WORLD EMPLOYMENT PROGRAMME RESEARCH

Working Papers

International Labour Office, Geneva

WEP 2-46/WP. 13

WORLD EMPLOYMENT PROGRAMME RESEARCH

Working Paper

INTERNATIONAL EMPLOYMENT POLICIES

Working Paper No. 13

STABILISATION POLICIES IN ZAMBIA: 1976-85

by

Manenga Ndulo
DEPARTMENT OF ECONOMICS
UNIVERSITY OF ZAMBIA

and

Martin Sakala
BANK OF ZAMBIA

With a postscript on the functioning of the foreign exchange auction

May 1987

ISBN 92-2-106086-1

First published 1987

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Printed by the International Labour Office, Geneva, Switzerland

Preface

Zambia is one Sub-saharan African country which has been almost continuously facing a severe deterioration in its terms-of-trade, mainly resulting from the fall in the price of copper, its main export product. Several stabilisation and adjustment programmes have been put in operation but, as the authors argue, these programmes continue to fall short of absorbing the external shocks. Because of extreme external pressures as well as of the failure of domestic policies, especially in agriculture, it has proved difficult to diversify the Zambian economy away from its dependence on copper. The result has been a serious deterioration in the average level of living.

A special element of the stabilisation and adjustment efforts was the production of a foreign exchange auction system. A postscript to this paper describes the system's manner of functionning and its early results.

P.J. Richards
R. van der Hoeven

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I. INTRODUCTION

This paper is an attempt to contribute to the understanding of stabilisation policies in Zambia. The purpose is to outline and analyse the various stabilisation policies and their likely impact on the performance of the economy from 1976 through 1984. We focus on stabilisation programmes with credits from the higher conditionality facilities. These stabilisation programmes attempted to resolve the external and internal disequilibria in the economy.

The disequilibria in the balance of payments and government budget started to reveal themselves between 1970 and 1975. The basic cause of these imbalances was and still is the performance of the mining industry and the falling trend of real world copper prices since 1970. Between 1970 and 1975 the real price of copper fell by about 57 per cent while copper production stagnated at an average of 673,000 metric tonnes per year. The effect of this was to create a strong external imbalance which spilled over to the internal imbalance. Consequently, the overall performance of the economy deteriorated drastically in sharp contrast to the previous six years of independence.

During this period, gross domestic product (GDP) in 1980 prices barely grew at an average of 0.06 per cent per year. The inflation rate increased from 2.6 per cent in 1970 to 10.04 per cent in 1975. This situation manifested itself in increasingly severe shortages of foreign exchange, commodities, underutilisation of industrial capacity and lack of employment opportunities in the country.

The policy-makers initially viewed these phenomena as temporary. They responded by financing the imbalances through running down the country's accumulated reserves and contracting external loans. Nothing much was done to restructure the economy away from its dependence on copper, which in the final analysis limited the country's flexibility in resolving the external imbalance.

In the end, as the performance of the country continued to deteriorate, the policy-makers turned to the International Monetary Fund (IMF) for assistance in resolving the external and internal imbalances.

II. ZAMBIA AND IMF

Although Zambia joined the IMF in 1965, it did not use its resources until in the early seventies. In 1970, two exogenous events occurred which adversely affected the performance of the economy, and made Zambia request for IMF credit. First, the world price of copper reversed its upward trend and dropped markedly by 14 per cent from its 1969 level. Second, Zambia's largest mine collapsed and was heavily flooded. It had to take some time before the mine was rehabilitated. However, the copper price continued to fall. It declined a further 23 per cent in 1971.

The effect of these two events was to reduce copper output and export earnings substantially. This exerted pressure on the balance of payments. Consequently the Government negotiated a compensatory financing facility (CFF) with the IMF and purchased ZK13.6 million (SDR19 million) at the end of 1971. Since then, Zambia has made constant use of IMF facilities. Financial flows between Zambia and the IMF are summarised in table 2. In 1972, Zambia purchased a further ZK14.7 million (SDR19 million) under the reserve tranche and ZK14.7 under the CFF from the IMF.

Despite the partial rehabilitation of the flooded mine by 1972, copper production did not recover fully. Furthermore, copper prices continued to fall on the world market. Therefore, export earnings were stagnant at a time when import payments were rising rapidly. The import pressures were partially eased by the drawing down of foreign reserves which declined drastically from ZK343 million in 1970 to ZK123 million in 1972.

These developments were reflected in a low performance of the economy and a further deterioration of the budgetary and external payments balances. Consequently, in 1973 Zambia negotiated the first stand-by arrangement in the first credit tranche with the IMF. This covered one year and amounted to ZK14.7 million (SDR19 million). It was fully drawn by September 1973.

Table 1: Selected economic variables

	1970	1975	1977	1980	1983	1984
GDP[a] (million Kwacha)	2 695	3 506	3 035	3 013	3 143	3 058
GDP per capita[b]	631.1	613.7	572.6	516.8	503.7	470.5
Inflation rate[c] (per cent)	2.6	10.4	19.62	11.73	19.66	20.01
Copper production 000 metric tonnes	683	640	660	610	640	535
Copper exports as per cent total exports	95.3	90.6	91.1	85.3	88.8	86.8
Wage employment ('000)	338	399	373	381	364	365

[a] GDP in 1980 prices; [b] GDP per capita at 1980 prices; [c] 1980 base year.

Source: IMF Financial Statistics; Bank of Zambia annual reports.

Table 2: Financial flows between Zambia and IMF: 1971-84 (million Kwacha)[a]

			Use of IMF credit			
Year	Repurchase	CCF	Oil facility	Credit tranche	Extended facility	Total
1971		14.7				14.7
1972		29.5				29.5
1973		29.5		14.7		44.2
1974		29.9		15.0		44.9
1975	28.6	28.6	14.2	14.3		57.2
1976	17.5	35.0	27.4	25.4		87.8
1977	17.5	52.5	27.4	7.8		87.8
1978	-	108.4	30.4	111.1		251.0
1979	26.9	95.5	24.2	205.8		327.8
1980	45.1	69.7	16.6	227.3		315.8
1981	48.4	98.2	9.0	228.5	307.3	643.0
1982	88.3	108.1	1.4	172.8	307.3	589.6
1983	146.0	243.9	-	185.9	384.1	814.0
1984		410.9	-	510.1	614.8	1 535.8

[a] Converted at SDR exchange rate.
OL - Oil facility; CR - Credit tranche; EF - Extended facility.

Source: IMF International Financial Statistics 1984.

The main objective of the 1973 stand-by was to arrest the decline in Zambia's external reserves and the deterioration in the budgetary balance. The conditions in the arrangement were mild. The Government was required to constrain expenditures and implement revenue measures in order to generate additional tax receipts. A wage freeze was imposed in the civil service. A ceiling was put on government borrowing from the Bank of Zambia (BOZ) and the banking system in general.

However, despite the 1973 stand-by, the economy continued to stagnate. The external payments position deteriorated. Furthermore, in 1975, there was a severe exogenous shock to the economy; the copper price drastically dropped by 40 per cent of its level in 1974. The country was now faced with the most serious external imbalance since independence. For the first time the balance of trade was negative. The net official reserves dropped to a negative of ZK30.5 million (SDR39 million). The country, for the first time, fell behind schedule in its external payments and started to accumulate arrears. The Government went back to the IMF to ask for another credit arrangement.

In the discussion that follows we concentrate on the post-1975 stabilisation programmes with the IMF. These are the 1976, 1978, 1981, 1983 and 1984 stabilisation programmes. Except for the 1976 programme, these involved higher conditionalities than the 1973 stand-by arrangement. The various facilities are shown in table 3.

Table 3: IMF stabilisation facilities 1976-86 (million Kwacha)

Facility	Amount agreed	Amount purchased	Undrawn balance	Quota*
1976/77	15.6 (25.0)	15.6	-	62.6
1978/80	250.0 (177.3)	250.0	-	141.1
1981/83	819.4 (378.3)	307.3	512.1	216.6
1983/84	270.8 (78.2)	213.2	57.6	346.1
1984/86	485.3 (83.2)	172.6	312.8	583.0

Percentage of quota in parentheses.

* Quota at the beginning of the facility.

III. THE 1976-77 STAND-BY FACILITY

The first post-1975 request to the IMF was a facility for ZK15.6 million (SDR19 million) in the first credit tranche. The agreed programme aimed at diversifying the economy to other productive activities. This would reduce its dependence on copper and the economy's vulnerability to fluctuations in copper prices. Furthermore, such diversification, if it occurred, would in the long run correct the disequilibrium in the balance of payments caused by both external and internal factors.

Table 4: Performance criteria: 1976-77 facility

	1976		1977
	Criteria	Out-turn	Out-turn
		(Annual rates of change)	
Real GDP	1.0	4.3	-4.3
Consumer prices	10.15	18.9	19.6
Domestic credit	16.9	26.9	30.0
Broad money	11.0	26.5	12.1
Government budget			
Revenue and grants	0.9	-0.3	10.8
Total expenditure	-13.1	5.9	2.0
Currency adjustment			
Nominal	-20.0	-20.0	-
Real effective rate	-	-2.8	3.3
		(Per cent of GDP)	
Budget deficit	8.5	14.0	12.7
Domestic bank financing	3.1	12.3	11.3
Foreign financing	3.8	1.6	0.9
Correct account balance	-9.6	-5.08	-9.0
		(Millions of SDRs)	
Overall balance of payment	-65	-165	-243
Payments arrears	70	203	393
		(US cents per pound)	
LME copper Price	65.0	63.6	59.4

Source: Bank of Zambia.

The programme therefore had policies to reduce real aggregate demand and to encourage domestic production. The aggregate demand policies covered both fiscal and monetary policies. It was hoped that these policies would reduce real aggregate demand in 1976 by 5 per cent of its 1975 level. The performance criteria for the 1976-77 programme are shown in table 4.

To cut aggregate demand, the Government froze wages for three years and reduced subsidies on consumer goods by 60 per cent. It undertook to reduce the budget deficit by reducing government expenditure and increasing taxes. However, during 1976, overall government expenditure increased by 5.9 per cent, while the targeted increase in revenue and grants was not achieved. Total revenue increased by 1.4 per cent only.

In monetary policy the objective was to restrain credit demand and encourage savings. To do so, interest rates were raised and total domestic credit in 1976 was to be restricted to ZK115 million. This was about 17 per cent greater than the level of 1975. During the period 1970-74 the average credit expansion rate was 27.3 per cent, while the inflation rate was about 6 per cent. Furthermore, the overall budget deficit to be financed by bank credit in 1976 was to be limited to ZK65 million compared to ZK290 million in 1975.

In the external sector, the programme aimed at reducing payment arrears and liberalisation of restrictions on current account transactions. To abate the pressure on the balance of payments, the Kwacha was devalued by 20 per cent in terms of the SDR. External borrowing in 1976 was to be limited such that the debt-service ratio did not increase by 1 per cent.

To encourage alternative productive activities in the economy, agricultural producer prices were increased substantially.

The major thrust of stabilisation policies in the 1976 stand-by was directed at cutting aggregate demand and increasing agricultural production. This would help relieve the pressure on the balance of payments. The success of the programme depended on the performance of the external sector. However, copper prices and copper production fell by 8 and 7 per cent respectively in 1977.

The programme was unable to restrain aggregate demand, despite the increase in taxation and wage freeze. This was mainly because overall credit continued to expand rapidly. Domestic credit increased by 27 per cent in 1976 and 30 per cent in 1977. This increased imports by about 13 per cent in 1977. This adversely affected the balance-of-payments situation.

At the end of the programme the balance-of-payments deficit deteriorated by 71 per cent. It increased from ZK136 million in 1976 to ZK224 million in 1977. External payments arrears, which had increased by ZK68.8 million in 1976, rose by another ZK156.7 million in 1977. These now totalled ZK362.3 million, a level equivalent to more than half the total export earnings in 1977. Gross foreign reserves only amounted to ZK56 million. Consequently, the Government introduced and intensified exchange restrictions. This was against the spirit of the 1976 stand-by agreement. Import shortages became more severe and economic activity declined. Thus GDP at constant 1980 prices declined by 4.8 per cent in 1977 and the inflation rate increased from 10 per cent in 1975 to about 20 per cent in 1977. The 1976 stand-by was unable to either arrest the decline in economic activity or improve the balance-of-payments position.

IV. THE 1978-80 STAND-BY FACILITY

In March 1978, the Government went back to the IMF and negotiated a comprehensive programme supported by a two-year stand-by arrangement totalling ZK250.2 million (SDR250 million). This was 177 per cent of Zambia's quota at the IMF.

The comprehensive programme was also supported by a ZK49 million (SDR49 million) CFF and a ZK18.4 million (SDR18.4 million) Trust Fund Facility. Repurchase obligations to the IMF due during 1978 totalling ZK38 million (SDR38 million) were rescheduled to subsequent years.

The main objectives of the 1978 stabilisation programme were to restore overall balance-of-payments equilibrium, reduce the rate of inflation and create conditions for a resumption of economic growth. To achieve these objectives aggregate demand had to be cut while sectoral policies would provide the setting for growth. These focused on the mining, agriculture and manufacturing sectors.

Demand management policies were the main substance of this programme. These aimed, as in the previous arrangement, at reducing aggregate domestic demand. Fiscal policy was tuned to reduce the budget deficit. This was to be done by increasing revenues and cutting expenditures. Revenues were to be boosted by increasing specific taxes and tapping new sources. For instance, customs duty was now introduced on capital goods, sales tax was levied on cement and telephone bills and an airport tax on passengers on domestic flights was imposed. Expenditures were to be cut through reducing subsidies, freezing new posts in the civil service and maintaining current levels of capital expenditures.

Monetary policy was to supplement fiscal policy in reducing aggregate domestic demand. Government borrowing from the banking system was limited such as to reduce credit expansion and inflationary pressures in the economy. To allow a compatible domestic credit expansion commercial banks' excess reserves were to be reduced by increasing the commercial banks' share in total bank lending to the mining companies and through increasing the reserve requirements. Interest rates on time and savings deposits were raised by about 1 per cent. These were increased from 7.25 to 8.25 per cent for time deposits and 6 to 7 per cent for savings deposits. Commercial banks were also allowed to raise their interest rates on loans. However, given an average rate of inflation of about 13 per cent during the programme, real interest rates were still negative and could have resulted in lower than desired rates of saving.

Furthermore, by strict control on domestic credit, the Government intended to encourage the private sector to use foreign sources of financing, especially for imports. This would relieve pressure on the balance of payments.

In the external sector, the stabilisation programme included two key measures. First, a 10 per cent devaluation of the Kwacha against the SDR. It was hoped that this would improve the competitiveness and profitability of the export sector and encourage the development of new exports and import substitutes.

Second, payment arrears were to be reduced and eventually eliminated. The Government also sought additional external financial assistance from abroad.

A World Bank-sponsored consultative group meeting met for the first time in Paris in June 1978. At this meeting a substantial amount of financial resources was mobilised (Bank of Zambia, 1978, p. 65).

Sectoral wise, the financial viability of the mining companies was to be restored. This was to be done by maintaining current production and continuing with expansion projects. Costs were to be cut by suspending operations in high-cost mines, a reduction in social services provided by the companies, lay-offs and the rationalisation of the two mining companies into one company.

In agriculture, extension services were to be expanded, food and export crops to be promoted and new sources of raw materials for local industry were to be developed. To this effect, agricultural producer prices were to be annually revised upwards.

In the manufacturing sector, the objective was to stimulate a gradual recovery in industrial output. This was to be done by easing the supply of imported materials and other inputs. Industry was by this time faced with severe shortages of raw materials and inputs having run down the stocks it had depended on since the crisis began in 1975 (Sanderson, 1978, p. 3).

The parastatal companies were encouraged to charge economic prices on their products and to reduce their reliance on the government budget. Price control was not abolished, but economic pricing was enhanced in parastatals by easing the process for approving price increases.

A wage policy was included in the stand-by which froze wage increases in the public sector and limited those in the private and parastatal sector to within 5 per cent.

The 1978 stabilisation programme included specific quantitative performance criteria. These are shown in table 5. Total domestic credit was to grow by 18 per cent in 1978. Within this total and consistent with fiscal policy, the banking system's net claims on the Government were to increase by 13 per cent by the end of December 1978.

Table 5: Performance criteria: 1978-80 facility

	1978		1979	
	Criteria	Out-turn	Criteria	Out-turn
Real GDP	-2.0-3.0	3.9	1.0-2.0	-7.7
Consumer prices	16-18	16.4	10.0	9.68
Domestic credit	18.2	17.4	8.8	9.3
Broad money	13.5	-8.5	21.2	30.2
Current budget				
Revenue and grants	11.5	15.5	-1.0	7.8
Total expenditures	-3.7	-8.4	-1.4	49.5
Terms of trade	8.0	-14.1	4.9	13.6
Currency adjustment				
Nominal	-10.0	-10.0	-	-
Real effective rate	-	-7.6	-	-0.1
	(per cent of GDP)			
Budget deficit	7.6	7.3	7.0	13.7
Domestic bank financing	4.3	4.2	1.9	2.3
Foreign financing	2.6	0.9	5.0	5.4
Current account balance	9.2	-10.1	-2.0	1.4
	(millions of SDRs)			
Overall balance of payments	-140	-207	-	173
Payments arrears	397	495	422	350
	(US cents per pound)			
LME copper price	60.0	61.9	70.0	89.5

Source: Bank of Zambia.

Table 6: Zambia's balance of payments for selected years (million Kwacha)

ITEM	1970	1975	1977	1980	1983	1984
Trade balance	325.5	(91.6)	168.8	163.4	256.0	551.7
Current account balance	77	(462.0)	(170.8)	(448.1)	(346.8)	(262.1)
Overall balance	113.8	(250.0)	(223.5)	(219.7)	(119.8)	(143.1)
Service payments % of exports		9	12.7	20	55	60
External payments arrears		159	362.3	505.3	962.6	1 548.7

Source: Bank of Zambia Annual Reports.

N.B.: ( ) = deficit.

To help in eliminating the mining companies' operating losses of ZK2.3 million in 1978, BOZ financing to these companies was allowed to increase substantially by 74 per cent over the 1977 level.

External payments arrears were to be reduced by ZK70.1 million (SDR70 million) to ZK397.4 million (SDR397 million) in 1978. New external borrowing contracted and guaranteed by the Government of between 1 and 15 years' maturity was limited to ZK280.3 million (SDR280 million) in 1978. ZK50 million (SDR50 million) of this amount was restricted to maturities between 1 and 5 years.

Most of the performance criteria in the programme were met. The financial viability of the mining sector improved considerably. This was mainly a result of a sharp increase in copper prices. Copper prices shot up by 68 per cent over the period of the programme, while copper production decreased by eight per cent. Consequently the mining companies which had a loss of ZK22.3 million in 1978 made a profit of ZK89.8 million and ZK140.7 million in 1979 and 1980 respectively.

Credit performance criteria were met. However, fiscal policy failed to arrest the deteriorating government budget deficit. The revenue measures failed to create significant additional revenue. The level of imports continued to be low during the programme and no revenue was forthcoming from the mines. Furthermore, whatever imports were allowed were dominated by essential goods. These carried a low rate of tax and therefore did not contribute much to government revenues.

Meanwhile, government expenditure continued to grow. By the end of the programme, government revenue had increased by 39 per cent, while government expenditure increased by 156 per cent. It rose from ZK639.9 million in 1978 to ZK1,640.5 million in 1980. This increase is mainly attributed to inflation, especially the increased prices of essential commodities, such as petroleum, oil and lubricants and increased expenditures on subsidies to the National Agricultural Marketing Board (NAMBOARD). The budget deficit increased from 7.3 per cent in 1978 to 29 per cent of GDP in 1980.

How did the 1978 stabilisation programme fare in terms of restoring the balance-of-payments equilibrium, generating growth in the economy and reducing the inflation rate?

It was relatively successful in containing the inflationary pressures. The inflation rate was reduced from 20 per cent in 1977 to 12 per cent in 1980 - a drop of 40 per cent. Apparently, the large budget deficits did not significantly influence the rate of inflation because heavy foreign capital inflows limited the need for bank borrowing. Furthermore, some price controls were imposed to contain the inflationary pressures.

The pressures on the external balance were also contained during the programme. About the same level of the deficit was maintained in 1978 as in 1977. A surplus was earned in 1979 of ZK177.2 million, although this was reversed to a deficit of ZK219.7 million in 1980. The devaluation of the Kwacha in 1978, the higher copper prices and the import compression of the exchange control authorities helped generate the balance-of-payments surplus in 1979.

Real GDP growth increased to 3.9 per cent in 1978, dropped to a negative 7.7 per cent in 1979 and bounced back to a positive growth rate of 3.5 per cent in 1980. This uneven vigour in the growth rate can be ascribed to the higher copper prices. However, over the period of the programme, real GDP declined mainly as a result of a drop in copper production and reduced output in the agriculture sector, in part due to unfavourable weather conditions. Moreover, insufficient volumes of imports led to severe underutilisation and impairment of the country's productive capacity.

V. THE 1981-83 EXTENDED FACILITY

After the expiry of the 1978 stand-by facility in April 1980, the country's internal and external imbalances deteriorated sharply. The foreign exchange crisis intensified. The copper prices continued to be weak. The mines had production problems and the capacity of the transport system to move the copper to the sea degenerated. Government expenditures increased rapidly, mainly because of increased subsidies for maize and debt service. For example, maize subsidies for 1980 increased to ZK208 million compared to the budgeted figure of ZK90.6 million.

The implementation of economic pricing for the parastatals and the provision of incentives and services to the agricultural sector were not vigorously pursued.

Thus, by the end of 1980, real GDP had declined by 4.4 per cent of 1978 real GDP. The economy was in a crisis reflected in shortages of commodities and underutilisation of industrial capacity.

Faced with this gloomy economic situation, the policy-makers were convinced that the long-run solution to the country's economic crisis lay in the diversification of the structure of domestic production. However, in the short run, policies ought to be sought to bring about domestic financial equilibrium and a sustainable balance-of-payments position. For any successful adjustment in the economy, substantial external resources in the form of capital inflows and balance-of-payments support would be required. The Government therefore requested for an extended arrangement for a period of three years with the IMF, in an amount equal to ZK819.4 million (SDR800 million), which was 378 per cent of the country's quota, to support a medium-term structural adjustment programme.

The objectives of the adjustment programme were to strengthen and diversify the country's production structure, restore domestic financial equilibrium and achieve a sustainable external payments position in the medium term.

The strengthening and diversification of the production structure was to be achieved through a shift of resources to productive investment by restraining both private and public consumption. Resources were particularly to be redirected to agriculture, the rehabilitation of past investments and new investments were to be directed to quick profit-yielding projects. This reorientation of resources to productive investment was to be achieved by the adoption of a World Bank-supported three-year investment programme.

The adjustment programme covered aggregate demand and sectoral policies, and had quantitative performance criteria. The criteria are shown in table 7.

The aggregate demand policies were focused at reducing real aggregate demand in the economy. In the fiscal area, policies were directed at mobilising resources for the budget and improving the administrative capacity of the public sector. New taxes were introduced, sales tax, excise duties and company income tax were increased. Consumer subsidies and government expenditure on capital projects were reduced. In 1980, the Government spent

ZK206.4 million on subsidies. This was cut by 46.6 per cent in 1981 to amount to ZK110.2 million. On the other hand the Government's expenditure on capital projects was cut by 31.7 per cent, from ZK231.7 million in 1980 to ZK158.2 million in 1981.

In the monetary area, domestic bank financing of the government budget deficit was restricted. The purpose was to shift resources to the private sector. Interest rates were increased in 1981 to encourage domestic savings

Table 7: Performance criteria: 1981-83 facility*

	1981		1982
	Criteria	Out-turn	Forecast
Real GDP	5.0	4.7	5.0
Consumer prices	14-16	14.0	12-14
Domestic credit	14.7	46.7	-
Broad money	13.1	7.9	-
Interest rates			
Maximum lending rates	12.0	12.0	12.0
Nominals	-2 to -4	-2.0	-2 to -0
Government budget			
Revenue and grants	12.4	5.4	13.0
Total expenditure	-12.3	-21.1	8.8
Terms of trade	-14.0	-14.2	14
	(per cent of GDP)		
Budget deficit	7.1	14.0	5.5
Domestic bank deficit	4.1	5.4	2.2
Foreign financing	2.0	8.1	2.2
Current account balance	-9.8	16.3	-5.6
	(millions of SDRs)		
Overall balance of payments	-152	-327	-35
Payments arrears	399	501	211
	(US cents per pound)		
LME copper price	93.0	79.0	115.0

* The 1981-83 facility became inoperative after 1981 and was cancelled in July 1982. The 1982 data reflect targets established at the start of the facility in 1981.

Source: Bank of Zambia.

and restrain consumer credit. The BOZ was to pursue a more active interest rate policy.

In the external sector, the Government agreed to periodically review and modify the exchange rate in order to maintain the competitiveness of the export sector. External payments arrears were to be reduced drastically during the programme.

In the mining sector output was declining due to various factors. Ore grades were falling, productivity declining, production costs increasing, there was insufficient capital replacement and continuous loss of skilled manpower. The programme focused at arresting this trend and aimed at maintaining copper production during the adjustment period at an average of 600,000 metric tonnes a year. This was to be achieved through a substantial amount of external financial assistance to rehabilitate the existing mines and invest in selected projects.

In agriculture, the aim was to expand technical assistance through the improvement of extension services and infrastructural investment in transportation to facilitate access of agricultural produce to markets. To increase agricultural production, producer prices were slowly to be raised to the level of world prices. However, it was difficult to expand technical assistance to agriculture, given the budgetary constraints. Agricultural services deteriorated as less resources were allocated to it. Actual capital expenditure on agriculture, which includes extension and research, fell from ZK41.1 million in 1980 to ZK34.8 million in 1981 - a fall of 15 per cent. Recurrent expenditures were cut by 41.1 per cent - from ZK225 million in 1980 to ZK131.1 million in 1981.

In the industrial sector, the programme aimed at improving the efficiency of individual companies. The policy of economic pricing was pursued vigorously and policies adopted to encourage industries to use local raw material in their production process. Increased investment expenditures were only to be undertaken to rehabilitate industry.

Besides the overall policy objectives and measures, like in the previous programmes, quarterly quantitative performance criteria were set on total domestic credit, government borrowing from the banking system, BOZ lending to the mining companies, external debt contracted and guaranteed by the Government, budget deficit and external payment arrears.

The implementation of the 1981 adjustment programme had difficulties right from the start. There was a severe decline, greater than projected, in copper and cobalt prices. This created severe pressures on the balance of payments. The first year of the programme assumed a copper price of US$0.93 per lb. The actual price was US$0.79 per lb. This was 15 per cent lower than estimated and a 20 per cent drop from 1980. The estimated cobalt price for 1981 was US$21.6 per lb. The actual price was US$9.7 per lb, 55 per cent lower than expected.

Under the circumstances, not all the performance criteria could be met at the end of June 1981. It was especially difficult to meet the criteria in respect to the budget deficit, associated bank financing and the reduction of external payments arrears.

Total domestic credit, which had been limited to ZK1,999 million at the end of June 1981, exceeded the ceiling by ZK14.7 million to reach ZK2,013.7 million. Net claims on government of the banking system amounted to ZK1,478.2 million. This was ZK23.8 million over the ceiling of ZK1,454.4 million.

The ceiling on BOZ credit to the mining companies of ZK61.4 million was exceeded by ZK4 million. External payments arrears, which had to be reduced by not less than ZK21.5 million (SDR21 million), increased by ZK29.7 million (SDR29 million).

During the subsequent quarter, June-September, the Government tried hard to restrain government expenditure. Consequently, the September ceilings on net claims of the banking system to the Government and total domestic credit were met. However, the deteriorating balance-of-payments position made it difficult for the target on external payments arrears to be met.

The economic and financial situation deteriorated sharply during the September-December quarter. The mining companies sought additional bank financing to cover large operating losses caused by weak copper prices. Furthermore the demand for agricultural credit was especially strong during this quarter because of a good maize harvest in 1981. Consequently, the

December ceilings on net claims of the banking system to the Government and total domestic credit were not met. The ceiling on external payments arrears was substantially exceeded, although the ceilings on the BOZ credit to the mining companies and new external borrowing were met.

The major achievement of the financial programme in 1981 was the restriction of the budget deficit close to the agreed ceiling. This was, however, insufficient to offset the sharp deterioration in the external imbalance and other domestic economic activities.

The budget deficit was cut from 29 per cent of GDP in 1980 to 14 per cent of GDP in 1981. This was a result of increased revenues and a big cut in government expenditures. Revenues increased by 5.7 per cent, while expenditures were cut by 21 per cent during the year, especially on subsidies, capital projects and recurrent expenditure on economic services. The balance-of-payments deficit increased to ZK341.4 million, a 55.4 per cent increase over the previous year.

The inflation rate accelerated by 19 per cent to 14 per cent, while economic activity stagnated. The real GDP (ZK3,153 million) and real growth rate (4.7 per cent) for 1981 gave a semblance of activity in the economy. This could have been due to increased maize production in 1981. However, on the whole, the level of economic activity in the economy declined (BOZ, 1981, pp. 5-8). Consequently, it became evident that the objectives of the extended arrangement could no longer be achieved during the programme. The programme became inoperative in December 1981 because several performance criteria were not met.

VI. THE 1983-84 STAND-BY FACILITY

Zambia's economic and financial situation continued to deteriorate in 1982. Real GDP dropped by 2 per cent, while wage employment decreased by 1.7 per cent. Lower export prices for copper and cobalt created severe shortages of foreign exchange. The situation was compounded by declining agricultural output due to drought.

The balance-of-payments and government budget deficit worsened. The balance-of-payments deficit was mainly financed by an increase in payments

Table 8: Public finances: 1970-1984 (million Kwacha)

Year	Revenue	Expenditure	Subsidies	Deficit
1970	457.2	360.3	18.4	23.4 (1.9)[a]
1975	449.2	646.9	82.8	-298.5 (18.9)
1976	455.6	685.1	59.8	-259.6 (13.9)
1977	500.1	698.8	66.2	-247.6 (12.7)
1978	551.9	639.9	42.1	-163.1 (7.3)
1979	592.8	956.4	105.3	-363.6 (13.7)
1980	767.7	1 640.5	206.4	-872.8 (29)
1981	811.6	1 293.9	110.2	-482.3 (14)
1982	850.8	1 536.8	154.1	-686.0 (19.3)
1983	1 021.4	1 284.5	82.9	-263.1 (6.3)
1984	1 003.1	1 509.0[b]	90.5	-505.9 (10.7)

[a] Percentage of GDP in parentheses; [b] Estimated from 1984 budget.

Source: Bank of Zambia Annual Reports.

arrears of ZK173 million (SDR169 million) and accumulating arrears on external public debt. The government budget deficit, which was 14 per cent of GDP in 1981, increased to 19 per cent.

The stagnation in economic activity decreased government revenue, increased government lending to parastatals and produced a mining companies' loss of ZK173.6 million in 1982. The loss had to be financed through the domestic banking system. This accelerated domestic credit creation and fuelled inflationary pressures in the economy.

By the end of 1982, Zambia was therefore faced with an acute internal and external imbalance. It therefore requested for a new stand-by arrangement with the IMF. This was in support of a financial recovery programme over one year (April 1983-March 1984) and totalled ZK270.8 million (SDR211.5 million).

The major objectives of the 1983 stand-by agreement were to restore financial stability in the economy; especially in public finances and the mining companies, to consolidate and restructure payments for external debt and external payment arrears, and to arrest the deterioration in the balance of payments such as to match the overall deficit to the available external resources. There was a recognition among the policy-makers that, in the long run, there was need to diversify the economy away from its dependence on copper.

To achieve the objectives, the Government adopted a comprehensive set of policies which were primarily focused at the reduction of real aggregate domestic demand, especially real consumption expenditure.

Fiscal policies to be pursued included a 10 per cent reduction in government expenditures and a 25 per cent increase in government revenue. Wages were frozen and government employment was to be held constant. Subsidies were to be reduced. In December 1982, presumably in preparation for final negotiations with the IMF over the 1983 stand-by facility, there was a general decontrol of prices. This gave industry increased flexibility to set economic prices as determined by market forces.

Monetary policy was aimed at deterring domestic credit expansion and increasing savings. Interest rates were increased in January 1983. In the external sector, the Kwacha was devalued by 20 per cent in terms of the SDR. This would stimulate the diversification of the economy towards export production and cut imports. In July 1983, the Government adopted a flexible exchange rate policy by delinking the Kwacha from the SDR and pegging it to its own basket of currencies. Furthermore, foreign exchange allocations and import licences were to be rationalised through a foreign exchange budget. Foreign debt service payments due in 1983 were consolidated and rescheduled.

As with previous programmes, the 1983 stand-by had quarterly quantitative performance criteria. The criteria included ceilings on net domestic assets, credit to the mining companies, external payments arrears and new external borrowing. The major ones are shown in table 9.

Table 9: Performance criteria: 1983-84 facility

	1983	
	Criteria	Out-turn
	(Annual rates of change)	
Real GDP	-	1.8
Consumer prices	25-23	19.7
Domestic credit	10.7	8.4
Broad money	12.5	11.1
Interest rates		
Maximum lending rate		
Nominal	13.0	13.0
Real	-12 to -17	-6.6
Government budget		
Revenue and grants	26.8	19.5
Total expenditure	-10.0	-16.4
Terms of trade	2.7	3.5
Currency adjustment		
Nominal	-34.8	-38.5
Real effective rate	-	-18.4
	(per cent of GDP)	
Budget deficit	5.6	6.3
Domestic bank financing	3.7	2.7
Foreign financing	0.5	1.8
Current account balance	-7.4	-8.3
	(millions of SDRs)	
Overall balance of payments	-100	-89.6
Payments arrears	720	720
	(US cents per pound)	
LME copper price	76.0	72.2

Source: Bank of Zambia.

Most of the measures and performance criteria under the programme were implemented and met. The growth of net domestic assets, net credit to the Government and broad money was constrained. All credit ceilings were observed. The budget deficit was reduced from 19 per cent of GDP in 1982 to 6 per cent of GDP in 1983. The biggest items in reducing the budget deficit were expenditures on capital projects, subsidies and personal emoluments. These were cut by 29.5, 46.7 and 14.3 per cent respectively during 1983.

The economy showed some marginal improvement, although unsatisfactory, during 1983. The real GDP in 1980 prices increased by 1.8 per cent, from ZMK3,089 million in 1982 to ZMK3,148 million in 1983. However, the inflation rate increased by 57 per cent to 19.7 per cent and wage employment was reduced by 1 per cent to 363,800.

The external payments situation remained precarious, although the balance-of-payments deficit was cut by 58 per cent to ZK119.8 million. The country was therefore unable to meet the December performance criteria on external payments arrears and on arrears under debt rescheduling agreements. Consequently, only three of the four purchases under the arrangement amounting to ZK213.2 million (SDR166.5 million) were purchased, leaving an undrawn balance of ZK57.6 million (SDR45 million). The final purchase under the arrangement could not be made because of the postponement of paying arrears and disagreement between the government policy-makers and the IMF on budgetary policy for 1984.

VII. THE 1984-86 STAND-BY FACILITY

The reduction of the budget and balance-of-payments deficit, and the marginal improvement in real GDP in 1983 were rays of hope amidst crisis for the Government. It therefore negotiated for another stand-by arrangement from the IMF whose objective was to consolidate the progress made in 1983 in reducing the internal and external imbalances. The agreement was for ZK485.3 million (SDR225 million) for 21 months, beginning July 1984.

The 1984 programme focused on cutting aggregate demand through fiscal and monetary policy. Supply side measures to stimulate production were also included. The major performance criteria for the programme are shown in table 10.

There were a combination of fiscal measures to raise revenue and reduce expenditures so as to reduce the budget deficit to 4.5 per cent of GDP in 1984. Revenue was to be increased through increased rates for excise and

Table 10: Performance criteria 1984-86 facility*

	1984	
	Criteria	Out-turn
	(Annual rates of change)	
Real GDP	-	-2.7
Consumer prices	25.0	20.0
Net domestic assets	11.1	11.1
Broad money	12.0	18.0
Interest Rates		
Maximum lending rate		
Nominal	17.0	17.0
Real	-8.0	-3.0
Government budget		
Revenue and grants	15.0	8.6
Total expenditure	12.8	17.5
Terms of trade	-11.9	-12.9
Currency adjustment		
Nominal	-30.0	-31.3
Real effective rate	-	-14.4
	(per cent of GDP)	
Budget deficit	4.5	10.7
Domestic bank financing	3.3	4.0
Foreign financing	1.8	1.3
Current account balance	10.7	8.2
	(millions of SDRs)	
Overall balance of payments	-93	-66.3
Payments arrears	620	718
	(US cents per pound)	
LME copper price	65	62.5

* The facility became inactive in April 1985 and was cancelled in February 1986.

Source: Bank of Zambia.

import duties and a shift in the basis for taxing imports from free on board (f.o.b.) to cost, insurance and freight (c.i.f.). A cut in expenditures was to be supplemented by reduced government personal emoluments and subsidies.

To stimulate production, agricultural producer prices were increased, greater price liberalisation was allowed, wages froze and efforts were to be made to improve the efficiency of parastatal companies.

In the external sector, the programme assumed debt relief from the Paris Club and non-Paris Club creditors. External payments arrears was to be reduced. The flexible exchange rate policy began in 1983 were to be continued to ensure depreciation of the Kwacha. This would maintain the financial viability of the mining companies and continue to provide adequate incentives for export diversification.

Most of the measures in the 1984 stand-by were implemented. However, real GDP fell by 2.7 per cent, the inflation rate increased to over 20 per cent, the budget deficit increased to 10.7 per cent of GDP and the balance-of-payments deficit increased by 19.4 per cent to ZK143.1 million.

The deterioration in the external deficit was mainly a consequence of low copper prices and high debt repayments.

The July and September 1984 performance criteria for the reduction of external payments arrears were not met. By July, these arrears had risen by ZK30.2 million (SDR14 million) compared to the programme's target of reduction of ZK12.9 million (SDR6 million). However, Zambia was allowed to purchase ZK172.3 million (SDR80 million) up to September with an IMF waiver on the level of arrears and a modification of the December 1985 ceiling on arrears. None the less, no further drawings were made under this facility because of the postponement of payment arrears. The facility was inactive during 1985 and was cancelled in February 1986.

VIII. FOREIGN EXCHANGE AUCTION SYSTEM

Although, the economic crisis started in 1975 and there have been IMF stabilisation programmes since then, the Zambian economy was, on the whole, in a worse situation in 1984 than in 1975. Living standards continued to drop, the inflation rate was higher and output and employment were constricted.

During 1984 and early 1985, it was clear major policy actions had to be carried out to arrest the declining economic situation. Furthermore, there was no IMF programme during 1985. The policy-makers needed to do something to bring back the IMF to the negotiation table for another programme. One of the daring policy measures taken by the Government was the introduction of the auction system of determining the exchange rate. This was part of a set of reforms to remove controls and rely on market forces in economic decision-making. It was argued that the exchange rate was the Government's most powerful instrument of general economic policy for achieving the needed structural adjustment in the economy. A "correct" exchange rate, to be established through the auction system, would assist in the diversification of the country's exports.

The idea of an auction system in Zambia came from the World Bank during 1984 (World Bank 1984). It was suggested as an alternative to a system of import shortages and devaluation. The auction system as an alternative was discussed and debated in Zambia during 1984 and 1985 at both the technical and advisory levels of the Government. The general consensus in official circles were hostile to it. However, it was in the end accepted as the only way Zambia could have access to external resources.

The President announced the introduction of the auction system on 4 October 1985 and the first auction was held on 11 October 1985.

The Kwacha was delinked from a basket of six currencies. It was allowed to float and be determined by weekly bids of importers, given a fixed amount of foreign exchange for the week. All foreign exchange was to be distributed through the auction except for a limited number of uses (mainly debt service, government operations and copper mining requirements). Capital account outflows remained controlled.

The purpose of the auction system was:

(i) to increase export diversification by making export activities more competitive and thereby increasing exports;

(ii) to reduce import dependence by discouraging imports;

(iii) to encourage labour-intensive techniques by changing the relative cost of domestic labour and imported capital.

A Foreign Exchange Management Committee was created at the BOZ. Each week, the committee announced the amount of foreign exchange available for auction. Importers submitted their bids for foreign exchange through their commercial banks indicating the amount and purpose of foreign exchange required and the dollar/Kwacha rate they were willing to pay. They deposited the Kwacha equivalent of that amount together with their bid with the bank. The commercial banks submitted the bids to BOZ, authorising BOZ to debit their accounts for the Kwacha required to cover all the bids. These submissions have to reach BOZ by 09.00 hours on Fridays. The Management Committee processed the bids by arranging them in a descending order, starting with the highest rate and ending with the lowest. The marginal rate is struck each Saturday and is the rate which exhausted the auction funds available for the week.

Initially, the marginal rate was used in purchasing foreign exchange by all successful bidders and for all foreign exchange transactions for the following week beginning Monday. Allocation for the categories exempted from the auction was done manually by the Committee using the marginal rate.

In July 1986, the system was modified. Successful bidders purchased foreign exchange at the rate they bid. However, all other transactions continued to be done at the marginal rate.

The foreign exchange for the auction came from external donors such as the World Bank, United States, United Kingdom, West Germany and Sweden. The rest came from export earnings.

Initially, trade payments under the auction were kept on schedule through foreign exchange purchases at the auction. However, by September 1986, auction floor payments arrears started building up, such that by November 1986, funds for the past eight auctions had not been disbursed.

It is still too early to analyse the auction system, although anecdotal evidence does exist.

However, the auction system was welcomed by most big businessmen and financial institutions because it brought about business confidence, the timely availability of foreign exchange and ended corruption in the issuing of import licences and foreign exchange. The major cost was the anticipated inflationary cost which was expected to result from the depreciation of the Kwacha.

Before the auction system, the exchange rate with the dollar was ZK2.35 = \$1. It quickly depreciated, reaching ZK8.07 to the dollar around mid-July and ZK10.32 to the dollar at the last auction in October. This has accelerated the inflation rate considerably. The consumer price index increased by 40.6 per cent for the low income group and 44.2 per cent for the high income group between September 1985 and April 1986. This has obviously had a significant impact on living standards which had already been drastically cut by the time the auction system was introduced. A further assessment of the foreign exchange auction system is given in a postscript to this working paper.

IX. DISCUSSION

Both the State and the IMF agree that Zambia has and continues to face a severe economic crisis which has made life intolerable for the majority of the population. This has been manifested by the deteriorating quality of life during the period.

Between 1970 and 1984, real GDP per capita has decreased by 26 per cent, while available earnings data show that real average earnings in wage employment decreased by 24 per cent between 1970 and 1980. Furthermore, the quality of medical and educational services and the availability of commodities has drastically deteriorated.

To arrest this situation, there is need for adjustment policies. These policies should obviously attack the basic problem: that of a chronic external disequilibrium. However, in attacking this problem there is a great danger that one overlooks the basic argument in developing countries, that is, in the final analysis, there should be development. Of course, it is difficult to bring about development if the country is faced with chronic balance-of-payments deficits. But policy-makers can focus on both aspects in their decision-making. Otherwise adjustment policies will destroy what they are meant to protect. Consequently, adjustment policies should attempt to both resolve the external disequilibrium and bring about structural changes in the economy.

The stabilisation programmes carried out between 1976 and 1984 recognise that the external imbalance in the balance of payments is the basic problem for the Zambian economy. The major reasons for this imbalance are: firstly, the country is solely dependent on one export product: copper. This dependency has limited its flexibility and ability to accommodate the effects of declining copper prices. Secondly, internal factors such as excessive aggregate demand and inappropriate pricing policies, especially over exchange rates, interest rates, the terms of trade between agriculture and industry and the prices of factors of production, contribute to worsen the situation.

The economy's extreme dependence on copper exports raises critical questions about the viability of IMF stabilisation programmes, wherein domestic and external criteria are set and the success of the programmes depend on their fulfilment. One of the reasons for Zambia's continued economic decline was the unexpected and continuous determination in the external terms of trade. On the whole, the IMF programmes were unable to correctly predict the copper prices. This was the case with the 1976, 1981, 1982 and 1983 programmes. Copper prices were overestimated. The effect of

Table 11: Actual and copper prices under IMF facilities: 1976-1984
(in US cents per pound)

	Projected	Actual	Per cent shortfall
1976	65.0	63.6	-2.2
1977	-	59.4	-
1978	60.0	61.9	3.2
1979	70.0	89.5	27.9
1980	80.0	99.1	23.9
1981	93.0	79.0	-15.1
1982	115.0	67.2	-41.6
1983	76.0	72.2	-5.0
1984	65.0	62.5	-3.8

Source: Bank of Zambia.

this, within the context of a crisis economy, was to make the programmes unsustainable.

The long-run solution to this problem therefore lies in the diversification of the production structure away from copper production especially into export production. The best way to do this is to devalue the Kwacha so as to bring about a better allocation of resources.

This policy stance has been a key to the diversification effort. The Kwacha was devalued thrice. There was a devaluation in the 1976 and 1978 stand-bys and in January 1983. The last devaluation was outside an IMF programme but was ostensibly a preliminary to the July 1983 stand-by. This put the Kwacha on a "sliding float". Only the aborted 1981 extended facility did not have a devaluation; even then it postulated a depreciation of the Kwacha over the programme.

Between 1975 and 1984, the Kwacha was devalued by 64 per cent against the SDR. This was to help the diversification of the economy away from copper. However, the experience of this period is that the economy's dependence on the copper sector did actually increase while alternative exports have stagnated (Ndulo, 1985).

Furthermore, it is not clear whether or not policies that solely depend on "efficient allocation of resources" will significantly restructure an economy like Zambia's. Thus, Gerschenkron has argued:

> To break through the barriers of stagnation in a backward country, to ignite the imagination of men, and to place their energies in the service of economic development, a stronger medicine is needed than the promise of better allocation of resources (Gerschenkron, 1965, p. 24).

Devaluation was also used directly to help in reducing the balance-of-payments deficit by cutting imports through making them more expensive. However, it is likely that in the Zambian case, devaluation only increased inflation. The reduced imports could have resulted from tight import licensing policies.

The stabilisation policies also postulated more use of the market mechanism. Policies like economic pricing and decontrol of prices can be seen in this light. In the development literature there is doubt on the effectiveness of the price mechanism as a tool for allocating and directing resources, especially in countries with a large subsistence sector (Dell and Lawrence, 1980).

The third major policy stance of the stabilisation programmes was a cut in aggregate demand. In each programme there were policies to reduce aggregate demand. The main tools used were credit restrictions and fiscal retrenchment.

Restrictive credit policies do limit total spending as most probably happened during the programmes, but cutting credit enough to compress total aggregate demand within certain targets can be detrimental to more desirable activities. •In this case private sector credit suffered as was recognised in the 1981 extended facility.

Fiscal retrenchment, apart from the issue of burden of adjustment, restricted economic activity in the economy, since the State controls over 90 per cent of all investment, directly or through parastatals.

How did the economy perform during the 1976-1984 stabilisation period? As we indicated earlier on, the crisis was never arrested. The country is now in a much deeper crisis than ever before.

We discuss the performance of the economy during the 1976-84 period. For this purpose, we shall compare the performance of the economy before the adjustment programme (1970-76) and during the programme.

It is obvious that the stabilisation programmes, as already pointed out, did not arrest the economic crisis. Their only achievement was to contain the budget deficit to around 14 per cent of GDP. The average budget deficit during 1970-75 was 12.4 per cent. Mainly as a result of cuts in government expenditure, it was contained at 14.1 per cent of GDP during the programme.

There was also some semblance of economic vitality in the economy with real GDP in 1980 prices increasing by 5.8 per cent between 1970-75 and 1976-84. It increased from an average of ZK2,912.7 million to ZK3,082.3 million. The real growth rate barely increased from -0.06 per cent to 0.11 per cent. However, the real GDP per capita fell by 15.4 per cent. It dropped from an average of ZK631.8 to ZK534.6 per capita.

On the other hand, the balance-of-payments deficit worsened. It increased from an average deficit of ZK73.6 million during 1970-75 to ZK170.4 million during the stabilisation period. The inflation rate accelerated from an average of 6.4 per cent to 15.8 per cent per year while employment

Table 12: Performance of economic aggregates

	1970-75	1976-84
Real GDP[a] (million Kwacha)	2 912.7	3 082.33
Real growth rate	-0.06	-0.11
Real GDP[a] per capita (Kwacha)	631.8	534.6
Inflation rate[b] (%)	6.4	15.8
Wage employment ('000)	371	372
Balance-of-payments deficit (million Kwacha)	-73.6	-170.4
Budget deficit (% of GDP)	12.4	13.6

[a] In 1980 prices.

[b] Consumer prices in 1980 prices.

opportunities stagnated with wage employment growing by 0.28 per cent over the two periods.

Clearly, the performance of the economy, with IMF stabilisation programmes during the period, was no better than the period before, without IMF stabilisation programmes. In fact, cuts in government expenditures, rising unemployment, inflation and falling real wages led to the contraction of an already small internal market, reinforcing tendencies towards the contraction of domestic activities.

Table 13: Foreign exchange rates, 1975-1984
(units of foreign currency per Kwacha)*

	US dollar	SDR
1975	1.5541	1.2800
1976	1.4019	1.2143
1977	1.2675	1.0848
1978	1.2307	0.9991
1979	1.2621	0.9763
1980	1.2682	0.9763
1981	1.1466	0.9763
1982	1.0748	0.9763
1983	0.7996	0.7480
1984	0.5573	0.4636

* These are average exchange rates.

Source Bank of Zambia.

POSTSCRIPT ON THE FUNCTIONING OF THE FOREIGN EXCHANGE AUCTION

The Auction of Foreign Exchange

As discussed in section 7 of the main paper, fundamental changes in the allocation of foreign exchange were introduced in October 1985. Under this new system an auction-determined rate was a central element. The foreign exchange auction was to be held on a weekly basis and the exchange rate determined by market forces i.e. by demand and supply of foreign exchange at the auction. Participation in the auction was opened to parastatals, private enterprises and licenced traders through their commercial banks. The commercial banks were also permitted to bid for their operational requirements. The government, the mining company and some specialised parastatals were exempted from participating in the auction but all exchange transactions were conducted at the auction determined current exchange rate. The foreign exchange available for auction consisted of export earnings, cash proceeds from loans and grants to government, net of the mining company's foreign exchange requirements, amount provided for oil. government's imports, debt servicing and for education and medical services.

Supporting Policies:

Monetary Policies

At the time of the announcement of the new system a number of supporting policies were also simultaneously announced. To restrain the increase in money supply and to mop up the existing high liquidity in the system, interest rate was decontrolled and a new treasury bills market was established for a flexible operation of the instrument of the open market operation. The flexible interest rate policy was also intended to promote savings and along with other monetary measures was to ensure that the exchange rate does not depreciate rapidly.

Fiscal Policy

An attempt was made to contain the possible sharp rise in government expenditure and to contain subsidies as far as possible. As the scope for cutting down capital expenditure was limited, it was felt that the only category for restraining government expenditure was personal emoluments. Increase in wages and salaries therefore were to be limited. Decisions were rather to prune government employment. Fiscal policy also emphasised the need for a substantial improvement in revenue collection both because of higher income of the mining industry as well as by improving the machinery for tax collection. In particular, steps were taken to maximise tax collection and to reduce tax arrears. Simplification of tax collection procedures was also an important step.

Pricing Policy

Pricing policy was geared to minimise consequential high rate of inflation and to provide incentive producer prices for farmers. The achievement of price stability was an important objective of fiscal and monetary policies. The basic approach in this area was to stabilise the exchange rate after the initial sharp depreciation and through the control of money supply, credit, wages and salaries rather than through imposing new price controls. After the general decontrol of prices in 1982, the private sector was able to enjoy a flexible pricing regime. An important decision in this respect, therefore, was to allow necessary freedom to the units in the parastatal sector in price fixation. This was found necessary to improve the efficiency and profitability of these units. Wage restraint was to be an important element of the overall approach.

Tariff and other measures

Finally, a tariff policy was to be used to achieve a desired intervention in the system of foreign exchange allocation. Under the new system, import licencing was no longer to remain as an instrument of control. Except for a few specifically listed items, import licences were made available freely and easily. Improved availability and competitiveness of the import substituting units was expected to minimise the need for protecting local production. However, where units were not viable, necessary protection was to be provided through appropriate changes in the tariff structure. At the same time, liberalization was extended to current transactions and foreign companies were allowed to remit current dividends and profits on the presentation of proper documentation. Travel expenditure was liberalised and after the introduction of the new system, no current payments were to be allowed to enter into the commercial pipeline arrears.

The new exchange rate system also envisaged the timely provision of foreign exchange to successful applicants. For this it was deemed essential that foreign exchange forecasting and budgeting was done regularly and comprehensively which was to form a basis for implementing the new auction system.

A Review

Since the introduction of the new system foreign exchange auctions have been conducted smoothly which was made possible by long drawn-out preparatory work before the announcement. Between 3 October 1986 and 30 June 1987 thirty-six auctions were conducted. In all over nine thousand bids were received of which about 65% were successful. Foreign exchange amounting to about about US $200 million have since been disbursed to the successful bidder at the auction determined weekly exchange rate.

This was a substantial amount which became available to a large number of bidders after a long period of protracted unavailability. An immediate impact was a general improvement in availability of all types of imported goods. The new system has also minimised the prevailing subjectivity in the allocation of foreign exchange. Further after the initial heavy depreciation of the exchange rate the gap between the formal and informal (black market)rate narrowed down considerably, with the result the black market in foreign exchange shrunk. Following the decision for changing the system Zambia has received considerable amount of auction related financial assistance from multilateral and bilateral sources.

The operation of the new system, however, has not been flawless. A number of disturbing things have emerged which are a source of concern. At the same time, the outlook of the economy still remains uncertain.

Exchange Rate

As expected the exchange rate depreciated very sharply in the first three auctions (by about 68%). There was a process of stabilisation in the following two months to be followed by a persistent depreciation in the exchange rate.

The continuing pressure on the exchange rate has been mainly caused by the continued scarcity of foreign exchange. Despite a pre-determined share of copper export earnings earmarked for the mining company, copper production and exports did not pick-up. At the same time international copper prices continued to deteriorate. Nor did earnings from the export of non-traditional

Table 1. Exchange rate

	Kwacha US$	US$ Kwacha	per cent depreciation
October 3;	2.22	0.4504	---
October 10;	5.01	0.1996	53.7
October 17;	6.10	0.1639	63.7
October 24;	7.00	0.1428	68.3
End of			
First quarter	5.70	0.1754	61.1
Second quarter	6.91	0.1447	67.9
Third quarter	7.32	0.1366	69.7

goods show any visible improvement. The actual export receipts were therefore much below the projected levels. The flow of auction related foreign resources inspite of slow disbursement, has therefore been critical for sustaining the auction during this period.

Composition of imports

An overall analysis shows that a major proportion of foreign exchange disbursed through the auction (65-70%) has been utilised for the importation of machinery and equipment, spares and raw materials. The remaining 30-35% was required for the import of consumer goods and services (including debt servicing). These figures, however, do not reveal a complete picture because imports of goods and services against "no fund involved" licences have not been included in the above estimates. (i.e. Licences not involving foreign exchange from the auction or otherwise. Anyone having foreign exchange abroad can use it for any import without an obligation to reveal the source of such foreign exchange). Generally it was observed that imports under "no fund involved" licences showed strong preference for quickly disposable manufactured commodities. Such licences were meant to encourage the repatriation of externally held foreign exchange by foreign exchange by residents through the banking system.

If it was meant only to meet the pent-up demand of the recent past, this should have been a passing phenomenon, and in the following months the composition of imports should have stabilised. In contrast, a significant amount of foreign exchange continued to be spent on the import of inessential commodities and cheaper imported manufactured consumer goods which adversely affected local production. Indeed, the market-based auction system instead of preventing, did actually encourage the use of scarce foreign exchange for imports of non-essential, mainly consumer, items. This was also a source of inflated demand for foreign exchange which aggravated the pressure on the exchange rate.

Excess liquidity

The new system was expected to generate substantial liquidity in the system: due to additional kwacha proceeds from a given amount of foreign exchange and that arising due to the implementation of the commitment to protect certain transactions against exchange loss.

To ensure effective control on liquidity a number of bold monetary steps were initiated. A free interest rate regime was announced and the instrument of open market options was actively operated through a newly established (daily) treasury bill market. As a result, interest rates increased sharply. The bank rate increased from about 11% to 23.5%. The treasury bill market rate more than doubled from 9.5% to 23.5% within a short space of 4-6 weeks. The maximum lending rate charged by commercial banks went up from 11-14% to 30-34% and the deposit rate from 7-11% to 18-25%. Even these steps proved inadequate in fully controlling liquidity.

Reserve requirements were revised upwards from 8% to 10% for time deposits and from 15% to 18% for demand deposits. The reserve requirements have since been further raised from 10% to 12% and from 18% to 20%. Although high interest rate structure has made inventory holding a highly expensive proposition, it has also made it extremely difficult for the marginal firms to remain viable. Moreover, high rates of interest do not favour fresh investments in the economy.

Prices and cost of living

During January-September 1985 Zambia's economy was already facing high rate of inflation. The consumer price index for low income groups increased from 413.9 to 525.5 or by 27% and for the high income group from 365.8% to 452.5% or by 23.7%. As the price structure was already based on informal exchange rate it was felt that further increase in prices consequent upon the expected depreciation of the Kwacha will be moderate and the rate of increase will peter out fairly quickly. However, the depreciation of the Kwacha after the introduction of the new system was immediately followed by a corresponding adjustment in prices. In October 1986 prices went up by 8.4% for the low income group and by 11.1% for the high income groups. The rate of increase decelerated, yet the monthly rate, at about 2.8% in April 1986, was still

Table 2. Movement in Prices

	Low income group			High income group		
	Index	percentage change		Index	percentage Change	
		Monthly	Quarterly		Monthly	Quarterly
December 1984	413.9	-		365.8	-	
September 1985	525.5	27.0		452.5	23.7	
October 1985	569.7	8.4		503.1	11.1	
November 1985	610.3	7.1		534.4	6.2	
December 1985	655.4	7.4	24.7	572.2	7.0	26.4
January 1986	682.9	4.2		604.7	5.7	
February 1986	708.9	3.8		620.4	2.6	
March 1986	730.7	3.1	11.1	639.8	3.1	11.8
April 1986	738.9	1.1		652.5	2.0	
October 1985 to April 1986			40.7			44.2

quite high. During the seven months following the auction the index increased by 40.7% and 44.2% respectively for the low and high income groups. For the low income group most of the increase in prices was felt through the increase in the prices of food and beverages group. In contrast for the high income groups the price increase was most acute in the transport and communication group and the rent, fuel and lighting group.

The annual rate of inflation for 1985 on a point to point basis thus worked out at 58.3% for the low income group and 56.0% for the high income groups. Although the increase in the price index after the introduction of the auction was less than proportional to the exchange rate depreciation (by about 69%) it had serious repercussions on the cost of living of the masses.

As a matter of policy the expected economic benefits from the new system were to be preserved by supressing pressures for a corresponding increase in wages and salaries. Therefore, except for a nominal increase already agreed upon, no significant increase was allowed. The high rate of inflation therefore resulted in a significant deterioration in the standard of living which had already suffered during the previous year. The most disturbing aspect was the continued inflation (of about 2.0% per month) which was aggravating the adverse effect on the standard of living. The deterioration in standard of living was expected and was being projected politically as an inevitable sacrifice for re-structuring the economy. However, there was emerging evidence of growing social discontent and tension due to the continued deterioration in the standard of living.

Employment

The impact on the employment situation has been most unexpected. Although some pruning of the civil and foreign service was built into the overall policy approach, more with a view to containing government expenditure, it was felt that the new system will have a positive effect on the employment situation. This anticipation was based on the presumption that improved availability of foreign exchange by increasing the imports of essential inputs will assist manufacturers to raise their capacity utilization. In the agricultural sector higher employment would result from increased exports.

Unfortunately, there was no evidence of any positive development in the employment situation. If at all the situation appears to have worsened. Increase in capacity utilization was limited to only certain types of production. There have been a number of reports of closures and lay offs involving both public and private sector units.

The employment statistics in Zambia are incomplete as in many developing countries. However, available data shows that in the first four months of 1986, a total of 765 workers were declared redundant in 32 enterprises, compared with 356 by 24 units in the same period of 1985. This was on top of 630 redundancies, 16 declared in December 1986 by 10 enterprises. This was a very disturbing development and does not augur well for the employment prospects in the medium-term perspective.

Several factors explain the unexpected deterioration in the employment situation. Firstly the extent of exchange rate depreciation has been too large for the viability of a large number of domestic manufacturers. Secondly, under the new system protection of local producers was considered unnecessary. Finally, highly restrictive monetary policy including extremely high interest rates has made institutional finance very expensive.

Unfortunately, the production structure in Zambia, consisting mainly of certain essental consumer goods and some form of processing, has been heavily import intensive and far from being cost-effective. For most such enterprises it does not seem to have been possible to remain competitive at a significantly depreciated exchange rate. In a number of cases local production did increase due to better capacity utilization, but many of these units were not able to sell their production due to competition from cheaper imported manufactured goods. The cost of inventory maintenance rose sharply and led many enterprises to either close down or to reduce their employment. Press reports indicate a deepening crisis which is reflected in growing violence and deterioration in the security situation. It was not uncommon to observe growing political dissent.

It may also be noted that lay offs have been reported particularly in construction , manufacturing, communication and services. The trading sector does not appear to have been badly affected.

In the agricultural sector the situation seems to have been worse. The longer production cycle and typical cost structure has made many commercial farms non-viable. This was clearly reflected in the sluggishness of demand for foreign exchange and the extent of success of the bidders from the agricultural sector. An analysis of successful bidders in the agricultural sector showed that the demand for foreign exchange was mainly for the importation of quickly disposable chemicals and spares. Only a neglible amount was taken for the import of agricultural machinery and equipment. Indeed, despite efforts to simplify procedures and enhance the coverage, less than 50% of the committed World Bank assistance under the Agricultural Rehabilitation programme was utilized up to the 36th auction. The extremely slow disbursement of auction related assistance for the agricultural sector continues to be a matter of serious concern.

Conclusion

It is perhaps too early to pronounce a definitive judgement on the effectiveness of the new system in Zambia. However, it is a matter of concern that in summer 1986 9 months after its introduction, the new system has not generated trends that would lead to the desired re-structuring of the Zambian economy. Indeed, sharper than expected depreciation in exchange rate, high rate of inflation and consequent deterioration in the standard of living, worsening employment situation are not only disturbing but also are leading to social tensions and discontent. Unless the promised upturn in the economy becomes visible in a relatively short period the credibility of the new system may diminish.

The establishment of a Tariff Commission of Enquiry in May 1985 has been a right step provided its recommendations are made available and implemented most urgently.

The auction of foreign exchange which forms the key element of the new system is basically an alternative method of exchange rate fixation and perhaps a convenient way to persuade reluctant developing countries to heavily depreciate their over-valued currencies. However, once the initial sharp depreciation in the exchange rate is accomplished, this system does not offer a better institutional mechanism than say the managed float or the basket arrangement. Even though this method substantially reduces subjectivity in the allocation of scarce foreign exchange, which is its strongest advantage relevant in most developing countries, one is not sure whether the resulting allocation also is economically efficient. Further, the actual exchange rate often does not have any relation with the fluctuation in the international exchange rate and those of the concerned trading partners. This may be an advantage, but in Zambia's case it was observed that the auction determined exchange rate often varied perversely compared with the variation in the exchange rate of the US dollar, which is its intervention currency. Further, it is not sure that such a system can be sustained much longer without substantial financial support from the international community.

Note

The system of auctioning foreign exchange was completely suspended in January 1987 and replaced by a two tier exchange system. Auctioning was completely abandoned in May 1987.

REFERENCES

1 Bank of Zambia, Annual Reports 1970-83.

2 Gerschenkron, A. (1965): Economic Backwardness in Historical Perspective: A book of essays, (Praeger Publishers).

3 Dell, Sidney and Lawrence, Rodger (1980). The Balance of Payments Adjustment Process in Developing Countries. United Nations.

4 Ndulo, Manenga (1985). "Planning in Zambia: An analysis of the third Five-Year Plan", in Osei-Hwedie, K. and M. Ndulo (eds.) Issues in Zambian Development. Omena Press, Boston.

5 Sanderson, M. (1978). "The State of Industry in Zambia today, and what needs to be done about it - a business view". Economics club meeting. 19 January, Ridgeway Hotel.

6 Zulu, J.B. and Nsouli (1985). Adjustment Programmes in Africa: The Recent Experience, IMF Washington, DC.

7 IMF, International Financial Statistics 1983, 1984.

8 World Bank Zambia Industrial Policy and Performance, April 1984.

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ISBN 92-2-106086-1