Approved For Release 2005/01/11 : CIA-RDP85T00875R001500220030-5

CIA/OER/IM 68-28 FILES

Confidential

25X1

DIRECTORATE OF INTELLIGENCE

Intelligence Memorandum

Zambia: Some Implications of the Copper Industry's Impending Cost-Price Squeeze

Confidential

COPY NO. 42

ER IM 68-28
MARCH 1968

WARNING

This document contains information affecting the national defense of the United States, within the meaning of Title 18, sections 793 and 794, of the US Code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law.

GROUP 1
EXCLUDED FROM AUTOMATIC DOWNGRADING AND DECLASSIFICATION

Approved For Release 2005/01/11 : CIA-RDP85T00875R001500220030-5

CONFIDENTIAL

25X1

CENTRAL INTELLIGENCE AGENCY
Directorate of Intelligence
March 1968

INTELLIGENCE MEMORANDUM

Zambia: Some Implications of the Copper Industry's Impending Cost-Price Squeeze

Summary

Settlement of the crippling US copper strike would cause the very high world market price of copper to tumble, since the United States is the leading copper-producing nation. Long-term prospects are for lower copper prices than have prevailed over the last few years. Zambia, whose economy is dominated by copper, is now a high-cost producer and finds these costs to be increasing rapidly. Hence, it can be expected that foreign exchange and government revenues will decline seriously.

The relatively high prices for copper since Zambia became independent in 1964 have allowed Zambian President Kaunda great latitude in carrying out policies. With government revenues soaring, Lusaka embarked on a massive development program while at the same time spending large sums on efforts to break its deeply embedded economic ties with white-ruled Rhodesia. Meanwhile, the mining companies absorbed much higher costs and still received an adequate return on their investments. The requirement to use poor-quality local Zambian coal has damaged smelters recently, requiring a 20-percent cutback in output until at least July 1968.

After a settlement is reached in the US strike, Zambian government revenues will fall faster than prices, and Lusaka will soon face the problem of financing an annual budget deficit of more than

Note: This memorandum was produced by CIA. It was prepared by the Office of Economic Research and coordinated with the Office of Current Intelligence.

$140 million in order to continue its extensive programs. Company profits will also be severely squeezed, so that the government will be unable to raise tax rates without risking a closure of mines with higher operating costs.

Significant reductions in production costs are unlikely because rising costs have resulted mainly from higher wage payments to mine workers which were obtained by the influential Zambian Mineworkers Union and from the political decision to implement, as far as possible, the policy of a complete economic break with Rhodesia. There is also little likelihood of obtaining sufficient funds from abroad or from non-copper local sources. Zambia thus will be faced with long-term financial difficulties and much slower economic development.

Background

1. Copper dominates the Zambian economy, accounting for about 50 percent of the gross national product, 90 percent of total exports, and about 65 percent of government revenue. The industry, largely owned by US, UK, and South African interests, produces nearly 15 percent of the world's copper. Zambia's economic well-being and economic development both depend heavily on the industry's prosperity.

2. Since it achieved independence in October 1964, Zambia has enjoyed the benefits of relatively high copper prices. Company profits have been adequate and government revenues have jumped sharply. Despite a 20 percent decline in the volume of production and sales during fiscal year 1967,* sales revenues increased about 10 percent because of high prices. But these large earnings have been accompanied by rapidly rising production costs, and in recent years Zambia has moved from a relatively low-cost to a high-cost producer of copper. Thus a serious cost-price squeeze is likely to emerge quickly once prices begin to fall.

Copper Price Trends

3. During 1959-63 the average annual price paid for Zambian copper remained relatively stable, fluctuating between 29 cents and 31 cents per pound. In 1964, world demand for copper jumped sharply, mainly as a result of a surge in economic activity in Free World developed countries. With prices on the London Metal Exchange (LME) rising rapidly, Zambian producers, like those in Chile and other major producing countries, agreed to sell their production at fixed prices in an effort to forestall a rapid shift to substitute metals. The price was set at 29 cents and was raised gradually to 42 cents in January 1966. LME prices, however, continued to skyrocket, reaching more than 80 cents per pound in early 1966, as demand was outrunning supplies. The US consumption of copper expanded rapidly as a result of requirements for Vietnam, and there were production

* *Companies report on a 1 July-30 June fiscal year basis.*

problems throughout the world, such as strikes in Chile. In order to benefit from the high world prices, the Chileans decided to abandon fixed prices and sell their output at the higher three-month future LME price. The move forced Zambia and other Free World producers, outside the United States, to take similar actions. As a result the LME price fell to about 70 cents per pound.

4. Toward the end of 1966, prices moved downward as an increasing supply outpaced demand (see Figure 1). Copper consumption declined as substitution of other metals that had been stimulated during the period of high prices started to be felt and because of a slowdown of economic activity in Western Europe. In addition, copper stocks were becoming ample. A further price decline was staved off by the US copper strike starting in mid-1967, although, thanks to the high level of stocks in the United States and Europe, the price remained at about 45 cents a pound through October. As stocks in the United States neared exhaustion, however, the London price moved up rapidly, reaching 70 cents as of the end of February 1968.

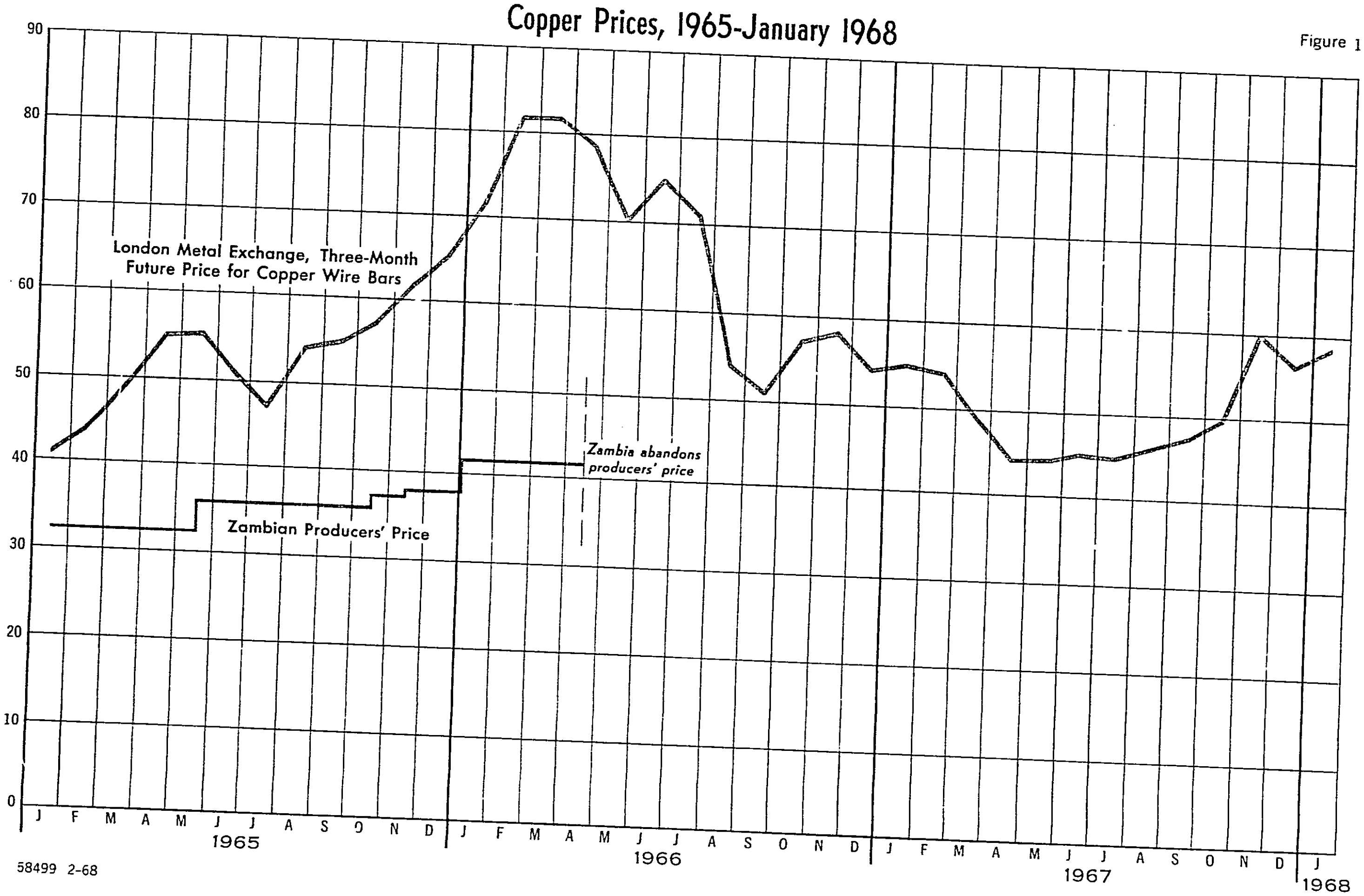
Rising Production Costs

5. The high prices over the last few years have allowed Zambian copper companies to absorb new taxes on copper and rapidly increasing production costs without serious adverse effects on their return on investment. This return for the last three fiscal years has been more than 20 percent, about the same as earned by other mining companies in southern Africa. Despite the 10-percent increase in gross sales revenue in fiscal year 1967, resulting from price increases which more than offset reductions in output, company profits declined slightly (see Table 1).

6. The cost of producing copper, which covers outlays of mining, smelting, and refining in Zambia, as well as selling and transporting charges, rose from 17 cents per pound in fiscal year 1964 to 25 cents per pound in fiscal year 1967 -- an increase of some 50 percent. As shown in Figure 2, the sharpest rise occurred during 1967. The increase in costs that year is somewhat overstated because

Copper Prices, 1965-January 1968

Figure 1

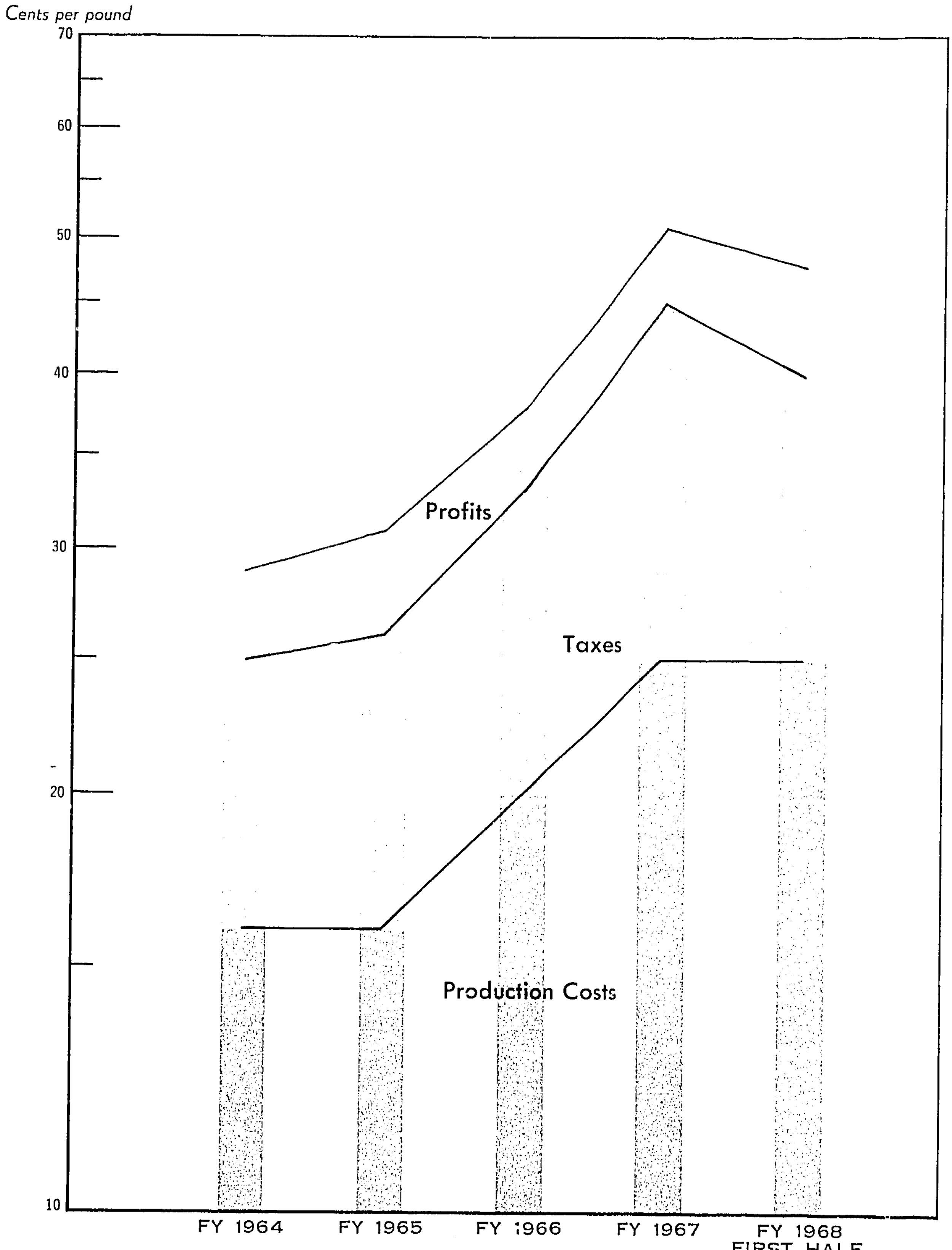


58499 2-68

Approved For Release 2005/01/11 : CIA-RDP85T00875R001500220030-5

Figure 2

Zambia: Distribution of Copper Revenues
Fiscal Years 1964-67 and First Half Fiscal Year 1968*



*Fiscal year-1 July to 30 June

58498 2-68

Table 1

Zambia: Copper Industry Sales and Profits

	Fiscal Year 1967 [a]	Fiscal Year 1966 [a]
	Thousand Short Tons	
Production	592	752
Sales	601	753
	Million US $	
Sales revenue	594.8	542.9
Royalty and tax payments	220.4	181.3
Royalties	80.1	111.4
Export taxes	82.6	1.6
Income taxes	57.7	68.3
Production costs, including transport and selling	299.6	284.5
Net profit	74.8	77.1

a. Fiscal years run from 1 July to 30 June.

all the ore that was mined could not be processed because of coal shortages. On the other hand, the increase in costs since then has probably been understated because some ore processed in the first half of fiscal year 1968 (1 July-31 December 1967) came from the stockpile rather than being newly mined.

7. Wages, particularly for mine workers, have been the major element contributing to higher production costs. Labor unrest in the copper industry in 1966 was stimulated largely by the wide gap in wage scales and working conditions between native and expatriate employees. Yielding to pressures of the strong Zambian Mineworkers Union, the government approved an increase that pushed up wages 42 percent. While labor costs have increased, productivity in the copper industry has declined since independence. For example, at one important mine the overall production per mine worker fell 25 percent between fiscal year 1963 and fiscal year 1967. This decline is attributable to white and black supervisors being unwilling to enforce discipline and work norms for fear of provoking violence. Moreover, the government policy of replacing white expatriates with Africans has proceeded much faster than the availability of newly trained local personnel, with a resulting loss in efficiency.

8. President Kaunda's efforts to sever all economic ties with Rhodesia have contributed greatly to rising cost, especially for fuel and transport. Lusaka's immediate response to Salisbury's Unilateral Declaration of Independence (UDI) in November 1965 was an attempt to redirect Zambian foreign trade -- almost all of which traditionally moved through Rhodesia -- to non-Rhodesian routes. The traffic which has been shifted, however, has had to use longer, less efficient, and less reliable routes, resulting in higher transportation and handling charges. (For costs of shipping copper on all routes, see Table 2.) The numerous difficulties encountered in using alternate routes often have resulted in delays and shortages which forced a reduction in copper production and added to unit costs. In addition, the freight which still transits Rhodesia must now pay rates about 30 percent higher

Table 2

Transport Charges for Shipping Zambian Copper to African Ports a/

US Dollars per Short Ton

	October 1966	October 1967
Rail through Rhodesia to Mozambique Ports	44.70	58.30
Rail through Congo to Lobito, Angola	48.20	59.10
Great East Road to Salima, Malawi, and hence by rail to Beira, Mozambique		75.90
Great North Road to Dar es Salaam		
Large vehicles		61.05 b/
Small vehicles		89.30
Airlift to Dar es Salaam		158.20 c/

a. Including port charges.
b. This price is charged for government-owned trucks and may not include full depreciation as a cost element.
c. The price charged by the partially government-owned Zambian Air Cargoes, which handles all copper shipments by air, is probably less than their actual costs.

than before 1967 as Rhodesia attempts to compensate for the revenue loss resulting from the diversion of Zambian traffic. In all, the higher costs for shipping copper to African ports added roughly 1.5 cents per pound to total costs.

9. The costs of supplies have also risen. There have been increased freight charges, and higher prices have been paid for many goods which were previously bought in Rhodesia but are now purchased elsewhere. The copper industry is affected indirectly by this upward movement in prices through pressure for higher wages and directly by the increased prices paid for imported items and locally produced supplies which generally have a high import content.

10. Coal is the most important commodity contributing to higher production cost for copper. Zambia normally consumes about 1.3 million short tons of coal annually, most of which is used directly or indirectly by the copper industry. Prior to UDI, all of Lusaka's coal requirements were met from Rhodesia's Wankie collieries, which provided cheap, high-quality coal. Since 1965, however, Zambia has attempted to reduce this dependence by rapidly developing its domestic coal resources. Thus far, these efforts have been only partly successful, and the coal obtained from Zambia's Nkandabwe mines has proved to be more expensive and of lower quality. The price of domestic coal delivered to the Copperbelt is about $20 a short ton, more than triple the pre-UDI Wankie price. Moreover, because of its high ash content and low calorific value, it takes about one and one-half tons of domestic coal to replace one ton of Wankie coal. The cost of Zambian-produced coal is thus about five times the cost of Wankie coal. The copper industry has also been using some heavy fuel oil and small amounts of coal imported from South Africa as substitutes for the Rhodesian product. In an effort to compensate for the loss of coal sales, Salisbury has introduced a sliding scale of prices which has also increased the cost of coal to Zambian users. Altogether the higher cost of coal to the mining companies has added nearly one cent per pound to production costs.

Government Spending and Copper-Derived Revenues

11. The amount the copper companies pay to the government has increased faster than copper prices. Government revenues from the industry are derived from royalties calculated at a rate of 13.5 percent of the LME price less one cent per pound, an export tax which absorbs 40 percent of the difference between 37.5 cents per pound and the LME price, and an income tax rate of almost 45 percent. Government revenues more than doubled between fiscal year 1963 and fiscal year 1967, when the government took 40 percent of all receipts from copper sales. The proportion of government revenue from the copper industry would be even higher if indirect taxes, such as import duties, paid by the copper companies were included.

12. With the large tax revenues generated by copper, the government believed it could accomplish many of its policy goals. It embarked on an ambitious $1.2 billion four-year economic and social development program on 1 July 1966 and spent large sums on trying to break economic relations with Rhodesia. The various schemes, however, fell far behind schedule because of shortages of materials caused by the attempt to break ties with Rhodesia and a severe deficiency in trained manpower. As a consequence, by 30 June 1967 only about two-thirds of authorized expenditures for the first year of the development plan had been actually spent.

13. Government fiscal planners, however, are now finding that spending is rising too rapidly, even with the additional tax revenues generated by the high copper prices. Wage rate hikes for civil servants have been larger than expected and costs of goods have increased as a result of the policy to reduce Zambia's dependence on Rhodesia. Also the funds required to operate the new schools, hospitals, and other facilities being completed under the four-year development program are mounting. Lusaka officials estimated that there will be a deficit of $62 million in the last half of calendar year 1967. The government, aware of its growing financial difficulties, has formulated a budget for 1968 which cuts back the growth rate for expenditures.

Prospects -- After the US Copper Strike Ends

14. The resumption of US production of more than 100,000 tons a month will affect prices immediately, particularly futures. A price drop could be precipitious. Moreover, there is now little expectation of an upsurge in prices for the years ahead. Major world copper producers have increased their production capacities and plan further large increases in the next few years. Meanwhile, the rapid increase in demand since 1963 has leveled off because of a significant shift to less expensive metals such as aluminum. A study carried out by a Zambian mining company indicates that through 1977, in the absence of a major long-term strike, Free World copper consumption will fall short of the amounts mining companies will be able to produce.

15. Zambian government spending will suffer a sharp setback from a price decline and the ensuing cost-price squeeze. Since the industry provides most of the government's current revenues, a sizable drop in income and profits will further erode Zambia's financial position. Copper prices averaging at least 55 cents per pound are required to generate sufficient revenue to match present spending levels. When the US copper strike is settled, the average copper price for 1968 probably will be much lower. Over the next few years if prices settle at about 40 cents per pound and there is no prolonged major copper strike, the Zambians would face an annual deficit of almost $200 million under the present tax structure. At a price of 45 cents per pound the deficit would amount to at least $140 million a year. The above calculations are based on full mined production, but actually for many months copper output will likely amount to only 80 percent of normal production. The increased use of the low-quality Nkandabwe coal has been causing copper companies to close down their smelting plants more often for maintenance than when they were using only Rhodesian-supplied coal. At this lower rate of output the annual deficit would amount to some $220 million at the price of 40 cents per pound and $170 million at 45 cents. The full impact of

a price decline can be postponed for a while, however, because the Zambian government has about $120 million in deposits in London to draw on.

16. A government which has enjoyed a large income since independence will not willingly permit its revenue to decline sharply. However, Zambia's options for dealing with the consequences of a price decline are limited. The mining companies would be earning much lower profits as a result of a cost-price squeeze and thus would be unable to pay higher tax rates to the government. The companies probably will even seek some tax relief. Only recently, Anglo-American, one of the two copper companies in Zambia, hinted that it may have to discontinue its lead and zinc operations (already faced with declining prices) in Kabwe (Broken Hill) unless the government reduced the size of the royalty payments. There is little likelihood that the costs of production can be cut. Because of domestic political considerations, wages cannot be reduced. In fact, it is probable that the rising domestic price level will eventually stimulate demands for further wage increases. UDI-associated costs also are not likely to be reduced but may actually increase. A return to the use of Rhodesia's economic routes and resources is politically unpalatable to Kaunda. Meanwhile, the development of economic alternate routes is still well in the future.

17. Zambia might consider devaluation as a device to lower the domestic cost of production and to increase government revenue. However, devaluation would immediately raise the price of most manufactured consumer goods purchased by copper workers and of the materials and parts used by the copper companies. Moreover, the copper workers would not long accept a decline in their real wages, and consequently the benefits of devaluation to the companies and the government would be transitory.

18. Zambia will most likely request more foreign aid in order to continue the development program and the effort to break economic relations with Rhodesia. The United Kingdom will probably be asked to make the major contribution because Lusaka blames London for the Rhodesian affair. For 1968, Zambian Finance Minister Mudenda hopes the United Kingdom will provide $67 million, which is his estimate of Zambia's cost

in supporting sanctions against Rhodesia. But despite its close economic ties with Zambia, the United Kingdom probably will give considerably less, primarily because of its balance-of-payments problems. Other countries, including Communist countries, are also likely to be approached, but their response may be small because they have little direct interest in Zambia. As a result, foreign aid probably will fall short of the $140 million or more a year required to meet Lusaka's financial deficit. Furthermore, sufficient local sources of revenue other than from copper could not be raised over a sustained period. Thus, with a possible 10-year period of low copper prices, Zambia will face long-term financial problems.