

- Union, the Party and the Government, see Bates (1971). Bates suggests that the Government has failed to control the mineworkers, but such a contention is certainly open to debate. For an alternative view see Burawoy (1972).
- 15 The survey was conducted with the assistance of personnel officers as interviewers, which may have biased the views expressed by the workers. Nevertheless the views expressed correspond closely to those discovered by the research team from the University of Zambia Sociological Association.
 - 16 Katilungu was perhaps the best known and in his early years the most popular of mineworkers' leaders. He was killed in a car accident in 1961.
 - 17 Workers often bitterly complain that at the time Independence was won they lost what was referred to as a copper bonus—a bonus paid on the basis of the price of copper—and other incentive bonuses were also withdrawn. This they attribute to the Government. In fact these bonuses were consolidated into the miners' basic pay but, as was indicated in chapter two, the Union was under severe pressure at that time from a rival leadership and therefore failed to strike as good a bargain as it might have done had there been no pressure.
 - 18 The '51 per cent' refers to the 51 per cent Government equity holding in the mines following their nationalization in 1970.
 - 19 Wilson Chakulya was, at the time of the comment, General Secretary of the Zambia Congress of Trade Unions. He was commonly regarded as the Government's representative in the Z.C.T.U., which existed to ensure that the unions remained loyal to the Government and the nation as a whole and not merely to the workers.
 - 20 The way the Zambian mineworkers see Zambian society may, indeed, be linked to the way in which Mills perceived American society, most poignantly described in *The Power Elite* (1959).
 - 21 Burawoy (1972).
 - 22 Durkheim (1968), p. 257.

CHAPTER SEVEN

PRESSURE ON THE COMPANIES:
WHERE DOES POWER LIE?

The Companies' *raison d'être*, like that of any other business enterprise, is to produce economic profit—a well defined, specific and measurable goal. Without profit, the Companies would close down the mines and abandon their investment until such time as it appeared profitable to re-open them.¹ In their pursuit of profits all economic enterprises incur costs emanating from the physical, economic, social and political environment in which they operate. The physical environment in the case of mining will give rise, for example, to technological costs, while the economic environment may be held attributable for loss of profits through taxation. The political and social environments also impose their own constraints on the efficiency with which the Companies may operate, as for example the Government of Zambia's decree that trade with Rhodesia be cut back or that expatriate manpower be no longer recruited from South Africa. Each party which has a direct stake in the production of Zambian copper has its own interests to pursue and protect, which it will attempt to do in so far as its bargaining power permits. These interests may seriously conflict with the principle of maximization of profits, but so long as the Companies find it worth while to operate, and depending on the negative sanctions at the disposal of those interests, so the Companies will accept constraints on their efficiency.

Changes in the power of the different parties brought about by such events as a falling price for copper, a change of government in Downing Street, or the granting of political independence to Zambia, necessarily lead to corresponding adjustments in Company policies. As chapter two suggested, this is an issue particularly sensitive to the power relations between four major interest groups asserting their claims on the Companies. First there was the Northern Rhodesian Government, acting as a representative of the Colonial Office in London, but which had also been granted varying degrees of autonomy to favour the European population, particularly in the early years of Federation. In the days when the most senior officials of both companies were based in London the British Government was able to exert direct pressure to maintain production at all costs. The Government of the Republic of Zambia has replaced these two pressure groups since Independence. Third was the European Union and its membership, which felt threatened by African advancement, and lastly there was a force which emerged as an articu-

late body only after the Second World War—African labour. From a purely economic standpoint the Companies themselves would have preferred Africans to advance to higher positions, but their directorates were at the same time influenced by links with the British Government, in the case of R.S.T., and, in the case of Anglo-American, South African influence inclined them to take a weaker line with the European labour. Pressure from all these parties has determined the extent to which the Companies deviated from a policy of allowing African advancement to proceed at such a rate as to maximize efficiency and minimize labour costs.

We saw in chapter two that prior to and during the Second World War the Companies did not put up much resistance to the erection of a colour bar within the industry. The Companies claim that they had no alternative in view of the pressures from the British Government for uninterrupted production of copper. A confrontation with white labour over the issue of African advancement might, in their view, have led to widespread unrest amongst the European labour force and paralysing strikes, with disastrous effects on the British war effort. An official of the R.S.T. group of companies, looking back on African advancement, has written:

While the Companies accepted all other findings of this Commission [the Forster Commission of 1940], they were reluctant to take the lead in African advancement on their own. They were well aware that there was a severe shortage of African candidates; they were equally well aware of the probably hostile reaction of Europeans to advancement, and knew that they would be under pressure to maintain copper production. The Government, too, was reluctant to take the lead, as they could foresee the position of having to find jobs for returning European ex-servicemen and the possibility of cuts in copper production at the end of hostilities.²

Apart from the decree from the British Government direct to the Companies' head offices, then situated in London, that production should take priority over African advancement, the Government of Northern Rhodesia seems to have been generally more sympathetic to the interests of white labour. The following is an extract from a pamphlet issued by the South African Institute of Race Relations in 1936.

Sir Hubert Young [the Governor] made it very clear that the Native Policy of the Government was conducted from Downing Street, but promised that the Government would not encourage any encroachment by natives into work now performed by Europeans.³

In short, until the end of the war both the British Government and, probably to an even greater degree, the Northern Rhodesian Govern-

ment were opposed to African advancement; this buttressed the strength of white labour, while African labour was still in a very weak bargaining position, without any legitimate means of articulating and presenting its interests.

The immediate post-war years saw a number of significant changes brought about by the new Labour Government. Under the guidance of a labour official sent out from England by that government, the African Mineworkers' Trade Union was formed in 1948. In 1947 the Dalglish Commission was appointed by the Northern Rhodesian Government to look specifically into the problem of African advancement. No progress was made because the British Government would not relax the demand for increased copper production, which the Companies interpreted as precluding any confrontation with white labour.

The Companies made it clear to the Government that unless the Government was prepared to make it clear before the Conference [of 1947] that the Government had accepted the principle of African advancement, the Companies would find it impossible at the Conference to declare themselves in favour of African progression. The reason for this was that the Companies knew that to make such a declaration, unless the Government had previously made it themselves, would lead to a strike and at this time copper production was just as important to the United Kingdom Government as it was during the war. The European Union associated itself with this view and the Conference was therefore abortive.⁴

However, Prain fails to offer any reason why the Northern Rhodesian Government refused to support African advancement in principle, in view of the fact that only a few months later it appointed the Dalglish Commission, and in view of the stated policy of the Labour Government.

The white miners were being buttressed in the struggle to protect their interests by the emerging pressures for the formation of a Central African Federation which would comprise Nyasaland and the Rhodesias. This was an attempt by the white settler communities, particularly in Southern Rhodesia, to consolidate white supremacy and to gain a hold over the lucrative copper industry of Northern Rhodesia. But the more iniquitous racial policies of Southern Rhodesia, if spread to Nyasaland and Northern Rhodesia, would have met with resistance from the Africans and also from the British Government. Indeed, so long as a Labour administration remained in power it appeared that consent to the formation of the Federation would not be forthcoming, despite growing support for it among the European population of the territories. It was as early as 1950, however, that one of the mining companies—Anglo-American Corporation—decided that it would be economically and politically expedient to move its headquarters from London to Northern Rhodesia.

... As far as the Rhodesia Companies were concerned, they were now able to escape much of the heavy taxation in the United Kingdom, which was attempting to pay both for the welfare state and rearmament.

The move also brought with it political advantages. The balance of political power had long been shifting from London to the European population in the Territory. If the companies moved to Northern Rhodesia, they could exercise far greater influence locally, where they constituted the greatest economic power, than they could in London, where they were overshadowed by many other interests. So Sir E. Oppenheimer, the great mining personality in the Territory, argued that after the move had been effected, it became possible to determine policy locally in consultation with Government and other authorities. This was most essential in an increasingly complex situation in which—as he believed—the views of the mining companies on many problems, especially those of European and African labour, must carry much weight. Roan held back for a while, but nevertheless its chairman considered that if Rhodesia became a Dominion, the Board would think again. Once having moved to Rhodesia, the companies were thus more likely to support local autonomy.⁵

Indeed, Richard Hall reports the mining companies as backing the Federation through the pressure group known as the United Central Africa Association. They were to continue their support for the Federal Party (later the United Federal Party) until as late as 1959.⁶ The moves of the Companies suggest that their interests lay in direct support of the controlling political power, buttressing the emerging *status quo* and so enhancing their bargaining power *vis-à-vis* the government of the day. When the Labour Government collapsed in 1952, the Conservatives took over and the Federation was born, the Companies saw their interests as lying at the focus of political power and moved their offices to Salisbury—the Federal capital.

During this period the African mineworkers, strongly organized in a powerful trade union, had to remain content with wage increases rather than offers of African advancement.⁷

The Northern Rhodesian Government replied that they hoped to initiate discussions but could not do so until after the war, when there might be difficulties because of an expected reduction in output. They said that for some time ahead the Africans must be content with a high remuneration rather than with greater opportunity.⁸

The Companies were probably 'buying time' until an opportune moment presented itself when they could openly confront the European Union over the issue of African advancement. In 1954, for the first time since the inception of the war, Britain relaxed the pressure for maximum

production,⁹ and with the price of copper falling the time was ripe for renewed attempts at African advancement. After abortive talks the R.S.T. group of companies forced the European Union into submission by threatening to terminate the recognition agreement. The Companies' wealth had the last word, since the future of the Federation depended upon it.

As I have pointed out, the mining companies claim to have been continuously under pressure from the British Government until 1953 to produce at all costs and not to risk cut-backs stemming from the implementation of African advancement. However, Prain never explains precisely the nature of the control or the sanctions the British Government could apply to the Companies. It is significant that at those times when pressure to produce was high, so demand too must have been high, which in turn would mean high prices and profits; consequently, high financial risks would be at stake in the case of a show-down with European labour. It is possible, therefore, that the Companies were as much influenced by the price of copper as by pressure from the British Government in the timing of their confrontation with European labour. The final show of force with the European Union came in 1958, with copper at its lowest price since 1950, when the Companies threatened to shut down the mines.¹⁰ There is a suggestion, then, that the Companies were as much concerned about profits as sanctions from outside parties in their dealings with the labour force.

The post-war period can be divided into two phases. The first phase, when the centre of power was in London, saw the mining companies rendering support and co-operation to the British Government, accepting the new African trade union and supporting the idea of African advancement. The second phase saw the locus of power shifting from London to the Federation, a process which was accompanied by a corresponding shift of political alignments on the part of the Companies, who moved their headquarters to Salisbury. The Companies rendered support to the Federal Party until 1959, while hoping, perhaps, that in exchange the Government would give its support or at least would not interfere, in attempts to introduce African advancement. In 1959, however, the political climate was once more undergoing a transformation and the Companies had to think again about their alignments, for it was clear that political power would soon be granted to the African peoples of Northern Rhodesia.

The rise to power of the Zambian has been accompanied by the decline of the European, and in particular of the white miner, who now, isolated from any outside political support, has little opportunity to resist Zambianization openly. The Companies were free to pursue active attempts at Zambianization, knowing that the black Government would

wish to further those interests of black labour that did not conflict with the national interest.

Just as had been the case with the Federal Government and the British Government before it, the Companies sought to co-operate and buttress the new Zambian Government with their considerable wealth. Headquarters naturally moved back to Lusaka, where they could, if necessary, maintain close contact with Government. The Companies, who not so long ago were financing the United Federal Party, were now actively collaborating with the Government of Zambia to cut back on trade with Rhodesia and to halt the recruitment of expatriates from South Africa, both at some considerable cost to themselves. Within Zambia the Companies, particularly the Anglo-American group, have been actively involved in a number of development schemes. The latest K4 million agricultural development project at Chisamba aims to help make Zambia self-sufficient in maize by efficient 'State' farms. The gradual introduction of Zambians on to the boards of directors was yet another sign of the growing importance the Companies attached to co-operation with the Zambian Government. One may argue quite plausibly that the Companies were more than content with the proposed nationalization of the mines, since this cemented their co-operation and identification with the Zambian Government, giving them much greater security if faced with opposition from, for example, their black labour force. The Government would now have to bear a considerable part of the burden of resisting wage increases and stemming strikes.

Zambianization has been pursued as rapidly as the Companies considered would be consistent with efficiency and with the availability of Zambian manpower, and as rapidly as the expatriates would tolerate. Though they had lost their formal powers the expatriates were still in a strong bargaining position and it is upon them that the success of Zambianization and the running of the mines depend. Indeed, it is the Government's dependence on white expertise and the Companies' presumed control over that expertise that ultimately gives the Companies a relatively secure and firm base in Zambia. Commenting on the nationalization of the mines, and comparing Chile and Zambia as copper producers, the *Metal Bulletin* had this to say:

The second aspect of difference that is important to copper buyers and therefore to the market, is the dependence of the mines on expatriate technical and managerial skills in their operation. Chile was, and still is, dependent on US talent in many key positions in the mines. It can also be said that the amazing stability of output in the Congo during the period of political disturbance there was undoubtedly attributable in high degree to a mere handful of Belgian technicians and managers. In neither of these countries, however, does the calibre of ordinary mine labour so

much demand skilled outside assistance in the higher echelons as is the case in Zambia.

There is no doubt that the root cause of the persistent failure of Zambian copper output to rise in proportion to the capital that has been put into it recently has been the creeping inefficiency that has spread through the mines in the wake of Zambianization. This has forced the promotion to responsible positions of Zambians who may not be equipped to meet all the technical and managerial qualities demanded by their posts. Much therefore hinges on the success which Zambia has in persuading its existing and potential expatriate mineworkers and technicians to stay in, or come to, Zambia in the next few years.¹¹

Zambianization has been pegged to forecasts which the Government can inspect and which are designed to replace expatriates with Zambians systematically and gradually without creating any disruptions that might adversely affect efficiency. In the event this has had the unfortunate and inevitable consequence, as I have already indicated, of leaving the structure of the industry, and thus of race relations, largely unchanged.

The history of Zambianization and African advancement illustrates the agility of the Companies in coping with conflicting interests and changing political forces.

For businessmen . . . are the first to try and adjust themselves to any situation as it is. So the stages are: first, that they will move in and develop the resources of the country for profit; then they will hang onto their position of strength for as long as they can, supporting European rule; then, when forced to face up to the forces of nationalism, they will try to support moderate (some would say stooge) African politicians likely to be favourably disposed towards them; finally, when they wake up one morning to find there is an African nationalist government in power, they will be the first in the queue on their doorstep eager to come to terms with the government of the day.¹²

Copper mining is inherently risky and uncertain, if only because of the technological problems involved in any mining enterprise and the unknowns that lie beneath the 'surface'. A single unexpected blow such as the Mufulira disaster¹³ can kill tens of people and put a whole mine out of action for a period of months or even years. In addition, the copper producer has to gear his production and expansion, and indeed the distribution of profits, to a fluctuating copper price sensitive to all sorts of changes all over the world which can be neither controlled nor predicted. Thirdly, the mining companies have had to be continually adjusting to the changes in the distribution of political power amongst the interested parties. With the localization of power in Africa following

the Second World War, the Companies had similarly to localize their decision-making apparatus. But proximity to the Zambian Government does not itself substantially reduce the uncertainties of politics in independent Africa. The Companies have had to remain ever on the alert for the unexpected, such as nationalization in 1969. Planning in an attempt to become more efficient becomes self-defeating in so far as it introduces elements of rigidity. Failure to adapt to a sudden change in the price of copper, a change in government or a mine disaster can be catastrophic for the Companies.

There is no 'Company policy' as such—only a series of *post hoc* rationalizations which seek to create consistent patterns of policy from *ad hoc* decisions made under prevailing pressures. The rationalizations, though they invariably have some validity and credibility, tend to stress certain factors which exonerate the Companies and if possible the incumbent government from responsibility, while omitting or underplaying other factors that may cast a more shady light on the Companies' submission to outside pressures. Thus the problems of Zambianization are blamed pre-eminently on the shortage of manpower; difficulties encountered on the shop floor by African supervisors are accounted for in terms of the conflict between the young and the old; fragmentation and the creation of new posts are said to be necessary because the Zambian successor is new to his job; the powers of the personnel department should be diminished because the previous system proved unworkable, and so on.¹⁴ Problems are portrayed as 'inevitable' in the circumstances.

In my attempts to understand the formulation of Company 'policy' towards African advancement and Zambianization I have insisted on taking into consideration a number of external pressures which act as constraints on what is and what is not expedient. The constraints, it has been argued, in combination determine the nature of the decisions reached. I must now try to formulate a model of the decision-making process. Weber provides a convenient starting point.

Bureaucratic administration means fundamentally the exercise of control on the basis of knowledge. This is the feature of it which makes it specifically rational. This consists on the one hand in technical knowledge which, by itself, is sufficient to ensure it a position of extraordinary power. But in addition to this, bureaucratic organizations, or the holders of power who make use of them, have a tendency to increase their power still further by the knowledge growing out of experience in the service. For they acquire through the conduct of office a special knowledge of the facts and have available a store of documentary material peculiar to themselves. While not peculiar to bureaucratic organizations, the concept of 'official secrets' is certainly typical of them. It stands in relation to technical

knowledge in somewhat the same position as commercial secrets do to technological training. It is a product of the striving for power.¹⁵

The question is always who controls the existing bureaucratic machinery. And such control is possible only to a limited degree to persons who are not technical specialists. Generally speaking, the trained permanent official is more likely to get his way in the long run than his nominal superior, the Cabinet Minister, who is not a specialist.¹⁶

Weber suggests that technical expertise is the ultimate source of power in the bureaucratic organization. But quite clearly he is referring to a particular type of bureaucracy to be found in governments where 'nominal' bureaucratic heads never remain with any one bureaucracy for any length of time. Such heads have the disadvantage of entering the bureaucracy from outside, rather than rising through the organization. Those who occupy top managerial or executive positions in the capitalist organization, be they from the ranks or from outside, have been recruited for their suitability for the command posts. More so than the political head of a Ministry, the managerial leader will be conversant with the operations that take place lower in the organization. Nevertheless Weber's point may be still valid. Whereas the ultimate responsibility for decision-making rests formally in the hands of head office in Lusaka, power may well reside at the mines where production takes place.

Because the capitalist organization formulates its goals in terms of profit-making and because profit is made through production, so those who control production are crucial actors. The more indispensable and irreplaceable they are the more power they have. The Zambian copper mines being relatively large organizations, newcomers to co-ordinating posts such as head of department would find their jobs difficult. Only those who have grown up with the idiosyncrasies of the particular department would easily slot into senior posts.

Second, to find personnel for such positions in the existing labour market is very difficult. In this way expatriates, and the more senior ones in particular, not only have a monopoly of knowledge and appreciation of production realities but they carry a scarcity value which enormously enhances their bargaining power *vis-à-vis* top managerial executives at head office. At the mine, resentment of head office means that the latter rarely exercises the formal powers that derive from its more lofty position in the organization. Directives from head office which encounter opposition at the mine are formally carried out but manipulations at the departmental level preserve the interests of the managerial personnel there. These manipulations can be very costly and are made possible by the high profit margins associated with copper

production. As profits decline, so, it would be reasonable to suppose, the powers of the managerial personnel in control of production at the mines will also decline. It is interesting, therefore, that with a decline in the price of copper Mindeco, the Government holding company which controls the 51 per cent share of the mines, is applying pressure to management to Zambianize more effectively.

The power of mine management lies in its ability to resist directives from head office, and, in making decisions, top managerial personnel in Lusaka regard this as a constraint. Weber seems to suggest in his analysis that the specialist, or in this case managerial personnel at the mine, has a more positive role to play in decision-making. In the case of the mining companies this may be less true because of the existence of a series of channels through which different interest groups exercise their influence. The managerial personnel at the mines are not the only pressure group whose interests are at stake in the decision-making process at head office. There are other equally important environmental pressures outside the organization, of a political and economic nature, such as Government, and labour and commodity markets, which conflict with the interests of those within the organization. Weber, it appears, does not attach much importance to the environment in which the bureaucracy operates and to which, if it is to survive, it must adapt. It is for this reason that he perhaps over-estimates the power of the specialist.

In trying to reformulate Weber's ideal-type model of a bureaucracy as a monolithic organization divorced from its environment and subject to its own irreversible logic based on 'rationality', I shall concentrate on the top-level managerial personnel as the link between environment and organization. We can look upon the head office personnel of the mining companies as the decision-makers. The decisions they make are the outcome of a set of organizational constraints and environmental pressures. 'Rationality' in the narrow Weberian sense is only one among many factors which influence the decision-makers. Environmental pressures will often come from the incumbent government, and we have seen earlier in this chapter how important they were in influencing the mining companies over the matters of African advancement and, more lately, Zambianization. We also saw how such pressures conflicted with the organizational constraints characterized by the resistance of white miners to African advancement.

How do the decision-makers translate environmental pressures and organizational constraints into decisions? Is there any perceptible principle, however vague, which informs the decision-making process? Is profit maximization an adequate explanation of the outcome of decisions? Though plausible, this is unlikely, since it is difficult to evaluate environmental pressures in terms of profits. As a first approximation,

the operative principle would appear to be the preservation of the *status quo*, i.e. the existing distribution of economic power. Any pressure or constraint can be evaluated in terms of its relevance to the *status quo*. Unlike a computer into which is fed a series of inputs and out of which appears that single unique solution which best preserves the *status quo*, the decision-makers draw upon their own prejudices and experience in evaluating the significance of the various pressures and constraints. In this sense the decision is political.

On the assumption that the decision-makers operate on the principle of the preservation of the *status quo*, large industrial corporations must be seen as responding to rather than stimulating change. Hence the emergence of the view that the mining companies have been 'timid' in their toleration of economic irrationalities and in their obsessive concern to placate the Zambian Government. No matter how hard corporations may attempt to buttress the *status quo*, any decision inevitably has its repercussions: in trying to avert change it stimulates change.

The reconciliation of conflicting demands is an integral element in the preservation of the *status quo*. Thus it may frequently be the case, as with Zambianization, that environmental pressures conflict with organizational constraints. There are a number of ways in which the decision-makers can cope with conflicting demands. First, directives to the organization may be framed in such a manner that their execution satisfies both sets of conflicting interests. One such technique is to exploit the ambiguity of quantified data. Directives expressed in terms of figures may be interpreted in a number of ways while at the same time offering a spurious air of precision. Figures by themselves can never portray reality, and that is why they are so useful in reconciling opposed interests. Zambianization figures may be presented in such a way as to paint a favourable picture of progress while ignoring the problems and obstacles which cannot be quantified. Another way of reconciling conflicting demands is to persuade one pressure group that it is misrepresenting its own interests. Thus in justifying the organizational changes which have accompanied and impeded Zambianization, the decision-makers have persuaded Government that more rapid Zambianization would lead to a fall in production and therefore reduced revenue. In rationalizing their failure to carry out a particular demand, the decision-makers have to be astute public relations men. A further technique, closely related to the previous two, is issuing directives and conniving at the failure to execute them in the intended spirit. Thus the Zambianization of the personnel department was a directive whose execution was left largely to the discretion of mine personnel, with little interference from Lusaka. When there is a discrepancy between the execution of a directive and the original demand from outside, say Government, it becomes

imperative to separate the conflicting pressure groups—that is, the mine personnel and the Government. These are but three of the mechanisms which assist the decision-makers to reconcile conflicting demands and preserve the *status quo*; doubtless there are others.¹⁷

In conclusion we may postulate three analytically separate aspects of decision-making. There are the influences—organizational constraints and environmental pressures—on those who make the decisions. The decision-makers attempt to reconcile conflicting demands and preserve the *status quo*. Finally, the execution of directives issued by the decision-makers may be obstructed by those whose interests they threaten.

NOTES

- 1 For example, in 1931, when the price of copper dropped dramatically coinciding with the world-wide economic depression, the Companies closed down four out of the six mines they were then operating. One of the mines, Bancroft, has often been on the verge of closing down and on occasions when the copper price was very low operations have been suspended.
- 2 Bromwich (1961), p. 4.
- 3 Prain (1954), p. 93, cites this quotation.
- 4 Prain (1954), p. 96.
- 5 Gann (1955), p. 14.
- 6 Hall (1968), p. 150.
- 7 Between 1950 and 1954 the total emoluments paid to Africans more than doubled:

1950 34,814 African employees: £2,116,251 total emoluments.

1954 37,193 African employees: £4,589,840 total emoluments.

These figures come from Northern Rhodesia Chamber of Mines (1956), tables 27 and 23. Figures for European employees for the same years are not given. The Companies have been able to buy time from the African Union so easily because labour costs represent a very small proportion of production costs. The following figures can be extracted from *ibid.*, tables 6, 7, 12 and 27.

Gross sales value for 1955: £114,154,088

Gross production costs for 1955 sales: £44,850,000

Taxation and royalties of the order of £35,000,000

Total emoluments for African labour: £4,723,658

Total emoluments for European labour: £11,111,707

An increase of 50 per cent in African emoluments raises production costs by only 5 per cent.

- 8 Prain (1954), p. 94.
- 9 *Ibid.*, p. 98.
- 10 The following figures illustrate the changing price of copper (average yearly prices per long ton of copper):

1950	£179.0
1951	£220.7
1952	£259.5
1953	£256.3

1954	£249.3
1955	£352.3
1956	£329.1
1957	£219.7
1958	£197.6
1959	£237.8
1960	£246.2

Figures from Northern Rhodesia Chamber of Mines (1961), table 5.

- 11 'Kaunda's carbon copy', *Metal Bulletin*, 15 August 1969, p. 35.
- 12 Sir Jock Campbell, *The New Africa*, p. 12, cited in Faber and Potter (1971), p. 38.
- 13 The Mufulira mine disaster, caused by an inrush of mud, resulted in the loss of eighty-nine lives. The disaster took place on 25 September 1970 and was the first of such magnitude ever to occur in Zambia. For a detailed account of the disaster see Government of Zambia (1971c).
- 14 For an account of Zambianization by the former Manager of Anglo-American Corporation (Central Africa) Ltd, see Etheredge (1969).
- 15 Weber (1964 edn.), p. 339.
- 16 *Ibid.*, p. 338.
- 17 For an alternative view that sees managers as forming an elite which controls both power and wealth see Burnham (1942).