

The Challenges Faced by Four African Economies: Zimbabwe, Zambia, Tanzania and the Sudan*

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Three African countries, Zambia, Tanzania and the Sudan (referred to subsequently as ZTS) provide excellent examples of the problems and challenges facing African countries generally, ones analyzed on a continent-wide basis by the World Bank study, *Accelerated Development in Sub-Saharan Africa*.¹ A fourth, Zimbabwe, which achieved majority rule in 1980, is potentially subject to the same problems. While these four countries have many problems in common, there are unique features in each, products of the natures of the economies and historical background.²

I. The Characteristics of the Economies

Table 1 shows some basic characteristics of the four countries. Zambia is the smallest in population, 5.8 million, and Zimbabwe is only slightly larger. By contrast, both Tanzania and the Sudan have approximately 19 million. All four countries show popula-

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¹ Washington, 1981.

² The authors spent three months in these countries in the Fall of 1982.

Table 1

PRIMARY FEATURES OF THE ECONOMIES:
ZIMBABWE, ZAMBIA, TANZANIA, SUDAN

	Zimbabwe	Zambia	Tanzania	Sudan
Population 1980 (millions)	7.7	5.8	18.7	18.7
Population Growth Rate 1970-80	3.3	3.1	3.4	3.0
% of Population in Urban Areas	23	43	12	25
Per Capita GDP US\$ (1980)	630	560	280	410
Per Capita GDP US\$ (latest year) ¹	(1982)	(1981)	(1982)	(1982)
Exports as % of GDP	39	45	12	8
Percentage of GDP (1980) from:				
Agriculture	14	14	51	38
Manufacturing	25	17	10	14
Mining	8	16	1	n
Other	53	53	38	48
Percentage of Labor Force (1980) in:				
Agriculture	60	67	83	72
Industry	15	11	6	10
Service	25	22	11	18
Percentage of Exports (1979) ² from:				
Agriculture	62	2	90	96
Manufacturing	13	1	6	4
Mining	25	97	4 ³	4

Sources: World Bank, *World Development Report* (Washington, 1982), and *Accelerated Development in Subsaharan Africa* (Washington, 1981); Monthly Statistical Bulletins, Annual Economic Survey volumes, and Central Bank Annual Reports of the countries.

n = negligible

¹These figures are calculated from sources in the respective countries, and are not necessarily comparable to World Bank figures shown on the previous line.

²For Tanzania, 1978 figures from World Bank, *Accelerated Development* are used, as more representative for the country than 1979 figures.

³Primarily petroleum exports (crude is imported).

tion growth rates (3% and over) in excess of that for Africa as a whole, but comparable to those of the other middle income oil importing countries. World Bank data indicate a much higher life expectancy at birth for Zimbabwe and Tanzania than the others and a much lower infant mortality rate in Zimbabwe, with Sudan the highest child mortality rate and the lowest life expectancy. Zambia has by far the highest degree of urbanization, 43%, one of the highest in Africa, Tanzania the lowest, with 12 percent. Half of the urban population is found in the two largest cities in the Sudan and Tanzania, only roughly a third in the other two countries.

Table 1 also shows the relative importance of the major sectors of the economy in the four countries. The majority of the population is dependent directly on agriculture in all four countries, with by far the greatest dependence in Tanzania, the lowest in Zimbabwe. But the percentage of GDP derived from agriculture shows a different picture; only Tanzania shows a figure in excess of 50%, and Zimbabwe and Zambia show figures of only 14 percent. The export picture is also markedly different, agriculture providing 90% of the exports from Tanzania and 96% from the Sudan, compared to 2% from Zambia, and 62% from Zimbabwe. The manufacturing sector is most important in Zimbabwe, providing 25% of the GDP, compared of figures half that great in the other countries; manufactures constitute 13% of Zimbabwe's exports, with lower figures in the other three countries.

Mining provides 16% of the GDP in Zambia (this varies widely from year to year with changes in world copper prices), and 97% of the exports; it provides 8% of Zimbabwe's GDP and 25% of its exports. The amounts are small in the other two countries.

The degree of dualism varies substantially. Zimbabwe has the largest modern non-African element, Zambia a much smaller sector, the other two only minor percentages. In all African countries the two parts of the dual economies are slowly merging. The degrees of openness of the economies (exports as % of GDP) vary from 45% in Zambia to 8% in the Sudan.

Table 1 also shows the per capita GDP figures, always subject to substantial error. Converted to U.S. dollars, the figures range from \$630 in Zimbabwe and \$560 in Zambia to \$410 in the Sudan

and \$280 in Tanzania.³ Figures for 1982, calculated from sources in the countries, are slightly lower. Thus, in summary, by usual criteria, Zimbabwe is the most developed of the four countries, with the highest per capita real income, the largest manufacturing sector and the only one to have significant exports of manufactured goods (as distinguished from processed mineral products). Yet Zimbabwe does have substantial agricultural exports.

II. The Growth of the Economies

Table 2 shows the relative growth of the economies over the last decade. The 1970-79 estimates of percentage changes in GDP are taken from the World Bank's *Accelerated Development* volume; the Tanzania figure is suspect, appearing to be far too high. Complete data are not available from local sources for the

Table 2
GROWTH OF THE FOUR ECONOMIES

Country	Percentage Change in GDP		Percentage Change in Per Capita GDP		Percentage Change in Volume of Agricultural Production 1970-79		Percentage Change in Industrial Output 1970-79	
	1970-79	1977-81	1970-79	1977-81	Total	Per Capita	1970-79	1979-80
Zimbabwe	+1.6	+4.9 ¹	-1.7	+2.0	+2.9	-0.4	+1.8	+9.8 ²
Zambia	+1.5	-1.2	-1.5	-3.4	+2.8	-0.2	+1.5	-13.1
Tanzania	+4.9	n	+1.5	n	+1.4	-2.0	+1.9	-3.5
Sudan	+4.3	n	+2.2	n	+1.8	-0.8	+3.3	n

Sources: World Bank, *Accelerated Development in SubSaharan Africa* (Washington, 1980); Monthly Statistical Bulletin, Annual Economic Survey volumes, and Central Bank Annual Reports of the countries.

n = negligible

¹1980: 11%, 1982: 3.5% (IMF Survey, April 4, 1983).

²1981-82: -2%.

1977-81 period; Zimbabwe shows a very high figure, Zambia negative (because of copper price declines). The figures for Tanzania and the Sudan may be negative; at any rate there was no significant increase. On a per capita basis, for the decade, the Sudan and Tanzania show increases, the other two decreases. But for the more recent years, up to 1981, Tanzania and the

³ The 1981 per capita GDP figure for Zambia is \$530.

Sudan appear to show negative figures, although for 1982 the Sudan may have had a net increase, due to sharp increases in farm output.

The 1970-79 agricultural output figures show a limited increase for all, Tanzania the lowest (increasing doubt about the World Bank's GDP figures), Zimbabwe the highest. All showed a decline on a per capita basis. All of these countries — particularly Zambia and the Sudan — have great unexploited agricultural potential, yet all showed declines in per capita output of food and other farm crops.

Table 2 also shows the growth in industrial output; in all countries the rate of growth is far less than the rate of population growth, except in the Sudan. The more recent figures, where available, show quite different results; in Tanzania, for example, output fell 3.5% in 1980-81, and in 1981 output fell 13.1% in Zambia, while the figure rose 9.8% in Zimbabwe.

All in all, these figures show a dismal picture; even in the relatively good years, per capita GDP and agricultural output were falling and in the last two years, with the worldwide recession, the declines are much more serious. The Zimbabwe experience has been better, but not outstanding.

Table 3
BALANCE OF PAYMENTS AND DEBT SERVICE

Country	Current Acct.			
	Deficit as % of GDP	Foreign Debt GDP	Service as % of Exports	Foreign Debt as % of GDP
Zambia (1981)	19.3	14.2	40	71
Zimbabwe (1980)	5.3 ¹	1.0	5.4	22
Tanzania (1980)	14.2	2.7	19	26
Sudan (1982)	8.5	10.2	128 ²	32

Sources: World Bank, *Accelerated Development in SubSaharan Africa* (Washington, 1981) and *World Development Report, 1982* (Washington, 1982); Monthly Statistical Bulletins, Annual Economic Survey volumes, and Central Bank Annual Reports of the countries; O.E.C.D., *External Debt of Developing Countries, 1982 Survey* (Paris, 1982).

¹1982: 12% (IMF Survey, April 4, 1983).

²Projected 1983.

Table 3 shows the foreign exchange and foreign debt situation of the four countries. Sudan and Tanzania show merchandise imports more than double exports; Zambia and Zimbabwe had a surplus on trade account in 1984⁴; all show a deficit on current account, equal to 19% of GDP in Zambia, 14% in Tanzania, 9% in the Sudan, 5% in Zimbabwe (rising to 12% in 1982). Far more serious is the very heavy drain on the economy caused by service on foreign debt in ZTS; in 1982/83 this constituted — if met — 128 percent of total exports in the Sudan and 40 percent of total exports in Zambia. The magnitude of the debt relative to GDP is by far the worst for Zambia, which has a much higher ratio of exports to GDP than the other countries; Zimbabwe debt and debt service are relatively low, but rising.

The serious deterioration in the balance of payments situation and in debt service in ZTS is a product of the severe decline in the terms of trade for many products of the LDCs, and particularly for copper. Copper prices fell before the current recession but the decline has been aggravated by the latter. In the period 1970-79, Tanzania's income-terms of trade fell by 4.4% a year, Sudan's 2.8%, Zambia's 9.7%, whereas for subSaharan Africa as a whole the figure rose by .6%.⁵ The debt service problems of ZTS have been aggravated by the extensive borrowing early in the decade, when export prices were better and funds were readily available; much of the borrowing went into infrastructure and projects that have not paid off, certainly in terms of exports. As a consequence of this situation, the ZTS countries have not been able to meet debt service obligations and have been obtaining extensions, but this, of course, builds up arrears.

III. The Causes of the Problems

The discouraging performance of the three economies are products of a variety of causes, in part misdirected government policies, but in part products of the underlying factors of the deteriorating terms of trade due to world economic developments and the inadequacy of trained personnel for policy determination

⁴ World Bank, *World Development Report; 1982*, *op. cit.*, pp. 124-125.

⁵ World Bank, *Accelerated Development*, *op. cit.*, p. 155.

and implementation in the years following independence. Consideration will be given first to agriculture, the basis of the support of the majority of the people of the countries.

A. Agriculture

The index of food production per capita (with 1969-71 equal to 100) was 92 in Tanzania, 95 in Zambia, 97 in Zimbabwe and 102 in Sudan in 1978-80.⁶ Thus, except in Sudan, food production is not keeping up with population growth and, with increasing incomes and high income elasticities of demand for food, further pressures are put on the food supply. The disappointing performance of agriculture has not only affected living levels but resulted at times in severe shortages, and seriously affected exports as well as imports. The causes are complex, but several major ones appear to be of primary importance.

a. Drought

In some years the problems have been aggravated by inadequate rainfall, including parts of the Sudan and Tanzania in some years, Zambia and Zimbabwe in the last two years — a drought that has extended across the southern hemisphere from southern Africa to Australia.

b. Government Policies

Zambia provides an excellent example of destructive government policy relating to agriculture; the Sudan and Tanzania, in somewhat different ways, are close rivals.

(1) Initial Neglect

Throughout tropical Africa, in the days following independence, emphasis was placed upon industrial development as the key to modernization and higher per capita incomes, to the neglect of agriculture. As the industrialization plans have not realized their objectives, emphasis has shifted back to agriculture, but only belatedly.

(2) Agricultural Product Pricing Policies

The most destructive government policy, found in extreme

⁶ World Bank, *World Development Report*, 1982, p. 110.

degree in Zambia and Tanzania but to a lesser degree in the Sudan as well, has been the policy of the governments in setting relatively low prices to the producers of farm products, particularly of basic foods, in order to assure continued low prices to urban customers. Partly, this policy was designed to check inflation, but primarily to avoid strong complaints from the urban groups, whose political power is disproportionate to their numbers. The situation was aggravated by the levying of relatively high export taxes in Tanzania and the Sudan, thus reducing the prices received by the farmers since, except in unusual circumstances, an export tax cannot be shifted to foreign consumers. In the Sudan, sales of products through local markets are subject to a substantial (frequently 15%) tax, further discouraging agricultural production. There is by now substantial evidence that African farmers, large or small, are very responsive to price changes — and the policies, therefore, have discouraged production for both domestic and export markets. In the Gezira, Sudan's irrigated cotton producing area, the policy of charging all project costs of water, etc. to cotton and not to other crops led to reduced cotton output — the country's chief export. In Tanzania, high export taxes and inefficient marketing boards reduced the domestic terms of trade for export crops by one-third in the 1970s; in addition, inputs were diverted from export crops to ujamaa village agriculture from the mid-1970s. It is not surprising, therefore, that the volume of exports fell materially.

As the serious effects of low producer prices on output became apparent, the governments began to subsidize basic foods to allow some increases in producer prices while holding consumer prices low. The result, especially in Zambia, was to add seriously to government deficits and to encourage the production of maize at the expense of other crops. Only in the last two years, under substantial prodding by the IMF and other sources of funds, have Zambia and the Sudan begun to reduce subsidies and allow increases in consumer as well as producer prices. In the Sudan, sugar, now imported in substantial quantities, has also been heavily subsidized — whereas once it was a source of substantial government revenue. In the system of pan-territorial pricing of basic crops, Zambia and Tanzania followed a national-uniform-price policy, resulting in serious misallocation of agricultural production instead of concentrating it in areas near to markets and

good transport facilities.

(3) Marketing of Products and Distribution of Inputs

Particularly in Tanzania and Zambia, but to a substantial degree in all four countries, the marketing of the domestic and export crops has been placed almost solely in the hands of government monopolies — marketing boards and similar organizations. This policy partly reflected fear of expatriate domination of marketing of these goods, concern about adequacy of facilities, fear of exploitation by local traders, and an ideological bias in favor of governmental activity. Similarly the distribution of primary inputs, especially fertilizer and seeds, has been handled by government monopolies. The results have been little short of disastrous. Inputs are frequently not received on time; collection of products is delayed; payment is often not forthcoming for long periods. The basic problem is that these government agencies attempt to do too much; they are given tasks beyond their capability, given shortages of trained personnel. Inefficiency have been well documented.

(4) Foreign Exchange Rates and Policies

All four countries, with the possible exception of Tanzania, are potentially net exporters of agricultural products, yet Zambia and Tanzania are net importers, and the Sudan imports substantial amounts. The underlying source of the problem is the level of the exchange rates; much of the time the exchange rate has been set by the government at such a level as to overvalue the currency. Tanzania is the worst case at present, but all four countries have at times followed this practice. In Zambia, the relatively high value of the Kwacha was initially not a product of poor government policy but of the copper exports, which, given the level of imports, insured such a high value that virtually all farm and other exports were impossible; they were simply too expensive in terms of the money of the possible purchasing countries, relative to sources elsewhere. But the other countries, and Zambia in more recent years, have created the problem artificially by holding the exchange rate above the market equilibrium level. The differential is clearly the greatest in Tanzania. The result is, of course, to discourage exports and thus production of export products.

This is not the only adverse effect, however. Imported agricultural products are made artificially cheap by the distorted

exchange rate, and thus agricultural products flow in from other countries. They are usually given preferential tariff and import quota treatment because they are products widely used. Wheat and barley have long been major imports to Zambia, and wheat into the other countries as well. This problem is aggravated by a worldwide trend by consumers in developing countries to shift from traditional foods, such as maize and sorghum, to wheat (and in some areas to rice) as income rises. Most African countries cannot produce wheat nearly as efficiently as they can other food crops. While these preferences cannot easily be reversed, development of them has been greatly encouraged by the foreign exchange and tariff policies, and by imports of wheat and rice from the U.S. under the PL480 program.

Thus unwittingly, these countries, and in fact most African countries, have discouraged their own exports of farm products and encouraged the importation of food products that they themselves cannot produce efficiently.

(5) Stress on Large Scale Projects

Both government policy and donor attitude encourage stress on major large scale agricultural projects. Some proved successful; other did not, and equivalent amounts of money on small projects might have brought far greater returns. At the same time, in the Sudan, deterioration of older irrigation facilities in the Gezira has interfered with agricultural production.

(6) Infrastructure

Like all sectors of economic development, agriculture has suffered from deterioration of infrastructure and shortages resulting from foreign exchange policies.

c. Exodus of Commercial Farmers

Zambia has experienced some loss of commercial farmers, who produced a substantial share of the market and export products. While production will undoubtedly return to earlier levels and beyond, during the transition period production suffers. Zimbabwe is currently experiencing some loss.

There are some positive linkages to the economies from commercial farms in addition to the importance of production of major food staples and exports. Local farmers see results of fer-

tilizer and higher yielding seed varieties; in working for the commercial farmers they learn how to drive, repair, and maintain mechanical equipment. Second hand agricultural equipment flows into the market for purchase by small farmers.

B. Industrial Development

These countries have stressed the importance of industrial development to provide employment, to lessen the foreign exchange drain from imported goods, and to lessen dependency. There has been widespread belief that development cannot depend on agriculture alone, that domestic production of manufactured goods that persons desire as their incomes rise is imperative. But only Zimbabwe has succeeded in developing industry to the point that it constitutes a significant element in the economy and in building industry primarily on the basis of domestic materials.

In the other three countries, the development of manufacturing has been very disappointing. Output has increased much less than anticipated, and in the last few years has actually fallen. Most manufacturing provides little value added and little employment; for example, in Zambia from 1965 to 1975, industry provided only 19,000 jobs — in which the open unemployment rate is estimated to exceed 20%. Though providing little value added, operation of industry absorbs a very large portion of total available foreign exchange. Products are frequently high in cost compared to comparable imports. The government receive little revenue — through many have provided or arranged for substantial funds, often borrowed and thus a source of interest obligations.

The inherent problems of developing extensive industry, particularly in countries with little comparative advantage for manufacturing, are great, but government policy has been seriously defective.

First, almost complete stress has been placed on import substitution, with encouragement given to importation of the inputs — capital equipment and materials. This encouragement has taken the forms of low or zero tariffs on inputs to facilitate manufacturing and of favorable import licensing policies. Thus value added has been inevitably low, and no stimulus has been

given to domestic production of the inputs — whereas the domestic-input-related type of industry alone offers substantial potential in aiding development. Not only is domestic production of the inputs discouraged, but the industries are highly dependent on access to foreign exchange for materials. As foreign exchange has become scarce, many of the industries are operating at only a small fraction of their capacity — thus suffering high costs, losses, declines in employment or none at all. Even spare parts are difficult to obtain, a situation that causes further curtailment of production.

Second, protection has often been excessive and prolonged, thus eliminating any competitive pressure for efficiency.

Third, industry has become artificially capital intensive, lessening employment possibilities. This is due to several forces, particularly overvalued exchange rates, absence of tariffs on capital equipment (some of the countries do apply relatively modest tariffs), and artificially low interest rates (often negative in real terms). Furthermore, wages are artificially high, due to either government policy or the strength of labor unions, as well as, in Zambia, the precedent of high wages for expatriate workers. Since independence Zimbabwe has increased wages substantially.

Fourth, export of manufactured goods has been made almost impossible by a combination of factors noted above: artificially high exchange rates, high wage levels (especially in Zambia), and failure to operate near capacity. Zimbabwe has the greatest potential to export manufactured goods, which presently constitute 13% of value of total exports.

Finally, in the ZTS countries, a substantial portion of the industrial development has been undertaken by parastatals; as in marketing of farm products, lack of trained personnel, lack of strong incentives to hold costs down, and political interference with decision making have lessened overall efficiency.

C. Mining

While all four countries have some mining activity, it is of primary importance in Zambia; copper, plus some cobalt, lead and zinc, provide 97% of the country's foreign exchange. In good copper price years copper provides half of the government's

revenue and employment directly to 70,000 persons. Copper prices fell drastically between 1975 and 1982 and have risen only slightly. The mines require subsidy at the present price and cost relationships to operate, although substantial progress has been made in reducing costs. The longer range problem faced by Zambia is that the known copper reserves will be more or less exhausted by the end of the century, and increasing costs will be incurred prior to that time.

Zimbabwe likewise has a significant mining sector, although relatively less than that of Zambia and more diversified. Declining prices have had adverse effects on that sector also. Tanzania and the Sudan, while having some mining activity, are not dependent on it to any extent. The discovery of oil in the Sudan will improve its foreign exchange position over the next five years; the wells are expected to supply an amount equal to about one-fourth of total requirements.

D. Infrastructure

Tanzania, the Sudan and to some extent, Zambia suffer from serious inadequacies of infrastructure. Zambia has, of course, had major transport problems for two decades. The Benguela railway route to the Atlantic, the best for many imports, remains closed because of unsettled conditions in Angola. Tazara is not operating near to capacity, and Zambia Railways still suffer from operating problems. Tanzania Railways is able to handle only about half of the traffic available to it. Sudan Railways has suffered continued deterioration and traffic loss, to the detriment of both agriculture and industry. In Tanzania and the Sudan there are serious problems of equipment shortages and deteriorated track, but many of the problems center around inadequate trained management and specialist personnel; even National Railways of Zimbabwe, the most efficient of the five systems, is commencing to suffer somewhat from personnel problems.⁷ Inadequate road networks, especially in Tanzania and the Sudan, seriously retard develop-

⁷ The railways of the four countries are reviewed in John F. Due, "Trends in Rail Transport in Four African Countries: Zimbabwe, Zambia, Tanzania, the Sudan," University of Illinois, College of Commerce, Working Paper #937, February 1983. A detailed survey of the Tanzania system is provided by Canadian International Development Agency, *Tanzania Railway Transport Study*, Dar es Salaam & Ottawa, 1981.

ment.

The ZTS airlines, especially in the Sudan, suffer from management and operational problems; telephone communication, and mail service are irregular and unsatisfactory in the ZTS countries.

E. Government Deficits and Capital Formation

As shown in Table 4, all of these countries except the Sudan have, for developing countries, relatively high percentages of tax revenue to GDP, and the structures of all except the Sudan have been modernized over recent decades, providing an acceptable balance between direct and indirect taxes and indirect tax reliance primarily on domestic levels rather than custom duties.

Table 4
BASIC PUBLIC FINANCE PERFORMANCE, FY 1981-82

Category	Zimbabwe	Zambia	Tanzania	Sudan
Population (millions)	7.7	5.8	18.7	18.7
Per capita GPD, US\$1980	630	560	280	410
Tax Revenue as % of GDP	29.7	23.6	19.6	10.9
% of tax revenue from:				
Personal income tax	ns	18.6	ns	5.0
Company tax	ns	18.8	ns	8.4
Total direct	53.7	40.6	34.7	16.3
Custom duties	11.4	7.6	7.1	47.8
Excises	10.6	38.4	35.9	22.8
Sales tax	22.8	13.1		3.1
Total indirect	46.1	59.4	52.0	73.8
Export taxes	00	00	13.3	9.9
Deficit in recurrent budget as % of Current Expend.	10.1	11.1	23.6	4.0
Deficit in overall budget as				
% of total expend.	13.2	30.8	23.6	36.0
% of GDP	4.6	15.4	8.7	8.0

Source: Budget documents of the respective countries.

ns = not separately stated.

Totals include miscellaneous items.

But none of the countries has been able to avoid substantial deficits in their recurrent budgets. The intent is that the recurrent budget should provide a surplus and thus savings for financing of development projects; instead, taxes do not cover recurrent costs. Thus not only is potential capital formation lessened, but domestic inflation results. The political pressures for expenditures and demands of government employees for wage increases are so great that, despite the good performance of the tax structures, the deficits have not been avoided.

IV. Proposals for Change

While the exact problems of the countries vary, the basic changes needed to move from the present unsatisfactory situation in Zambia, Tanzania and the Sudan, and to avoid it in Zimbabwe are similar. Some of the countries have made considerable progress in the last two years, others less so.

A. Realistic Exchange Rates

The most urgently needed policy is to establish an exchange rate that is realistic in terms of total import and exchange transactions. Zimbabwe, Zambia and the Sudan all have devalued within the last year and the rates may be close to the economic equilibrium figure at the moment, but the Tanzania shilling is still grossly overvalued. Holding the value of the currency at a higher than optimal level makes it impossible for most of the country's exports to compete in world markets. With Zambia's copper, in which there is a world price and sales can still be made, domestic production is made unprofitable since a smaller number of Kwacha are received from a given quantity of foreign currency. At the same time, the overvalued currency makes imports artificially cheap, thus discouraging domestic production (unless offset by adequate tariffs) and leads to excessive capital intensity of industry, since foreign-source capital goods are relatively cheap. In manufacturing, foreign inputs are made cheap relative to domestic inputs, discouraging domestic production. Likewise, an unbalanced trade situation necessitates import licensing, which is difficult to implement and results in shortage of spare parts and other items essential for continued operation of various activities,

even when the cost of the item is small. None of these countries appears to be able to solve the spare parts problem when it employs import licensing.

Several objections are raised against downward adjustments of exchange rates. First, if a country sells at a lower price (in foreign currency) to gain world markets and if elasticity of foreign demand for the product from the country is low (as, for example, will be the case if total world demand is inelastic and either the country is the sole supplier or other countries match the price reduction), foreign exchange earnings will fall. Or even if the world total demand is elastic but other countries meet the price reduction and this country cannot increase its output (as is true with some types of mining) it will earn less foreign exchange. But this is not the typical situation with world markets that are more or less perfectly competitive and for which the country is not a major supplier. Perhaps the greatest danger occurs when the country can economically export only to a neighboring country for which it is the chief source of supply of the commodity, and the demand in that country is relatively inelastic. But this is not likely a common situation.

A second problem relates to the higher cost of imports. To the extent that these are inputs for goods produced for export, the higher cost of imports will in part offset the gains from the readjustment of the rate of exchange in the export markets. Some domestic production may have to close down because of the higher cost of inputs. But this is hardly a conclusive argument against the foreign exchange rate adjustment; the problem illustrates the danger to a country of heavy reliance of its export industries upon imported inputs.

Third, and the objection most widely heard in the countries, is that the exchange rate adjustment will raise the cost of living, particularly in the urban areas. It is this issue that leads to strong political objection to devaluation, to excoriation of the IMF both within the countries and by external observers for insisting on exchange rate adjustments, and in some instances to riots and coups attempted. It is true that increases in prices of imported food are not popular. But they are inevitable sooner or later — and the sooner the change is made, the sooner will domestic production increase and the reliance on foreign sources, with consequent

foreign exchange drain, be lessened. The reactions to devaluation will obviously depend in large part on the success of the government in making very clear to the people why the adjustments are necessary.

Fourth, devaluation increases the cost, in money units of the country, of foreign debt service. But if the change stimulates domestic production and exports adequately, as it should, the increase in the real burden of the foreign debt service may be reduced. In some of the countries, there is no possibility of meeting the debt service in the foreseeable future at present exchange rates in any event. If a country is going to have to deferments or to default anyway, it might as well do so on a large figure (in money units of the country) as on a smaller sum. But hopefully the exchange rate adjustment will aid in economic development that will make the foreign debt service manageable.

A final question relates to the longer range problems of a country such as Zambia in which the optimal rate of exchange with "normal" copper prices is substantially different from the optimal with low copper prices, and wide swings in copper prices can occur very quickly. Substantial change up and down in the rate of exchange over a period of a few years is a highly destabilizing force in the economy, and the high value during the "good" years prevents the diversification of the exports so essential for long run development — especially in light of potential exhaustion of copper deposits by the end of the century. There are only two solutions, given the impossibility of predicting fluctuations in the price. One is to maintain an exchange rate that is in some fashion midway between the high-copper-price and low-copper-price figures, adjusting this at intervals of several years as the forecasts turn out to be inaccurate. The other is to move to a two tier exchange rate policy in which the effective exchange rate on copper is allowed to vary independently of the rate for all other transactions. Dual rates are maintained currently by Jamaica and Uganda for example.

B. Tariff and Tax Policy

Related to the exchange rate policy is tariff and tax policy. To encourage production of domestic inputs for industry and domestic agriculture generally, the policy of no or low tariffs on

such goods should be reversed, tariffs being raised on both sets of commodities to aid domestic production. On protected industry, carefully review of the amount of effective protection should be made, to avoid excessive amounts. Similarly, tariffs should be applied to capital equipment, to avoid encouraging capital intensity.

At the same time, export duties should be eliminated once and for all to stimulate export production. These are among the most economically undesirable taxes ever devised. Equally objectionable are the taxes on local sales of produce (*ushur*) in the Sudan, which disorganize marketing as well as discouraging production of the basic crops.

Except for the Sudan, the countries have basically satisfactory domestic tax structures. However, there would be great merit in Zambia in strengthening the sales tax and applying it equally to imports and domestic goods, eliminating the use of custom duties as revenue sources. The greatest danger of using high custom duties for revenues is that domestic production may be encouraged in fields not in conformity with any sort of logical planning. Customs revenue inevitably falls as development continues.

The tax structure of the Sudan has been modernized much less than the systems of the other three countries and warrants general review, including strengthening the sales tax. The problem in the Sudan is complicated somewhat by the desire to give the regional governments some financial autonomy.

C. Agricultural Policy

Of all sectors of the economy, agricultural policies have been perhaps the most detrimental to development. In addition, to tariff and export duty changes noted above, there are several important agricultural policy changes required.

First, produce prices must be raised to stimulate output, perhaps to border (export) prices with a realistic exchange rate. In order to allow elimination of the subsidies, which have been severe drains on government budgets, the prices to consumers must be raised to more realistic levels — or preferably allowed to be determined by free market forces. This may require some form of more general assistance to the urban poor; above all it requires

adequate publicity to the people of the country about the change and the need for change.

Second, strong effort must be made to improve the marketing of farm products and the provision of farm inputs, particularly fertilizer. None of these countries — particularly from Tanzania south — would be willing to go to a complete system of marketing by private traders. But increased competition from private traders and others, particularly at the primary market levels and in the retail distribution of fertilizer and seeds, almost certainly will bring substantial gains. Improved systems of payments for farm produce and allocation of credit to small farms also are urgently needed.

Third, of concern to industry as well, there is urgent need for improved transport — particularly, more efficient operation of the railways, which, despite improvements, are in particularly serious condition in the Sudan and Tanzania, but to some extent in Zambia as well. Hopefully, deterioration of the National Railways of Zimbabwe can be avoided. Foreign assistance in this field is imperative. Improvement of rural roads serving agricultural areas warrants priority over highways connecting major cities.

D. Industrial Policy

A reorientation of industrial policy is imperative in ZTS countries, moving away from overemphasis of assembly-type import substitution industries in Zambia, and state enterprises in Tanzania and the Sudan to ones based upon domestic inputs and with the possibility of exports. The changes in tariff policy noted above will assist in this type of change, but appropriate decision making in granting of tax concessions, if they are to be made at all, in developing of government-owned industry, and in other forms of assistance can greatly improve the contribution of industry to economic development. Government wage policy, to prevent wages of some groups from getting out of line with the rest of the economy and making exports impossible is also essential.

V. Conclusion

In general, the economic performance of Zambia, Tanzania and the Sudan in the 1970s has been discouraging. The worldwide recession and high petroleum prices and the decline in metal prices have played a part, but domestic policies, though well intended, have had serious deterring effects. But breaking away from the existing policies, which will necessitate politically unpopular increases in the cost of living, will not be easy. Substantial progress has been made in the last two years; hopefully it will continue. For Zimbabwe, the challenge is to avoid the trap into which the others fell. The foreign debt situation will continue to hang over these countries like a dark cloud — but the foreign creditors have little choice but to extend interest and repayment periods, and to accept some cancellation of debt. There is no other option open to them.

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