thus, to a significant extent, the appropriateness of the level of interest rates will depend on a given country's intended investment-GDP ratio--regarded as reasonable for a target rate of growth--and its relation to saving performance and macroeconomic balance. On the basis of this argument, it can be said that the interest rate structures over the adjustment period (1975-78) in the two countries became inconsistent with the adjustment strategy of preserving the development dynamic by maintaining relatively high investment-GDP ratios. It would be unrealistic to assume that the resource gaps could continue to be financed externally, with the implication, therefore, that continued investment efforts could be reflected in inflation. The nature of inflation in the two economies, and its relationship to the adjustment policies that were pursued are the subject of the next section.

3. Policy conclusions

The preservation of the investment efforts in the economies of Kenya and Tanzania was central to adjustment targets in both countries,

1/ As determined by the difference between nominal interest rates and the rate of inflation derived from consumer price indices. A more appropriate variable for the rate of inflation should be the expected rate of change in prices, but this, as well as the question of the appropriate inflation index, is ignored for simplicity.

2/ For a detailed discussion along these lines see D. R. Khatkhate, "Analytic Basis of the Working of Monetary Policy in Less-Developed Countries," International Monetary Fund Staff Papers, Vol. 19 (November 1972).

3/ For an empirical discussion of this point, see N. H. Leff and K. Sato, "Macroeconomic Adjustment in Developing Countries: Instability, Short-Run Growth, and External Dependency." Review of Economics and Statistics, Vol. 62 No. 2 (1980).

and, as argued earlier, contributed significantly to the maintenance of the growth momentum over the adjustment period. This overall effort was enhanced by reallocation of investment to directly productive sectors.

As experience with the Tanzanian manufacturing sector shows, however, although it is necessary to reallocate investment in favor of directly productive sectors, that act is by no means sufficient for accelerating growth, let alone for strengthening the external sector. Apart from specific issues related to particular sectors (e.g., thorough project analysis and coordination in manufacturing investment), reallocation of investment and the pursuit of long-term structural change must be reconciled with the balance-of-payments outlook resulting from a major external shock. The strong shift in investment allocation toward an energy-intensive and domestic-demand-based sector (manufacturing) in an economy whose export volume was declining was bound to face problems. Kenya's rapidly-growing but "unexporting" manufacturing sector, as well as its decelerating growth in agriculture, are also notable in this regard. With respect to commercial energy, it can be specifically said that despite the important successes--in consumption and production--recorded in this section (Table 6), the poor export-volume performance in the two economies meant that they had not adjusted to the much higher energy import bills (given the very high dependence on imported energy in the two countries). The fact that export-volume performance was poor in both cases meant also that overall growth was being jeopardized--given that exports are the main determinant of import capacity--as was demonstrated after the second oil shock.

The saving-investment process is a central aspect of growth in the low-income countries, and as was pointed out earlier, the interest-rate structures that evolved over the adjustment period were not conducive to the strengthening of that process in the two countries. So long as the resource gaps cannot continue to be financed externally, it can be argued that a positive interest-rate policy--aimed at ensuring a positive return to saving efforts--is desirable 1/. This is over and above investment-efficiency considerations already alluded to. Although it is beyond the scope of this paper to discuss the problems of implementing a positive interest-rate policy, one broad approach could be a concentration of reform efforts on raising returns on long-term funds with more gradualism (on the lending side) in the weak sectors (e.g.,

1/ For a more detailed argument on this issue, see International Monetary Fund, "Interest Rate Policies in Developing Countries," unpublished (1982); D. R., Khatkhate, "False Issues in the Debate on Interest Rate Policies in Less Developed countries," Banca Nazionale del Lavoro, Quarterly Review (June 1980); and more specifically, in the context of African economies, D. G. Rwegasira, "Internal Monetary and Fiscal Policies and their Effects on the National Development Process in Africa," in A. H. Rweyemanu, (ed.), African Development Strategies in the 1980s (forthcoming).

small-scale rural production). This would, of course, have to be complemented by the continuation of efforts to create more adequate financial institutions and instruments for the still underdeveloped financial markets in these economies.

V. Inflation

1. Introductory

Inflation in the developing countries has been associated with a number of factors. Prominent among these are those related to monetary and general financial policies; the foreign-trade sector; the processes of industrialization, urbanization and the supply of capital; and to agriculture and other potentially-bottleneck sectors. 1/ There has been a tendency, therefore, to link inflation to the longterm development process itself, essentially through the pressures and imbalances that accompany that process. It has been noted that especially in developing economies, price rises in one sector as a result of a shift in demand are not accompanied by price declines elsewhere in the economy, thus making them particularly vulnerable to domestic inflationary problems. 2/ Apart from domestic problems, the behavior of the foreign-trade sector--particularly the sometimes-sluggish growth in export demand 3/ partly reflected in terms-of-trade deterioration, and export fluctuations 4/--has also been associated with inflation in the developing countries, essentially through various policy-induced and other reactions arising from falling capacity to import and downward rigidity in expenditures.

1/ For some detailed discussion of these factors, see for instance, Kahil R., Inflation and Economic Development in Brazil, 1946-63 (London: Oxford University Press, 1973); and Kirkpatrick, C.H., and F.I. Nixon, "The Origins of Inflation in Less-Developed Countries: A Selective Review," in Inflation in Open Economies, M. Parkin and G. Zis, editors, (Manchester University Press, Manchester, 1976).

2/ For further discussion see Olivera, J.H.G., "On Structural Inflation and Latin American Structuralism," Oxford Economic Papers, Vol. XVI (November 1964); Bruton, H.J., Inflation in a Growing Economy (University of Bombay, 1961); and Hirschman, A.O., The Strategy of Economic Development (New Haven: Yale University Press, 1958), pp. 158-160.

3/ Seers, D., "A Theory of Inflation and Growth in Underdeveloped Countries Based on the Experience of Latin America," Oxford Economic Papers, Vol. XIV (March 1962).

4/ G. Maynard, Economic Development and the Price Level (London: Macmillan, 1962).

The role of monetary and general financial policies has been equally stressed by other analysts looking at the problem. ^{1/} This is of course only right since it is a truism that for inflation to be sustained it must be financed. The varying roles of monetary and structural factors in the inflationary problems of developing countries have been debated for quite some time, especially among students of Latin American economies. ^{2/}

More recently in the 1970s, 'internationalized' inflation often associated with such diverse factors as the collapse of the par-value system, the oil-price shocks, synchronous business-cycle booms, and sharp increases in grain prices, led to renewed interest in the role of external disturbances in domestic price inflation. Both macro- and micro-economic channels through which price rises abroad may be transmitted into an open economy (with a fixed exchange rate) have been identified. ^{3/} While the macroeconomic channel works through a favorable trade balance, increases in international reserves and domestic money supply for a noninflationary country, the microeconomic connection is between factor markets in the rest of the world and the domestic factors of production. With respect to the latter link, it will be noted that for a country highly dependent on imported inputs, inflation abroad will have a cost-push effect on the domestic price level, everything remaining equal.

2. General evidence

Recent econometric testing for a number of developing countries has tended to narrow down the list of factors that are statistically

^{1/} See, for instance, A. C. Haberger, "The Dynamics of Inflation in Chile" in C. F. Christ, (ed.), Measurement in Economics (Stanford: Stanford University Press, 1963); and B. B. Aghevli, and M. S. Khan, "Government Deficits and the Inflationary Process in Developing Countries," International Monetary Fund Staff Papers, Vol 25 (September 1978).

^{2/} See, for instance, W. Baer, "The Inflation Controversy in Latin America: A Survey," Latin American Research Review, Vol. III (Spring 1967); R. Thorp, Financing Development in Latin America (London, Macmillan, 1971); and S. M. Wachter, Latin American Inflation (Lexington Books, 1976).

^{3/} For details see, for instance, R. Caves, "Looking at Inflation in the Open Economy," Discussion Paper No. 286 (Harvard Institute of Economic Research, 1973); S. J. Turnovsky, and A. Kapsura, "An Analysis of Imported Inflation in a Short-Run Macroeconomic Model," Canadian Journal of Economics, Vol. VII (August 1974); Y. Shinkai, "A Model of Imported Inflation," Journal of Political Economy, Vol. 81 (July/August, 1973); and I. Otani, "Inflation in an Open Economy: A Case Study of the Philippines," International Monetary Fund Staff Papers, Vol. 22, No. 3 (1975).

associated with the inflationary process. 1/ However, the balance of evidence points to the fact that both monetary and structural factors matter, 2/ and that addition of structural variables to monetary models of inflation improve the explanatory power of such models. 3/ Two structural variables which figure prominently in the explanation of developing-country inflation are the relative price of food 4/--representing the various domestic rigidities already noted, and import prices 5/--which reflect not only openness but also limited domestic-substitution possibilities in production and consumption.

3. Inflation in Kenya and Tanzania, mid-1960s to 1978

a. General framework and data

As a starting point to evaluating efforts aimed at controlling inflation in Kenya and Tanzania, a single-equation model based on the general evidence as outlined in subsection 2 above, was tested. The model used is therefore basically monetary, 6/ with addition of the two structural variables--the relative price of food, and import prices--already identified in the preceding subsection. It will be recalled that externally-caused inflation was also suspected when briefly outlining the general financial experience of the 1970s in Section II--thus partly giving further justification for the inclusion of import prices. The combination of monetary and structural variables is also to some extent justified on the grounds that real activity models based on the Phillips-curve idea of relating inflation to excess demand (as measured, for example, by some relation between actual and potential output) perform poorly for a wide range of developing countries. 7/

1/ See, in particular, V. Argy, "Structural Inflation in Developing Countries," Oxford Economic Papers, Vol. 22 (March 1970), and S. M. Wachter, "Latin American Inflation, op. cit.

2/ Wachter, op. cit.; W. R. Cline, and Associates, World Inflation and the Developing Countries (Washington, D.C.: The Brookings Institution, 1981); V. Argy, "Structural Inflation in Developing Countries," op. cit.; and K. G. Saini, "The Monetarist Explanation of Inflation: The Experience of Six Asian Countries," World Development, Vol. 10 (1982).

3/ W. R. Cline, and Associates, op. cit.; and Saini, op. cit.

4/ Wachter, op. cit.; W. R. Cline, and Associates, ibid.; and M. Edel, Food Supply and Inflation in Latin America (New York: Praeger, 1969).

5/ W. R. Cline, and Associates, op. cit. A number of studies on developed countries have also pointed to the role of this factor in those economies; see Cline and Associates, p. 83, footnote 42, for references.

6/ As, for instance, formulated by A. C. Harberger, "The Dynamics of Inflation in Chile," op. cit.

7/ Cline and Associates, op. cit., Chapter 3.

There are serious data problems even for testing such a simple model. Money-supply data are available only from 1966/67, thus making only about twelve annual observations. And although quarterly observations are available, import-price and income data are available only on an annual basis. The dependent variables--price indices--are also limited in coverage. There are neither wholesale prices nor independently-constructed GDP deflators, while the consumer prices apply only for the major urban areas. 1/ Finally, the existence of price controls--which are more stringent in the case of Tanzania--distorts the measures of inflation. Thus, consumer-price indices and implicit GDP deflators used in the regression equations below are to a large extent proxies for more comprehensive measures of inflation. This, together with the limited number of observations, to some extent justify the simplicity of the estimation technique employed. Further, the very limited degrees of freedom suggest that some economization is justified in testing for the significance of variables. Thus, variables like the cost of holding money, which appears in the basic monetary model but turns out to have low statistical significance, 2/ are in general ignored, while testing for accepted variables is done selectively.

b. Results and interpretation

Empirical results, using annual data and all the main price indices available, are selectively shown in Table 7. Money-supply variables in the case of Tanzania do not appear to be statistically significant (at the usual 5 percent level) either in the equations reported here (specifically equation 1) or in many others that were tried. This situation was not changed when quarterly data were used. A variable that turned out to be significant in some equations (not reported here) was the rate of inflation lagged one period. This has at times been taken as a proxy for the cost of funds in a financially undeveloped market, but it could also be interpreted as representing a host of not-so-easily identified factors influencing current inflation--including adjustment lags. While monetary factors seemed in general to be weakly related to inflation in Tanzania over the period studied, in a good number of equations tried, only some of which are reported here, money-supply variables appeared with the right sign. For Kenya, the purely monetary model appeared reasonably strong (as for instance in equation 6).

Import unit values were significant in almost all equations tried, being particularly so in the case of Tanzania--where significance at the one percent level was frequent. In the case of Kenya, monetary variables at times lost significance when import-price variables were

1/ Tanzania has a fairly comprehensive National Consumer Price Index--based on 18 major urban centers--since 1969.

2/ Cline and Associates, op. cit.

Table 7. Tanzania and Kenya: Estimated Regression Equations

Country	Estimated Regression Equation	
<u>Tanzania</u>		
1.	$P_1' = -23.9 + 1.32Y' + 1.33M' + 0.47M'_{-1}$	$R^2 = 0.27$
	(-1.52) (0.52) (2.22) (0.72)	
2.	$P_1' = 1.6 + 0.25M' + 0.56Q'_{-1} + 0.76F'$	$R^2 = 0.71$
	(0.26) (0.72) (4.5)** (0.55)	
3.	$P_2' = 6.0 - 0.18M' + 0.20Q' + 0.39Q'_{-1}$	$R^2 = 0.61$
	(1.1) (-0.56) (1.89) (3.7)**	
4.	$P_3' = 6.0 + 0.17M' + 0.28Q'_{-1}$	$R^2 = 0.58$
	(1.0) (0.52) (3.3)*	
5.	$P_4' = 4.37 - 0.15M' + 0.35Q''$	$R^2 = 0.69$
	(1.3) (-0.75) (4.42)**	
<u>Kenya</u>		
6.	$P_5' = 21.14 + 0.44M' + 0.21M'_{-1} - 4.17Y'$	$R^2 = 0.67$
	(4.34)** (3.06)* (1.99) (4.5)**	
7.	$P_5' = 0.59 + 0.72P_5'_{(-1)} + 0.21Q'$	$R^2 = 0.82$
	(0.45) (4.95)** (3.02)*	
8.	$P_5' = 0.98 + 0.11M' + 0.43Q' - 0.62F_1'$	$R^2 = 0.40$
	(0.24) (0.75) (3.21)* (-1.14)	
9.	$P_5' = 1.64 + 0.13M' + 0.24Y' - 0.46Q''$	$R^2 = 0.58$
	(0.18) (0.73) (0.15) (2.52)*	
10.	$P_6' = 4.39 + 0.24M' - 0.92Y' + 0.31Q''$	$R^2 = 0.80$
	(0.91) (2.55)* (-1.1) (3.25)*	
11.	$P_7' = -0.53 + 0.32M' - 0.59Y' + 0.44Q''$	$R^2 = 0.94$
	(0.17) (5.1)** (-1.0) (7.1)**	

Notes: * and ** indicate variables that are statistically significant at 5 and 1 per cent levels, respectively.

P_1' , P_2' , P_3' , and P_4' refer to Tanzanian price indices and are annual percentage changes in the Dar es Salaam-based Wage Earners Retail Price Index (P_1'), and the Middle-Grade Civil Servants Cost of Living Index (P_2'); the National Consumer Price Index (P_3') and the implicit GDP deflator (P_4'). Kenyan price indices (in annual percentage changes) are the Nairobi-based Lower-Income Group Index (P_5'), and the Middle-Income Group Index (P_6'); and the implicit GDP deflator (P_7'). Regressions equations are for the period 1966/67 to 1978 with the exception of equation 4 (1969-78) and equation 5 (1966-75).

Y' is the percentage change in real GDP; M' , the yearly percentage change in narrowly-defined money supply in the current period and M'_{-1} the corresponding magnitude in the previous period; Q' the percentage change in the import unit value in the current period and Q'_{-1} the corresponding value in the previous period; $Q'' = 1/2(Q' + Q'_{-1})$; F' and F_1' , the relative prices of food (the food price index deflated by the corresponding consumer price index) for the indicated consumer price indices. The various P 's are also at times shown in lagged form. R^2 = coefficient of multiple determination corrected for degrees of freedom; and figures in parentheses are t-values. ^{1/}

^{1/} Note the Durbin-Watson statistics are not shown as many of these equations involve lagged variables in which case the statistics would be biased toward 2 which is the asymptotic value in the absence of autocorrelation; see Nerlove, M., and K. Wallis, "Use of the Durbin-Watson Statistic in Inappropriate Situations," *Econometrica*, Vol. 34 (1966).

added (as in equation 9). The other structural variable--relative price of food--was not statistically significant in the two cases, although it tended to appear with the right sign.

There are a number of reasons which might explain some of the results. First, the extreme weakness of the monetary variables in the case of Tanzania, and to an extent in that of Kenya, 1/ is related to their stage of monetary and general economic development, reflected in the persistently downward behavior of velocity until the early 1970s, as already observed in Section II. The decline in velocity was quite strong as a counteracting factor against internal and external liquidity creation. This factor as was noted, however, was weakening in the later period. On the whole, velocity behavior counteracted some of the potential inflationary impact. 2/ Kenya, with a higher per capita income and substantially smaller subsistence sector, benefited less from this phenomenon. 3/

Second, the weak money-price relationship for Tanzania to a large extent reflects the price controls that were firmly instituted in 1973. This effect, as already mentioned, reduces the usefulness of the price indices as measures of inflation. It is important to note, however, that a number of items entering the price indices are not controlled, and that the price surveys frequently done to calculate the indices do not necessarily record official but actual prices--and the two can differ significantly with many actual prices above official levels. 4/ The official prices that are part of the various indices analyzed here will tend to be less sensitive to demand pressures coming through monetary expansion and more sensitive to cost changes--as the controls tend to liberally allow increased costs, particularly those of imported inputs. 5/ These considerations suggest that the relationship between monetary expansion and inflation may be better represented in lagged form. A preliminary attempt to do that (for instance in equation 1)--by including a lagged money supply variable--did not improve explanatory power. Because of the limitations of data, already mentioned, as well as the scope of this paper, we did not pursue the investigation further.

1/ For discussion of this phenomenon in some Asian economies, see Saini, op. cit., pp. 879-880.

2/ Note that the effects of velocity changes may be partly reflected in the coefficient of the real-income variable--as a result of the monetization process, but given the specification and sample size, one cannot be sure of this.

3/ This conclusion is based on a more detailed monetary analysis not produced here.

4/ See R. C. Rice, "The Tanzanian Price Control System: Theory, Practice and Some Possible Improvements", in K. Kim, et al., op. cit., pp. 106-107.

5/ The methods of price control in Tanzania are discussed in A. Whitworth, "Price Control Techniques in Poor Countries: the Tanzanian Case", World Development, Vol. 10, No. 6 (1982); and R. C. Rice, op. cit.

Thirdly, the high significance of the import-price variable does in fact reflect the vulnerability of the Kenyan and Tanzanian economies to external inflation. This vulnerability cannot be easily reversed by import or price controls or productivity growth, given other domestic rigidities already noted and the large shares of imports in the GNP. It is important to note, however, that the impact and significance of external inflation on domestic prices will partly depend on domestic macro-financial policies; the more accommodating the policies, the easier it will be for external changes to affect domestic prices. For this reason, import-price and money-supply variables appearing in the simple model tested above could be correlated thus indicating the possible role of financial accommodation, and raising the problem of multicollinearity. Correlation coefficients between the two variables were calculated but were found to be statistically insignificant. ^{1/} This result, however, cannot be conclusive with respect to the role of financial policy because the latter is more accurately reflected by domestic credit expansion in the category of countries studied here.

Finally, the non-significance of the relative food-price variable may be due to the fact that domestic food-supply shortfalls tend to be accommodated by corresponding imports. The role of relative food prices may, therefore, already be reflected in the significance of the import price index.

c. The role of import-cost inflation

It would not be accurate to estimate the role of import-cost inflation entirely on the basis of obtained regression-equation coefficients because of the likely simultaneous-equation bias, problems of multicollinearity, and the limited sample size. The simultaneous-equation bias could be particularly important because in a larger model, the influences of domestic policy factors--expressed in domestic credit expansion--could be explicitly estimated, unlike in this simpler case. It might be useful to note, however, that the values of the imported-inflation coefficients are within the ranges estimated for other developing countries, ^{2/} and that although they are at times large in relation to import-GDP shares, the phenomenon has been observed in other studies of developing as well as developed countries. ^{3/} In any case the role of imported inflation will be estimated by two methods: one based on the regression results and the other on import shares (direct and indirect) in consumer price indices.

^{1/} In the case of Kenya, the correlation coefficient was very low and negative, but for Tanzania it was positive (0.32); both coefficients were insignificant at the 5 percent level.

^{2/} Cline and Associates, *op. cit.*, p. 87.

^{3/} Cline and Associates, *ibid.*; M. Bruno, "Exchange Rates, Import Costs, and Wage Price Dynamics," *Journal of Political Economy*, Vol. 86 (June 1978); and papers by S. Y. Kwack, F. Modigliani and L. Papademos; and R. Dornbusch and P. Krugman, in *Brookings Papers on Economic Activity*, Vol 3 (1976).

It should be noted for purposes of these estimations that there are a number of possible domestic financial policy reactions to externally-generated inflation. One could be the adoption of tighter monetary and fiscal policies to suppress the external effects. Another could be one that fully accommodates the changes in import prices. The third would be in between these two alternatives. In the growth-oriented adjustment approach taken in Kenya and Tanzania, the latter two were the real alternatives, with Kenya less accommodating than Tanzania. In the following estimates using import shares in consumption, the assumption will be that domestic financial policies do not allow relative price changes beyond what is warranted by the changes in import prices.

Two estimates of the direct and indirect import weights in consumer prices are available for Kenya. By using an inverted matrix of a 1971 input-output table, it was estimated that the weight of the direct and indirect imports in the Nairobi Lower-Income Consumer Price Index was 0.14. 1/ A more recent estimate based mainly on nationally accounts, trade and survey data, put the direct and indirect weight of imports in the average (of Nairobi's lower, middle and upper income groups) consumer price index at 0.21. In the case of Tanzania, no such estimates have been made. However, the percentage shares of private consumption expenditure met out of imports have been officially estimated and published 2/ for the period up to 1975. Using that data on total private consumption expenditure we derived the absolute values of direct imports into the "consumption sector", and added nonconstruction intermediate goods imports, 3/ which together provided an estimate for direct and indirect imports into the consumption sector. Direct and indirect imports as a proportion of total private consumption was fairly stable, at an average of 0.22 over 1970-73, jumped to 0.3 in 1974, mainly because of the large increase in food imports, and fell to about 0.25 in 1975. It should be noted that both in the case of Tanzania and that of Kenya, the estimated weights are national averages, and may therefore understate actual weights to be applied on urban-based price indices--used here. But as imports are not separated between those for urban and other areas, this remains a problem.

An interpretation of the 1974-78 inflation experience in the two countries can now be attempted. Applying the weights of 0.21 for Kenya and 0.3 (1974) and 0.25 (1975) for Tanzania 4/ over 1974-75, the sharply

1/ Quoted in Killick, "The IMF and Economic Management in Kenya," op. cit. The basic methodology in J. K. Maitha, T. Killick, and G. K. Ikiara, "The Balance of Payments Adjustment Process in Developing Countries: Kenya," unpublished (University of Nairobi, 1978).

2/ United Republic of Tanzania, National Accounts of Tanzania, 1966-76 (Dar es Salaam: Bureau of Statistics, 1979) Table 25, pp. 3-37.

3/ Published in the Economic Survey (various issues).

4/ Note that the sharp increase in food imports in Tanzania over 1974-75 requires that import weights be adjusted accordingly. Kenya did not have that problem (see Table 3).

increased cost of imports in that immediate post-shock period (1974 and 1975) explains 45 percent of the average rate of inflation in Kenya (as measured by the average group indices shown in Table 1), and 49 percent in Tanzania (using the National Consumer Price Index). Thus it seems that imported inflation was not the decisive factor for the two years combined -- but perhaps the most important single factor. In 1974 alone, imported inflation explained nearly 60 percent in Kenya and almost 100 percent in Tanzania; the proportions having dropped sharply in 1975--to 30 percent for Kenya, and to only less than 10 percent in Tanzania. The role of external inflation declined substantially over 1976-78 (using weights of 0.21 for Kenya and 0.22 for Tanzania), when the explained proportions dropped to only 15 percent in Kenya and 17 percent in Tanzania.

By using regression-equation coefficients, higher proportions of the inflation rates are explained by higher import costs in 1974-75. And this is not surprising as the import-weight approach does not take into account consequential adjustments (very likely including the effects of domestic financial policy) that could be reflected in higher regression coefficients--particularly in a single-equation model. Thus by applying regression coefficients, 43 percent of the average percentage increase in the Nairobi Low-Income Group Price Index is explained by imported inflation in Kenya in 1974-75 (equation 7) compared to 29 percent obtained by using the input-output based import weight (of 0.14), whereas in Tanzania the explained proportion of the average percentage increase in the National Consumer Price Index over the same period rises to 57 percent (equation 4) compared to the 49 percent derived by applying the import weights for 1974 and 1975. The proportions explained by using regression estimates also fall substantially over 1976-78--to only 15 percent in Kenya and 23 percent in Tanzania (for the price indices mentioned in this paragraph).

In broad terms, the results obtained by the two approaches are similar. In the immediate post-shock period (1974 and 1975), the role of imported inflation was substantial; given the growth-oriented adjustment perspective taken in the two countries, it easily explains the movements from the low average inflation rates of the pre-shock period (Tables 1 and 2) to double-digit figures (i.e., in excess of 10 percent). However, as already seen by using import-weight calculations, the proportions explained by higher import costs in the two countries did not exceed 50 percent over the two years 1974-75 (together), and fell back to quite low levels in 1976-78. The case of Tanzania, where more than 50 percent (for 1974 and 1975) is explained by using regression results, is strongly influenced by a very high value in 1974.

d. Domestic factors

As already noted, inflation rates in Kenya and Tanzania over the adjustment period remained historically high, above policy targets, and above those in the trading-partner countries. Part of the problem was

the very strong influence of imported inflation in 1974-75--which was, however, dominant in only one of the two years. It is not easy, within the scope of this paper, to do a refined analysis of the roles of domestic supply and demand factors in the inflationary process. However, the evidence cited in earlier sections--on both production growth and monetary developments in the post-shock period--more strongly points to the role of demand factors, over and above that of imported inflation. As already cautioned though, the separation of the roles of import prices and macro-financial policies on the domestic price level is not easily done--because of the possible co-movement of the import prices and domestic credit. Indeed this seems to have been an important factor in Tanzania in the 1970s. The correlation coefficient between the rates of domestic credit expansion and annual percentage changes in import prices (late 1960s to 1978) was 0.7 and significant at the 5 percent level, but in Kenya it was negative and insignificant.

Over the two years, 1974-75, domestic credit expansion in both countries exceeded planned levels, and was led by government borrowing from banks. Government recurrent expenditures in 1974/75 increased rapidly, and rose well beyond budgeted levels. This was partly due to underestimation of the shocks, but was also a reflection of the over-estimation of resources. Development expenditure also increased rapidly. When the severity of the shocks had become clearer in 1975/76, the resource outlook became less optimistic, particularly in the case of Tanzania. In Kenya, however, there was still considerable overestimation of resources, and development expenditure continued to rise significantly faster than was envisaged in the Government's medium-term budget. As a consequence of the over-optimism on the resource side (for the two fiscal years taken together) there were shortfalls on the envisaged recurrent-budget contributions to the development budgets--by over 32 percent in Kenya and 53 percent in Tanzania. These significant shortfalls were reflected in much higher-than-planned increases in government borrowing from banks--rising by an average of over 62 percent in Kenya and 78 per cent in Tanzania ^{1/}--which threatened the achievement of the other stabilization objectives. The sharp, higher-than-planned increases in government borrowing must have contributed to the strong inflationary climate of 1974/75. The overcommitment of resources was also reflected in a rise in per capita consumption--led by public consumption--at significantly faster paces than the increases in GDP in 1974 in Tanzania and 1975 in Kenya.

The 1974-75 average rate of inflation in Tanzania, which had taken a relatively more accommodating monetary and fiscal stance but also experienced an increased share of imports in consumption expenditure,

^{1/} The 1975/76 actual recurrent budget surplus in Tanzania slightly exceeded the planned amount, but the sharp increase in government borrowing from the banking system resulting from the 1974/75 expenditure overhang seriously distorted the 1975/76 budgetary operations.

was significantly higher than that of Kenya (Tables 1 and 2). Although the regression results do not indicate statistical significance for the money-supply variable in the case of Tanzania, the co-movement of domestic credit and import prices has already been noted. And this is where it becomes difficult to separate the roles of internally from externally-caused inflation within the simplified framework used here. A plausible interpretation of the results however, is that the relatively more accommodating financial stance permitted a quick pass-through of the external inflation, but also led to a more marked difference between planned and actual domestic credit expansion. The role of domestic monetary factors is further indicated by the facts that the money supply variables appeared with the correct sign in a good number of equations tried (not all reproduced here) and that over 1976-78 only a very small percentage of the domestic inflation rate is explained by import prices. It is useful to note that the behavior of inflation and growth in Kenya and Tanzania over the years 1974-75 (Tables 1 and 2) seems to indicate a short-run trade-off between the two policy objectives--given the corresponding policy stances already described--but this can only be suggested, not rigorously demonstrated, because of the very short period involved. 1/

Over the two fiscal years 1976-77 and 1977-78, the recurrent budgets contributed significantly to the financing of the development budgets--the actual recurrent surplus in Kenya substantially exceeded the planned level, while in Tanzania there was a relatively small shortfall. Development expenditures in real terms continued to expand rapidly on average but actual government borrowing from banks remained well below targets in both cases. Government budgets in the two countries were thus aiding economic expansion while reducing their inflationary potential but were, however, based on resource outlooks that were not really tenable in the medium term. On the average, recurrent expenditures in both countries increased at faster rates than originally allowed for in the budgets; the reason why this was not reflected in serious shortfalls in recurrent budgetary surpluses and unplanned government bank borrowing was the unusually good performance in revenues. The latter increased much faster than recurrent expenditures in both cases, in large part because of buoyancy flowing from the 1976/77 export boom and the 1977/78 import liberalization policies.

The consequences of the tendency for recurrent expenditures rising faster than the financing resources available were dramatically demonstrated in fiscal year 1978/79 following the sharp deterioration in terms of trade. In that year, the rate of increase in recurrent expenditure in

1/ For some empirical discussion on the link between growth and inflation in non-oil developing countries, see, for instance, International Monetary Fund, World Economic Outlook (1982), pp. 132-135. For observation on this short-term trade-off in Kenya, see also T. Killick, "The IMF and Economic Management in Kenya," op. cit.

Kenya far exceeded that envisaged in the budget while revenue seriously lagged behind; in Tanzania the situation was much worse following a war outbreak. In both cases government borrowing from banks increased beyond expectations, adding to the inflationary climates of that time. Real per capita consumption growth rates in both countries far exceeded those of GDP in 1978.

4. Policy conclusions

Monetary and fiscal targets in the adjustment programs of Kenya and Tanzania were set within the growth-oriented strategy described earlier. Apart from the question of whether these targets were adequate to tailor aggregate expenditures to available resources, there was a failure to observe even these targets. Specifically, actual government recurrent expenditures were poorly fitted to medium-term resource availability. This was most notable following the 1976-77 beverage boom. With respect to external inflation, it has to be recognized that an import-dependent developing country facing deteriorating terms of trade, as was the case for Kenya and Tanzania in the mid-1970s, will have little scope for direct counter-inflationary action in the short run, such as reducing import tariffs and/or appreciating the exchange rate. However, strong and effective macro-financial policies will help limit the extent to which external inflation will worsen the existing domestic situation.

In relation to domestic financial policies, the experiences outlined above suggest that, first of all, the achievement of inflation and balance of payments objectives in the process of adjustment significantly depends upon the success with which government recurrent expenditures can be restrained. ^{1/} Although it can be argued that development expenditures should also in certain circumstances be restrained, and that improvements be made on the revenue side of the budget, the bigger problem in the two economies studied here was the tendency to underestimate recurrent expenditures, although there was also a tendency to overestimate external development revenues. ^{2/}

Achieving more appropriate levels of recurrent expenditures could be approached in three ways. First, improved budgetary forecasting; second, more effective budgetary administration; and third, better public-sector project appraisal. These improvements would require, among other things, the strengthening of economic-analysis and decision-making capacity in the key economic ministries. In the words of the World Bank Report on Sub-Saharan Africa, "experience indicates a pressing need to reinforce

^{1/} For an empirical generalization of this point, see N. H. Leff and K. Sato, "Macroeconomic Adjustment in Developing Countries...." *op. cit.*

^{2/} For a specific analysis of the Kenyan government budget, 1973/74-1980/81, see Killick, *ibid.*, pp. 34-36.

procedures and institutions in three key areas: the generation of development projects; the evaluation of expenditure requests; and, the formulation of economic policies." ^{1/} Given the developmental role of governments in low-income economies, and the interdependence of monetary and fiscal outturns, characteristic of developing countries, ^{2/} the role of these factors in financial stability cannot be underestimated.

The lesser problem of overestimating external development revenues can also be reduced by some of the steps suggested above. However, it is also related to problems of mobilizing foreign assistance discussed in Section VI. Part of the reaction to shortfalls in expected official external capital inflows is often increased domestic bank borrowing to finance government development expenditure, leading to higher credit expansion. Suggestions made in Section VI to enhance the role of external capital flows in the adjustment process will therefore also be applicable to the control of domestic inflation.

For a more accommodating policy--of quickly allowing a once-for-all pass-through of a new price structure resulting from exogenous shocks and planned internal changes to ensure continued growth--as was adopted in Tanzania, the bias of the authorities might be described as the acceptance of greater risk on higher inflation rather than on lower growth. In order to minimize the dangers of exceeding the inflation targets, it can be argued on the basis of experiences revealed here that the accommodating policy not only has to be carried out within a carefully-calculated aggregate supply-demand balance, but must also be accompanied by increased resource-use efficiency. The latter refers in particular to better control of the government budget, and to economization on the use of nongovernment-sector credit. The Kenyan experience at that time shows that, with respect to non-government credit, a more flexible use of interest rates can be a useful complement to overall credit ceilings--that were used in both countries. Furthermore, a move toward a positive interest-rate policy suggested in the preceding section would in general enhance the saving-investment process and aid the greater flow of non-inflationary finance. It should also be clear that a more permissive financial policy is from a balance-of-payments point of view, viable only in the short run--a year or so, and is substantially dependent on external resources--including own international financial reserves.

The expansionary monetary stance taken in Kenya over 1976/77-1977/78, and the tendency in both countries for government recurrent expenditures to quickly follow the beverage-boom revenue levels--from

^{1/} IBRD, Accelerated Development...., op. cit., 31. These themes, among others, are also emphasized in IBRD, World Development Report 1983, (New York: Oxford University Press, 1983).

^{2/} M. S. Khan and M. D. Knight, "Some Theoretical and Empirical Issues Relating to Economic Stabilization in Developing Countries," World Development, Vol. 10, Vol. 9 (1982).

the overexpenditure positions already noted--illustrates the other basic problem with respect to demand management, already stated. This is the poor coordination between actual government recurrent expenditures and medium-term resource availability. Over 1976/77-1977/78, Kenyan policies were, on the whole, much weaker in this regard--as revealed by the very rapid rates of domestic credit expansion, and the failure or refusal to institute a significant counter-cyclical tax on coffee and tea exports. 1/ This policy stance contributed to the acceleration of inflation in Kenya between 1976 and 1978 (Table 1). By way of contrast, Tanzania did considerably reduce the rate of inflation during this period (Table 2).

The behavior of recurrent expenditures is particularly worrisome because of a further characteristic--downward rigidity. This rigidity means that realizing budgetary surpluses for financing development expenditure becomes increasingly harder over time--given difficulties on the revenue-raising side, and leads to higher government bank borrowing to maintain a given level of development expenditure. This problem was most apparent in both countries in 1978/79--when the terms of trade declined sharply. The solution to this partly lies in better coordination between annual programs--the annual budget in particular--and medium-term planning, as spelled out in consecutive Five-Year Plans or medium-term adjustment programs.

Emphasis in this sub-section has been placed on the need to contain recurrent government expenditures and bank borrowing as central issues in demand management. Two further points should be noted. First, the tendency for development expenditures to grow faster than planned--which was more marked in Kenya (in the years 1974/75, 1975/76 and 1977/78)--is one reason for the rapid increase in recurrent expenditures because the latter, to some extent, depend on previous development expenditures. Solution in this area has been implied above; it lies not only in better coordination between annual and medium-term plans but also in better project appraisal that should be related to budgetary planning and forecasting. Second, the growth in nongovernment sector bank credit has not been emphasized because over the adjustment period in the two countries, it did not show systematic signs of being difficult to control. Whenever increases were large--relative to domestic policy targets in the adjustment programs--they were significantly influenced by shifts in short-term policy stances.

1/ This is also strongly criticized by Killick "The IMF and Economic Management in Kenya," op. cit. He states on page 31, "if during the 1970s the Government ever was serious about the importance of stabilization, it abandoned this priority as soon as the commodity boom allowed it off the hook."

VI. Balance of Payments

1. Introduction

It was cautioned in Section II that it would be an oversimplification to regard the payments imbalances of the 1970s as simply resulting from inappropriate monetary and fiscal policies--emphasized by the monetary approach as being fundamental to payments problems. Apart from the exogenous shocks already outlined in Section III, the supply side of balance of payments--principally the growth of export volume--weakened considerably in the two countries, as can be seen partly from Table 8. That weakening rendered the two economies extremely vulnerable to payments imbalances. Thus, although there is general as well as specific evidence linking payments imbalances to demand-management policies 1/, the strikingly weak supply side of the balance of payments deserves a closer look, particularly given the adjustment perspective taken in the two countries. 2/ This section concentrates on the supply side. Demand-management issues are taken up again in the concluding section.

2. Export promotion and performance

One striking feature in the adjustment experiences of Kenya and Tanzania was what might be termed the "asymmetry of behavior" on their trade accounts. For although policy to substantially contain import volume growth over the adjustment period was clearly successful--import volume in both countries remaining below the 1973 level by end-1977, export-volume expansion was evidently unsuccessful (Table 8). Over this period (1973-78), terms of trade in the two countries fluctuated considerably (Table 3) but had returned to approximately their 1973 level. World trade slowed down considerably in 1974-75, but picked up reasonably between that time and 1978. Thus the export-volume problem seems to have been mainly on the domestic-supply side.

It is not easy, within the scope of this paper, to fully explore the supply-side issues on export production in the two countries--particularly given the dominance of agricultural exports and, therefore, the complexities involved in agricultural supply growth. However, since the export volume problem has been recognised to be common in the 1970s in Sub-Saharan Africa, it might be useful to explore the issues in the light of hypotheses recently advanced for the region as a whole. The World Bank Report on Sub-Saharan Africa (World Bank Report) put forth three hypotheses to explain the African

1/ For a test of the monetary approach using cross-section evidence for 39 LDCs including Kenya and Tanzania, see B. B. Aghevli, and M. S. Khan, "The Monetary Approach to Balance of Payments Determination: An Empirical Test", in International Monetary Fund, The Monetary Approach to the Balance of Payments, (Washington, D.C., 1977). The specific case study of Kenya is in King, op. cit. and Grubel and Ryan, op. cit.

2/ Also see T. Killick, "The IMF and Economic Management in Kenya," op. cit.

Table 8. Kenya and Tanzania: Selected Growth Performance, 1964-78

(Average annual percentage changes)

	Kenya		Tanzania	
	1964-73	1974-78	1964-73	1974-78
Real GDP	6.7	5.8	5.1	6.1
Agricultural production	4.7	3.0	3.1	8.7
Export volume	7.4	-1.9	2.6 <u>1/</u>	-2.8

Source: National Accounts Sources; and IMF, International Financial Statistics, (various issues).

1/ Exports outside Kenya and Uganda--the bulk of the total.

region's relatively poor export performance in the 1970's: (i) a policy bias against both agriculture and exports; (ii) rapid population growth, which, by increasing consumption, has reduced exportable surplus of crops and raised the proportion of land used for domestic food production; and (iii) the inflexibility of African economies, which has prevented their diversification into products with rapidly growing markets. ^{1/} These hypotheses will guide the following discussion of export performance in Kenya and Tanzania, and will be complemented by a closer look at the explicit export-promotion policies that were adopted in the country adjustment programs.

a. Agricultural exports

Agricultural exports, as stated earlier, constitute the bulk of exports in the two countries--approaching 60 percent of the total in Kenya and substantially exceeding the proportion in Tanzania over 1973-78. A policy bias against agricultural exports, therefore, would very likely be reflected in poor or inadequate total export performance.

One important indicator of the bias against exports is the behavior of producer prices in real terms. This bias may not necessarily be explicitly stated in policy terms but could take place in practice and therefore adversely affect export volume. Four key variables that determine producer prices (in domestic currency) are the prices of exports in international markets, the real effective exchange rate, government taxes and subsidies, and marketing margins. The latter partly reflect marketing efficiency in the absence of price-stabilization functions. A change in any of those variables will therefore affect producer prices, everything remaining equal.

(i) Kenya

The behavior of real producer prices and export volumes for principal agricultural exports in Kenya is shown in Table 9, which also gives changes in export unit values--deflated by the domestic consumer price index. ^{2/} It will be seen from the table that percentage changes in real producer prices between 1973-74 and 1978-79 were invariably higher than percentage changes in export unit values--adjusted for domestic inflation. The Kenyan authorities were able to pass on positive changes in export prices to farmers or defend producer prices in cases of export price declines.

^{1/} IBRD, Accelerated Development in Sub-Saharan Africa, op. cit., p. 21.

^{2/} Note that producer prices and export unit values may not be strictly comparable because of some processing that may take place between domestic purchases and exportation.

Table 9. Agricultural Exports, Real Producer Prices and Export Unit Values, 1973-74 to 1978-79

Export Item	Percentage Change in Volume	Percentage Change in Real Producer Price <u>1/</u>	Percentage Change in Real Export Unit Value <u>2/</u>
Coffee	22.3	53.7	50.0
Tea	68.0	17.3	2.7
Sisal	-50.2	-45.8	-48.1
Cotton	-61.7	21.7	-4.2
Pyrethrum <u>3/</u>	-20.5	0.9	-12.7

Source: Kenya, Statistical Abstract (various issues).

1/ Nominal prices are deflated by the Nairobi composite consumer price index.

2/ Export unit values are deflated by the Nairobi composite consumer price index.

3/ Pyrethrum extract.

Export-volume response to producer-price changes does not show a simple relationship. This results, firstly, from the fact that the various items do not necessarily represent total output. Some export items, e.g., cotton, are a residual, after significant domestic industrial demand. The sharp drop in cotton exports when the real producer price was rising (Table 9) simply reflects increased domestic demand, as total marketed output rose substantially in the period indicated. The drop in cotton exports, thus dramatically demonstrates what the World Bank Report advanced as the second major hypothesis on poor export performance in the Sub-Saharan region--rising domestic demand and reduction of exportable surplus. 1/

Secondly, there seem to be a number of factors other than the price 2/ of a given commodity explaining the supply behavior of items like pyrethrum. But these will not be treated in great detail in this paper.

The farmer-rewarding price policy pursued in Kenya resulted in a good overall performance in agricultural exports. The volumes of two key Kenyan exports, coffee and tea--which together constituted about 30 and 40 percent of the total in 1973-74 and 1978-79 respectively grew by 22.3 3/ and 68 percent (Table 9). However, that performance should not conceal a major weakness in the country's trade structure--the very high dependence on the two crops. As was observed in a study of the country's exports, Kenya has not yet succeeded in developing a viable and efficient alternative to these two major export items. 4/ The only significant single exception to this statement is pineapples (tinned) whose export volume grew from an average of over 11,000 metric tons in 1973-74 to exceed 41,000 tons in 1978-79. 5/ The very high concentration on coffee and tea to some extent demonstrates what the World Bank Report refers to as the inflexibility of African economies.

1/ This is, of course, true only if the reduction is not accompanied by an increase in processed or manufactured exports.

2/ For a good illustration of the many factors affecting crop production in Sub-Saharan Africa, see J. C. de Wilde, "Case Studies: Kenya, Tanzania, and Ghana" in R. H. Bates and M. F. Lofchie, (eds.), Agricultural Development in Africa: Issues of Public Policy, New York: Praeger (1980).

3/ Part of the growth in coffee exports has been attributed to Ugandan coffee marketed in Kenya, following the deteriorating economic conditions in Uganda in the 1970s.

4/ T. E. Ibrahim, "Prospects for Export Growth in an African Economy: The Kenya Case," Vierteljahresberichte: Probleme der Entwicklungslander, No. 80 (June 1980) p. 22--also World Bank Reprint Series No. 188.

5/ The share of this product in total export value rose from less than 1 percent to 2.5 percent over the same period; see Kenya, Statistical Abstract (1980), pp. 58-59.

(ii) Tanzania

Changes in real producer prices, export volumes and export unit values for the major commodities in Tanzania are shown in Table 10. The table covers a slightly different period from that presented for Kenya, and has two products--cashew nuts and tobacco--which are important to Tanzania but not to Kenya. As can be seen from the table, in the period 1972/73-1973/74 to 1977/78-1978/79, changes in producer prices did not compare favorably with changes in export unit values, with the exception of cotton and tea. This was the reverse of what was taking place in Kenya. The general tendency in Tanzania was to reduce the producer share in export proceeds.

The reasons for the declining producer share in Tanzania varied among different crops but the main ones were rising gross margins by the marketing parastatal organizations and export taxation. 1/ Both were generally important depending on the crop, but the more worrisome aspect was the rising parastatal marketing margins which partly reflected failure on the part of parastatals to minimize costs. 2/ This was in part a result of the residual approach to producer-price determination, whereby official producer prices were determined after allowing for all marketing costs. 3/ The parastatals themselves influenced the pricing decisions.

As was the case in Kenya, export volume response to producer prices did not show a simple relationship. This is seen in the cases of cotton 4/, tobacco and coffee (Table 6.3). As said earlier, these cases point to factors other than prices of the commodities in question, and cannot be adequately discussed in this study. In the following sub-section, we shall only take a closer look at the role of changing relative prices in agriculture which, as will be recalled from Section III, were actively used in the two countries for adjustment management.

The declining producer share in export proceeds in Tanzania is associated with notable declines in major export commodities (Table 10). This trend is also true of total domestic production and overall agricultural exports. The only important exceptions were tea and tobacco, crops which had been developed under special programs.

1/ For some detailed discussion of the issues, see F. Ellis, "Marketing Costs and the Processing of Cashewnuts in Tanzania: An Analysis of the Marketing Margin and the Potential Level of the Producer Price;" and F. Ellis, and E. Hanak, "An Economic Analysis of the Coffee Industry in Tanzania, 1969/70-1978/79: Towards a Higher and More Stable Producer Price," Economic Research Bureau Papers 79.2 and 80.4 respectively, (University of Dar es Salaam, 1980 and 1981).

2/ F. Ellis, "Agricultural Price Policy in Tanzania," World Development, Vol. 10, No. 4 (1982).

3/ Ibid.

4/ This was also significantly affected by domestic demand, as was the case in Kenya.

Table 10. Tanzania: Agricultural Exports, Real Producer Prices and Export Unit Values, 1972-74 to 1977-79

Export Item	Percentage Change in Volume	Percentage Change in Real Producer Price <u>1/</u>	Percentage Change in Real Export Unit Value <u>2/</u>
Cotton	-27.5	2.3	-4.8
Coffee	-8.3	5.9	91.5
Sisal	-37.2	-46.4	-35.8
Tea	48.1	10.0	0.6
Cashew nuts	-53.5	-23.6	16.8
Pyrethrum <u>3/</u>	-30.0	-21.7	-9.0 <u>4/</u>
Tobacco	43.9	-23.9	3.3

Source: Export volume figures and sisal prices are taken from the Economic Survey; pyrethrum extract figures from the Tanzania Customs and Excise Department, Annual Trade Report; and price data from F. Ellis, "Agricultural Price Policy in Tanzania," World Development, Vol. 10, No. 4 (1982)--Appendix Tables pp. 281-83.

1/ Crop years 1972/73-1973/74 to 1977/78-1978/79 except for sisal which refers to crop years 1973/74-1974/75 to 1977/78-1978/79.

2/ Export unit values are deflated by the national consumer price index.

3/ Pyrethrum extract.

4/ Refers to years 1972-74 to 1977-78.

(iii) Conclusion

It can be concluded from the brief survey of the Kenyan and Tanzanian agricultural export performance that part of the difference in outcomes in the two countries should be found in the difference in the degree of price biasedness against exporters. In other words, to the extent that one can tell by looking at the behavior of producer prices, the Kenyan and Tanzanian experiences do support the hypothesis advanced in the World Bank report.

b. Agricultural relative-prices and exports

It will be recalled from Section III that one policy reaction following the shocks of the mid-1970s was the change in agricultural prices in the two countries. Tanzania shifted incentives clearly in favor of food crops, while Kenya--less speedily--tilted them in favor of export or industrial crops. Movements in relative prices in the two countries can be seen from Tables 11 and 12, which also give data on marketed production.

It can be seen from the tables that in Tanzania, export-crop prices relative to domestic-crop prices (mainly those of domestic food crops) declined by 31 percent between 1973/74 and 1978/79 (Table 11), while in Kenya the reverse was taking place--cereal prices relative to temporary industrial-crop prices 1/ and relative to permanent-crop prices 2/ declined by 19.3 percent and 36.5 percent, respectively, over 1975-78 3/ (Table 12). The prices of livestock and related products relative to those of export/industrial crops 4/ were also declining in Kenya. The data in Tables 11 and 12 indicate that the shift in relative prices might have led producers in these low-income economies to shift production in the direction implied by the price incentives--away from certain export crops toward domestic crop (food) production in Tanzania, and away from certain food products toward export/industrial crop production in Kenya. The tonnage of smallholder export crops relative to that of domestic crops declined by 20.4 percent over 1973/74-1978/79 in Tanzania (Table 11), while in Kenya, over 1975-78, the quantum index for officially-marketed cereals showed a decline of over 28 percent in contrast to the upward trends for temporary industrial crops and permanent crops (Table 12).

These results look rather strong, although their full interpretation--particularly their long-term implications--must still remain cautious in view of the many factors other than prices influencing overall and individual crop production over a given period, 5/ the limited

1/ Mainly those of pyrethrum, sugarcane, cotton and tobacco--see Statistical Abstract (1979), p. 103, for detail classification.

2/ Mainly those of coffee, tea and sisal, see Statistical Abstract, ibid.

3/ Note the relevant periods are 1973/74-1978/79 for Tanzania and 1975-78 for Kenya as agricultural prices were significantly revised in 1974 in Tanzania and 1975 in Kenya.

4/ Temporary industrial crops and permanent crops.

5/ de Wilde, op. cit.

Table 11. Tanzania: Agricultural Producer Prices and Marketed Production, 1973-74 to 1978/79

(Indices, 1969/70 = 100) 1/

	<u>Producer Prices 2/</u>			<u>Marketed Production 2/</u>		
	1973/74	1978/79	Percentage Change	1973/74	1978/79	Percentage Change
<u>Export Crops</u>	<u>106.8</u>	<u>203.2</u>	<u>90.3</u>	<u>97.0</u>	<u>75.2</u>	<u>-22.5</u>
<u>Domestic Crops</u>	<u>115.8</u>	<u>319.5</u>	<u>175.9</u>	<u>120.2</u>	<u>278.2</u>	<u>131.4</u>
Staple grains	109.9	277.0	152.0	123.2	223.5	81.4
Drought crops	207.5	399.0	92.3	136.4	958.1	602.4
Oilseeds	106.8	308.1	188.5	90.8	97.8	7.7
<u>Memorandum Items:</u>						
Export-crop prices as a percentage of domestic--crop prices	92.2	63.6	-31.0	--	--	--
Smallholder export-crop tonnage as a percentage of domestic-crop tonnage	--	--	--	105.8	84.2	-20.4

Source: Ellis, F., "Agricultural Price Policy in Tanzania," World Development, Vol 10, No. 4 (1982), Appendix Tables, pp. 281-83.

1/ Price indices are weighted by values; production indices are not weighted--they simply show tonnage.

2/ These relate to officially-marketed items.

Table 12. Kenya: Marketed Agricultural Production and Prices, 1975-78

(Indices, 1972 = 100)

	1975	1976	1977	1978	Percentage Change 1975-78
<u>Quantum Indices</u>					
Cereals <u>1/</u>	119.9	145.0	115.1	86.0	-28.3
Temporary industrial crops	132.7	125.1	129.5	148.2	11.7
Permanent crops	106.0	121.2	150.7	143.9	35.8
Total crops	113.6	126.8	138.9	130.8	
Livestock and products	86.3	81.4	94.3	91.2	5.7
Grand total	104.5	111.1	122.5	116.7	
<u>Price Indices</u>					
Cereals <u>1/</u>	186.2	209.5	238.2	246.7	32.5
Temporary industrial crops	143.4	167.2	208.8	235.5	64.2
Permanent crops	144.2	260.1	433.7	300.7	108.5
Total crops	150.7	231.7	366.1	279.4	
Livestock and products	133.1	145.0	165.7	217.8	63.6
Grand total	146.2	212.4	319.5	264.7	
<u>Memorandum Items:</u>					
Cereal prices as per cent of:					
Temporary industrial-crop prices	129.8	125.3	114.1	104.8	-19.3
Permanent crop prices	129.1	80.5	54.9	82.0	-36.5
Livestock and products prices as per cent of:					
Temporary industrial crop prices	92.8	86.7	79.4	92.5	-0.3
Permanent crop prices	92.3	55.7	38.2	72.4	-21.6

Source: Kenya, Economic Survey (1977 and 1979).

1/ Based on sales to official Marketing Boards only.

evidence on factors influencing overall rather than single crop production, and, of course, the limited country sample. Nevertheless, the Kenyan and Tanzanian experiences, after the shocks of the mid-1970s, do point to the possibility of crop substitution rather than substantial overall production growth, at least in the short run, in response to changes in relative prices in low-income economies as a significant problem or at least a factor to contend with in the management of economic adjustment. While there is strong evidence that an increase in the price of an individual crop will lead to a positive response increasing the supply of that crop there is no equally strong evidence that a shift in relative prices will be accompanied by a significant rise in overall agricultural production. 1/

In the event of a severe drought, such as the one that took place in Tanzania, a simple risk analysis 2/ of small-holder producer behavior seems to explain the strong shift toward food production. The small-holder peasant producer--who generally raises both food and cash or export crops--perceives production risk not only as a function of perceived or anticipated weather variations but also of the value of purchased inputs (which may also include the imputed value of owned resources). An increase in the perceived severity of a drought will raise the risk of producing a given crop, but given the strategic importance of food security in peasant agriculture 3/ also shift production in favor of drought-resistant food crops. Also, perceived risk will be higher, the higher the value of purchased inputs for a given crop. For smallholder traditional export crops, purchased inputs are quite substantial relative to food crops 4/ so that even though labor returns are significantly higher for the export crops, 5/ the expected value of the loss function turns out to be higher for the latter sub-group of crops. 6/ More specifically, the risk for annual export crops such as cotton, tobacco, and pyrethrum is quite high--in contrast to tree crops--because the probability of crop failure is

1/ For a summary of the evidence in Sub-Saharan Africa, see M. Bond, "Agricultural Responses to Prices in Sub-Saharan African countries", International Monetary Fund DM/83/39 (May 1983).

2/ See, for instance, K. G. Swanberg and E. Hogan, "Implications of the Drought Syndrome for Agricultural Planning in East Africa: The Case of Tanzania," Development Discussion Paper No. 120, Harvard Institute for International Development, Harvard University (August 1981).

3/ For emphasis on food security in peasant agriculture see J. C. de Wilde, "Price Incentives and African Agricultural Development," in Bates and Lofchie, op. cit.

4/ For comparative Tanzanian data see Swanberg and Hogan, ibid., p. 16.

5/ Ibid., p. 16.

6/ Swanberg and Hogan, ibid., p. 19; using estimates for the standard deviation of the mean gross margins derived under similar ecological regimes in Kenya.

high and the purchased inputs substantial. Hence, the likelihood of acreage substitution between these crops and their principal competitors--some food crops--is quite significant. 1/

The annual export crops have further risks associated with them. First, food-crop prices tend to be officially fixed annually in contrast to some export producer prices that are determined by varying international prices and marketing costs; price variability may increase perceived risk. Second, domestic institutional failures, e.g., delayed purchases and/or payments, may affect export producers, who have very limited domestic market alternatives, more adversely than food-crop producers, who may resort to domestic informal markets. Finally, more exacting processing and grading procedures are required for certain export crops, thus increasing the chances that a given quantum of output will be downgraded or even rejected at buying points.

Thus, purely on risk terms, food crops--termed staple grains and drought crops in Table 11--will be quite attractive in the event of a severe drought, as producers will seek to ensure food security first and minimize products requiring substantial purchased inputs. A strong shift in relative prices in favor of food crops, as took place in Tanzania in the mid-1970s, simply reinforces that trend and could lead to an absolute decline in export crops. Domestic crop prices in Tanzania rose by nearly 176 percent between 1973/74 and 1978/79 and marketed output by over 130 percent (Table 11), with drought crops marketed showing massive increases. 2/ Annual export crops--notably cotton and pyrethrum--experienced substantial production declines (Table 10), with total export production also declining. The mid-1970s was also the time during which the widespread villagization movement reached its peak and reinforced the food-security factor in the new areas of peasant settlement. 3/ Cashew nuts, for instance, though not an annual crop, were conspicuously affected by the villagization movement--with output falling from over 145,000 tons in 1973/74 to less than 97,000 tons in 1976/77.

Thus the substantial decline in agricultural exports in Tanzania in the post-shock period is significantly related to the pricing policies that were overly influenced by one aspect of the shocks of the mid-1970s--drought and the huge domestic food-production shortfalls. The sharp recovery in food production later in the 1970s and the more than

1/ Ibid., p. 16.

2/ The rise in marketed drought crops very likely overestimates production response. quite a substantial part of the increase could have been simply due to increased procurement efforts by the food-marketing parastatal--the National Milling Corporation.

3/ For a short description of this movement and its effect on production, see, for instance, G. Hyden, "The Resilience of the Peasant Mode of Production: The Case of Tanzania," in Bates and Lofchie, op. cit.; and for a more detailed treatment in G. Hyden, Beyond Ujamaa in Tanzania, (Heinemann, London, 1980).

self-sufficiency in domestic grain requirements were achieved at the expense of export-crop production growth that was also necessary for the narrowing of the large balance of payments deficits of the 1970s. Export production was further adversely affected by depressed producer prices arising partly from the poor financial performance of the marketing parastatals, ^{1/} as already noted. The real effective exchange rate had, by end-1978, also shown significant appreciation vis-a-vis 1973 levels, so that there was further downward pressure on real producer prices from this side.

A look at the Kenyan data (Table 12) also indicates, as already stated, the existence of crop-substitution problems and underlines the importance of fixing appropriate relative prices for food and non-food crops in inducing desired adjustments in agriculture. In the case of Kenya, the systematic price bias in favor of temporary industrial and permanent crops (exports) and against cereals and livestock and related products (Table 12) resulted in the substitution of, for instance, temporary industrial crops (e.g., sugarcane) for cereals (e.g., maize) as has been recently noted by the World Bank. The price bias in favor of industrial/export crops has resulted partly from the Government's practice of liberally passing on world export prices to domestic producers while elaborately controlling the pricing and marketing of domestic food crops and livestock products. Food marketing has tended to be inefficient and prices too low, thus discouraging production. Crop substitution, partly the result of pricing decisions, was becoming a significant problem in Kenya's agriculture in the late 1970s. As was remarked by the World Bank, "...the Price Review does not appear to give much weight to relative incentives among crops, (thus) there is no consideration of substitution effects. More importantly, there is no analysis of the trade-off between producing food crops and exports crops. Although the Government neither sets nor stabilizes export prices, which move in line with international prices, the effects of export prices on the substitution of cash for food crops, especially in view of the growing land constraint, needs to be considered in sector planning."

Thus, the relatively good performance in cash crops and agricultural exports in Kenya was accompanied by a conspicuous weakening in food-crop production (Table 12). As poor food-production performance would eventually affect the balance of payments adversely--as was demonstrated in the late 1970s and early 1980s, it can be concluded also that the pricing policies pursued were problematic--as was the case of Tanzania.

^{1/} Over 1969-80, the producer share of the export price declined from 70 to 35 percent in the case of cashew, from 70 cent to 45 percent in the case of cotton, from 61 to 48 percent in the case of tobacco, and from 81 to 45 percent in the case of coffee; see Ellis, "Agricultural Price Policy in Tanzania, *op. cit.*"

c. Subsidies and manufactured exports in Kenya

In the case of Kenya, the next important single export category-- apart from agricultural commodities--during the period of this study was manufactured goods. Excluding petroleum products, that category constituted over 30 percent of total exports over 1973-75. 1/ The behavior of manufactured and other major export categories between 1975 and 1978-79 is shown in Table 13.

As can be seen from the table, total export volume was almost stagnant between 1975 and 1978-79, with the rather strong rise in the volume of the first two categories--mainly agricultural exports--having been offset by substantial declines in the other categories. Thus the negative annual growth rate that has already been noted for the period 1974-78 (Table 8) must be associated with the decline in nonagricultural exports. Given the share of manufactured goods in the total exports in the mid-1970s, it is clear that the sharp declines in the former--almost 34 percent for manufactured goods and 39 percent for miscellaneous manufactured articles (Table 13)--must have been the central cause of poor export performance in Kenya. 2/

A principal policy instrument that was instituted to encourage manufactured exports was, as stated in Section III, export subsidies. This was to be complemented by the control of domestic inflation. Prior to the institution of the 10 percent subsidy in 1974, the only explicit intervention for export promotion was a duty-drawback scheme which was, however, discretionary and used relatively little. Most manufactured goods became eligible, under the 1974 subsidy scheme, as a result of the proviso that the value of imported materials used in production should not exceed 70 percent. 3/

The subsidy scheme, however, does not seem to have been quite effective--as was revealed by a recent survey study. 4/ It is reported in that study of 55 manufacturing firms conducted in 1977 that 40 percent of exporting firms treated the subsidy as a windfall gain--that is, did not increase exports--while 16 percent did not even claim the

1/ See Kenya, Statistical Abstract, (1980) pp. 58-59.

2/ This conclusion is also stressed by Ibrahim, op. cit. Fuel exports were also important--having a share of over 20 percent of the total over 1973-75--but given the very direct dependence of these on imports, their decline may not be that important. Actually, there was also a decline in the quantum of oil imports between 1975 and 1978-79.

3/ P. Low, "Export Subsidies and Trade Policy: The Experience of Kenya," World Development, Vol. 10, No. 4 (1982), pp. 294.

4/ Low, ibid., and "Kenya Government Policy Towards the Export of Manufactured Goods from 1964," unpublished doctoral thesis, University of Sussex (1980).

Table 13. Kenya: Export Quantum Indices, 1975 to 1978-79

(1976 = 100)

Category	1975	1978-79	Percentage change
Food and live animals	86	113.5	32.0
Beverages and tobacco	94	124.5	32.4
Crude materials, inedible	98	87	-11.2
Mineral fuels	102	84.5	-17.2
Manufactured goods	101	67	-33.7
Miscellaneous manufactured articles	130	79	-39.2
Total exports	94	95	1.1

Source: Kenya, Statistical Abstract (1980).

subsidy; only 37 percent claimed to have increased exports as a result of the subsidy. 1/ However, the study also revealed that, in general, greater export orientation--as measured by the percentage of total output exported in 1977--was associated with a positive response to the availability of export subsidies. 2/ Further, the study separately indicated--by expressing 1976 subsidy disbursements as a percentage of total eligible exports for that year--that a substantial number of exporters did not claim or were not granted the subsidy.

Two main reasons seem to explain the generally low level of response. First, the interval between exporting and receiving the subsidy was quite long as a result of administrative delays. 3/ Further, the subsidy payments were subject to some uncertainty. 4/ The combination of delay and uncertainty reduced the perceived exporter value of the subsidy.

The second major reason for the low response was the strong anti-export bias, partly resulting from the high levels of domestic industrial protection that had characterized Kenya's import-substituting industrialization. 5/ This made the effective exchange rate on imports--measured as the official exchange rate adjusted for taxes and subsidies--significantly higher than on exports (even after adjusting for the export subsidy). 6/ Partly as a result, export subsidies required to equalize returns on local and foreign sales tended to be much higher than was allowed for under the scheme. 7/ Therefore, local sales remained substantially more profitable than exports. The rapid growth of manufacturing output, already noted in Section IV (Table 4), when manufactured exports were declining is also an indicator of higher local profitability--as was observed in a different study 8/

The relative constancy of the nominal exchange rate resulting from the exchange-rate policies pursued in both Kenya and Tanzania, together

1/ See Low, "Export Subsidies and Trade Policy: The Experience of Kenya," *op. cit.*, Table 1, p. 295.

2/ Low, *ibid.*, Table 2, p. 296.

3/ See Low, *ibid.*, p. 297, for the waiting times as revealed by the survey.

4/ Low, *ibid.*, p. 297.

5/ For details, see for instance, M. G. Phelps, and B. Wasow, "Measuring Protection and Its Effects in Kenya," Working Paper No. 37, Institute of Development Studies, University of Nairobi (1972); J. H. Powers, "The Role of Protection in Industrialization Policy with Particular Reference to Kenya," *Eastern Africa Economic Review* (June 1972); and A. Hazlewood, *The Economy of Kenya*, *op. cit.*, Chapter 5.

6/ Low, "Export Subsidies and Trade Policy: The Experience of Kenya," *op. cit.*, Table 3, p. 298.

7/ Low, *ibid.*, Table 4, p. 298.

8/ Ibrahim, *op. cit.*, p. 134.

with high domestic inflation rates relative to those abroad, had led to significant appreciation of the real effective exchange rate for the Kenyan and Tanzanian shillings. Thus, between 1973 and 1978, the real import-weighted effective exchange rate for the Kenyan shilling appreciated by 6.6 percent, while in Tanzania it had gone up by 7.5 percent. 1/ Appreciation of the exchange rate not only increased attractiveness of producing for the domestic market, but also led to the loss of competitiveness. 2/

It can be concluded, therefore, that subsidies, which were the principal instrument for promoting manufactured exports, achieved very limited results over the 1975-78 adjustment period. Both the relatively attractive domestic market--resulting directly from the strong anti-export bias, including the appreciation of the exchange rate, and the administrative drawbacks on the scheme's operation were cited by exporters as important considerations influencing their response. 3/ However, even with various reforms in the scheme--as took place in 1980--it is not difficult to see the long-term problems.

The striking failure of the export promotion system (Table 13) raises serious doubts about the entire approach. In particular, the government budgetary problem soon arises as "the budgetary constraint bites at a low level of export 'protection' relative to existing domestic-market protection." 4/ Indeed, it is not surprising that the scheme had to be abandoned in 1982, as it became quite heavy on the budget. The potential size of the manufacturing export sector in Kenya and the considerable reduction of the anti-export bias required to turn that sector into a dynamic force necessary for the country's continued development, seriously limit the extent to which the government budget can be relied upon as a generalized instrument of export promotion. In addition, subsidies could provoke retaliatory and other actions by trade partners--both regional and those in the rest of the world.

Another minor problem that seems to have arisen in relation to export promotion was the behavior of multinational-corporation subsidiaries. There was some evidence of corporate policies which restricted exporting

1/ Fund staff calculations.

2/ For the empirical testing of the importance of the exchange rate on nontraditional exports, see for instance, J. D. Teigeiro, and R. A. Elson, "The Export Promotion System and the Growth of Minor Exports in Columbia," International Monetary Fund Staff Papers, Vol. 20, No. 2 (1973); also see W. R. Cline "Economic Stabilization in Peru, 1975-78" in Cline and Weintraub, (eds.) op. cit., pp. 314-315.

3/ Low, "Export Subsidies and Trade Policy: The Experience of Kenya," op. cit., p. 299.

4/ Low, ibid., p. 301. See also Teigeiro and Elson, op. cit., for the case of Columbia.

to specific markets; a number of foreign-owned or partly foreign-owned firms had explicit understandings with their parent companies which prevented them from seeking export markets either at all or outside specific areas. 1/

It would, however, be an oversimplification to suggest that the poor export performance was entirely due to the limitations of the subsidy operation and the anti-export bias. Already in the 1970s, there was a slow-down in the growth of Kenyan exports to Tanzania and Uganda--the East African Common Market partners--as the latter were catching-up in import substitution to Kenya's disadvantage. 2/ In 1977, the East African Community broke up and significantly affected Kenya's manufactured exports. Tanzania and Uganda had, on the average, imported a fifth of Kenya's manufactured exports in 1975-76, and after the Community break-up, there was a drop of about 25 percent in value--between 1975-76 and 1977-78. Diversion of trade to other markets could not have been easy even in the presence of stronger incentives as new market penetration presents difficult problems, particularly for a low-income country. These problems--among others, relatively underdeveloped industrial infrastructure, inexperienced management, transport difficulties, unfamiliarity with requirements of potential markets, lack of commercial channels and an inadequate financial network--are wide-ranging. Thus, as has recently been observed by the World Bank, "reduction of the anti-export bias in the trade regime will not assure rapid growth and diversification of exports" as long as those many handicaps common to new exporters are not effectively tackled.

At the end of the adjustment period in 1978, Kenya was therefore still performing poorly with respect to export-volume growth mainly as a result of the decline in manufactured exports. The Government adjustment program's target of .8 percent annual export volume growth was a far cry from the actual performance of only 1 percent over the entire period. Part of this serious problem resulted from an over-reliance on an export-policy instrument--subsidies--that was met with low response as a result of administrative difficulties and failure to substantially reduce the anti-export bias. Exporters were also still faced with the usual handicaps common to new foreign-market entrants.

d. Primary-export processing in Tanzania

An explicit policy approach for export promotion in the Tanzanian adjustment program was, as stated in Section III, primary-export processing--to be implemented mainly through continued investment in plant and equipment. This can be seen as a modification to the domestic-demand-based basic industry strategy also launched in the mid-1970s.

1/ Low, ibid., p. 300.

2/ Ibrahim, op. cit., p. 124; and R. C. Porter, "Kenya's Future as an Exporter of Manufactures," Eastern Africa Economic Review, (June 1974).

Outcomes of the processing efforts in the areas where they were expected to make significant contribution are summarized in Table 14.

The table shows unambiguously that export performance in that direction was also poor. Exports of processed products that are easily expressed in quantity terms--sisal rope and twine, cashew kernels, and pyrethrum extract--which were also, as a group, the most important in value, declined between 1973 and 1978. Also shares of both processed and total manufactured exports in the overall total declined by 1978--taking either 1973 or 1975 as a base (Table 14). Thus, Tanzania was failing not only in increasing its quantity of exports but also in effecting structural change toward the fastest growing part of world trade.

There are many reasons to explain the poor performance in processed and manufactured exports, and all cannot be discussed in detail in this paper. One important reason, however, must have been the decline in domestic raw material output for processing, which to a good extent explains the fall in the exports of cashew kernels and pyrethrum extract. The fall in processed output and therefore low utilization of processing capacity was also leading to rising ICORs, as was seen in Section IV. The second reason was rising domestic demand whose effect was probably most marked on cotton textiles. But expansion of textile and leather production was also adversely affected by the economic crisis, leading to alterations in financing plans. A third reason was the various international marketing problems and protectionist pressures, which affected items like sisal products, on the one hand, and leather and cotton fabrics on the other. A final factor was the break-up of the East African Common Market, whose effects were only partially compensated by diversion to other markets.

It is difficult to believe, however, that these isolated reasons can explain the generally poor performance. A basic difficulty must lie in the export strategy--primary export processing--that was emphasized in the adjustment program. First of all, processed exports in 1973 constituted a very small share of total exports (Table 14), so that giving it primary emphasis was in a way being indecisive--in terms of being able to manage the large payments gap by supply expansion and by effecting structural change. Secondly, and probably more important, the distinction between processed and manufactured exports--which easily becomes rather tenuous in the economic circumstances of Tanzania--was in a way misplaced. It would seem that a more meaningful approach would have been one that emphasized total manufactured export expansion rather than simply processed exports. The latter are only a part--although a very important one--of the former.

It can thus be said that in effect Tanzania lacked a viable export policy. Emphasis on primary export processing was unlikely to have a decisive impact on total exports, given the initial share, and failed to push manufactured export growth because the main accompanying measure--

Table 14. Tanzania: Processed and Manufactured Exports, 1973-78
(Quantities in quintals and values in millions of shillings)

Export Item	1973		1975		1978	
	Quantity	Value	Quantity	Value	Quantity	Value
Processed exports						
Sisal rope and twine	294,311	72.3	159,486	89.5	271,160	115.5
Cashew kernels	37,087	32.7	39,997	44.1	36,346	67.9
Pyrethrum extract	1,369	16.6	1,340	19.3	687	17.3
Cotton textiles and products	--	14.7	--	15.4	--	4.0
Hides, skins and leather	--	47.0	--	44.0	--	19.6
Total	--	<u>183.3</u>	--	<u>212.3</u>	--	<u>224.3</u>
<u>Memorandum items:</u>						
Total manufactured exports	--	235.4	--	269.5	--	310.4
Processed exports as per cent of total exports	--	7.2	--	7.6	--	6.1

Source: Various issues of Tanzania Customs and Excise Department, Annual Trade Report; and Bank of Tanzania, Economic Bulletin.

investment in plant and equipment for primary processing, which was by itself successful--lacked the comprehensiveness necessary for the promotion of such exports. Export processing, as already said, was also limited by declining domestic raw material production. Other manufactured export promotion measures that were in place--restriction of domestic demand, an import duty drawback scheme, export targeting for individual manufacturers--were neither centrally administered nor pursued with persistence.

By the end of 1978, therefore, as a result of the lack of effective export promotion policies, Tanzania's total export volume remained well below the 1973 level due to declines in agricultural, processed and total manufactured exports. The demand side of the balance of payments, however, was, until 1977, effectively managed by quantitative import controls. This one-sided practice in balance-of-payments management led to a strong bias against exports, making production for the domestic market much more attractive--as was the case in Kenya. And the relative unattractiveness of external markets did not necessarily mean that financial losses would be incurred by domestic exporters because of the appreciated real effective exchange rate. Indeed, a World Bank-sponsored study completed in 1978 found out that in general profits could be made--for a wide sample of manufactured articles--at the exchange rate prevailing at that time. The point is rather that domestic sales were leading to higher profits, and were therefore more attractive for the producer. The anti-export bias reinforced the various practices that were resulting from the earlier import-substituting industrialization, 1/ and was itself reinforced by the domestic-demand-oriented basic industry strategy of the mid-1970s.

The lack of emphasis on export production in Tanzania can be interpreted as the result of the greater attention devoted to meeting the food crisis. 2/ At another level, however, this lack of emphasis reflected inadequate comprehension of the complexities of "economic transformation"--from an open, dependent and poorly industrialized country to a self-reliant more industrialized economy, 3/ and specifically the role of international trade in the transition and beyond.

1/ For details, see J. F. Rweyemamu, Underdevelopment and Industrialization in Tanzania, (Nairobi: Oxford University Press, 1973).

2/ Failure to develop adequate storage, and to reduce dependence on rain-fed agriculture must be seen as important points on the negative side.

3/ For some thoughts on the process of transformation, see C. Y. Thomas, Dependence and Transformation, (New York: Monthly Review Press, 1974).

3. External transfers and other capital flows ^{1/}

A very important determinant of import capacity in the low-income economies of Kenya and Tanzania is, of course, the inflow of foreign capital--official transfers and other capital flows, which are on the whole not easily influenced by policy action in the short term. These are crucial in maintaining domestic investment rates essentially through the supply of machinery, equipment, technical assistance personnel and other requirements for capital formation. An important point to note in connection with these inflows is the fact that they are in general project-specific and therefore inflexible to use. In the adjustment experiences of Kenya and Tanzania, these flows were substantially used, no doubt as a result of growth-oriented adjustment already described. In terms of magnitudes, however, total net external financing--including the use of reserves--in both countries did not cover the external shocks over the two critical years 1974-75, and for the adjustment period as a whole. ^{2/} The coverage over 1974-75 was closer for Tanzania, but that was seriously disturbed by the internal exogenous shock--drought and the resulting food imports. The additional and more flexible financing obtained from the Fund and the World Bank in 1974 and 1975 neither covered the relatively large gap in Kenya nor matched the cost of additional food imports in Tanzania.

The inadequacy of external funding relative to exogenous shocks--both internal and external--contributed to import compression and slower growth in the two economies. The general inflexibility of external funding had separate sub-optimal effects on growth, as indicated in Section IV, by the manner it influenced current import capacity and domestic utilization of installed productive capacity.

Given the fact that, overall, capital flows as projected in the two country adjustment programs were met, the inadequacy in relation to the shocks could be associated with technical difficulties (uncertainties) of gauging the extent and impact of the shocks, and therefore of accurately projecting the financing gap. While this is part of the truth, it conceals various problems associated with mobilization of funds quickly enough to meet a crisis--which for a low-income economy could easily result in serious interruptions in production and essential (e.g. food) consumption. There were other problems related to uncertainty,

^{1/} The net service account is left out of this discussion partly because in both countries it is relatively small, although still significant--averaging nearly 15 percent of the purchasing power of exports in Kenya over 1974-78 and less than 9 percent over 1973-78 in Tanzania. It is safe to say that inadequate attention was given to this side of the balance of payments in both countries, given its size and potential.

^{2/} The measures of the shocks are those estimated by Balassa, "The Policy experience of Twelve Less-Developed Countries," op. cit.

mobilization cost, and micro-efficiency. 1/ A special problem arose in Tanzania in the mobilization of food-import assistance: an international basis on which substantial food aid could be mobilized promptly in response to drought hardly existed.

It can be concluded that the inflexibility and inadequacy of external financing, in relation to the exogenous shocks, increased payments imbalances vulnerability in the two countries. Domestic credit expansion under these conditions was likely to result in fairly quick spill-overs into the balance of payments.

4. Policy conclusions

In this section, emphasis has been put on the supply side of the two countries' balance of payments problems on the grounds that the various weaknesses in aggregate demand management were not enough to explain the payments imbalances in the two economies. The strong vulnerability to external-payments problems obviously points to the importance of aggregate demand management--mainly through monetary and fiscal policies, as outlined in Section V--but seen in the context of the growth-oriented or 'expansionary' adjustment perspective taken in the two countries, also points to the critical importance of foreign-exchange supply enhancement--mainly through exports of goods and services. The notable failure to increase manufactured exports in Kenya, and both agricultural and manufactured exports in Tanzania, must be regarded as extremely serious problems of adjustment in these economies. The "asymmetry of behavior" on the trade account--import volumes being contained without expanding exports at the same time--which has resulted over the adjustment period in both countries, points to limitations of import and exchange controls as a tool of balance-of-payments management, and to the weight which ought to be given to export promotion in national policy-making. These issues are taken up again in the next section.

A comparative assessment of experiences in the two countries in this section, firstly continues to underline the importance of a farmer-rewarding price policy for agricultural export-volume performance. 2/ But, as can be easily concluded from the agricultural experiences outlined above, balance-of-payments implications arising from the crop substitution

1/ For details, see Green, et.al., Economic Shocks and National Policy-Making, op. cit., pp. 129-135.

2/ For supportive evidence elsewhere in Africa, also see J. Hinderink and J. J. Sterkenburg, "Agricultural Policy and Production in Africa: The Aims, the Methods, and the Means"; and R. M. Hecht, "The Ivory Coast Economic Miracle: What Benefits for Peasant Farmers?", Journal of Modern African Studies, Vol 21 No. 1 (1983).

process have to be taken into account in the design of adjustment programs in low-income agricultural economies. Precise details on this matter are clearly beyond the scope of this paper, but a couple of guidelines seem to be warranted.

It can be said on the basis of Kenyan and Tanzanian experiences that, subject to ensuring remunerative prices, official intervention in agricultural pricing should be consistent with overall agricultural objectives. Thus a policy of, for instance, more or less allowing international export prices while rigorously controlling domestic food prices, as was done in Kenya, was not likely to be consistent with maximizing overall agricultural output--as low food prices discouraged food production. ^{1/} This was exacerbated by inefficient food-marketing arrangements. To be internally consistent, the pricing approach taken in Kenya would have to allow greater market determination of food prices, leaving it to public policy to intervene either with limited subsidies if that were socially pressing ^{2/} or with a specialized food-reserve management scheme to stabilize prices.

On the basis of the Tanzanian experience, it can be said that the rise in relative food prices over the adjustment period (Table 11), was unnecessarily strong and, given that an important part of the exogenous shock arose from the sharp rise in oil prices requiring an increase in export volume, inconsistent with the wider needs of adjustment. It has been argued in this Section that risk and food-security considerations tend to favor food production in these circumstances anyway, and that a generalized strong rise in relative food prices could lead to export-crop decline where a strong substitution process exists.

In the design of adjustment programs involving agricultural pricing, it would seem desirable, therefore, to preserve relative prices--given that absolute prices of either export or food crops have to be raised--or to change them only gradually paying particular attention to short-term results. ^{3/} Furthermore, pricing for equilibrium would also seem to imply, that lasting biases--in favor of export or food crops as happened in Kenya and Tanzania--should be avoided. Subject to the general requirement that agricultural prices be remunerative, relative prices would move in accordance with the requirements of domestic and external equilibria.

^{1/} This is true for marginal efforts by farmers who produce both food and export crops, and for specialized food producers.

^{2/} They can quickly create fiscal problems, and have therefore to serve well-defined limited purposes.

^{3/} This, in effect, implies shifting resources into the agricultural sector through improvements in internal terms of trade. For these agricultural economies, successful adjustment seems to require that. And evidence seems to indicate that overall agricultural output positively responds to such shifts in the internal terms of trade; see M. Bond, op. cit, pp. 13-19.

Secondly, the failure of the major specialized export-promotion policies in the country adjustment programs--specifically export subsidies in Kenya, and primary export-processing in Tanzania--support the view that for successful export growth, economy-wide policies are a necessary accompaniment of specialized measures.

Thirdly, it would seem that strategic choices in terms of export categories should be made in sufficiently broad terms, if they are to lead to a significant contribution toward the closing of balance-of-payments disequilibria. In most non-oil, non-mineral, low-income economies, the distinction between agricultural and manufactured exports still remains the basic one, so that promotional policies are better off starting there. Agricultural exports, because of their initial share in the total, are the most decisive in the medium-term, although the evolution of world demand points to manufactured exports as most dynamic 1/--as reflected in the growth of world trade. Medium-term adjustment policies should therefore take agricultural-export growth as the basis (of closing the disequilibrium) while raising the share of manufactured exports. 2/

Finally, the very poor export performance in the two low-income economies of Kenya and Tanzania partly points also to the comparatively low capacity for these economies to adjust to exogenous shocks. 3/ Export promotion has therefore to be accompanied by institutional and other changes aimed at tackling the many handicaps that face new exporters.

With respect to foreign grants and loans, the main issue relates to the changes that are necessary for enhancing the suitability of this accepted major instrument of international cooperation in the event of a major international shock. It is easily argued, on the basis of the Kenyan and Tanzanian experiences, that an international framework committed to continued growth and equilibrium in the low-income countries would seek to ensure undiminished "operational" and "developmental" imports to those countries in the event of a major shock. To achieve that, international cooperation and assistance would have to be more coordinated--so as to evolve global dimensions to the problem, more prompt, and more flexible--in the sense of being less project-tied.

1/ See, for instance, M. Goldstein, and M. S. Khan, Effects of a Slowdown in Industrial Countries on Growth in Non-Oil Developing Countries, International Monetary Fund Occasional Paper No. 12, Washington, D.C. (1982), Table 9, p. 13; and H. B. Chenery and D. B. Kessing, "The Changing Composition of Developing Country Exports," World Bank Staff Working Paper No. 314 (Washington D.C., January 1979).

2/ This should by no means, imply the underestimation of other minor exports, or the long-term potential of such exports as minerals, oil and gas, all of which are relatively unexplored in the low-income countries.

3/ For an emphasis of this point, see G.K. Helleiner, The IMF and Africa in the 1980s, Essays in International Finance No. 152 (Princeton, New Jersey: Princeton University, July 1983). p.19.

VII. Adjustment and External Balance

1. The adjustment perspective

The growth-oriented adjustment perspective--as was adopted in Kenya and Tanzania in the wake of the first oil-price shock--has gained broad support, although differences remain with respect to specifics. Thus, in reference to adjustment policies in the 1970s, the 1982 World Economic Outlook argued that "the success of an adjustment policy should be measured not only by how much the external deficit has been reduced, but also by how little reduction, or how much increase, in economic growth has taken place during the adjustment period." 1/ This adjustment perspective is all the more appropriate for low-income economies where satisfactory growth is fundamental to the achievement of basic economic and social objectives.

There are other reasons for the support of the growth-oriented or supply-enhancing adjustment strategy. First, demand-management policy instruments aimed at equating aggregate supply and demand--a fundamental aim of stabilization and adjustment programs--work sluggishly in low-income economies because of certain structural characteristics of those economies. 2/ Those characteristics make it harder to bring about a balance of payments improvement through measures that simply restrain domestic demand. 3/ Second, and related to the first reason, there is some empirical evidence to show that output and employment costs of restrictive demand management policies are indeed significant. 4/ For these reasons, it is easy to argue that supply-side measures should be used to minimize the costs of demand restraint in adjustment management. 5/

A growth-oriented or "expansionary" adjustment strategy in less developed countries is thus not only appealing but also defensible on both theoretical and empirical grounds. It is very important to recognize, however, that in the medium term the viability of that strategy in

1/ International Monetary Fund, World Economic Outlook, Occasional Paper No. 9, Washington, D.C. (April, 1982), p.17.

2/ For some discussion of those characteristics see Crockett, A.D., "Stabilization Policies in Developing Countries: Some Policy Considerations," International Monetary Fund, Staff Papers, Vol. 28 No. 1 (1981), pp. 58-62. Also see L. Taylor, "IS/LM in the Tropics: Diagrammatics of the New Structuralist Macro Critique," in W. R. Cline, and S. Weintraub (eds), Economic Stabilization in Developing Countries, op.cit.

3/ Crockett, A. D., ibid., p. 61.

4/ M. S. Khan, and M. D. Knight, "Stabilization Programs in Developing Countries: A Formal Framework," IMF Staff Papers, Vol. 28, No. 1 (1981).

5/ For elaboration on the supply-side policies, see M. S. Khan, and M. D. Knight, "Some Theoretical and Empirical Issues Relating to Economic Stabilization in Developing Countries," World Development, Vol. 10, No. 9 (1982), and Crockett op. cit.

economies that are substantially dependent on imports--like Kenya and Tanzania--is ultimately dependent on the strength of the external sector. ^{1/} It can therefore, be said that the strategy's viability ultimately depends on the success of both supply- and demand-side policies aimed at restoring external balance at growth rates that are not substantially below the average pre-shock record. In particular, it is only on the basis of reasonable growth in a country's foreign-exchange earning capacity that one can hope the usual foreign-capital inflows could fill the balance-of-payments gap and permit continued growth. As already indicated in the previous section, more coordinated, more prompt and more flexible foreign aid and other capital inflows in the low-income countries would also considerably enhance the viability of the growth-oriented strategy. It is clear from the preceding sections, however, that the adjustment efforts in the two countries did not meet the overriding requirement--the strengthening of the external sector (discounting the *exogenous 1976-78 beverage boom*)--for the viability of the strategy. This short concluding section emphasizes the broad policy perspectives--required for growth and external equilibrium in the medium term--that are derived from the Kenyan and Tanzanian growth-oriented adjustment experiences.

2. Demand-management policies

Direct issues related to demand-management in the two low-income countries--principally related to fiscal and monetary policies--were outlined in Section V. Particular attention was paid to fiscal deficits because of the interdependence between the latter and domestic money-creation. What ought to be emphasized here is that the experiences studied point to the rather obvious fact that effective demand-side policies are supportive of supply-side policies--aimed at, for instance, increasing exports and/or raising domestic savings. Effective demand-management policies are, therefore, very important for the success of a growth-oriented adjustment strategy.

It was, for example, concluded from the examination of export-promotion policies and performances in the two countries (Section VI) that supportive economy-wide policies were weak in both cases, partly leading to poor export-volume performance. Weaknesses in demand policies--reflected, for instance, in real per capita consumption rising faster than GDP in some years in both countries--were intensifying the conflict (common in less developed countries) between domestic absorption of local manufactures and exportation. This factor must have been of much greater importance in Kenya whose manufacturing-sector output was relatively large and growing rapidly (Table 4), yet experiencing a sharp decline in the exportation of manufactures (Table 13). The other aspect of the conflict resulting from demand-management weaknesses is, of course, the

^{1/} For an emphasis of this point in the context of African economies, see J. B. Zulu and S. M. Nsouli, "Adjustment Programmes in Africa: The Recent Experience, 1980-81," International Monetary Fund DM/83/54 (July 1983).

one between consumption and saving. As was suggested in Section IV, a positive interest-rate policy could lessen this conflict.

It was also shown in Section V that after the mid-1970s, average domestic price inflation rates, which remained higher than that in the trading partners, were significantly affected by demand-management weaknesses. This led to the appreciation of the real effective exchange rates, given the constancy of the nominal rates, and to the weakening of export incentives.

3. Supply-side policies

As already concluded, the glaring problem in the adjustment experiences of the two countries was the unsatisfactory export performance. The preceding sections indicate that, depending on the specific country, this was the result of a combination of the following factors: weak export incentives; the conflict (in terms of resource allocation) between domestic food and agricultural export production; the conflict between domestic absorption (mainly of manufactures) and exportation; low capacity to adjust; and general trade policies.

Unsatisfactory export performance was also seen in Section IV as one of the key aspects of failure to adjust to the inevitably much higher oil-import bills. Increasing export-volume in the two economies--in response to the oil-price shock--would have ensured the maintenance of growth-related oil demand, which is desirable from an adjustment point of view. Despite the encouraging achievements in domestic commercial energy production in the post-shock period (Table 6) it has to be recognized that in the medium term the decisive solution to the oil price shock for low-income, low-technology economies like Kenya's and Tanzania's is export expansion. 1/

The very poor record on export performance in the two countries raises questions about the appropriateness of their general trade policies. As was indicated in the previous sections, the emphasis on import and exchange controls was a one-sided approach to balance-of-payments management leading to an "asymmetry of behavior" on the trade accounts. Given the critical importance of increased import volume for growth in the medium term and therefore the limited room for maneuver in compressing imports without adversely affecting growth, the one-sided approach to balance-of-payments management becomes really questionable.

The issue of an appropriate trade policy, however, is complicated by its significant role in a country's entire development strategy--which, among other things, defines the allocation of resources to

1/ For energy-production problems, see for instance, T. C. Lowinger, "Petroleum Production in Developing Countries: Problems and Prospects," Journal of Energy and Development, Vol. 7, No 2 (1982).

different competing uses. The export-policy goal in a growth-oriented adjustment strategy should be, as was suggested in a study of export performances in Kenya, to achieve levels of exports, at the least cost, sufficient to enable the country to import without constraining the desired levels of imports in essentials. 1/ External equilibrium in this situation is approached as soon as trend performance in export volume is consistent with the target rate of growth--allowing a critical rate of increase in import capacity. This analysis for simplicity ignores various complications that could arise as a result of significant trend changes in other variables (e.g., external capital inflow) determining import capacity. It is not easy to be precise about the required rate of export-volume growth, but experience indicates that a minimum target should be a rate above that of the target GDP growth. 2/ A reasonably good performance in external capital inflows could then be expected to sustain a viable current account deficit.

Export-volume growth of between 5 and 7 percent per year in Kenya and Tanzania to satisfy the minimum conditions for external equilibrium, is a considerable challenge, given the performance record of 1974-78 (Table 8). The challenge is more serious for Tanzania. A wide range of pro-trade policies has to be pursued, therefore, to reverse the growth, inhibiting trend of export performance. Two important practical points of caution, however, ought to be made at this juncture. First, the pro-trade policies in the two countries will start from a point of serious disequilibrium managed by widespread controls, so that there are critical problems of a practical nature in managing the transition to a more pro-trade growth-permitting equilibrium. 3/ Second, and related to the first point, since a "distorted trade policy cannot be corrected quickly in only one or two steps," 4/ it is important to emphasize that controls as well as price mechanisms can both be used in a pro-trade manner to accelerate the approach toward equilibrium. 5/ At any rate, equilibrium as defined above has more to do with consistency (with the target growth rate) so that effective controls beyond that purpose is not our basic concern.

1/ T. E. Ibrahim, "Prospects for Export Growth in an African Economy: The Kenyan Case," op.cit., p. 135.

2/ This is based on the assumption of a unitary income elasticity of demand for imports, from some level of external equilibrium--defined in terms of a current account/GNP ratio.

3/ For some useful insights into the management of the transition, see D. B. Keesing, "Trade Policy for Developing Countries," World Bank Staff Working Paper No. 353 (Washington, D.C., August 1979).

4/ D. B. Keesing, "Trade Policy for Developing Countries," ibid., p. 233.

5/ Keesing, op.cit., p. 141. The issuing of import licenses could, for instance, discriminate in favour of inputs into export production generally, and foreign-exchange as well as import controls would pay special attention to the promotion of manufactured exports.

Specific export-promotion guidelines that are derived on the basis of the two-country experiences have already been outlined in the previous section. What needs greater emphasis is the importance of a conducive economy-wide framework within which specific measures would stand a greater chance of success. An important relationship in this regard-- which was more explicitly recognized in the Kenyan adjustment program-- is one between aggregate demand (domestic absorption) and supply, and the consequence of that on the real effective exchange rate. Demand-management weaknesses directly intensified the conflict between domestic absorption of local manufactures and exportation, as already indicated with specific reference to Kenya.

With respect to the exchange rate, it can be said that given the persistence of relatively high inflation rates in most less-developed countries in the 1970s and in Kenya and Tanzania in particular, a more flexible exchange-rate policy accompanied by improved demand-management was likely to be a potent instrument for protecting the profitability of export production, and therefore strengthening the external sector. This flexibility is all the more useful where room for raising producer prices through other means, (e.g., restricted government subsidies or the use of marketing-parastatal surpluses), is severely limited. Greater flexibility also avoids potentially large changes in the exchange rate which could significantly push up the price level and probably affect inflationary expectations, thus contradicting the price-stabilization objective. It should be noted, however, that the Tanzanian experience of declining producer shares in export proceeds implies that a more flexible exchange-rate policy may not be sufficient to protect, let alone, raise, export profitability. Serious reform of the marketing system would also have to be undertaken.

A flexible exchange-rate policy can be conveniently combined with domestic agricultural pricing to support more remunerative prices for export producers. ^{1/} The industrial protection system also has to be progressively reformed to increase production efficiency and ability to export. Growth in total exports should increasingly obviate the need for controls on growth-related imports.

As cautioned in the previous section, however, the export problem in the low-income countries is partly a reflection of their low capacity to adjust. Even with vigorous pro-trade policies, these countries would still face wide-ranging problems common to new exporters. Thus domestic efforts to solve these problems, as well as to further identify potential exports, have to go side-by-side with specific and economy-wide

^{1/} For some empirical evidence on the role of the real exchange rate on exports in an African economy (Zaire), see O. Johnson, "Macroeconomic disequilibrium--The Zairian Experience, 1967-81," International Monetary Fund DM/82/64 (September 1982).

promotional policies. Internal efforts would of course be aided by greater international understanding and cooperation in trade matters.

The second conflict that has been noted in relation to export performance is the one between domestic-food and agricultural-export production. One policy instrument that can be used to lessen that conflict is appropriate pricing whose broad directions were indicated in the previous section. It may be pointed out in addition that crop-substitution problems and weak agricultural trend performance are also a reflection of nonspecialized, low-productivity agriculture. As was indicated in Section IV, solution to this problem lies in productivity-enhancing factors--including directing greater resources to the agricultural sector. If productivity can be raised using both price and nonprice means, a more dynamic agriculture freer of crop-substitution problems should emerge.

Appendix Table 1. Kenya: Sources of Monetary Financing and Absorption, 1967-1978

(In millions of Kenyan shillings)

	1967	1971	1973	1974	1975	1976	1977	1978
<u>Sources</u>								
1. Internal credit monetization (Fi = (a)-(b))	302	675	601	910	441	328	337	2,535
(a) Change in bank lending	161	626	539	1,159	1,021	1,254	1,498	3,020
(b) Change in non-money domestic bank liabilities	-141	-49	-62	249	580	926	1,161	485
(i) change in quasi-money	117	187	193	233	434	483	988	1,079
(ii) change in other liabilities	-258	-236	-255	16	146	443	173	-594
2. External credit monetization (Fe)	74	234	365	556	524	507	779	1,265
3. Total current monetization (Fi + Fe)	376	909	966	1,466	965	835	1,116	3,800
4. Liquidity financing (Fm)	-146	-18	-427	279	650	-16	-1,097	-330
5. Total sources (3 + 4)	230	891	539	1,745	1,615	819	19	3,470
<u>Uses</u>								
6. Income growth	19	186	127	147	73	332	530	412
7. Price increase	27	109	247	609	675	693	964	249
8. Deficit	260	668	239	1,126	824	-215	-1,497	2,895
9. Total uses (6 + 7 + 8)	306	963	613	1,882	1,572	810	-3	3,556
10. Errors and omissions	-76	-72	-74	-137	43	9	22	-86

Source: Various issues of Central Bank of Kenya, Annual Report, and International Monetary Fund International Financial Statistics for monetary, balance-of-payments and price data, and Kenya, Statistical Abstract for product data.

Appendix Table 2. Kenya: Balance of Payments, 1967-1978

(In millions of Kenyan shillings)

	1967	1969	1971	1973	1974	1975	1976	1977	1978
Exports	1,580.0	1,804.0	2,098.0	3,290.0	4,150.0	4,648.0	6,224.0	9,360.0	7,330.0
Imports	2,332.0	2,426.0	3,924.0	4,380.0	7,352.0	7,220.0	8,158.0	10,586.0	14,466.0
Trade balance	-752.0	-622.0	-1,826.0	-1,090.0	-3,202.0	-2,572.0	-1,934.0	-1,226.0	-7,136.0
Balance on services	318.0	402.0	612.0	-2.0	778.0	524.0	966.0	904.0	1,290.0
Balance on goods and services	-434.0	-220.0	-1,214.0	-1,092.0	-2,424.0	-2,048.0	-968.0	-322.0	-5,846.0
Balance on transfers	20.0	162.0	416.0	156.0	138.0	370.0	270.0	550.0	796.0
Balance on current account	-414.0	-58.0	-798.0	-936.0	-2,286.0	-1,678.0	-698.0	228.0	-5,050.0
Balance on capital account	228.0	408.0	364.0	1,062.0	1,716.0	1,378.0	1,420.0	2,048.0	3,420.0
a. Government	64.0	126.0	-36.0	336.0	588.0	608.0	698.0	1,098.0	1,952.0
b. Parastatals	n.a.	n.a.	n.a.	n.a.	n.a.	216.0	100.0	-10.0	-60.0
c. Private	158.0	260.0	240.0	626.0	832.0	542.0	744.0	960.0	1,528.0
d. Other capital movements	6.0	22.0	60.0	100.0	296.0	12.0	-122.0	—	—
Net errors and omissions	76.0	82.0	72.0	73.0	137.0	-44.0	-10.0	-23.0	80.0
Overall balance	-110.0	432.0	-362.0	199.0	-433.0	-344.0	712.0	2,253.0	-1,550.0

Source: Central Bank of Kenya, Annual Report, (various issues).

Appendix Table 3. Tanzania: Sources of Monetary Financing and Absorption, 1967-1978

(In millions of Tanzanian shillings)

	1967	1971	1973	1974	1975	1976	1977	1978
<u>Sources</u>								
1. Internal credit monetization (F _i = (a)-(b))	-13.6	314.2	119.3	1,609	957	837	-185	2,391
(a) Change in bank lending	-111.3	521.9	215.5	1,490	1,633	1,315	418	3,377
(b) Change in non-money domestic bank liabilities	-97.7	207.7	95.7	-119	767	478	603	986
(i) change in quasi-money	44.1	128.9	183.7	128	232	321	383	605
(ii) change in other liabilities	-141.8	78.8	-88.0	-247	444	157	220	381
2. External credit monetization (F _e)	66.0	279	283.0	389	676	300	590	780
3. Total current monetization (F _i + F _e)	52.4	593.2	402.8	1,998	1,633	1,137	405	3,171
4. Liquidity financing (F _m)	-33.3	-259.2	-126.6	16	-319	-280	432	-224
5. Total sources (3 + 4)	19.1	334.0	276.2	2,014	1,314	857	837	2,947
<u>Uses</u>								
6. Income growth	69.0	99.7	93.6	96	138	205	293	301
7. Price increase	-5.2	35.7	116.0	507	338	507	947	108
8. Deficit	-109.3	101.6	156.7	1,363	881	81	166	3,098
9. Total uses (6 + 7 + 8)	-45.5	237.0	366.3	1,966	1,357	793	1,406	3,507
10. Errors and omissions	64.6	97.0	-90.1	48	-43	64	-559	-560

Source: Various issues of Bank of Tanzania, Economic and Operations Report and International Monetary Fund, International Financial Statistics for monetary, balance-of-payments and price data, and Tanzania, Economic Survey for product data.

Appendix Table 4. Tanzania: Balance of Payments, 1967-1978

(In millions of Tanzanian shillings)

	1967	1969	1971	1973	1974	1975	1976	1977	1978
Exports	1,734.4	1,717.5	1,871.3	2,553.4	2,851.2	2,788.5	4,107.8	4,464.2	3,670.6
Imports	1,713.8	1,790.3	2,835.1	3,532.7	5,303.0	5,728.5	5,354.7	6,161.3	8,797.7
Trade balance	20.6	-72.8	-963.8	-979.3	-2,451.8	-2,940.0	-1,246.9	-1,697.1	-5,127.1
Balance on services	-60.9	177.3	208.8	190.1	181.7	480.9	466.4	155.7	210.1
Balance on goods and services	-40.3	104.5	-755.0	-789.2	-2,270.1	-2,459.1	-780.5	-1,541.4	-4,917.0
Balance on transfers	67.9	75.5	41.4	34.9	351.4	759.2	464.0	961.6	1,271.8
Balance on current account	27.6	180.0	-713.6	-754.3	-1,918.7	1,699.9	-316.5	-579.8	-3,645.2
Balance on capital account	151.1	151.4	889.8	909.1	894.1	1,229.9	536.1	790.6	1,014.7
a. Government	158.8	138.0	919.5	990.9	647.6	1,091.2	830.5	722.9	765.1
b. Parastatals	n.a.	58.2	106.2	69.3	160.4	210.1	55.3	149.6	377.9
c. Private	n.a.	16.9	13.5	10.5	14.5	-2.1	-0.6	37.7	-57.5
d. Other capital movements	-7.7	-61.7	-149.4	-161.6	21.6	-69.3	-349.1	-119.6	-70.8
Net errors and omissions	-64.5	-174.8	-97.2	95.3	-49.4	44.6	-63.9	568.1	559.2
Special transactions	-8.1	6.8	64.0	—	50.7	264.7	—	212.9	124.6
Overall balance	106.1	163.4	143.0	250.1	-1,023.3	-160.7	155.7	991.8	-1,946.7

Source: Bank of Tanzania, Economic and Operations Report, (various issues).