NORDISKA AFRIKAINSTITUTET

(The Scandinavian Institute of African Studies)

RESEARCH REPORT

C.S.L. Chachage
Magnus Ericsson
Peter Gibbon

No. 92

MINING AND STRUCTURAL ADJUSTMENT

Studies on Zimbabwe and Tanzania

Research Report no. 92

Chachage Seithy L. Chachage
Magnus Ericsson
Peter Gibbon

Mining and Structural Adjustment

Studies on Zimbabwe and Tanzania

Nordiska Afrikainstitutet
(The Scandinavian Institute of African Studies)
Uppsala 1993

Indexing terms
Economic policy
Mining
Structural adjustment
Tanzania
Zimbabwe

Typesetting: Kajsa Overgaard
Language polishing: Elaine Almen

ISSN 0080-6714
ISBN 91-7106-340-4

Printed in Sweden by Motala Grafiska AB, Motala 1993

Contents

Foreword

The mining industry was an important focus of scholarly and political discussion amongst Africans and Africanists during the 1970s. At this time most debate concerned the economic and political implications of the seemingly inexorable expansion of the influence of multi-national mining houses, and of the actions of African states anxious to restrict their influence and gain access to their revenues. From the mid-1970s the interest of these companies in most areas of Africa apparently declined, and discussion about African mining followed this same trend.

The 1990s have seen a revival of interest in the topic of African mining for four reasons. Firstly, structural adjustment programmes have been adopted by most African governments. Amongst their central features is a more welcoming attitude to private capital in general and to foreign direct investment in particular. The World Bank and others envisage that those investors most likely to be attracted by this change are those with traditional experience of African investment. Most obviously, these include the mining houses.

Secondly, this 'improvement' in the African investment climate is accompanied by certain problems attending further investment in the main growth centres of 1975-90, ie Australia and Canada. On the one hand, the best deposits are probably all now developed in these countries. On the other, increasingly restrictive environmental laws (and laws protecting the rights of indigenous peoples) limit the ability of companies to exploit new prospects there.

Thirdly, the prospect of a negotiated settlement in South Africa has already succeeded in allowing South African capital to overcome its long isolation and begin contemplating new external investments. The obvious site for mining capital's expansion is elsewhere in Sub-Saharan Africa.

Fourthly, there has been a growing acknowledgement of the scale and significance of small-scale or 'artisanal' mining in Africa. This has come about largely through an increased practical and academic interest in the growth of the informal sector generally during Africa's deepening economic crisis.

These two studies, both produced as part of the SIAS research programme on 'The Political and Social Context of Structural Adjustment in Sub-Saharan Africa', reflect on these themes and others. In doing so they aim to provide up-to-date information on the countries examined in a clear and accessible way. However, they do so from a specific shared perspective.

The authors approach structural adjustment critically. Rather than seeing it as the necessary instrument of Africa's economic salvation, an effort is made to examine its concrete effects with regard to specific local situations and constellations of interests.

The authors also systematically distinguish different interests within the mining industry, not only between countries but also between different types of mining operations and their operators. Finally they focus attention on the usually neglected social and political dimensions of the mining industry and in particular its relation to the national and local state in Africa. The paper by Chachage, moreover, contributes to the task of providing a theoretical framework linking each of these concerns.

Uppsala, April 1993

Peter Gibbon

Mining Investment, Structural Adjustment and State-Mining Capital Relations in Zimbabwe

Magnus Ericsson and Peter Gibbon

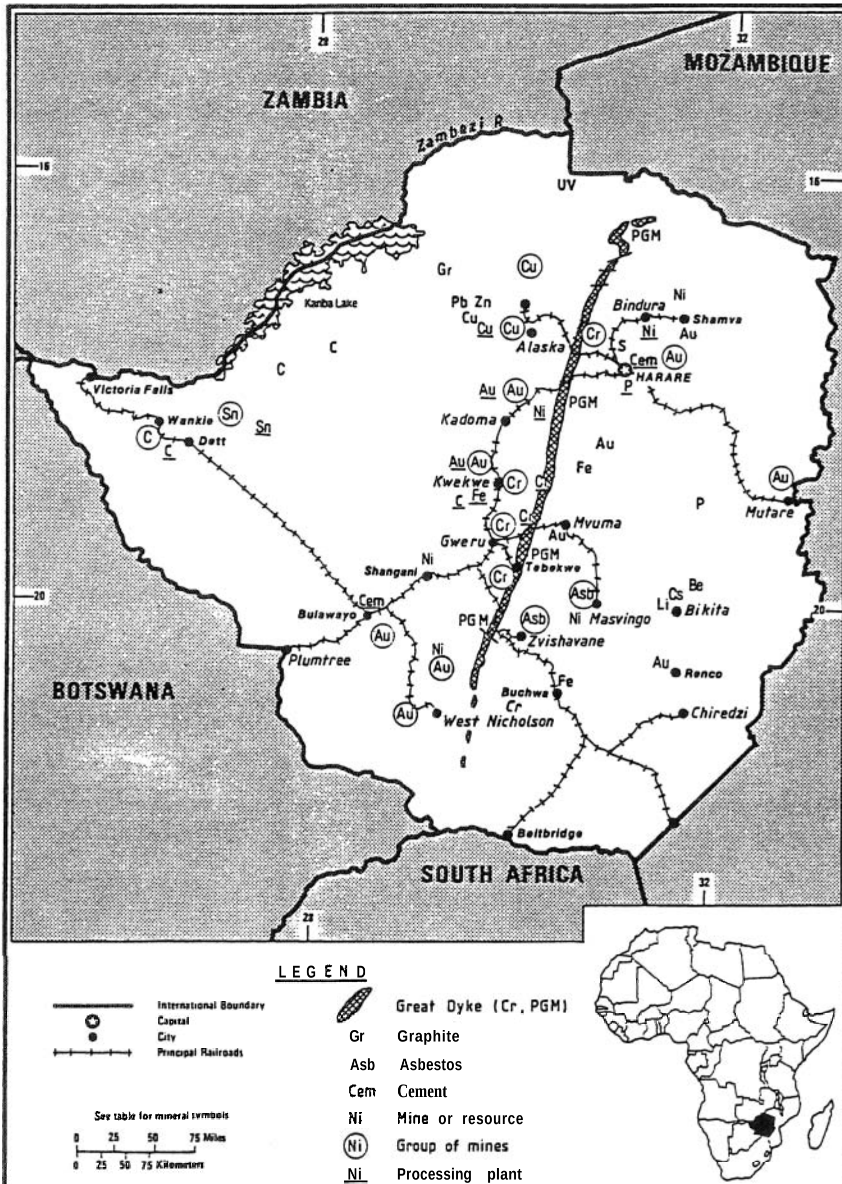
ABBREVIATIONS

AAC	Anglo American Corporation of South Africa Ltd
BHP	Broken Hill Pty Co Ltd
CIL	Carbon in leach
Cr	Chromium
CZI	Confederation of Zimbabwean Industry
EIU	Economist Intelligence Unit
EPO	Exclusive Prospecting Order
FER	"Framework for Economic Reform 1991–95"
GDP	Gross Domestic Product
IDA	International Development Agency
IFC	International Finance Corporation (World Bank)
IMF	International Monetary Fund
kg	Kilogram
kZWD	Thousand Zimbabwe Dollars
LDC	Less Developed Country
LSCF	Large-Scale Commercial Farming
MGBP	Million British Pounds
MIGA	Multilateral Investment Guarantee Agreement
MMCZ	Minerals Marketing Corporation of Zimbabwe
MUSD	Million US Dollars
MZWD	Million Zimbabwe Dollars
OGIL	Open General Import Licence
OPEC	Organisation of Petroleum Exporting Countries
OPIC	US Government Investment Protection Guarantee Agreement
PGM	Platinum Group Metal
SADCC	Southern African Development Coordination Committee
t	Metric ton
TNC	Transnational Corporation
TNDP	"Transitional National Development Plan 1982–85"
UANC	United African National Congress (Muzorewa)
UDI	Unilateral Declaration of Independence
UN	United Nations
UNIDO	United Nations Industrial Development Organisation
USAID	US Aid Agency
ZANU	(PF) Zimbabwe African National Union (Patriotic Front)
ZAPU	Zimbabwe African People's Union
ZCCM	Zambian Consolidated Copper Mines
ZISCO	Zimbabwe Steel Corporation
ZMDC	Zimbabwe Mining Development Corporation
ZNCC	Zimbabwe National Chamber of Commerce
ZUM	Zimbabwe Unity Movement
ZWD	Zimbabwe Dollars

EXCHANGE RATES (USD: ZWD)

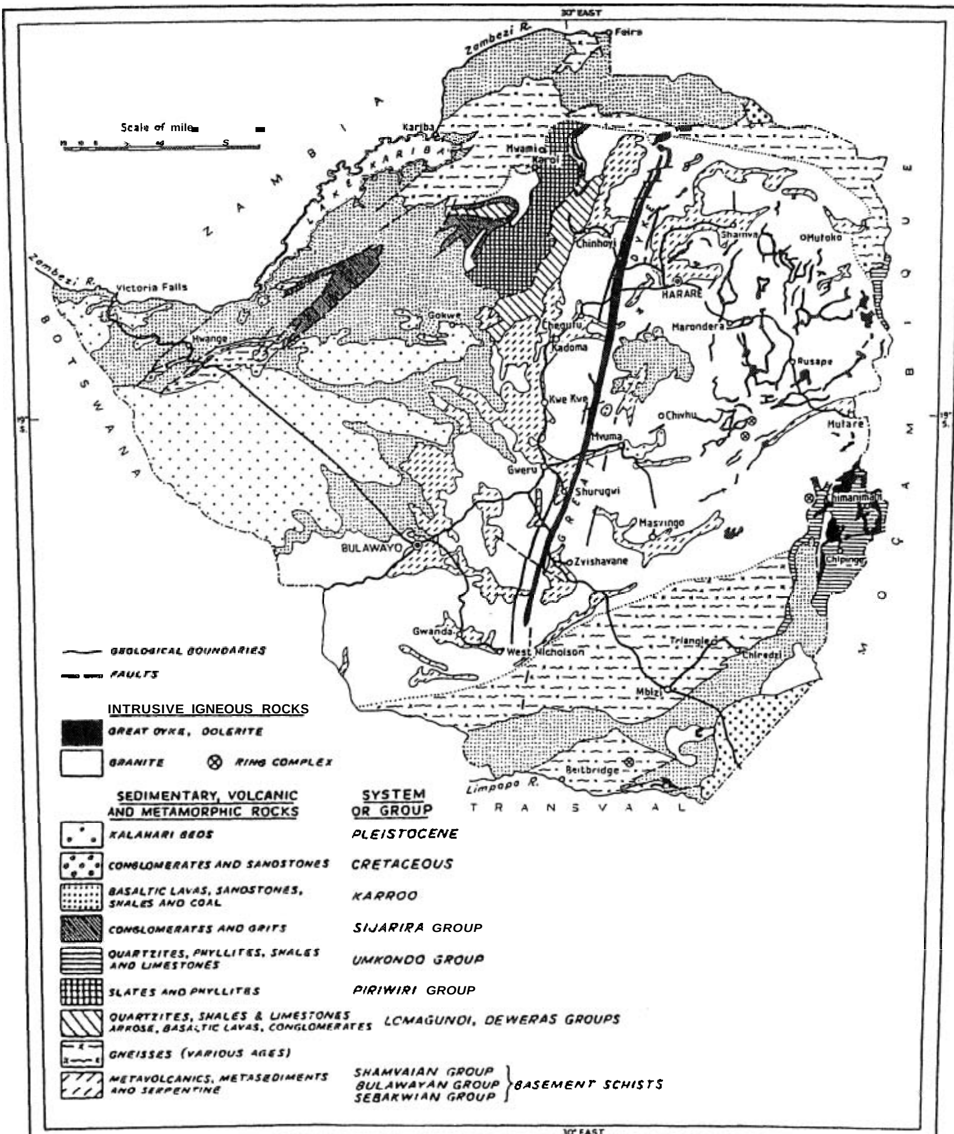
1980	1 USD	= 0.62 ZWD
1981	,,	= 0.73 ZWD
1982	,,	= 0.74 ZWD
1983	,,	= 0.96 ZWD
1984	,,	= 0.87 ZWD
1985	,,	= 1.24 ZWD
1986	,,	= 1.61 ZWD
1987	,,	= 1.66 ZWD
1988	,,	= 1.89 ZWD
1989	,,	= 2.23 ZWD
1990	,,	= 2.53 ZWD
1991	,,	= 4.95 ZWD
1992	,,	= 5.20 ZWD

ZIMBABWE



Source: US Bureau of Mines, 1984

GEOLOGICAL MAP OF ZIMBABWE



Source: US Bureau of Mines after R. Tyndale-Biscoe, 1959 and 1968

INTRODUCTION

This study[1] looks at a number of related issues and questions. Firstly, it traces the historical develbpment and contemporary structure of the Zimbabwean mining industry. Secondly, it examines factors influencing the relatively low levels of investment in this industry during most of the post-independence period, against the background of a discussion of the main phases of political and economic policy development up to 1989. Thirdly, it looks at the country's current economic policy reforms, or "structural adjustment programme", adopted in 1990. Fourthly, it discusses the implications of Zimbabwean adjustment for Zimbabwean and international business interests and for mining investment in particular. Fifthly, it discusses the relation of the World Bank both to Zimbabwean adjustment and to mining sector policy reform.

The most important issues reviewed in the process are the determinants of foreign direct investment in African mining, the significance of adjustment as a factor influencing foreign direct investment, and the main contours of the reshaping of national politics which accompany an improved environment for foreign investment.

Other issues examined in the course of the discussion include the relevance and effectiveness of past and current World Bank mining policy. The order of presentation broadly (but not exactly) follows the structure indicated above. An appendix is attached containing the details of Zimbabwe's mining legislation. The main sources employed are documents and statistical information from the international financial institutions, the Zimbabwean government and from the Raw Materials Group Data Base, the scholarly and specialist literature on post-independence economic, industrial and mining developments in Zimbabwe and a series of interviews carried out with representatives of a cross-section of Zimbabwe-based mining companies in late 1991. Statistical and other information was updated in February 1993.

THE ZIMBABWEAN MINING INDUSTRY[2]

Zimbabwean mining is much diversified in terms of minerals produced, the number of operating mines and dispersal of control over the

---

[1] The authors wish to thank L. M. Sachikonye, R. Bush and M. Bhagavan for their comments on a draft of this paper. Typesetting was done by E.-L. Volk and K . Overgaard.

[2] The main sources used in this and the following sections are Andrews (1991), Chadwick (1991), Hollaway (1987) and passim, Jourdan (1990), McCarty (1991), Newman (1988), the Raw Materials Group Data Base, and various issues of the mining journals listed in the references at the end of the paper.

mine production. More than 40 minerals are mined; the number of operating mines is 800–900; the most important mining company, Anglo American, controls 25 per cent of the value of total mining output and state ownership is not dominant. This situation contrasts sharply with the situation in most African countries. Most mining countries in Africa depend on one single or possibly two or three minerals, there are usually only a few large-scale mines and only a handful, usually transnational, mining companies dominate the industry or there is a large state ownership.

The main factors, which have led to this situation are:

- general economic and political developments.
- a favourable geology. The political boundaries of Zimbabwe coincide almost completely with the geological boundaries of the Zimbabwean Craton and is intersected by the Great Dyke. Both are geological phenomena with large reserves of several economically interesting minerals.
- liberal and clearly defined mining legislation, which has been in force since long before independence. A licence to explore, the right to peg a claim and to mine a deposit are given to basically anybody with only limited exemptions. This is in contrast to most African countries where exploration and mining is only allowed with special permits.

History

The renowned gold fields of Zimbabwe were once believed to be one of the biblical King Solomon's most important sources of riches. In the late nineteenth century the lure of new gold and possibly diamond deposits to rival those found in the South African Witwatersrand and Kimberley areas was the main reason for Cecil John Rhodes to start the British South African Company (BSAC). There proved to be a gross overestimate of the mineral resources of Zimbabwe. Neither gold nor diamonds were found in amounts even close to the South African discoveries. Gold production peaked in 1916 at 30 ton/year. The extensive search for gold and diamonds, however, led to the discovery of other metals and already in the first years of this century mining of chromite, copper, asbestos and coal started and became economically important. The early small-scale prospector and miner was gradually replaced by foreign owned mining companies. Beginning in the 1950s the number of minerals produced in significant amounts increased and in 1965 ten minerals each represented more than 0.5 per cent of total mineral production by value. In 1989 the figure had risen to 13 minerals.

The government formed in 1923 after the BSAC charter elapsed, attained a high degree of economic independence from Britain. This development facilitated the establishment of a metallurgical industry and both the mining and metallurgical industries of Zimbabwe developed in a different way compared to that of Zambia, Zaire and other colonies in central Africa. After the Second World War the mining industry started to integrate downstream into smelting and refining. After UDI in 1965 the white settler regime supported and reinforced this trend during the UN imposed sanctions throughout the 1970s. At this time copper- and nickel cathodes, pure tin, iron and steel and ferrochrome metal were produced in Zimbabwe in contrast to exporting the crude ores only. There was also an integration upstream in that mining equipment was manufactured in the country to substitute for imports which were difficult to obtain under the embargo and would further need scarce foreign exchange.

Post-independence developments

Mining industry developments after independence can be divided into three main periods, which coincide with the periods discussed below, to explain the general political/economic development of Zimbabwe:

- a brief flurry directly after the end of the liberation war. Gold prices were high and the accumulated backlog of investments particularly in exploration, which it was impossible to carry out during the bush war, led to some new capital flow into mining.
- the world recession and the historically low metal prices in the mid 1980s hit Zimbabwean mining hard. Rising costs added to the problems of the industry and employment even declined during this period.
- in 1986–87 with the improvements in international metal markets, exploration began to increase slowly again. This led to announcements in 1990–91 of several very large possible new projects. However 1992 witnessed an apparent abatement in this revived momentum.

Six minerals dominate the mining industry in Zimbabwe. In order of importance measured by the value of production they are gold, nickel, asbestos, coal, copper and chromite. Together these accounted for 90

Table 3. *Control of Zimbabwean mining companies 1989*
(Controlling companies in alphabetic order)

Controlling company/state Mineral Controlled producer	Total annual prod. of producer	Controlled production Quantity	Share of Zim. prod. (%)	Calculated value of controlled production MZWD	% of tot. Zim. value
Anglo American Corp. of *SA*/South Africa					
Chromite					
Zimbabwe Alloys Ltd	77.00 kt	77.00 kt	12.3	7.0	0.6 (est)
Mining cooperatives	110.00 kt	35.00 kt	5.6	3.9	0.3 (et)
Coal					
23% Wankie Colliery Co Ltd	4.68 Mt	1.08 Mt	23.0	27.4	2.3
Cobalt					
Bindura Nickel Corp Ltd	0.11 kt	0.11 kt	100.0	3.0	0.2
Copper					
Bindura Nickel Corp Ltd	1.20 kt	1.20 kt	7.6	5.9	0.5 (et)
Nickel					
Bindura Nickel Corp Ltd	12.72 kt	12.72 kt	100.0	284.0	23.6
Palladium					
Bindura Nickel Corp Ltd	0.02 t	0.02 t	50.0	0.8	0.07 (est)
Phosphate rock					
Dorowa Mining (Pvt) Ltd	0.12 Mt	0.12 Mt	92.3	11.1	0.9
Platinum					
Bindura Nickel Corp Ltd	0.02 t	0.02 t	66.7	0.8	0.07 (est)
Total				342.3	28.5
Afex *Corp SA*/Luxembourg					
Gold					
Falcon Mines plc	2.22 t	2.22 t	13.9	57.4	4.8
Olympus Gold Mines Ltd	0.30 t	0.30 t	1.8	7.8	0.6 (et)
Total				65.2	5.4
Brascan Ltd (Noranda)/Canada					
Gold					
50 % Blanket Mine (pvt) Ltd	0.47 t	0.24 t	1.5	6.1	0.5
50 %Golden Kopje Mine	0.31 t	0.16 t	1.0	4.0	0.3
Total				10.1	0.8
Cluff Resources plc/UK					
Gold					
Cluff Resources Zim. Ltd	2.19 t	2.19 t	13.7	56.7	4.7
Total				56.7	4.7
CRM (Pvt) Ltd/Zimbabwe					
Beryllium	2.00 t	2.00 t	100.0		
Forbes & *Thompson (Pvt) Ltd*/Zimbabwe					
Gold	1.00 t	1.00 t	6.3	25.9	2.2 (est)
Graphitwerk *Kropfmühl AG*/Germany					
Graphite					
50 % Zimbabwe German Graphite Mines	16.9 kt	8.45 kt	50.0	3.6	0.3
Lonrho plc/UK					
Gold					
Independence Min. (Pvt) Ltd	2.70 t	2.70 t	16.9	69.9	5.8
Corsyn Consolid. Mines Ltd	1.80 t	1.80 t	11.3	46.6	3.9

cont.

Controlling company/state Mineral Controlled producer	*Total annual prod.*	*Controlled production* Quantity	 Share of Zim. prod. (%)	*Calculated value of controlled production* MZWD	 % of total
RTZ Corporation *plc*/UK					
Gold					
Rio Tinto Zimbabwe Ltd	2.24 t	2.24 t	14.0	58.0	4.8
Lithium					
50% Bikita Minerals (Pvt) Ltd	0.45 kt	0.23 kt	50.0	2.0	0.2 (est)
Total				60.0	5.0
Trelleborg *AB*/Sweden					
Gold					
50 %Blanket Mine (Pvt) Ltd	0.47 t	0.24 t	1.5	6.1	0.5
50 % Golden Kopje Mine	0.31 t	0.16 t	1.0	4.0	0.3
Total				10.1	0.8
Turner & Newall plc/UK					
Asbestos					
Shabanie and Nashaba Mines	187.07 kt	187.07 kt	100.0	134.0	11.2
Total				134.0	11.2
Union *Carbide Corp*/USA					
Chromite					
Zim. Mining & Smelting Co	440.00 kt	440.00 kt	70.1	40.0	3.3 (est)
Mining cooperatives	110.00 kt	75.00 kt	11.9	6.1	0 5 (est)
Gold					
Mopane Mines (Pvt) Ltd	0.34 t	0.34 t	2.1	8.7	0.7 (est)
Total				54.8	45
Government of *Zimbabwe*/Zimbabwe					
Coal					
40 % Wankie Colliery Co Ltd	4.68 Mt	1.87 Mt	40.0	47.6	4.0
Copper					
Mhangura Copper Mines Ltd	10.70 kt	10.70 kt	68.2	52.5	4.4 (est)
Merits Ltd	3.70 kt	3.70 kt	23.6	18.1	1.5
Gold					
Sabi Consolidated Gold Mines	0.53 t	0.53 t	3.3	13.7	1.1
Mhangura Copper Mines Ltd	0.29 t	0.29 t	1.8	7.5	0.6
Graphite					
50 % Zimbabwe German Graphite Mines	16.9 kt	8.45 kt	50.0	3.6	0.3
Iron ore					
Buchwa Iron Min. Co (Pvt) Ltd	1.14 Mt	1.14 Mt	100.0	32.0	2.7
Palladium					
Mhangura Copper Mines Ltd	0.01 t	0.01 t	25.0	0.4	0.03 (est)
Platinum					
Mhangura Copper Mines Ltd	0.01 t	0.01 t	33.3	0.4	0.03 (est)
Silver					
Mhangura Copper Mines Ltd	17.00 t	17.00 t	76.2	6.1	0.5
Tin					
Kamativi Tin Mines Ltd	0.85 kt	0.85 kt	100.0	16.0	1.3
Tantalum					
Kamativi Tin Mines Ltd	9.00 kt	9.00 kt	100.0	3.0	0.2
Total				204.5	17.0
Total all companies in table				1087	89.8
Total all mine production in Zimbabwe				1201	100.0

Note: (est) = estimated production figures
Source: RMG Data

RTZ group, produces gold and operates a nickel refinery. The US Union Carbide maintains its last investment in mining and metallurgy in Zimbabwe where its subsidiary Zimasco produces ferrochrome and gold. The British company Turner Newall dominates Zimbabwe's asbestos production. In addition to these companies two smaller but growing companies, Cluff and Falcon control 10 per cent of mine production. The Zimbabwean government controls the iron and steel producer Zisco and the holding company Zimbabwe Mining Development Corporation (ZMDC), which operates gold, copper, silver and tin mines. In all the government controlled approximately 23 per cent of the total value of mine output in 1989.

During the first years of the 1990s, government control in the mining industry has slowly decreased and foreign control increased. This is the natural effect of increasing exploration funded by foreign companies. Further, the closedown of the Kamativi Tin Mines in 1992 and the new joint venture policies of ZMDC to attract new capital decreases government control over Zimbabwean mining. The joint venture between ZMDC and Trillion Resources to expand production under Trillion technical management from the Jena gold mine and the new ownership of Sabi gold mine by the Irish junior company, African Gold, are both examples of this new policy.

The formal sector mining industry is an important employer with 50–60,000 workers. The number of employees decreased slowly during the 1980s due to lower output, increased scale of operations and mechanization. Mining industry wages rose 12 per cent in real terms from 1980–89, in sharp contrast to average real earnings, which fell by 11 per cent over the same period. The industry is however still comparatively labour intensive. In addition to the traditional large-scale mining operations there are three other important forms of mining operations in Zimbabwe:

- a thriving semi-formalised small-scale sector owned by local entrepreneurs and businessmen, possibly employing as many as 40,000 part-time workers, of which a large number are women.
- cooperatives mainly working on the Great Dyke chromite deposits with a total membership of more than 2000.
- as in many other African countries, an increasingly important informal gold mining industry. The increased economic hardship in rural areas which has accompanied recession, drought, inflation and the continuing absence of other viable sources of income generation has forced thousands of Zimbabwean peasants into panning for alluvial gold in dried-up river beds.

Until 1991 panning was illegal, but its increasing popularity forced the government to try to control it instead by licensing claims of up to 50 metre stretches of river bed and by new marketing provisions. Legalisation led to a further stream of participants, who in late 1992 were said to total around 100,000. Local councils now buy gold from panners on behalf of the Reserve Bank of Zimbabwe, but much is sold on parallel markets, estimated to be worth MZWD 100–120 in 1992. Panning production methods are crude, laborious and dangerous. In November 1992 the Minister of Home Affairs stated that at least three miners were dying each week as a result of cave-ins of unsecured tunnels. The Economist Intelligence Unit has meanwhile claimed that some illegal refining is taking place in Zimbabwe (EIU 1992, No. **3).**

Gold

Production

Gold is the most important mineral mined in Zimbabwe accounting for 40 per cent of the total value of mineral output in 1991. Gold production has increased by almost 50 per cent in volume since 1980. The number of formal and semi-formalised gold producers was almost 700 in 1988, of which 17 mines with a production exceeding 300 kg of gold annually accounted for 72 per cent of total output. 655 mines producing less than 150 kg/year produced together only 9 per cent of total production. The most important gold producers are Lonrho, Rio Tinto Zimbabwe, Cluff Resources and Falcon Mines, all foreign controlled. The biggest locally controlled mining companies are Forbes and Thompson and the state owned ZMDC (see Table 4).

Lonrho has been mining gold in Zimbabwe since long before independence. In 1990 production reached 5 t from 8 mines of which How, Arcturus, Redwing, Shamwa and Athens are the most important. The mines are controlled through Corsyn Consolidated Mines and Independence Mining. Lonrho also has important gold interests in Ghana and in 1990 started production in Mozambique. In spite of announced plans for expansion of its Zimbabwe gold output in the mid 1980s production has remained fairly constant. In 1991, there were several new projects on the table which, provided that there was enough capital and experienced staff available, could go ahead quickly. The total investment projected is around 400 MZWD including three major new production units with a planned output of 250–300 kg/month and smaller projects with some heap leach operations, which together could increase production marginally by 10–20 per

Table 4. *Gold mining in Zimbabwe*

Area	1989 t (estimated)	1989 % of total
Lonrho	4.4	27
Rio Tinto	2.7	17
Cluff	2.2	14
Falcon	1.4	9
Forbes & Thompson	1.0	6
Falconbridge	0.8	5
ZMDC	0.5	3
Union Carbide	0.4	2
Golden Valley	0.3	2
Boulder Mining	0.3	2
Olympus Mining	0.3	2
Others	1.9	12
Total	15.94	100

Source: Jourdan.

cent at six mines. Total estimated production gained from these investments would be around about 3.5 t of gold. All these projects were viable in 1991 according to Lonrho's investment criteria but, considering the continuous downward trend of the gold price and that the projects would almost double Lonrho's gold production, it remains to be seen how quickly and to what extent they will materialise. During 1992 Lonrho started a new dump retreatment at its Mazowe mine but the total expansion did not meet the expectations of 1991.

The variety and scale of Rio Tinto Zimbabwe's operations differ very much from RTZ's other, mostly mega-mining, ventures both around the world and in Africa. Mining accounts for only 38 per cent of total Rio Tinto Zimbabwe sales and most of the mines are small-scale operations compared to the Rossing uranium mine in Namibia or the Phalabora copper mine in South Africa. Furthermore the local ownership in the Zimbabwean subsidiary has increased and around 35 per cent of the shares are traded on the Zimbabwe stock exchange. In the early 1980s Rio Tinto Zimbabwe expanded gold production at its Renco mine partly through an outside infusion of 5 MGBP from the British parent company. Since that no outside financing either from RTZ or from other sources has been used by Rio Tinto Zimbabwe. Gold output from two mines, Renco and Patchway/ Brompton, and the Cam and Motor dump retreatment was 2,126 kg in 1990. Operations at the Cam and Motor dump were very difficult in 1990 and a new plant did not perform as expected. The nickel mines of Rio Tinto were closed down when the ore reserves were depleted in 1982 and since that the Empress nickel refinery has been run on a toll basis. Rio Tinto Zimbabwe conducted virtually no exploration during the crisis of the mid eighties until 1988 when work focussing on gold and PGMs started. In 1989 and 1990 expenditure on exploration and development was about 3 MZWD per year. The efforts in gold will aim mainly at keeping output at present levels rather than expanding it. In PGMs the company believes it has an advantage over the other competitors in Zimbabwe in that it started its research and other preparations already in the early 1970s. In spite of this lead Rio Tinto has entered into a joint venture with Anglo American and Plateau Mining, where Plateau is to conduct a feasibility study. However the main Rio Tinto project for the next few years is the Sengwa coal project. The project is of such a size that RTZ might be interested in investing directly from London and the Zimbabwe government could demand a share. Production from Sengwa in 1992 was around 50 kt which is only 1 per cent of the output from Wankie Colliery and expansion is so far slow.

During 1992 there have been discussions about a possible takeover of Union Carbide's activities in Zimbabwe by Rio Tinto Zimbabwe. The Zimasco chromite and ferro chrome operations and its other local mining activities are the only mining companies left within the Union Carbide group after divestments since the mid-1980s. If the deal takes place it will further concentrate ownership in the mining industry in Zimbabwe.

Cluff Resources Zimbabwe is the third most important gold producer, It represents a new wind in the Zimbabwean mining industry bringing in new technology which has proved to be successful in other parts of the world during the gold rush of the 1980s. Its Freda Rebecca open cast mine is now the largest gold mine in the country producing 1,246 kg gold alone in 1990. However, Cluff's gold production sunk by around 10 per cent in 1991 compared to 1990 and reached only 2.11 t. According to the company this was primarily due to lack of spares because of limited foreign exchange available. Two new projects are the Peach Tree Mine and the Marvel Mine Dump which are to replace production from the Royal Family Mine, which was closed in July 1992.

The company is controlled by the British junior mining company

Cluff Resources plc. Cluff has gradually shifted its main business from oil to minerals through the 1980s and mining in Zimbabwe now represents by far the most important part of its entire operations. After the introduction of Cluff Resources Zimbabwe on the local stock exchange in 1990 Zimbabwean shareholders hold a 17 per cent stake in the company. Cluff also has plans to start gold mining in Ghana and is negotiating for exploration permits in Tanzania. In 1990 Cluff spent 27 MZWD on investments including exploration. In 1991 and 1992 exploration continued and will also be expanded. Gold is the principal target but exploration has also covered diamonds, PGMs, chromite and lead/zinc. However no major expansions in production were planned for 1991 or 1992, only marginal increases at existing plants.

Among the British-based junior mining companies with activities in Zimbabwe, Falcon Mines plc is the second biggest gold producer. It is a company incorporated in Britain but it has been mining gold in Zimbabwe since before independence and has all its activities in the country. It is controlled by Afex, which is Luxembourg-based. Its ultimate owners are not known in detail, but the company has strong South African ties. In 1990 (April 1990–March 1991) production including its two biggest mines, Dalny and Venice, reached 1,519 kg after a very difficult period in the two preceding years. Falcon also has a 40 per cent interest in Olympus Gold Mines one of the medium-sized mining companies in Zimbabwe producing 300 kg/year. Falcon floated 30 per cent of its local subsidiary Falcon Mines Zimbabwe on the stock exchange in July 1991. The issue raised nearly 20 MZWD for Falcon's further expansion and exploration. Golden Quarry is Falcon's major new project. It needs an investment of 10 MZWD to produce just above 400 kg of gold annually.

Of the local mining companies the Bulawayo-based family controlled Forbes and Thompson (Pvt) Ltd is the biggest gold producer. Its output from the Vubachikwe and Freda mines reached just above 800 kg in 1989. The second largest locally controlled company is Boulder Mining of Bulawayo which acquired the Indarama and Broomstock mines in 1986. Production at these two mines and the C mine is about 300 kg in all annually. The seller was Norman Levin Gold Mines, owned by private, local shareholders. The company still operates the Joyce/Roma mines with an annual gold output around 200 kg.

Two large transnational groups, AAC and Union Carbide have only entered into gold mining very recently. Anglo invested **3** MZWD in 1989 to start the Isabella dump retreatment, which is its first gold operation in Zimbabwe for many years. In 1991 the company decided to go ahead with a new heap leach operation at Hopefield. Anglo has gradually increased its exploration activities from almost zero in 1988 to 8.5 MZWD in 1991 and a further increase is planned for 1992. One major area of concern for Anglo is the depletion of two of its four nickel mines in 1996. Other targets for exploration include gold and PGMs. Union Carbide has a special gold mining subsidiary called Mopane Mines (Pvt) Ltd which operates three gold mines, Camperdown, Gaika and Lennon, together producing 340 kg of gold in 1989. Union Carbide opened its new Motapa opencast goldmine close to Bulawayo in early 1992. A third transnational mining company, Falconbridge Gold Corporation, based in Canada is also producing gold in Zimbabwe. The Zimbabwean holding company Falconbridge Investments bought Blanket Mines in 1983. The company produces around 850 kg from its two mines Blanket and Golden Kopje. Falconbridge estimates that these two mines can almost double their output over the next five years. A first step was taken in August 1992, when Falconbridge Gold announced plans to invest the equivalent of 6.6 MUSD in the Golden Kopje Mine to double the output starting in 1994. Blanket mine also continues to attract the interest of Falconbridge. Exploration for gold continues in both Zimbabwe and Botswana. In Zimbabwe the 44.5 per cent owned Signal Hill deposit attracts a lot of Falconbridge's interest. Recently Falconbridge has made two joint venture deals with Reunion. One concerns the exploration and development of a small gold deposit and the second is for a more long term cooperation on selected regional exploration licences for gold and base metals.

Exploration

Most present exploration and development activities in Zimbabwe concern gold. At the end of 1990 there were thirty-seven valid Exclusive Prospecting Orders (EPO) (see Appendix) of which all covered gold, one-sixth gold exclusively and five-sixths gold in combination with either base metals or other precious metals. In 1990 fifty-four applications for EPOs were made. The number of EPOs issued is a good measure of the renewed interest in gold. This started in 1986 and in 1987 eleven EPOs were issued. By 1989 the figure was up to eighteen. Half of the EPOs valid then were licenced to existing companies active since before independence and which are producers of gold such as Lonrho, Anglo American, Rio Tinto Zimbabwe, Falcon Gold and Union Carbide and smaller local companies. The other half had been granted to newcomers to the industry establishing themselves during the mid and late 1980s including Cluff Resources, the Irish owned African Gold and Falconbridge, all of which are also already in production. Reunion Mining owned by the Canadian junior mining company Thorco Resources, the Ottawa-based Trillion Resources, the Australian companies Delta Gold NL, Auridian and Sons of Gwalia, Australian/American BHP/Utah and the British Plateau Mining are all in the process of exploration but have not yet started production. Further extensive exploration activities are also being undertaken on existing claims around both closed down and operating mines.

In 1991, the number of EPOs granted leaped to fifty-one, which was even more than the most optimistic observers had expected. In all, there were in mid-1992 eighty-one current EPOs. Diamonds had become the most popular target for exploration; of the applications for EPOs being processed at the Mining Affairs Board at this time, more than half were for diamonds. Of the companies mentioned, Auridian and Reunion are amongst the leaders in diamond exploration.

The Dublin-based African Gold established itself in Zimbabwe in 1988. It started by evaluating the formerly Lonrho-held Owl gold mine north of Kadoma. However small-scale production started already in 1989 from the Bay Horse and Commoner dump retreatment. A total of 72 kg was produced at Bay Horse and at present the output at Commoner is 5–10 kg/month. African Gold is also studying the promising Sunace deposit near Bulawayo. In 1990 it was announced that the company had concluded an agreement with ZMDC for an option of 40 per cent or more in Sabi Consolidated Gold Mines for 4.75 MGBP after conducting a feasibility study of 0.5 MGBP. The Sabi Mines produced 590 kg of gold in 1990.

Reunion Mining (Zimbabwe) Ltd was founded in 1990. It is headed by ex-Cluff staff with a thorough experience of Zimbabwean gold exploration and gold production. Reunion has brought 1.6 MGBP into Zimbabwe to provide working capital. In addition to this, blocked funds have been acquired and swapped for Thorco shares listed on the Toronto stock exchange. The excellent Canadian connections are obvious also in the two joint ventures concluded with Falconbridge. Reunion focuses on gold, base metals and diamonds. Its exploration efforts are massive and it has applications filed for twenty-two EPOs covering 12 per cent of the land surface of Zimbabwe. Most of this area is for a regional diamond reconnaissance programme but nevertheless the company is making a major gold exploration effort. The main areas for gold exploration are the Midlands and the Auriga project, the Ball Mine, Sanyati and Victoria EPOs. Reunion also intends to start gold exploration in several other African countries such as Kenya, Zambia, Malawi and Tanzania. After De Beers' forfeiture of the River Ranch kimberlite pipe (see below), Reunion was among those companies which made applications for the claim. In early 1991 Reunion made public plans to spend 1.54 MZWD on exploration in Zimbabwe during the next 18 months.

Delta Gold NL concentrates on the platinum prospects it acquired from Union Carbide but has also some interests in gold. Delta has changed its exploration policy recently to concentrate only on the larger gold targets with a potential of more than 300 kg gold. Delta has a large number of Zimbabwean subsidiaries. The main gold deposits are Peerless and Pickstone in the Chegutu area which are held by the wholly-owned subsidiary Masasa Mines (Pvt) Ltd. It was decided in 1990 that both Peerless and Pickstone should remain under review, pending a better gold price. Exploration will continue at the 1991 level also in 1992 and the most interesting area is the Shamwa belt and the Chipenguli deposit. Delta also explores for diamonds in Zimbabwe.

Another junior Australian company with growing activities in Zimbabwe is Gwalia Consolidated Ltd. Gwalia Consolidated is closely connected to Sons of Gwalia and is its largest share holder with a 36 per cent interest. It established a local subsidiary called Chase Minerals (Pvt.) Ltd. in 1987. Chase, which is 80 per cent owned by Gwalia, up from 75 per cent in 1990, in turn holds several interesting deposits. The Connemara group of gold mines are the most promising. Together with a partner Chase holds a 70 per cent interest in the Hope Fountain joint venture southeast of Bulawayo. Exploration will continue in the next years on 'a modest level'.

Trillion Resources is a Ottawa-based junior mining company which concluded negotiations, in July 1992, to buy 50 per cent of Jena Mines (Pvt.)Ltd. from ZMDC. Production at the Jena mine is planned to increase to around 900 kg annually in 1993 after an investment of 14 MZWD.

Depending mainly on the future price developments for gold, investments planned in plants during the next few years could boost production by 1–2 t in 1992 and further still in the next few years. Total production could be increased by more than 25–30 per cent to reach 23–25 t 1995 (see Table 5).

Table 5. *Announced possible increases in gold production (1991)*

Lonhro	3,500 kg	Three major new projects, marginal increases at 6 mines
Falconbridge	800	Extension in five years at Golden Kopje and Blanket
Cluff	600	"Addition of new facilities"
Union Carbide	500	Matapa, Gaika prospects
ZMDC	400	Estimate of Elvington deposit
Falcon	400	Golden Quarry
Rio Tinto	200	Renco increase
African Gold	100	Commoner dump retreatment
AAC	?	No plans announced but intensive exploration
Total	***6,500 kg***	

Sources: The table is based on trade journals and company annual reports.

Platinum group metals

The platinum group metals (PGMs) are also attracting considerable interest. Three projects are currently most advanced:

- Rio Tinto Zimbabwe together with the AAC subsidiary Valley Exploration and Mining and Plateau Mining are completing a feasibility study to reassess properties like the Zenca pilot mine owned by Rio Tinto and others owned by Anglo. Plateau, through its local subsidiary Mhondoro Mining, was entitled to gain a 24 per cent interest in the project by spending 5 MZWD on a feasibility study over a five-year period ending in 1992. In mid-1992, Plateau sold its rights to Delta Gold and the Australian company now has a 24 per cent stake in the project. Rio Tinto and Anglo each also hold 38 per cent stakes in the project. If the appraisal is favourable production could begin in 1994. The total investment is estimated at 170 MUSD (1990) with an output of 6 t PGMs, 700 kg gold and some nickel and copper.
- Union Carbide is working together with the government-owned ZMDC and an undisclosed European partner with refining capacities on the possibility of reopening the Mimosa pilot mine near Zvishavane. This was run technically successfully, but without the necessary economic return, in the 1970s. The estimated in-

vestment for this project is 500 MZWD. Projected production volumes are not known.
- the Hartley joint venture. BHP/Utah and Delta Gold through its subsidiary Hartley Platinum Mines, are intensively studying claims on the central Dyke called the Hartley Complex. They were taken up by Delta in 1987. It was originally Union Carbide that did extensive studies on these claims between 1968 and 1972. After shopping around for new partners Delta concluded a joint venture agreement with BHP/Utah in October 1990. BHP/Utah was given the right to take 67 per cent of the project. In return BHP/Utah carries all the costs for the necessary exploration and feasibility studies during a two-year period. These costs are 7–10 MUSD. Delta does not have to make any investments but BHP/Utah will fund all Delta's contributions for mine development and be paid by receiving a portion of Delta's share of the production from the mine. Delta has the possibility of remaining a minority owner and there are also provisions to take on other minority owners such as the Zimbabwe government and international financial institutions. The total investment in the mine and plant itself is estimated at 200–250 MUSD.

Delta has taken a strong lead in the Zimbabwean platinum race by the acquisition of Plateau's share in the Mhondoro joint venture. In addition to its interests in the Hartley project and the Mhondoro joint venture, Delta also has 100 per cent owned exploration rights which are adjacent to them.

Other companies are searching for PGMs along and outside the Great Dyke but are at less advanced stages. Cluff Minerals is one of those exploring in the Snake's Head northern part of the Dyke.

If any of these projects materializes, Zimbabwe would become one of the biggest producers of PGMs in the world.

INVESTMENT FLOWS AND ZIMBABWEAN MINING

Zimbabwe

During the liberation war, the international boycott and sanctions against Rhodesia, there was, in addition to the direct problems caused by the war itself, a shortage of both manpower and capital in the mining industry. It was not possible to keep mineral production at capacity levels in all branches of the mining industry. These problems occurred in spite of a total capital inflow which averaged 50 MZWD/year between 1970 and 1975. At the time the value of the Zimbabwe dollar was about 1.5 ZWD to one British pound, i.e. the annual capital being invested in the country was 30–35 MGBP. The flow was severely cut down in the end of the 1970s and only the most importa0t investments were made. After the liberation in 1980 there was an accumulated need for new investments in the whole mining industry. There was however still a strong hesitation from the mining TNCs to invest in Zimbabwe due to their doubts about the intentions of the new pragmatic but nevertheless, in their eyes, clearly Marxist government. On the other hand many of the mining houses with capital already invested in the country were compelled to stay in order to reap the profits of their earlier investments. Very limited investments were made in the early 1980s by companies established since before liberation. The only exception was Rio Tinto Zinc which provided 5 MGBP to its Zimbabwean subsidiary in 1980 to replace outdated equipment and to boost production at its Renco gold mine. The infusion was made by taking part of a rights issue which was floated in Zimbabwe. Apart from this there was a brief and small flurry of generally badly planned exploration projects in 1981 and 1982 which died away very soon when metal prices declined. Among those companies getting into Zimbabwe early after independence but leaving quickly again was Shell. Others, like the German/Japanese uranium joint venture between Interuran and the Power and Reactor Nuclear Corporation have kept activities on a low level, investing only 15 MZWD over more than ten years.

Cluff

There was only one newcomer which stayed on: Cluff Resources, which came to the country immediately after independence. Cluff was at the time a British minor oil company operating in the North Sea. The company wanted to diversify to survive the 'oil gloom' of the late 1970s. It was advised by its bankers, which had long had a Zimbabwean branch, to try the newly independent country on the grounds of its 15 years of under-investment. An exploration company was set up without any foreign funds at all being brought into the country. It started modestly and spent 300,000 GBP in local currency on base metal exploration to the end of 1982. In 1983 Cluff began to look for gold and found a group of old workings at Filabusi near Bulawayo which now constitute the Royal Family mine. The small amount of foreign currency (equalling 380,000 ZWD) needed to set up the first mining operation in 1984 was borrowed from the government. The Royal Family gold mine was a success and was able to repay its foreign currency debt within 45 days of commencing production. The next projects were the Freda/Rebecca discoveries close to Bindura. Cluff introduced new heap leach technology appropriate for low grade open cast mines, which had proven successful in Australia. Of total investments between 1987 to 1988, for both the Freda heap leach and CIL operation of 36 MZWD, just below 22 MZWD was raised locally and the equivalent of 14 MZWD (8 MUSD) was raised in foreign currency via an equity issue by Cluff's British parent company. In all Cluff has since the start invested about 20 MZWD in foreign currency in Zimbabwe. Cluff was the first of the new entrants among the mining companies to float its shares on the Zimbabwe stock exchange. In 1990 local owners including both private and institutional investors acquired 18 per cent of the shares and added **53** MZWD to Cluff's funds.

Investment Levels

Between 1980 and 1983 the total investment in Zimbabwean mining was 323 MZWD, derived almost entirely from internal sources. The figure for the four years immediately preceding independence was 367 MZWD. The total value of mineral output for 1980–83 was around 400 MZWD annually with a peak in 1980 at 415 MZWD and a decline to 383 MZWD in 1983. The investment level in this period, even if it declined a little, was not critically low. However, access to foreign currency has been a limiting factor all through the decade. In the second half of 1987, for example, industry applied for 81 MZWD in foreign exchange but was only allocated 13 MZWD. It has been estimated that a total of 30 MUSD in foreign currency was invested in Zimbabwean mining between 1980 and 1988. This is a severe reduction compared to the inflows during the 1970s even when taking into account the international recession which hit the mining industry world-wide hard. The investments by RTZ and Cluff account for the bulk of capital inflow. At the same time disinvestment via remittable funds and the 4 per cent interest on blocked dividends and funds is estimated to have occurred at about the same level annually during the decade.

The investment climate improved during the late 1980s. This gradual change depends both on the active measures taken by the Zimbabwean government to attract foreign capital and also on the much improved market situation for metals and minerals in general. Today, as has been described, there are numerous projects on the drawing board mainly in gold and PGMs but also in base metals, Five other ZAPU members were also appointed to ministerial or to deputy ministerial posts.

A number of serious political problems confronted the first Zimbabwean government. The first of these was to balance satisfying the high expectations of its own supporters against a perceived need to retain the economic contribution of the white settler population—and the transnational capitals with which it was linked. A second was to prevent a permanent polarisation in African politics along ethnic lines, between the predominantly Ndebele ZAPU and the predominantly Shona ZANU. A third was to maintain an independent foreign policy without provoking military destabilisation from South Africa. By the end of the 1980s a degree of, albeit uneven, progress was evident on each of these fronts, but not without considerable costs. However, the early 1990s have seen these costs increase still further, in the context of increasingly unfavourable internal and external conditions.

It is possible to identify four main phases in the development of politics and economic policy in post-independence Zimbabwe. The first, from independence down to 1982, is characterised by an economic boom, the adoption of distributivist social policies, a fragile peace between ZANU and ZAPU and a high level of mutual suspicion between government and white capital. A second phase, from 1982 to around 1987, contained two economic recessions (the first quite severe), a check on distributivist policies, a major deterioration in ZAPU-ZANU relations partly fuelled by South Africa and continuing cool relations between government and capital. The third phase, dating from 1987 to 1990, involved the resumption of some degree of economic growth, a partial reversal of distributivism, the displacement of the ZANU-ZAPU conflict by one between a unified ZANU and an emergent but weak liberal and radical opposition and a very substantial improvement in relations between government and private capital. The fourth, dating from the beginning of 1991 and still continuing, has been marked by a catastrophic decline in economic growth against the background of a disastrous drought and unforeseen difficulties attendant on economic liberalisation. Its political fall-out remains unclear.

1980–82

In 1980 and 1981, economic growth in Zimbabwe easily exceeded 10 per cent per annum. This growth was based partly on the removal of sanctions — allowing industry to be re-equipped — and the removal of pre-independence restrictions on African agriculture. The boom was also fuelled by a large increase in state expenditure on social services, as what were to prove the most significant social reforms of the period were enacted. Secondary education was extended to persons of all races, as was free or subsidised health care. A start was also made on what at the time was considered the most important area of reform, land reform. Roughly 15–20 per cent of the land occupied by white large-scale commercial farmers (LSCFs) was earmarked for resettlement by ex-combatants, the landless and the poorer peasantry. But progress was slower than anticipated and by 1983 only around 5 per cent of LSCF land had been transferred, mainly in Manicaland (Moyo, 1986). Of greater significance than land reform was to be the extension of agricultural services to the communal areas.

Government economic policy in this period was expressed first in the policy statement "Growth with Equity" (1981), followed by the "Transitional National Development Plan 1982–85" (TNDP). "Growth with Equity" envisaged a mixed economy with foreign investment and increased state participation, 'just' levels of worker remuneration and a continuing expansion of welfarist provision. TNDP set a series of ambitious economic targets to sustain the latter, including an annual growth in GDP of 8 per cent and in wage employment of 3 per cent — without however providing any clear indication of how they were to be accomplished (cf Kadhani, 1986).

These policy statements were accompanied by the release of an investment code, the calling of a major donors' conference (ZIMCORD) and the appointment of a commission to establish a minimum wage. The investment code had an economically nationalist complexion. Foreign investment was welcomed, but only in a joint venture form and/or in designated geographical areas (e.g. rural centres) or under conditions where it promoted technology transfer, increased export capacity or higher labour intensity. Foreign takeovers of Zimbabwean companies were expressly prohibited and guarantees for incoming companies were weak. Although 50 per cent of after-tax profits could be remitted, (against 25 per cent for already present foreign-owned companies) this level was guaranteed only for two years. Implicitly discretionary grounds for possible nationalisation were also specified. It was hardly a surprise that ZIMCORD raised only one-third of the 3,600 MUSD backing requested (Chimombe, 1986) in this context. On the minimum wage issue, the Riddell Commission recommended a minimum of 60 per cent of the Poverty Datum Line, to rise to 90 per cent by 1984.

A strong continuity was established between pre- and post-independence forms of economic management. The Smith government had itself inherited, then considerably extended, a system of administrative regulation of the private sector covering borrowing, investment, prices, access to imports, repatriation of earnings and, for white workers at least, wage levels and hiring and firing procedures (Stoneman and Cliffe, 1989, 120). The central feature of this system was regulation of access to foreign exchange (forex) by the Reserve Bank and Treasury. Allocative decisions were administratively devolved to sector-specific quangos responsible to the Ministries of Trade and Commerce and Industry and Technology, to whom individual companies made bids on a half-yearly basis. In 1980, 90 per cent of imports were funded in this way (Durevall, 1991). The Mugabe government adopted this system wholesale. In agriculture a similar committee structure for price setting was also continued, although here the Cabinet also became involved in decision making (Skålnes, 1989).

The post-independence government inherited an economy with a relatively large industrial base (c 25–30 per cent of GDP) and a significant white settler — and transnational — owned LSCF sector (about 9 per cent of GDP and 40 per cent of export earnings), aside from the mining sector described elsewhere. Private capital in Zimbabwe had a number of distinctive features. Firstly, any remaining distinction between 'settler' and 'foreign' capital was largely a formal one. Capitals of both provenances were found in all branches of production in complementary relations. Their political unity had been secured during the Smith regime when they united to evade the country's economic blockade. In the transition to independence they heavily backed Muzorewa's UANC, to the tune of at least 5 MUSD in campaign contributions. Secondly, private capital in Zimbabwe evinced very high levels of vertical and horizontal integration and, consequently, high levels of monopoly. The major transnational companies found there were often involved in mining, manufacturing, trade and agro-industry, while according to a 1986 study carried out by UNIDO (cited in Durevall, 1991) out of 6000 products made in Zimbabwe, approximately 50 per cent were made by only one company and 80 per cent by three companies or less. Thirdly, private capital had adjusted to the period of state illegality and sanctions by turning inward in its sourcing of inputs and capital and had developed mainly in import-substituting branches of production. Hence at the time of independence the economy was a relatively closed one, with both imports and exports representing less than 25 per cent of GDP.

Although as Mandaza points out (1986a, b) private capital became part of the new Zimbabwe with considerable power and guarantees, this is not how it perceived the situation. Uncertainty about Zimbabwe's economic direction, shared by the left as well as the right and exacerbated by occasional calls for general nationalisation from high-level ZANU politicians, meant that independence was followed by a degree of capital flight, increased dividend repatriation and other signs of insecurity (Davies, Sanders and Shaw, 1991,15). Private capital's fears were further magnified by the announcement in late 1980 that a Minerals Marketing Corporation of Zimbabwe (MMCZ) would be set up.

The MMCZ was intended by government merely to ensure Zimbabwe received the true forex value of its mineral exports through rendering transfer pricing impossible (transfer pricing was thought to have been rife under the Smith regime, EIU, 1981, No. 2, p. 13). Despite this, lurid tales circulated that MMCZ was a punishment for the mining houses' collaboration with Smith and that it would be used as an instrument of foreign policy to direct sales toward the socialist countries—to whom a limited diplomatic opening had been made (EIU, 1982 No. 1). The mining houses responded firstly by fruitlessly attempting to lobby the government through Lord Soames (interim governor during the transition to independence in 1979) (Herbst, 1990, 155), then by offering to open their books to government and, when this failed, by offering them a share of equity. Suspicions did not really diminish even after a well-known sanctions buster, Mark Rule, was appointed General Manager of MMCZ. Similar panics greeted the few isolated cases of nationalisation around this time, although only one was explicitly politically motivated.

1982–87

From the end of 1982 a deep recession set in, with negative per capita growth rates recorded until 1985. Initially this reflected poor weather conditions, reduced levels of agricultural production and record lows in international mineral prices. From 1983 onward it was exacerbated by deflationary economic policies. These had been adopted by government in response to the rising internal and external imbalances which followed the increased levels of public expenditure of the first two years after independence. Results included a transmission of the agricultural recession to industrial production and cutbacks of expenditure on subsidies and on land resettlement.

A recovery occurred in 1985 and 1986 and while growth did not approach the levels of 1980 and 1981 it was reasonably strong. Sufficient confidence was generated for government to formulate a "Five Year Development Plan 1986–90" which envisaged further nationalisation, broadened state economic involvement and a doubling of current land resettlement levels — albeit with scaled-down targets. Like its predecessors, this plan never got off the ground, however (Kadhani, 116). Instead improved external earnings were used to reestablish a positive current account. Another, less severe, recession was to follow in 1987.

This period saw the height of the post-independence government's political difficulties. Early in 1982 arms caches were discovered on ZAPU-owned property in Matabeleland. ZANU ministers responded by dismissing ZAPU ministers from government and detaining leading ZAPU military figures. This was followed by desertions (some claim up to 3,000) of ZAPU ex-combatants from the Zimbabwe army, to form a ZAPU dissident force. A bomb attack on ZANU headquarters (killing eleven) and an attempt on the life of the Prime Minister then followed, along with the sabotage of a third of the Zimbabwe airforce on the ground at Gweru. Emergency regulations were strengthened and the North Korean-trained Fifth Brigade was sent to Matabeleland to restore order. Events reached a nadir in 1983 and the first half of 1984 with up to 2,500 deaths in Matabeleland, the breaking-off of ZANU-ZAPU unity talks, the temporary self-imposed exile of Nkomo and international controversy over allegations of maltreatment and torture of civilians and security suspects. Later evidence suggested that both the original caching of arms and a good deal of the later violence was perpetrated by South African agents, working not only in ZAPU but also in the Zimbabwe armed forces and state security service (Hanlon, 1988).

Two important consequences were the postponement of ZANU-ZAPU unity for at least three full years after the Matabeleland curfew was lifted in August 1984, and growing tension between government and the local white population — some of whom were either involved in or sympathetic to destabilisation. This was reflected in an increased level of combativeness in the pronouncements of leading ZANU figures like Herbert Ushewokunze, who in this period served first as Minister of Home Affairs and then Minister of Transport.

Relations between government and private capital continued to be poor in this period, although some important countervailing trends also emerged. Tensions focussed partly around the increasingly evident trend of disinvestment, with fixed capital formation falling from 19.8 per cent of GDP in 1982 to 11.9 per cent in 1985 and 1986—a level which probably did not cover depreciation. This was particularly galling to government, who perceived themselves as pursuing moderate economic policies. Gross new foreign direct investment in the entire 1981–86 period amounted only to 110 MZWD, of which 30 MZWD was in kind (Herbst, 132). A second source of tension was that, at least until 1986, employers' associations sometimes became involved in political issues with a racial dimension. Of greatest significance in this respect was the initial opposition of the Confederation of Zimbabwean Industry (CZI) and Zimbabwe National Chamber of Commerce (ZNCC) to sanctions against South Africa.

One countervailing trend in this situation was the government's introduction, from around 1985, of a series of export financing and promotion schemes. These enabled first manufacturing and later mining and agriculture access to additional forex for imports through 'revolving fund' arrangements. Additional measures then followed, giving manufacturing companies the right to retain a proportion of their forex earnings for importing inputs. Towards the end of the period government added a series of revisions to arrangements governing the use of blocked funds.

Secondly, and in the longer term, more significantly, from the end of 1986 CZI became involved in discussion with government on a range of issues. This coincided with its decision (under public pressure) to reverse its stance on sanctions. With this about-face, CZI could distinguish itself from the dominant white political force. This was a precondition of its slow integration into a partnership role with government, emerging first in contingency planning over sanctions (never in fact introduced) and then in the foundation of the Beira Corridor Group. Simultaneously a series of further roundtables occurred between government, the CZI, UNIDO and the World Bank on the future of the industrial sector.

1987–90

The period 1987–90 saw a limited economic recovery, with growth rates averaging just above population growth. This recovery has been uneven though, with a major increase in production of and earnings from flue-cured tobacco, declines in maize and beef production and a slight rise in industrial and minerals production (and a large rise in Zimbabwe dollar earnings from precious metals). A small but limited rise in investment occurred, fixed capital formation rising to 14 per cent of GDP in 1987 and 15.6 per cent in 1988 (the last year for which figures are available). There has been no recovery in employment, which continued to fall in some sectors (by 15 per cent between 1985 and 1990 in the LSCF sector, Financial Times, 30 August 1991).

Politically the period opened with considerable progress on ZANU-ZAPU unity, in the wake of conflict dying down in Matabeleland. Progress was assisted by a new 1987 constitutional dispensation, whereby the Prime Minister became President, enabling Nkomo to be offered the post of Vice President. Simultaneously, Parliament's 20 reserved white seats were abolished. White representation was reproduced on a non-partisan basis through ZANU's nomination to Parliament of a number of whites prominent in the business community. Raftopoulos observes that this was of considerable benefit to whites, since it "contributed to a...politicisation of their power profile and fed a... heightened technical discourse on the economy" (1991a, 33).

As the ZANU-ZAPU unity process progressed (culminating in formal unification in 1989), elements of a new political agenda emerged. These were the issues of transition to a one-party state and government privilege and corruption. On single-partyism the main protagonists were President Mugabe and a sizable element of ZANU on the one hand and the Zimbabwe Unity Movement (ZUM), led by Edgar Tekere, on the other. The latter, campaigning on a pro-multiparty and anti-corruption platform, temporarily made considerable inroads into ZANU support in Harare before fizzling out in 1990–91. Since then the mantle of political opposition has been largely inherited by an internally divided assortment of leftist students and trade union officials on the one hand, and individuals, clubs and societies campaigning for democratic rights and more systematic economic liberalisation on the other. Similar differences of emphasis are evident in the increasingly important independent press. The period saw the lifting of the State of Emergency, in force since the Smith era, but also the detention of the leader of the Zimbabwean Trade Union movement and the passing of a new University Act, which (inter alia) reduced teaching staff to the status of government employees. While plans to introduce a de jure one-party state were eventually dropped, a de facto one-party state had emerged by 1990.

The government's main efforts to recapture the political initiative at this time centred on the promulgation of structural adjustment as a general development model rather than merely a set of technical economic policy changes (see below) and a new effort to come to grips with the land question. With the expiry in 1990 of the guarantees to white Rhodesian farmers contained in the provisions of the Lancaster House agreement, the Zimbabwe government announced its intention to resettle a further 50 per cent of the LSCF area, by compulsory purchase if necessary. At the time this was announced, however, contradictory signals were given on who would benefit. These continue down to the present. Although the government has now indicated the number of African farmers who will be resettled (110,000) it has been variously suggested that these should be the landless, or 'trained' black commercial agriculturalists.

The economics and politics of Zimbabwean adjustment

1983–January 1991

Zimbabwe became a member of the World Bank and the International Monetary Fund (IMF) shortly after independence. During the budgetary problems of 1983 it obtained an eighteen month Standby Credit from the IMF, worth 375 MZWD. In return, Zimbabwe is said to have agreed to devaluation, restoration of internal and external balances and cuts in development programmes and subsidies (Kadhani, 1986). In early 1984 the Standby was suspended by the IMF. According to Kadhani, this resulted from a failure to meet credit targets; according to Stoneman and Cliffe the most important factor was a failure to meet budget reduction targets (1989,163); for Davies, Sanders and Shaw it was the result of the introduction of tighter import controls in February 1984 (1991, 20). Whatever the reason, the break left a residue of ill-feeling and Zimbabwe subsequently avoided further dealings with the Fund.

The World Bank's (not IFC's) first involvement with Zimbabwe dated from the mid-1980s when it financed the first of the country's export revolving funds with a 70 MUSD loan. The scheme was recognised as successful by both parties and the Zimbabwe government was anxious to extend it to mining and agriculture, but the Bank demanded that in return for this Zimbabwe should embark on trade liberalisation (EIU, 1987 No. 4, 13; 1988 No. 1, 15). Zimbabwe refused and borrowed the money instead from British commercial banks (the scheme has remained commercially syndicated ever since).

In the wake of the 1986 UNIDO report described above, the Bank sought to get trade liberalisation back on the agenda by generating a public debate on the issue of low levels of private investment. Besides the need to radically improve investment incentives, the Bank has also argued consistently for the 'exhaustion' of the Zimbabwean import-substitution experiment. According to this argument, Zimbabwe has now developed import-substitution for the full range of products for which this could possibly be profitable. Further substitutions would have to be for products for which the Zimbabwean market was too small to justify the substitution (cf World Bank, 1987). On the basis of these arguments, the CZI seems to have been gradually converted to trade liberalisation and formally endorsed it at the end of 1987 (Stoneman and Cliffe, 1989,137). The Zimbabwe government required a more prolonged offensive, and some concessions. From 1988 strong signals were sent that government would be allowed a strong technical input into the design of any programme, and that flexibility existed over timing. After a visit from Sven Sandstrom (World Bank Director for Southern Africa) in March, the Cabinet set up a committee to examine all aspects of structural adjustment. It was led by an Australian economist, included representatives from both the CZI and the University, and contained a balance of pro- and anti-adjustment figures.

The first result of the change in line was the issuing of a new investment code in May 1989, at a conference in London jointly sponsored by CZI and the Confederation of British Industry. The code contained three new elements: a redefinition of foreign companies as those with 25 per cent of their shares or more owned by non-Zimbabweans (the previous figure was 15 per cent), the establishment of an Investment Centre with authority to independently approve projects of up to 5 MZWD in one step; and the recognition by Zimbabwe of the two principal international investment guarantee protocols, MIGA and OPIC (Government of Zimbabwe (GoZ), 1989a). Simultaneously the government published a list of 68 projects in which foreign investment would be welcomed (GoZ, 1989b).

Structural adjustment itself was unveiled in three phases, July and September 1990 and January 1991. The July package was preceded in February 1990 by the announcing of a major easing of price controls and the introduction of what was called 'free collective bargaining'. In fact this meant the abolition of statutory wage regulation, except for agricultural and domestic workers. Collective bargaining was still to be regulated through the Ministry of Labour, while the right to strike remained highly circumscribed.

The July version of structural adjustment (GoZ, 1990) stated the government's new economic policies in a forthright but not particularly detailed way. Government would "de-emphasise its expenditure on social services and emphasise investment in the material production sectors such as agriculture, mining and manufacturing" (GoZ, 1990, 6, para 21). Targets were set of 5 per cent annual GDP growth, 20 per cent annual nominal investment growth (later revised to 25 per cent) and a reduction of the budget deficit from ten to 5 per cent of GDP by 1994–95. The centre-piece of the package however was the announcement that over a five year period the import con-troll forex allocation system would be replaced by an Open General Import Licence (OGIL) and tariffs. There would be further deregulation of prices and labour laws.

The envisaged reduction in budget deficit was to be accomplished by an (unspecified) reduction in the size of the civil service, a phasing out of subsidies to parastatals and through the introduction of cost-recovery measures, particularly primary school fees. The exact timing and sequencing of the OGIL proposal was left vague, and a commitment was made to retaining the various export promotion and incentive schemes alongside the new system. The proposals on price and labour law deregulation focussed on deregulation of consumer prices (except some basic goods) and severe reduction of the waiting time between announcing retrenchments and being able to enforce them. The publication of the document was followed by the replacement of a leading adjustment sceptic, Sam Geza, as Permanent Secretary (PS) at the Ministry of Industry and Commerce. The new PS was Mudziviri Nziramasanga, who would be paid in hard currency by the American Zimen Manpower Development Programme (as well as being the beneficiary of a USD 171,000 relocation package) (EIU, 1990, No. 4). The next stage of the proposals was unveiled on September 18 1990, when the government unveiled additional forex retention1 export bonus schemes, more generous regulations on remittance of earnings, and an upgrading of the Investment Centre to consider projects up to 10 MZWD in scale, with strong recommendatory powers in other cases.

The World Bank welcomed the first two sets of adjustment proposals but insisted that more concrete information be provided, especially on the budget deficit, before coming up with financial support (EIU, 1991, No. 1). It also indicated that it felt the time frame of five years to be undesirably long, and that the issue of parastatals had been soft-pedalled. These were, however, issues it was prepared to concede on, at least for the time being. There may also have been a difference of emphasis on the question of social aspects of adjustment, for in the third version of the proposals references to cost recovery in education were deleted and a number of compensatory measures were added to protect 'vulnerable groups'.

At the end of January 1991 the Zimbabwe government announced the most detailed version to date of the package, "Framework for Economic Reform 1991–95" (FER) (GoZ, 1991). FER opened by specifying a (front-loaded) timetable for reducing subsidies to parastatals from 629 MZWD in 1990–91 to 40 MZWD in 1994–95. It then provided a similar timetable for a reduction of 25 per cent in non-education civil service employment. A commitment to opening up money and financial services markets to new entrants was followed by the provision of a timetable for implementing OGIL. In the first phase of this, raw materials would be transferred with a tariff level of five to 10 per cent. In the second stage, intermediate and capital goods would be transferred, with tariffs of 5–10 per cent and 10 per cent respectively. In the final stage, consumer goods would go on to OGIL with a tariff of 30 per cent. In an important departure from earlier versions, FER stated that all export promotion/incentive schemes would be phased out as this occurred. FER also refined the new investment code. The chief evaluative criterion of the early 1980s, forex savings potential, would be replaced by that of project feasibility. By 1994–95 earnings remittability would rise to 100 per cent for all foreign-owned enterprises investing hard currency (GoZ, 1991, 13). FER concluded by announcing that goods would become price decontrolled as they entered the OGIL and that licensing and zoning regulations would be relaxed for informal and small-scale enterprises.

Relative to other structural adjustment programmes in Africa, FER was notable mainly for the absence of an agreement with the IMF (Nigeria was another example, however). This appeared to give the government some latitude in other areas, notably the length of the programme's life—five years rather than the standard three—and the limitation of parastatal reform to commercialisation rather than privatisation.

Perhaps the most striking aspect of the Zimbabwean package was less its economic content, however, and more the way in which until mid-1991 it came to dominate the government's political discourse, displacing most of ZANU's traditional themes. In the process, as Raftopoulos has observed (1991b) a shift occurred in Zimbabwe's racial politics. Whites, in the form of CZI and ZNCC representatives, directors of large companies, professional economists etc returned to the political spotlight as the main supporters of the new policy. In consequence the white community has gained a new lease of self-confidence.

In response to this and its implied dependence on 'external' forces, the Zimbabwe government (urged on by the World Bank and USAID, Raftopoulos, 1991a, 29) made compensatory efforts to conciliate indigenous African business angry at its visible exclusion from proceedings. The most important sign of this was the blessing it gave to the formation of an 'Indigenous Business Development Centre', whose aim is to press for "more black participation and control in the Zimbabwean economy" and resist "further marginalisation by existing monopolies" during trade liberalisation (Raftopoulos, ibid).

February 1991–December 1992

It was not long before structural adjustment Zimbabwe-style began to run into serious difficulties. Initially these seem to have been a product of technically deficient implementation (or perhaps poor design), coupled with apparent second thoughts on the whole process on the part of the World Bank. Later, as the introduction of the IMF into the picture combined with a very severe drought, it began to seem that Zimbabwe was reverting from a wide-ranging structural adjustment exercise to a combination of a traditional IMF stabilisation programme with a revival of some of its pragmatic policy instruments of the 1980s.

Import restrictions were lifted on the first items shifted to the OGIL in October 1990. It is not clear whether tariffs were raised on these goods in the manner intended, or whether the choice of items was a coordinated one. In any event, there followed a surge of imports, much of it apparently speculative, which was to continue right through 1991. While exports rose by only around 5 per cent in the first year of adjustment, imports ran at roughly double their anticipated level. The result was that a trade surplus in 1989 of MUSD 203 was turned into a deficit in 1990 of MUSD 398 and in 1991 of MUSD 560. A balance of payments crisis ensued.

Coinciding with and contributing to this balance of payments crisis was a failure on the part of the World Bank and certain other major donors (e.g. the African Development Bank, US and Britain) to disburse any of the agreed finance for adjustment, which it had been anticipated would arrive at the beginning of 1991 at the latest. The Zimbabwean government was forced into commercial short-term borrowing of MUSD 155 in mid-1991 and attempting to depress import demand by introducing a 20 per cent tariff surcharge on all OGIL items. Simultaneously it made its first soundings about the possibility of an IMF loan. It may possibly have also deliberately slowed down the number of items being transferred to the OGIL list — according to the CZI only 13 per cent of all items had been transferred by the end of 1991 as against a target of 30 per cent.

Presumably as a precondition of obtaining IMF finance, a massive devaluation of the Zimbabwe dollar was undertaken in the second half of 1991, pushing inflation up to over 30 per cent in consequence. Still the World Bank declined to disburse its promised funding until a formal agreement with the IMF was reached in January 1992. By this time the Zimbabwe government had also been obliged to limit forex allocations for raw materials (which were not as yet on the OGIL list).

The deal signed with the IMF was said to be worth MUSD 484 over three years. Initially Zimbabwe did not gain access to the softer loan terms of the Fund's 'Enhanced Structural Adjustment Facility' (ESAF) window. The major condition (as opposed to pre-condition) of the loan appears to have been an agreement to very substantial public expenditure cuts, with commitments both to overall magnitude and to a reduction in the number of ministers and ministries. A second condition was the introduction of positive real interest rates. Finally, in March 1992 Zimbabwe received (part of) the instalment of support from the World Bank it was supposed to receive in 1990–91. The African Development Bank's first disbursement did not occur until June 1992.

At the same time that the World Bank was making its first payment it was also convening a second donors conference on Zimbabwean adjustment. Zimbabwe raised its request to the conference to support of MUSD 1,000 per annum, on account of the problems caused by delays in the first round of disbursements. This was apparently agreed by the donors but no indication was provided of how the funding would be shared or how much would be disbursed quickly. The World Bank attempted to make agreement on this round subject to Zimbabwe providing undertakings to begin a programme of parastatal privatisation, beginning with the profitable posts and telecommunications company. The Zimbabwean government apparently resisted.

Meanwhile the economic crisis of 1991–92 was being deepened and overtaken by the most serious drought in the country's history since 1967, or possibly 1911. Poor rains in 1990–91 were followed by even poorer ones in 1991–92, with many parts of the country receiving only around 40 per cent of normal precipitation. Maize production, which had already fallen by 25 per cent in 1990–91, fell by a further 66 per cent in 1991–92. The 1990–91 fall, which was also widely blamed on poor producer incentives, should not however have led to a grain shortage on the scale finally experienced, or the subsequent further pressures this placed upon foreign exchange reserves. These were brought about instead by the Maize Board exporting 600,000 t of maize between March 1990 and December 1991, in order to meet adjustment-related financial targets. By the third quarter of 1992 a maize supply deficiency of 2.5 to 2.7 million tonnes (1992–93) had opened, equivalent to import costs of over MUSD 700, and 93 per cent of the population of the communal areas were said to be experiencing food shortages.

In May 1992 Zimbabwe's agreement with the IMF was renegotiated and the former obtained a loan under ESAF conditions. This added a condition of much strengthened credit control to those already agreed. A third donors conference followed at the end of 1992 in which a package of MUSD 1,400 was agreed for disbursement during 1993, including provisions for both continuation of the adjustment programme and drought relief.

If these sums are disbursed swiftly, Zimbabwe's balance of payments crisis should be considerably eased. But the general condition of the economy has meanwhile deteriorated strongly. Most observers predict a decline in GDP of around 10 per cent in 1992. In his July 1992 budget the Minister of Finance, Bernard Chidzero, predicted that exports would fall in both 1992 and 1993. Manufacturers, who in 1991 were complaining of a shortage of imported essential inputs following from forex shortages, were in 1992 voicing concern over high interest rates and the credit squeeze. Many were beginning to shed jobs (the Indian Ocean Newsletter, 28 November 1992, estimates 7,500 private sector retrenchments occurred in 1992). In October 1992 an official of the Zimbabwe Investment Centre told the Financial Gazette that the Centre had approved projects worth only MUSD 40 for September 1991–92 as against MUSD 48.5 for the corresponding period the previous year. Some projects approved for 1990–91 had apparently been shelved because of local money market illiquidity. The forex component of the 1991–92 projects was said to be very small.

The mood of business toward adjustment had become more nuanced. While no sections of it were generally hostile, its increasing resemblance to an IMF stabilisation package was causing irritation. Probably as a gesture towards such criticism, when a new Industry Minister (Chris Ushewokunze) was appointed in July 1992, Nzairamasanga was removed as PS. Simultaneously it became clear that rather than put more items on the OGIL, the Zimbabwe govern-

Table 8. *IFC lending fo mining and non-ferrous metals in Sub-Saharan Africa, 1977–89 (MUSD)*

Mineral and Country	Loan	Equity	Syndications	Total	Year
Coal					
Zimbabwe	20.0		18.0	38.0	1981
Copper					
Zambia	30.0			30.0	1982
Alumina					
Cameroon	7.0		0.9	7.9	1977
Zaire	0.2			0.2	1983
Nigeria	12.3			12.3	1988
Gold					
Ghana	30.0		30.0	60.0	1984
		0.6		0.6	1988
	14.0	4.8	29.8	48.6	1989
Other					
Zambia (cobalt)	20.0		10.0	30.0	1980
Guinea (diamonds)	14.9	1.2		16.1	1983
" (dimen stone/granite)	0.1			0.1	1987
	2.6	0.5		3.1	1988

Source: Adapted from Fozzard, 1989
Key: IFC = International Financing Company

Table 9. *Total lending to mining and non-ferrous metals in Sub-Saharan Africa, World Bank Group, 1959–89 (MUSD)*

		Total Lending		
	1950/60s	**1970s**	**1980s**	**Total**
IFC Lending/Equ/Synd		7.9 (1)	245.5 (12)	254.5 (12)
World Bank/IDA	131 (3)	206.5 (5)	323.4 (13)	663.9 (21)
Totals	131 (3)	214.4 (6)	568.9 (25)	914.3 **(34)**

Source: Adapted from Fozzard, 1989

Thirdly, the range of minerals for whose exploitation the Bank has lent has steadily widened over the years. In the 1980s the Bank lent to five or six main mineral sub-sectors, as opposed to four in the 1970s and three in the 1960s.

Fourthly, some minerals which were the subject of relatively high levels of lending in the 1960s and 1970s either ceased to be the subject of lending in the 1980s or acquired loans only on a much reduced scale. These were iron ore, nickel, manganese and potash (three of them with principal end-uses in steel-making). Gold emerged during the 1980s as a major focus of lending, predominantly in a com-

Table 10. *World Bank lending to specific minerals in Sub-Saharan Africa, 1959–89 (MUSD)*

	1950160s	1970s	1980s	Total
Coal			48.6	48.6
Iron ore	66.0	60.0	52.4	178.4
Copper/lead/zinc		100.0	249.4	349.4
Bauxite/alumina		16.9	12.5	29.4
Nickel		37.5		37.5
Manganese	35.0			35.0
Gold			156.7	156.7
Other	30.0		49.3	79.3
Totals	131	214.4	568.9	914.3

Source: Adapted from Fozzard, 1989

Table 11. *World Bank lending to mining and non-ferrous metals in Sub-Saharan Africa, 1986–89 (MUSD)*

	1986	1987	1988	1989	Total
Coal					
Iron Ore			**8.5**		**8.5**
Copper/lead/zinc	**110.0**			**20.0**	**130.0**
Bauxite/alumina			**12.3 (IFC)**		**12.3**
Nickel					
Manganese					
Gold			**48.1 (8.1 IFC)**		
Dimen. Stone/granite			**0.1 (IFC)**	**3.1 (IFC)**	**4.2**
Total					**251.7**

Source: Adapted from Fozzard, 1989

mercial form through IFC. However, lending to gold remained at a lower level than lending to projects in the copper/lead/zinc group of metals even in 1986–89. Lending to the latter represented 46.6 per cent of lending in the 1970s and 43.8 per cent in the 1980s. In 1986–89 it represented 51.6 per cent of lending, while gold accounted for 38.4 per cent. Throughout the period the bulk of copper/lead/zinc lending has gone to Gecamines of Zaire, which received a total of 237 **MUSD** from the Bank between 1975 and 1989, or 26 per cent of the Bank's historical commitment to African mining. Gecamines were followed by ZCCM of Zambia, which received 135 **MUSD** (14.8 per cent of all lending) over the same period, including 30 **MUSD** for cobalt.

Despite an involvement in African mining finance from 1959 (and mining finance elsewhere from 1957), it was not until 1977 that the Bank published its first major policy statement in the area. This took the form of a full-length book entitled "The Mining Industry and the Developing Countries" (Bosson and Varon, 1977).

The authors' starting point was to draw attention to two conflicting trends in contemporary mining 'politics'. On the one hand, there was a trend for developing countries to seek to gain a greater share of returns from mineral wealth, exemplified in strategies of nationalisation and the formation of producer cartels such as OPEC. On the other hand, the multinational corporations which dominated the industry were "unwilling to give up the old yardstick of stability in making investment decisions". Hence new substantial investments could well grind to a halt. To break this deadlock and for 'stability' to be regained

> *...the changes in perception and aspiration on the part of the developing countries must first be accommodated. This accommodation however, can only take place with the agents and mechanisms at hand in the marketplace, (which)must be brought into a more perfect partnership with the host countries rather than replaced.* (Bosson *and Varon, 1977, Introduction)*

It was the view of the authors that the World Bank could and should play the role of broker in promoting the 'more perfect partnership' between governments of less developed countries (LDCs) and the international mining houses necessary to avoid the impending crisis of investment. Elsewhere they describe this role as a 'bridge'. In other words, Bank mining sector policy in the 1970s was to persuade both LDC governments and the transnationals to accept compromises to stances which were perceived as becoming increasingly entrenched and, hence, dangerous to the end-users whom the Bank saw itself representing.

The wider context of this position was a contemporary conviction on the part of the Bank and other influential institutions and governments in the developed countries that LDCs were experiencing a secular rise in economic and thereby strategic importance, due mainly to their monopoly or semi-monopoly over many basic commodities. The latter were simultaneously reacting against earlier exploitation by adopting an increasingly independent line on both political and economic questions vis-a-vis the former colonial powers. This line could be expressed in a variety of ways, from nationalisation of foreign assets to flirtation with the socialist countries on issues of international politics. Thus for the West it was both important to 'buy into' LDCs, and simultaneously make them safe for capitalism. The Bank saw its own role in this process as taking a lead where private capital was reluctant, by disbursing large-scale development assistance, using the influence this bought in LDCs to secure more moderate policy orientations, and explaining to the outside world (including international capital) that their future in LDCs would have to be on new terms.

Bosson and Varon's book contains three main proposals for LDC governments to consider adopting. The first is to treat nationalisation in technocratic rather than ideological ways. Where companies had already been taken over by the state, their functions should be kept modest (essentially, the production of ore), they should be insulated as far as possible from 'political interference' and they should be pushed toward collaboration with private enterprise. The second is that LDCs should strongly consider pursuing national objectives by options other than outright nationalisation. Chapter 5 of their work lists a series of measures through which LDCs could improve their leverage against and their returns from foreign capital. These include obtaining financial support from donors to establish independent national survey and exploration capacity, setting up minerals marketing boards, drawing up mining codes with provision for resource conservation, and obliging private companies to train nationals for managerial positions and reinvest their profits in further production activities such as processing, refining and fabrication. Finally, and as a corollary, private mining houses should themselves be provided by LDCs with sufficient incentives to continue investing in these circumstances. Ideally these might include fiscal regimes based on income tax rather than royalties (the latter were rarely discountable against country-of-origin tax obligations), with tax levied only after companies had recouped all their expenditure and made a minimum reasonable profit.

Bosson and Varon's book seems to have had some influence on Bank lending policy, as Payer describes an increase in loans for government-based exploration at the end of the 1970s (Payer, 1982, Chapter 6). The influence on governments and mining houses does not seem to have been very strong, though. Few, if any, governments introduced codes of the kind described, while the mining transnationals followed a rather different strategy to the kind Bosson and Varon suggested. This involved a continuation of the trend to reduced levels of investment in LDCs, coupled with the adoption of new institutional forms of investment where it was continued. These included the formation of consortia with other private capitals (occasionally with LDC governments as junior partners), and seeking to finance developments through large-scale loans rather than through expansions of equity (Payer, ibid.).

The years 1980–81 were ones in which a fundamental shift occurred in the Bank's general development philosophy and in its lending strategy. The idea of 'modernisation', which in the 1960s and 70s had justified huge investments in LDCs' infrastructures and even support for their import-substituting industries, as well as for large-scale mining projects and transformatory rural integrated development schemes, was largely abandoned. Its place was taken by the idea of structural adjustment. In a LDC context, this referred to the adoption by government of far more modest development plans and a far less interventionist economic role. LDCs were now seen as having overextended themselves, financially and politically, and as needing to embrace financial orthodoxy and economic reforms through which the leading role in development would be transferred to the private sector.

The background to this change in the Bank's philosophy was the international recession of 1979–83, a profound economic crisis in the LDCs, and the international debt crisis. The last of these sprang from unregulated over-lending to LDCs by public and private financial institutions in the 1970s, but was triggered by a 50-year high in variable interest rates and a 40-year low in LDC terms of trade. The interests of the international commercial banks, and development agencies like the World Bank, now turned from competing to unload loans onto LDCs (especially LDC state enterprises) to ensuring that LDCs repaid their international debts. This was seen as requiring policies which on the one hand would reduce fiscal deficits (through devaluation and cuts in subsidies and social services) and on the other hand stimulate exports.

Because the supply of western public and private money for LDCs was now contracting, in a situation where demand from the LDC side remained high, the World Bank determined to try to use the higher marginal value of its funds to 'buy' from the LDCs the economic reforms it believed would set them on a path a stable export-led growth. The Bank's agenda for this 'policy-based lending' in Africa was set out in 1981 in the text "Accelerated Development in Sub-Saharan Africa: An Agenda for Action" (World Bank, 1981) (also known after its main author as the Berg report). The main focuses of this work were agriculture, industry and internal regulatory regimes. The text recommended that major increases be paid to agricultural producers, that state marketing boards be pared down or eliminated, that subsidies to both state industrial concerns and consumers be withdrawn, that privatisation be initiated wherever feasible, and that internal and external trade be liberalised.

Despite the fact that much Bank lending to mining had been carried out on a basis and on assumptions little different from that of lending to industry, the considerable change in the Bank's general agenda was not reflected in the section of the report on African mining (pp. 97–99). In tone and content this retained strong continuities with Bosson and Varon's position, apart from a stronger emphasis on falling investment levels.

The section opens with a definition of the main current issues in African mining. These are said to be the needs to rehabilitate existing facilities (due to low levels of reinvestment), to attract capital for new ventures and to step up exploration. The new neo-classical conceptual framework of the remainder of the report is not extended to the diagnosis of the reasons for capital shortage in mining. These are formulated in terms of the downturn in the international market and in prices and a consequent shortage of new projects with viable rates of return. Emphasis is also placed on broad political issues (a high level of civil disturbances and tendencies for disagreements between local and foreign partners) and on infrastructural ones — Africa's relatively poor infrastructure and the lack of a pre-existing 'critical mass' of diversified mining activity. There is no critique of state enterprise as such, unlike the rest of the report. The only discussion of state enterprise is actually in terms of the disadvantages it suffers in state-controlled forex allocation.

The main change of emphasis from the Bank's 1977 work on mining to its 1981 work is the toning down in the later publication of suggestions concerning mining codes and regulative frameworks. For while the 'bridging' role concept is maintained, nothing is said about how this may be used by LDCs to obtain better conditions from the mining houses.

The chapter also contains a statement of the areas of African mining which the Bank regarded in 1981 as of greatest development potential. These are listed as iron ore and hydro-electric/bauxite/alumina complexes, particularly in Guinea and Zaire. For continuing general exploration and development in these areas, an annual investment requirement of 1,000 MUSD at 1977 prices is estimated. This implied precisely the large showcase projects, probably with state majority ownership, of which the rest of the Berg report was so critical. It also implied a fundamental misjudgement of the market, which already in 1981 was suffering from high levels of over-capacity in these minerals, and which by 1982 was witnessing closures on a temporary or permanent basis in the Americas, Asia and Africa. The Bank's own lending for these minerals was in fact to decline in the 1980s over its 1970s levels. Curiously the (equally bleak) prospects for copper, where the Bank's major financial commitments already were, and were to remain, were not discussed at all.

For most of the 1980s, structural adjustment thinking affected the Bank's mining sector lending only indirectly. The primary mechanism concerned was not a new policy approach to mining but an insistence that governments who received mining-related loans had "appropriate macro-economic frameworks" in place (Haug and Strongman, 1988).

The late 1980s saw a slight change in emphasis in the content both of adjustment and in lending policy. Whereas in the early 1980s the primary emphasis of policy reforms was on price issues (devaluation, contraction of state expenditures, higher agricultural producer prices, withdrawal of subsidies) as well as privatisation, the end of the decade saw the creation of an 'enabling environment' added to this list. By the latter the Bank meant some very concrete measures LDC governments were encouraged to address, such as new foreign investment codes, investment promotion regimes and simplification of licensing and fiscal regimes, as well as some rather vague ones, such as 'good governance'. Broadly however, it implied LDC governments should concentrate on developing infrastructure and 'human capital formation' (education and health), while completely removing themselves from involvement in productive activity and trade.

The adoption of this new position coincided with the mining section of the Bank's Africa Technical Department engaging in the first serious review of its policies for over a decade. This review had three elements: collection of materials on changing patterns of investment during the 1980s, the formulation of new policies to be embodied in the Bank's major 1989 report on Africa, and the launching of an African mining policy study (eventually published in August 1992).

A treatment of investment trends in African mining is found in a 1989 paper by Fozzard, Senior Geologist in the Bank's Africa Technical Department (Fozzard, 1989). This noted an increasing polarisation of African mining production towards six countries (Botswana, Zaire, Zambia, Namibia, Zimbabwe and Guinea — South Africa was not considered), whose potential was "not necessarily the highest on the continent". It further — and more significantly — noted a considerable fall in Africa's relative production levels. Fozzard stated that whereas between 1960 and 1970 the real value of Africa's mineral production for selected major commodities more than doubled, between 1970 and 1987 it virtually halved. Over the same period the value of production in Asia and Latin America rose. For 1947–87 as a whole, according to Fozzard, Sub-Saharan Africa's share of developing world mineral production fell from 23 per cent to 10 per cent.

The immediate cause of this decline is said to be a fall of exploration-related investment, currently running only at 115 MUSD per annum. This represented an expioration investment1 sales ratio for Africa of only 1.5 per cent, as against ratios of five to 10 per cent in Australia and Canada. Fozzard reckoned that for a viable level of discovery of new ore bodies to proceed, African mining needed an annual exploration investment of 460 MUSD.

This definition of the central problem of African mining was carried over into the chapter on mining in the Bank's major 1989 report on Africa (World Bank, 1989,122–28). On the basis of this definition, the report argues that African governments have to formulate new mining investment promotion strategies. These should involve removing restrictions on foreign ownership, simplifying 'cumbersome' regulatory procedures (including those proposed by the Bank in 1977), devising (still) more attractive tax arrangements, and formulating a mining code. The key provisions of this should be 'iron clad guarantees' on repatriation of earnings, including the possibility of mining houses operating entirely through off-shore accounts; 'appropriate rules' giving access to land, granting of exploration licences and mining rights; 'appropriate' mine development agreements and management, marketing and export arrangements; and "objectively applied labour regulations" (World Bank, ibid.). The report presents Ghana as a model to emulate in these respects: "...exploration there by private companies has picked up...following more promotional mining and investment codes (being) introduced in (1986)" (World Bank, 1989,127).

This call for new investment and mining codes along these lines is accompanied in the 1989 report by a direct attack on parastatal mining companies of a kind previously avoided. The latter are said to operate in intrinsically economically distorted ways because of "constant political intervention, insensitivity to mineral market conditions, (pressure to) keep...high cost mines in production and managerial deficiencies" (p. 125). Rather then persevere with these, African governments should concentrate on getting the regulatory framework 'right', through rehabilitating and restructuring ministries and departments of mining, mining promotion offices and geological surveys to give them greater strategic direction and clear responsibilities.

According to this report, the main areas of potential development for African mining in the 1990s will be in diamonds, gemstones, industrial minerals (unspecified), rare earths and, above all, gold. This emphasis can only be described as belated. Haug and Strongman, writing in 1988, stated that "of 71 new internationally financed mining projects in 1984 and 1985, 59 were in gold", while "the World Bank was involved in none of them" (Haug and Strongman, 1988, 360).

The prescriptions found in Fozzard and in the 1989 report actually predated the factual results of the Africa Mining Policy Study which was presumably conducted in order to establish new policies — a situation far from unique in the development of Bank policy. Some initial results of surveys carried out as part of the Policy Study are reported in Bolte (1990). These suggest similar doubts about the causes of low investment (and hence also the prescriptions for higher investment) presented in the 1989 work to those revealed by this study in regard to Zimbabwe (see below). However, when the Study's final report was eventually published it upheld and developed the conclusions of the Bank's general 1989 African study. The future of African mining was one and the same as the future of private foreign direct investment. For African countries to attract such investment they had only to adopt a standardised package of measures. These are listed as macro-economic structural adjustment reforms, privatisation of state mining companies, state withdrawal from marketing functions, provision of clear and competitive tax incentive structures and new, 'enabling' mining laws (World Bank, 1992, 52–56). (The main novelty of the 1992 study lies in its discussion of environmental questions (p. 47–51) and of 'artisanal' mining (p. 42–45), both of which issues are outside the scope of the present study).

VIEWS FROM THE ZIMBABWE MINING HOUSES, 1991

In the second half of 1991 one of the authors carried out a series of extended interviews with executive director-level personnel from six of Zimbabwe's mining houses. The objective was to ascertain the relation of their companies to the changing Zimbabwean political and economic policy climate, to the "Framework for Economic Reform" (i.e. to structural adjustment in general) and to the specific provisions of the new regulatory frameworks governing investment and mining. Discussion also covered companies' relations with the Zimbabwe government and the World Bank.

The companies

The six mining houses chosen did not represent a scientifically arrived at sample of all those with activities in Zimbabwe since independence. However, they were selected with a view to establishing a balance between companies of different generations and sizes, and with interests in different minerals. There are therefore good reasons to regard them as reasonably representative of the contemporary Zimbabwean mining scene.

Three of the companies with whom discussions were conducted had been operating in Zimbabwe since the colonial period, i.e. throughout the life of the Smith and Smith-Muzorewa regimes and continuously since independence. Each were part of large, diversified groups. In all cases they had substantial interests in other sectors of the Zimbabwean economy, including agriculture and industry. Two of these companies' main interests in Zimbabwean mining were in base metals, the third's in gold.

Two of the remaining companies were 'junior' exploration and mining houses of much more recent vintage. Both were externally owned, but Zimbabwe was the major or even overwhelming part of their business. Both were mainly involved in gold, one in exploration and production, the other so far only in exploration. Both had come to Zimbabwe in the post-independence period, one in the last couple of years.

The sixth company was a very large international conglomerate of fairly recent origin, with external interests in minerals, petroleum and steel. This company had no past experience of Zimbabwe, or indeed of Africa. It was presently in the country for exploration of precious metals, together with a junior partner (also external). "If things worked out" it intended to go ahead with what it described as a "medium-sized investment" in terms of the company's overall commitments — although an extremely large one in the Zimbabwean context.

None of the companies had invested a total of more than 20 MUSD in Zimbabwe in the post-independence period. The highest recent annual investments were in the range of 6–10 MUSD, by the fourth and fifth companies described above. But at the time of the interuiews one of the three older companies had projects worth 160 MUSD 'on the table', while the sixth company was planning an investment of 200–250 MUSD in hard currency.

The changing political and economic policy climate in Zimbabwe

All of the companies regarded the investment climate for mining in Zimbabwe as having been adverse for most of the 1980s, but to have significantly improved in the last few years. On the other hand, differences in emphasis emerged with respect to the role of Zimbabwean political and economic policy conditions in this climate, as against other factors. Other, probably less marked, differences were evident with regard to the timing of the improvement of the investment climate and its current degree of attractiveness.

For four of the companies, poor world market conditions were a major component of the investment climate of the first half of the decade, inhibiting their levels of investment or discouraging any investment at all. For two of the companies, both long-established conglomerates whose major local interests were in base metals, poor market conditions, combined with the relatively dispersed geology of Zimbabwe's base metals deposits, were regarded as the single most important factor inhibiting investment.

All of the companies regarded political and economic policy conditions in Zimbabwe as unfavourable for investment for most of the 1980s. These conditions were the main reasons for low or zero levels of local investment by the other four companies. Of the adverse political and economic policy conditions mentioned, the most frequent was ZANU's general political orientation. This was characterised by the representative of one company as 'Marxist-Leninist', by another as 'communist leaning', by two as 'Marxist-Leninist in rhetoric' and by a fifth as 'a bit socialist'. Additional negative political conditions were mentioned by four companies. Two gave prominence to the 'dissident problem' in Matabeleland (these two companies may have had interests in gold deposits in the area, or close to it), one highlighted Zimbabwe's high level of 'political centralisation' and another found the commitment to a one party state very discouraging. While the interpretation of political events offered by these companies may be questioned, it was evident that all had a close knowledge of and interest in Zimbabwean politics.

Companies also complained about what they perceived as unfavourable attitudes to foreign investment for most of the period. This was felt (or expressed) particularly sharply by the three mining houses whose involvement with Zimbabwe dated back to the pre-independence era, and who for this reason had been popularly identified with colonialism and the Smith regime. Each of these companies had felt more or less under siege during the first years of independence and further felt that the post-independence economic policy and legal framework incorporated a degree of punitiveness or at least suspicion toward them. In one case this was accompanied by resentment toward the more favourable conditions under which post-independence newcomers were admitted. But one post-independence newcomer itself detected an unwelcoming attitude to foreign investment at the time of its entry: "the official attitude in the early 1980s was that they were doing you a favour letting you into the country". This company also mentioned an adverse forex regime and the absence (sic) of an investment code at this time as hampering investment.

The dominance attributed by certain companies to market/ geological conditions in determining their investment decisions is mainly explicable in terms of their particular histories. These were companies with heavy fixed investment in Zimbabwe at the time of independence and little choice about whether to remain or not. Under these conditions, undertaking any further investment would be determined by purely micro-economic factors: "when you have a smelter and a mine becomes exhausted, you have to open another mine"; "a project which is believed to be interesting enough to be presented to the Board today would also have been presented before the recent changes...began to take place".

The priority given by the other companies to political factors is perhaps less easily analysed. For obvious reasons, all private companies fear whole or partial nationalisation above all else. Yet some—even possibly most—of the companies for which political considerations were paramount did not really regard nationalisation by the Zimbabwe government as a serious threat. A more tangible concern was probably that ZANU's 'bit of socialism' made for a less than optimal business environment.

Three companies saw an improvement in the investment environment from 1987 onward, the others from 1989 or 1990. Two of the three who saw the improvement starting earlier were ones who also mentioned the 'dissident problem'. For all three the change was at first one of general atmosphere rather than concrete measures:

"more stability and some rethinking by government"; "more pragmatism"; "a new general attitude to private capital". For almost all the companies, really meaningful change started with the new investment code in 1989 and structural adjustment in 1990–91 (the precise significance of these events will be returned to below). One, the largest of the newcomers, saw the turning point as the decision to abandon the doctrine of one partyism at the end of 1990.

Companies expressed different impressions of how far the investment climate had changed. Only for one newcomer had Zimbabwe attained the status of the most attractive country in southern Africa for new mining investment. The other two newcomers felt there was some way to go before this could be said to be the case. For one "the atmosphere is still not really one of active encouragement", at least compared with Ghana and Tanzania, while for the other — for whom one-partyism had been the main concern — there were still political worries. These concerned the legal basis of the government's envisaged land resettlement programme (see above) and, more surprisingly, its "backward-looking and repressive" relationship to the University of Zimbabwe. Both this company and another were both also very concerned by the recent River Ranch case. River Ranch was a diamond claim prepared by De Beers to the point of exploitation, which was then reallocated to a junior Australian company after De Beers refused to allow the Minerals Marketing Corporation to handle its product (rather than the De Beers' controlled Central Selling Organisation). De Beers made several concessions, including offering to set up a diamond cutting industry in Zimbabwe, but the government refused to budge.

To summarise, companies' perceptions of Zimbabwean politics and changes in it took rather different forms and were shaped in different ways. All had a negative view of the 'old Zimbabwe' (pre-1987), although some had been forced to live with these dislikes. For most of these structural adjustment represented a belated acknowledgement of their weight and value, and a certain amount of pride was taken in it. The smaller international mining companies tended to see adjustment in narrower economic cost-benefit terms. As such it promised to herald a considerable improvement in their operational conditions. They were not however particularly interested in its origins and had only a limited appreciation of its broader political significance. The largest incoming company however read recent economic policy developments in purely political terms — but ones which again differed from the longer-established ones. To it, economic policy change was one piece in a jigsaw which also involved political democracy and a reasonably strong civil society as preconditions of a sustainable role for modern capital.

Structural adjustment

All the mining houses viewed structural adjustment positively, although not necessarily for the reasons which might be anticipated. For four out of six of the companies its importance was political rather than economic. Only for the smaller of the post-independence newcomers did it have much economic significance as such.

For the three pre-independence groups, the political importance of structural adjustment was twofold. On the one hand it represented a generalised commitment by government to "allocate resources to the sectors where they are most needed", on the other hand, and more importantly, it signalled an historic rapprochement between state and private capital—one moreover which was perceived as durable. In this connection, each of these companies emphasised the internal origins of structural adjustment and its political differences from standard IMF/World Bank packages. The latter were described by one director as "Day 1: withdraw subsidies; Day 2: riots; Day 3; withdraw structural adjustment". Hence FER's longer than normal time frame and its softpedalling on issues of subsidies and the minimum wage were seen as signs of, and necessary conditions for, government seriousness about the whole enterprise. The view of the largest of the incoming companies was similar.

The smaller incoming companies saw FER as directly helpful to them insofar as it involved a liberalisation of access to forex. A director of one of the companies described this reform as "the single most important change in the structural adjustment package", and the package itself as "the most important event in Zimbabwe in many years, possibly more important than independence". This was because "Lack of forex has been the chief excuse during the last twenty years not to reach targets, whether for production or whatever. Now that constraint will go." The view from the other small incoming company was similar. Free forex availability would speed up delivery of raw materials, spares and consumables and eliminate having to pay middlemen through the nose for import licence allocations. Interestingly, one of these smaller companies saw responsibility for FER as located with the IMF and World Bank, rather than the Zimbabwe government and CZI.

The reasons for the economic (as opposed to political) indifference of most companies toward FER was that they had already established ways of minimising the effects of the forex allocation system on themselves, or intended to come to individual contractual agreements with the Zimbabwe government covering all aspects of business arrangements. The group of companies falling into the former category stated (inter alia) "forex shortages have been of only minor importance to us", "the main problem with forex was the time lag in getting the hard currency, not the allocation itself" and "the real forex constraint was its effect on our capacity to start new projects, not obtaining spares and consumables". FER would make little difference to this last constraint. These companies had all evolved mechanisms for by-passing middlemen in the import licence 'market'.

For the large incoming company which intended to negotiate an individual investment contract outside FER with the Zimbabwe government, neither structural adjustment nor any other economic policy was of direct relevance. This company was seeking a deal (more or less on a 'take it or leave it' basis) which would allow it to do its main business through an off-shore account, allow it to carry on its own marketing outside of MMCZ, allow it a higher financial gearing then provided for in Zimbabwean law, and allow it to use switched 'blocked funds' for up to two thirds of its onshore investments. At least two other companies wished to see adjustment extended in some of these directions, but did not see such movements as being attainable in the short term. Nor, presumably, did they contemplate the levels of investment which made some of them desirable.

Most of the companies also had minor economic reservations about FER of various kinds. For example, the base metals producers, who were naturally intensive consumers of energy and bulk transport, objected to the introduction of fully 'economic' pricing in the electricity industry and rail transport. One of them also linked the economic reforms to steeply rising inflation, stating that on the basis of his company's local purchases in 1991 (not only its mining operation) prices were rising at an annual rate of 38 per cent, and not 20 per cent as the Reserve Bank was claiming. Longer-term political qualifications were voiced by other companies, warning that government expectations over the investment and employment effects of FER were over-optimistic ("an eased forex situation won't in itself lead to higher investment"; "where you get investment it'll probably be in further mechanisation, even if this isn't what the country needs right now"), and that some slippage would be inevitable. The latter was because "the programme relies on a constructive attitude from middle and lower level government employees, who will probably be suffering as a result of it".

In short, only for the small-to-medium size international mining companies were the specific features of a promised 'enabling environment' of much interest. Larger resident companies had always been powerful enough to insulate themselves from the worst effects of the less enabling environment which it had succeeded and hence had little to materially gain from the concrete changes envisaged. Larger incoming companies on the other hand felt themselves powerful enough to set their own terms, regardless of whatever particular policies were in place.

Specific aspects of the regulative framework

Each of the companies was asked to comment on the current position and planned changes with regard to a number of aspects of Zimbabwe's regulative framework. Specific comments were solicited on the issues of repatriation of earnings, company taxation, the exploration permit system, mining rights, health and safety legislation and labour regulations. In most cases, except with regard to the River Ranch case (see above) and to some of the labour legislation which it was proposed to change, companies had little quarrel with the status quo. The managing director of one company described this as "in general, not ideal but satisfactory". Where reservations existed, these were generally found among the older established companies and concerned their less favourable terms of operation than the post-independence entrants.

The provision in Zimbabwean labour law requiring companies wishing to retrench workers to go through lengthy procedures (up to a year) in order to obtain permission was the subject of past dissatisfaction. The proposal to change this law was greeted with general relief, although in practice most companies had found ways around it anyway — usually by offering new employment only on a fixed-term contract basis. Another labour regulation regarded negatively was the restriction on hiring expatriates, but this was not seen as a major problem (at least at present), as the great bulk of mining skills were in adequate supply within the country. None of the companies found the regulations governing relations with Trade Unions a problem and two even thought that Zimbabwe would benefit from stronger unions than at present, at least in the mining industry — presumably because these would enable a higher degree of regulation of industrial relations. One of the smaller, incoming companies had reservations about the requirement to build housing and infrastructure to permanent standards when a project may have a life of only a few years, but this was not shared by larger companies who experienced more stringent conditions in other countries

Relafionswith the Zimbabwean state

The basic lines of division between different kinds of mining company on structural adjustment partly reflected different sorts of relations these companies had with government. The older mining houses tended to have one sort of relation, the smaller newcomers another, and the larger newcomer a third.

As already noted, a degree of mutual distrust has characterised relations between the post-independence state and the pre-independence mining houses in Zimbabwe. On the side of the state, its most concrete manifestation has been the creation of the MMCZ, to which the older mining houses strongly objected.

This underlying suspicion, together with a tradition and experience of what one managing director called "striking deals with governments all over the world", led the large older mining houses to establish direct links with government leaders in order to cut through the difficulties they anticipated with the state. Two of the older companies distinguished between the Zimbabwean political elite, who they regarded as basically cooperative, and 'middle-level state officials' who viewed them less sympathetically. A director of one company indicated that relations between themselves and government were personalized through the company chairman, who was on first name terms with a very senior Zimbabwean politician and who "could always phone him if there were any problems". The downside of this for the company was that its chairman was expected to do the Zimbabwean government favours in return.

De Beers' loss of the River Ranch diamond EPO illustrated that relations between the pre-independence mining houses and the government were still a bit tense. It is possible that the new Minister of Mines, Dr. E. Zvobgo, will try to change this situation. In a recent interview he stated: "I am excited about diamond prospects in this country...(and)...I'd like to see South Africa coming in vigorously."

By contrast with the large, older mining houses, the smaller newcomers dealt with the Ministry of Mines rather than the political elite. These dealings were open and positive. The most senior politician they expected to encounter was the Minister himself. A director of one of these companies observed that it was "extraordinary that other companies should feel it necessary to work in any other way", while another remarked: "the older mining houses have monopolised relations with the state. They have very close links with politicians and it is doubtful that they have used their influence to support the industry as a whole".

In its relation with government, the largest of the newcomers shared aspects of both these positions. Its scale of operations and the conditions it set for its entry were sufficiently unique to merit its representatives again needing to deal directly with very senior political figures. On the other hand, it had no interest in a cosy relation of mutual favours. It saw itself as different from the traditional companies insofar as it planned to bring a very large sum of hard currency into the country, giving it a bargaining position from which it was confident of extracting an agreement outside existing regulations. It was strongly implied that given 'traditional' African conditions, the best prospects for such an agreement being sustained was that it should be transparent. This in turn implied the necessity of a more general transparency — thereby explaining the previously indicated interest in democracy and civil society.

Relations with the World Bank

Interestingly, only the last company discussed had what could be regarded as a close relation with the World Bank. It was "well aware" of current Bank policies and of its Mining Sector Policy Study, on which it had been consulted. IFC had participated as a partner in some of its earlier projects and would possibly participate in its upcoming one.

The two smaller newcomers, whose interests possibly coincided most closely with the Bank's position, had in one case a less close relationship with it and in the other case no relationship at all. One of the companies was receiving some IFC finance but was unaware of Bank mining sector policies and the Mining Sector Policy Study. The other company — the only one which mentioned unprompted the importance of a mining code — was not aware of any Bank policies about mining and saw the Commonwealth Development Corporation as an obvious partner.

Of the traditional mining houses, one stated that it was not in contact with the Bank and was unaware of its recent activity. The other two were in contact, but were positively hostile to it. One disapproved of policy-based conditionality (on the grounds that issues like energy pricing should be matters between government and the local private sector). The other stated that the Bank "wasted a lot of managerial time with their studies". A director of this company described the World Bank mining team as "useless" and its reports as "rubbish". Furthermore he took exception to the Bank's patronising attitude "anticipating that there are no internal skills in LDCs regarding economic policy formulation". These were the same companies who were at pains to stress the 'home grown' nature of FER, and the predication of FER's political significance on its domestic origin.

Determinents of investment in perspective

International mining companies, even quite large ones, are by no means a homogeneous group. They have vastly different levels of resources, bargaining powers and historical involvements with different minerals, continents, countries, states and politicians. Obviously, all prefer free enterprise to socialism of whatever variety but beyond this similarities of interests and outlook are few. For some, such as De Beers, the premium on maintaining an international monopoly over a particular mineral means that they will probably invest anywhere diamonds are to be found, regardless of political regime and economic policy framework. Others, such as some small or small-to-medium junior companies, tend to be much more sensitive to the structure of local legislation, environmental, mining and investment incentive related. Others again, such as the larger non-African international companies probably reason that they have enough bargaining power to set their own conditions anywhere in Africa, but that these conditions are more likely to be guaranteed in some political environments rather than others (e.g. not where they are seen as personal favours bestowed by a possibly temporary dictator). Yet others, such as the larger African-based conglomerates, tend to be less concerned with the content of a political or economic regime than with the degree of partnership and respect they feel they can command. Here economic reforms imply that such partnerships are deepened and formalised, something highly desirable but not essential. All these politico-economic philosophies of investment are also all in the last instance subordinate to considerations about geology and international market conditions.

The economic policylmining policy frameworks which particular African governments adopt therefore have some undeniable importance to each of these different types of company. But for only a particular and restricted group of them will the significance be primary. For others, the process of upheaval caused by the wholesale adoption of a new framework may even be disruptive. For most there will either be more important considerations than the precise content of these frameworks or other ways of obtaining the benefits they apparently promise. The World Bank, by advocating a uniform solution to the on-going problem of low investment in African mining is implying a uniformity in company outlooks and interests which simply does not exist.

SUMMARY AND CONCLUSION

Investment in Zimbabwean mining exploration and mining was at very low levels throughout the 1980s. Due to the combined effect of low metal prices and perceived political problems, a trough in investment occurred in the mid-1980s. Willingness to invest in exploration and new production facilities increased toward the end of the decade. This change depended both on the changing local investment climate and increasing metal prices. However the main focus of investment is gold, which has experienced a fairly poor price development in the last few years. It therefore seems that the current exploration boom in Zimbabwe is primarily related to a perceived improved climate for investment.

Nonetheless, the exploration level is still not satisfactory if Zimbabwe's mining industry is to retain existing production levels in the long-term, much less if an expansion is desired. Real investment decisions have yet to be made for any of the large-scale projects under discussion, primarily in PGMs. It is possible that recent economic policy changes may tip the balance in favour of some of the projects proceeding and that large-scale investments will then take place. On the other hand it is equally possible that the problems increasingly encountered in managing the transition to a more free market system could act as a deterrent. The next twelve months will be decisive in this respect.

Structural adjustment's meaning as far as the main sections of mining capital are concerned is that it represents an official acknowledgement of the importance of the role of private capital in the country. Its detailed economic provisions are of less importance than its status as a sign that its interests can be expected to be taken into account in more comprehensive and extensive ways than before. While private capital has previously had some impact on some aspects of economic decision-making, adjustment opens the door for a more generalised influence on developments and perhaps a long-term corporatist role.

However, the external signals which are sent by this changed environment mean that some of the new investments which can be expected in mining, particularly the larger ones, may be on a legal basis outside the framework of the reform programme and its associated investment code. This is despite the fact that the code almost directly reflects the content of demands some large mining houses were making one or two years ago (cf Andrews, 1991). The adoption of the code seems to have been taken as a signal for some of the mining houses' demands to escalate, in line with what they may perceive as a greater receptiveness to their demands.

The World Bank is involved in each of the different aspects of these developments. It is the author of structural adjustment globally and has been instrumental in its adoption and design in Zimbabwe — although initially not to the same extent as elsewhere in Africa. This in turn may have introduced an ambiguity toward the Zimbabwean programme which led it to postpone its finance to a degree which has endangered its long-term viability. The World Bank has also maintained an on-going involvement in African mining finance and in the development of policies to encourage mining investment. On the whole both the content and influence of its work in mining have lagged behind that of its more mainstream activity. Moreover, its current fixation with promoting the adoption of mining investment codes corresponds neither to the real determinants of investment decisions by mining companies, nor to the content of the investment contracts which the most powerful of them are now seeking.

Zimbabwe currently still has some prospect of attracting levels of foreign investment in mining vastly in excess of the paltry magnitude of the early 1980s, in the context partly of a new political and economic-policy scenario. However, by the end of 1992, Zimbabwe's economic situation had deteriorated to the extent where internal investment had begun to shrink and some signs of a re-thinking of adjustment had emerged. Expectations which had been raised amongst certain sections of local capital had been disappointed, adding to the general disillusion with adjustment amongst the mass of the population. For the latter there had only been increases in unemployment and declines in real purchasing power and in public and social service quality and availability. As fresh elections loom in 1995, these are likely to add to pressure from below for further policy revisions.

APPENDIX: ZIMBABWE'S MINING LEGISLATION

General

Zimbabwean mining law differs from the legislation in most African countries in that the right to prospect is subject only to limited exceptions. Exploration permits are given to most prospectors, overriding the claims of landowners, and there is no need for specific negotiations with government in each particular case. When a deposit is found no specific permits are needed to start mining. Marketing of all mineral production is done by the state. An export organisation called Minerals Marketing Corporation of Zimbabwe (MMCZ) was founded in 1983. It exports all mineral production except gold which is refined in the state owned Fidelity Gold Refinery and sold by the Reserve Bank. State ownership in the mining industry is relatively limited in Zimbabwe compared to most other African states. The state-owned mining holding company, Zimbabwe Mining Development Corporation (ZMDC) is mainly engaged in base metals and to a lesser extent gold. During the metal price crisis in the mid-1980s ZMDC acquired some loss-making base metal mines and saved jobs in the sector. The other main state company is the steel company Zisco. The tax level for mining companies is not particularly high in comparison with neighbouring countries. However the foreign currency regulations, introduced during the UDI period were very stringent and have only recently begun to be relaxed in order to promote foreign investments. Labour regulations have been very strict and it has been necessary to have permission from the Ministry of Labour to lay off a worker, but these regulations are now in a process of change. The government operates a price regulating system for gold, which is of great importance to all gold producers. A floor price is established in Zimbabwe dollars, at present 950 ZWD/ounce, and government pays this amount to all producers if the world market price falls below this level. If the market price rises above the floor level the producers repay the money in instalments.

All mineral rights in Zimbabwe are vested in the President on behalf of the State and administered by the Minister of Mines according to the Mines and Minerals Act, originally promulgated before independence but amended several times, lastly in 1990. This regulates all exploration and mining. The Act provides for two types of exploration permits while no specific permit is needed to begin actual mining. Exploration can be done either with a Prospector's Licence or with an Exclusive Prospecting Order (EPO). A prospector's licence, intended for small-scale prospectors, costs only 50 ZWD and is valid for two years but does not give any exclusive rights to the holder. A prospector's licence can only be given to Zimbabwean residents or their appointed agents. An EPO is granted for an initial period of three years and may be extended for a further period not exceeding three years. The EPO covers a specific area and specific minerals only. The right to peg a claim and start mining stems from either of these two licences to carry out exploration. The Mines and Minerals Act and the system of licences is handled by a Secretary of Mines assisted by the Mining Affairs Board and local Mining Commissioners.

Fiscal regulations

There are several special regulations for the mining industry on fiscal matters. In short the tax regime and the foreign exchange control policy have the following characteristics:

- Income tax is charged at 45 per cent of taxable income. In addition to normal allowances for depreciation, special mining allowances include full deductability for all preliminary and pre-production expenditure, such as shaft sinking and exploration, either as it is incurred or spread over the life of the investment. The deduction can be made in unequal instalments. There is a special depletion allowance of 5 per cent of the sale value of mineral production (15 per cent for gold and silver) and a replacement allowance for later capital expenditure. Generally applicable allowances such as Growth Point Allowance (15 per cent) for investments made in rural depressed areas and Training Investment Allowance (50 per cent) are naturally also given to the mining industry.
- Withholding tax is levied at source on dividends, interest, fees and royalties payable to persons not resident in Zimbabwe. The rate is generally 20 per cent except on interest where it is 10 per cent. In the cases where double taxation treaties have been concluded, as for example with the UK, Germany, Sweden and South Africa the rate is lowered to 10–15 per cent.
- Government makes a distinction between remittance of profits from investments made before 1 September 1979, called 'old investments' and those made after that date (independence) called 'new investments'. Remittability of profits on old investment is 25 per cent of net after-tax profits and 50 per cent on new investments. After the new regulations issued in 1989 the government also opened the possibilities to give priority projects, on a case by case basis, higher remittability, (up to 100 per cent). One of the examples explicitly given of projects that would be likely to qualify for priority status is "mining projects, where almost all of the output will be exported". All dividends which are not repatriated, i.e. are above 25 or 50 per cent of net after-tax profits, will be paid to the local blocked fund account of the foreign share holder. The government tries to encourage investors to keep their money in Zimbabwe by waiving the withholding tax on that part of dividends.
- Mining companies are liable to pay 4 per cent of output value as a royalty. This tax was however suspended in the 1970s and has not been applied since.
- Local borrowing may not exceed 35 per cent of shareholders funds in the case of companies with more than 25 per cent foreign shareholding. The

mining industry has been given a higher limit than the general limit of 25 per cent for other branches of industry. If local equity participation exceeds 30 per cent additional allocation of foreign currency to the local partner is possible.
- Duties, surtax and import tax are levied on imported items. Duties range from 0–50 per cent but most capital goods are in the range 5–20 per cent. As an incentive to export, industry rebates or drawback on duties are offered. Surtax is normally 20 per cent but mining equipment qualifies for a 15 per cent rate. There are fewer opportunities for rebates on surtax than on duties. Import tax is often refunded for priority projects and is not payable on specific items for the mining industry such as chemicals, explosives, rock drills, pipes and tubes.

Investment incentives

Since independence in 1980, and throughout the decade Zimbabwe, attracted little foreign investment. On the contrary there was even a net outflow of capital during 1987 and 1988. New foreign investment in the mining industry was practically zero. In order to change this situation the government of Zimbabwe embarked on a programme changing the investment conditions aimed at encouraging foreign investments in all sectors of the economy, including mining. In April 1989 the first step was announced to the international mining community at a well attended investment seminar in London. The second step was taken in late 1990 with the unveiling of the Economic Policy Statement by finance minister Dr Chidzero.

The first step included several features. Firstly a new Investment Centre was created to act as the single window for foreign investors in order to diminish bureaucracy. The Centre was given the authority to take decisions itself on projects not exceeding 5 MZWD (for larger projects it had to consult the Minister of Finance). Further the Centre had the obligation to respond to all proposals within ninety days. Secondly the government manifested its commitment to maintain the protection of private property and not to nationalise private holdings. Zimbabwe acceded to the World Bank's Multilateral Investment Guarantee Agency, insuring private investors against non-commercial risks. The government also signed bilateral investment agreements and instituted arrangements for international arbitration in cases of dispute. Thirdly the government reviewed the Exchange Control Act. The use of blocked funds for investment by third parties was introduced. These funds, consisting of profits which have not been allowed repatriation, can be bought at a discount rate of around 65 per cent of their nominal value. The limits for access to local credit facilities in relation to shareholders' funds was raised from 15 per cent to 35 per cent. The Zimbabwean Export Revolving Fund was extended to also include the mining sector. 30 3

The second step focussed on a trade liberalization programme, in addition to further investment and export incentives. Trade liberalization aims to remove quantitative controls over imports and gradually expose the economy to foreign competition. The pace of the liberalization is dependent on the availability of finance and as long as this is not solved the progress will be slow. To start with the government lifted import controls on a small number of items and added them to the Open General Import Licence (OGIL) system. None of these items was however, of interest to the mining industry. The introduction of an Export Retention Scheme is of much greater importance to the mining industry. The mining sector including ferro-alloys and steel is entitled to retain locally 5 per cent of the value of export for the purchase of imported raw materials and capital goods used for the production of the export goods. The manufacturing sector was allowed to retain 7.5 per cent. During spring 1991 a one-year 75 MUSD trade facility was set up through a consortium of London-based commercial banks to specifically improve the efficiency of the Zimbabwean mining industry.

A number of new investment incentives were also introduced to projects which were considered to be export oriented. To be classified as export oriented a project must export at least 75 per cent of its output or have a foreign exchange payback period of three years or less and be able to earn over five years double the amount of foreign exchange released for the initial investment. A number of special investment incentives were given to the mining sector in order to provide a more favourable climate for new investors and to encourage investments in beneficiation of minerals. The following regulations were introduced:

- A 100 per cent foreign owned company which funds its project through an injection of foreign funds, may repatriate 100 per cent of its net after-tax profits.
- A 100 per cent foreign owned company which funds its project with foreign funds and locally obtained blocked funds, its own switched or surplus funds (cash resources of local subsidiary), may repatriate dividends in proportion to the foreign funds it brought in. There is a minimum ratio of 50:50 applied. After 5 years there is 100 per cent remittability of profits.
- A joint venture with a minimum local participation of 30 per cent will have its level of dividend remittability decided in the same way.
- When there is a local Zimbabwean partner in a joint venture with at least a 30 per cent stake the authorities will additionally allocate foreign exchange to match the 30 per cent local equity for required inputs of the project. In addition the authorities will allocate a further 30 per cent to the local partner as a way to encourage local participation.
- In the case of mining exploration, blocked funds or switched funds and cash resources in the country may be used to meet local expenses with the imported inputs financed by new capital brought into the country by

the investor. However, once the mining stage has been reached and the company capitalises these funds there must a matching inflow of funds in order to qualify for the dividend remittability as above.

Initially the new regulations apply only to new projects or expansions of existing ones but the government is considering the review of dividend remittability for existing projects. The government also announced that specific incentives to promote minerals beneficiation projects would come during the next few months.

REFERENCES

African Business (various).

Andrews, C. (1991), "Mining Investment Promotion—a View from the Private Sector", *Natural Resources Forum,* Vol. 15 No. 1.

Bolte, E. (1990), "Investment in African Mining Development", paper presented at Workshop on African Mining Development, Harare.

Bosson, R. and B. Varon, (1977), *The Mining Industry and the Developing Countries,* Oxford University Press, Oxford.

Chadwick, J. (1991), "Zimbabwean Mining", *Mining Magazine,* June.

Chimombe, T. (1986), "Foreign Capital" in Mandaza (1986c).

Company Annual Reports.

Davies, R., D. Sanders and T. Shaw (1991), Zimbabwe's Adjustment Without the Fund, *Unicef Innocenti Occasional Papers,* No. 16, Florence.

Durevall, D. (1991), "Trade Liberalisation the Zimbabwean Way", paper delivered to SIDA seminar on Structural Adjustment and Economic Change in Sub-Saharan Africa.

Economist Intelligence Unit (EIU), *Quarterly Economic Reports* (various), Harare.

Engineering and Mining Journal (various).

Financial Gazette, Harare.

Financial Times, London.

Fozzard, P. (1989), "Mining Development in Sub-Saharan Africa: The Level of Investment and its Relationship to the Enabling Environment", paper given at Mineral Exploration Programmes Conference, Madrid.

Government of Zimbabwe (1989a), *The Promotion of Investment: Policy and Regulations,* Government Printer, Harare.

Government of Zimbabwe (1989b), *Investment Register: Summary,* Government Printer, Harare.

Government of Zimbabwe (1990), *Economic Policy Statement: Macro-Economic Adjustment and Trade Liberalisation,* Government Printer, Harare.

Government of Zimbabwe (1991), *A Framework for Economic Reform (1991–95),* Government Printer, Harare.

Hanlon, J. (1988), "Destabilisation and the Battle to Reduce Dependence" in Stoneman, C. (ed.), *Zimbabwe's Prospects: Issues of Race, Class and State in Southern Africa*, Macmillan, London.

Haug, M. and J. Strongman, (1988), "Impact of International Lending on Metals Industries", *Mineral Processing and Extractive Metallurgy Review*, Vol. **3.,**

The Herald, Harare.

Herbst, J. (1990), *State Politics in Zimbabwe, University Zimbabwe Press, Harare.*

Hollaway, J. (1987), "Gold Mining Opportunities in Sub-Saharan Africa", Mining Magazine, August.

Hollaway, J. (various years), "Zimbabwe" in *Mining Annual Review.*

Indian Ocean Newsletter, Paris (various).

International Mining (various).

Jourdan, P. (1990), "Strategies for the Regional Planning of the Minerals Industry in Southern Africa: The Case of the SADCC", PhD thesis, University of Leeds.

Kadhani, X. (1986), "The Economy: Issues, Problems and Prospects" in Mandaza (ed.) (1986c).

McCarty, D. (ed.) (1991), *Mining Taxation: A Global Survey,* Price Waterhouse, London.

Mandaza, I. (1986a), "Introduction" to Mandaza (ed.), *Zimbabwe: The Political Economy of Transition, 1980–86*, Codesria, Dakar.

Mandaza, I. (1986b), "The State in the Post-White Settler Colonial Situation" in Mandaza (ed.), *Zimbabwe: The Political Economy of Transition, 1980–86*, Codesria, Dakar.

Mandaza, I. (ed.) (1986c), *Zimbabwe: The Political Economy of Transition, 1980–86*, Codesria, Dakar.

Mining Journal, London.

Mining Magazine, London.

Moyo, S. (1986), "The Land Question" in Mandaza (ed.) (1986c).

Newman, C. (1988), "Zimbabwe Consolidates in the Wake of the World Gold Boom", *International Mining*, September.

Payer, C. (1982), "The World Bank: A Critical Analysis", *Monthly Review Press*, New York.

Raftopoulos, B. (1991a), "Beyond the House of Hunger: The Struggle for Democratic Development in Zimbabwe" (mimeo), ZIDS, Harare.

Raftopoulos, B. (1991b), Personal communication.

Skålnes, T. (1989), "Group Interests and the State: An Exploration of Zimbabwe's Agricultural Policies", *Journal of Modern African Studies*, Vol. *27*, No. 1.

Stoneman, C. and L. Cliffe, (1989), *Zimbabwe: Politics, Economics and Society*, Pinter, London.

The Chamber of Mines Journal (various), Harare.

World Bank (1981), *Accelerated Development in Sub-Saharan Africa. An Agenda for Action*, Washington.

World Bank (1987), *Zimbabwe. A Strategy for Sustained Growth*, Washington.

World Bank (1989), *Sub-Saharan Africa. From Crisis to Susfainable Growth,* Washington.

World Bank (1992), "Strategy for African Mining", Africa Technical Department Series, *Technical Paper*, No. 181.

Zimbabwe Mining World (various).

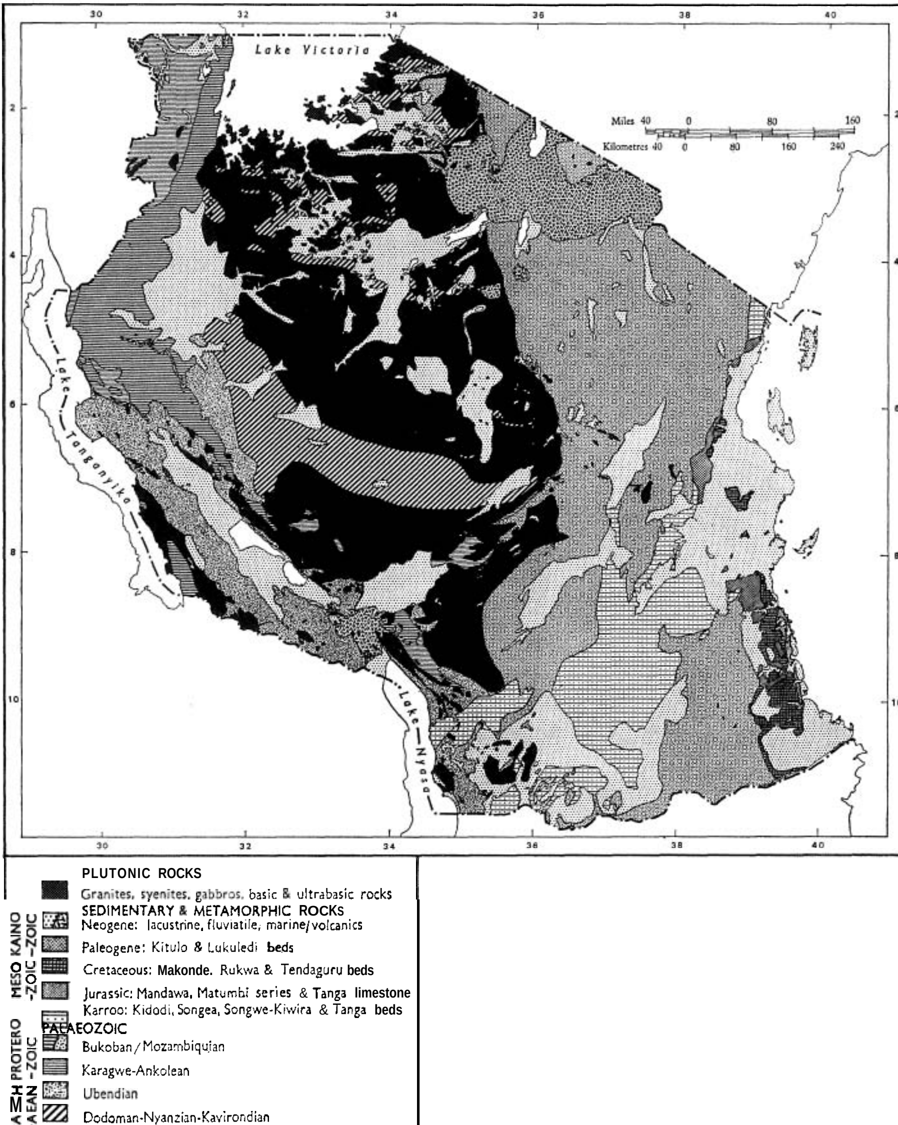
New Forms of Accumulation in Tanzania: The Case of Gold Mining

Chachage Seithy L. Chachage

ABBREVIATIONS

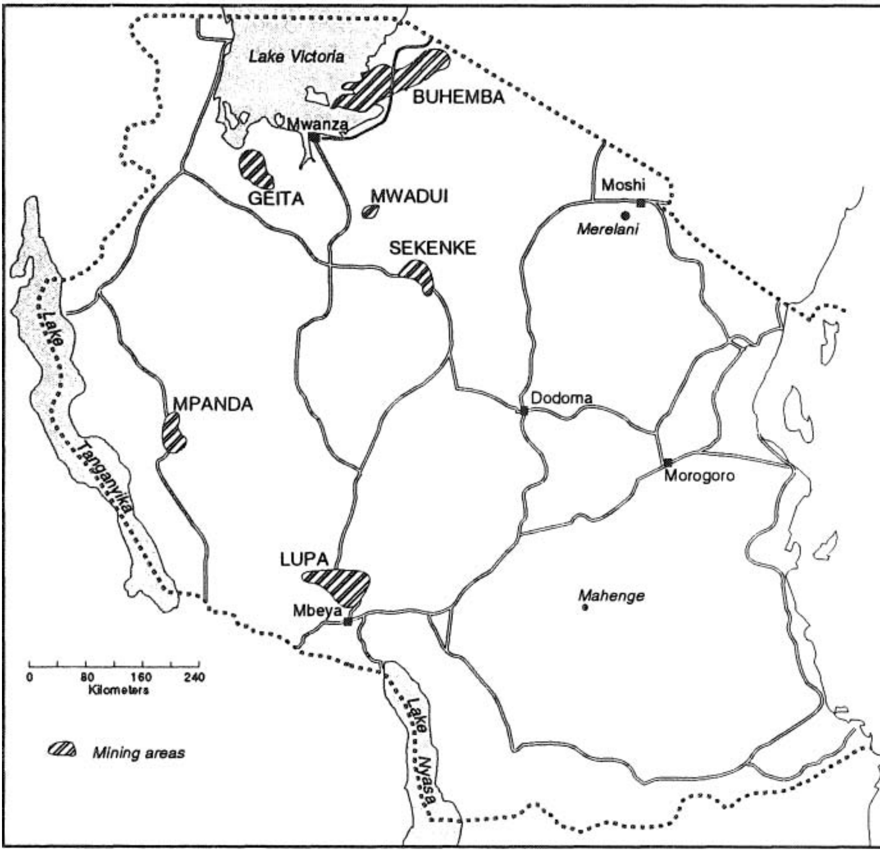
USD	US Dollars
GDP	Gross Domestic Product
EIU	Economic Intelligence Unit
TET	Tanzania Economic Trends
ILO	International Labour Organisation
IBRD	International Bank of Reconstruction and Development (World Bank)
IPC	Investment Promotion Centre, Tanzania
STAMICO	State Mining Corporation, Tanzania
KSh	Kenya Shillings

GEOLOGICAL MAP OF TANZANIA



Source: *Tanzania in* Maps, ed. L. Berry. University of London Press Ltd., 1971

LOCATION OF MAIN MINING AREAS, TANZANIA



Map produced by: Odd Arnesen

Structural Adjustment Programmes (SAPs) in Tanzania have been designed since the early 1980s as a means to combat the balance of payments crisis and resolve the socio-economic crisis which started facing the country in the early 1970s. However, the performance — as the government was to admit by 1990 — has been disappointing. Commodity export earnings which financed less than one third of the imports by 1985 have remained at almost the same level.

As a result of this stagnation in export performance, the balance of payments position deteriorated further over the years. A deficit of USD 539 mn. in 1982 became one of USD 3,431 mn. in 1984 and rose further to USD 4,918 mn. by 1989 (EIU, Tanzania Country Profile 1991–92, 29). In the process, Tanzania became a major debtor — to the tune of USD 5,866 mn. in 1990 (EIU, Tanzania Country Profile, 1992–93, 32). On the other hand official GDP figures show an average growth rate of 4 per cent annually since 1986 and the official inflation rate had dropped to 20 per cent in 1990 from 30 per cent in the early 1980s (although it somehow rose again to 27 per cent in 1991).

This GDP growth is partly a reflection of increased donor support. External assistance to the country increased from USD 287 mn. (1985) to USD 680 mn. (1986) and USD 850 mn. (1989). About 47 per cent of this came in the form of import support. Donor funding as a percentage of the GDP rose from a low point of 13 per cent in 1983 to 38 per cent in 1987 (Maliyamkono and Bagachwa, 1990, 23) and 48.1 per cent in 1990 (EIU, ibid., 31).

More fundamentally, as it is noted by the World Bank (1991, 60), growth in GDP has mainly resulted from the unification of official and "parallel markets" under liberalisation, especially through the inauguration of the "own funded import scheme" since 1984. The scheme had significantly eased the import compression of the previous years (Maliyamkono and Bagachwa, ibid., 6–7). It is significant to note, for example, that while official commodity export values were USD 424 mn. and imports were worth USD 1,380 mn. in 1989–90, imports through the "own account" scheme were worth USD 638 mn. by 1988. Imports through this scheme grew to 35 per cent of the total between 1984 and 1988 and reached almost 50 per cent by the end of the decade (ibid., 29–30). This is aside from unregistered imports. As a result of this scheme, the number of registered import/export companies rose from 104 in 1980 to 1,787 in 1986 (ibid., 111). Within this context, some growth in the official GDP figures had already taken place by 1985: a rise occurred from nil growth in 1983 to about **3** per cent in 1984 and 2.3 per cent the next year (Ndulu, 1986).

The significant difference in the new scenario is that while over 70 per cent of export earnings in 1985 were generated by the six traditional crops, by 1989' non-traditional exports accounted for about 44 per cent—i.e., they had more than doubled in value within this period. (Tanzania Economic *Trends* (TET), Vol. 2, No. 4,1990; Vol. 4, No. 1,1991). The question is: what are these other exports and under what conditions are they produced and traded? There is evidence (see for example Maliyamkono and Bagachwa's account of the activities in the "second economy" op. cit.) that real but probably ecologically irreversible "growth" has been evident in wildlife products (traditionally ivory but now also crocodile skins, ostrich and other exotic birds), forest products (timber generally, but especially black woods, mangrove, mahogany, as weli as medicinal plants, etc.), marine products (prawns, lobster, *béche-de-mer* (sea slugs) etc.) and mineral products. A partial shifting from illegal to legal circuits has occurred in each of these areas, especially minerals, giving for the first time a partial indication of the significant scale of activity in this sector. Despite the fact that the majority of gold and gemstones continue to be smuggled illegally, the mining sector's official growth was 18.7 per cent in 1990 and a further 45 per cent in 1991 (TET, Vol. 5, No. 1/2, 1992, 64), compared with 1.1 per cent in 1989. It was in this sector that Tanzania's highest economic growth by far was registered.

Alongside these activities there has also been a growth in the incidence of recorded drug trafficking, whereby between 1986 and 1991 468 Tanzanians were netted abroad for this offence and 19.7 tonnes of bhang were impounded in 1991 alone (Daily News, 28 July 1992). There is an inextricable linkage between the booming new export areas, cross-border criminal activity of this kind and the ongoing significance of the "own funded import scheme". The former, recorded and unrecorded, fund the latter as well as the unknown level of unregistered imports. Liberalisation has resulted in the expansion of combined legal-illegal import-export trade and created conditions whereby previously mainly illegally exploited and marketed commodities can enter legal circuits, and vice-versa.

The objective of this study is to examine the specificity of these apparently increasingly central forms of economic activity and capital accumulation in Tanzania through an analysis of one of its main elements, gold mining. Until recently this had hardly attracted any attention. Except for diamonds, the mineral sector has been considered unimportant in the past, although it has been often admitted that the country is potentially rich in minerals. Official figures state that in 1988 mining provided only 0.5 per cent of GDP and 0.8 per cent of formal wage employment — i.e. 8,500 people (Jourdan, 1990, 2). Yet two years later gold had become one of the major official foreign exchange earning commodities, following the adoption of a government policy of buying gold at parallel market rates. Officially purchased volumes increased from 116,000 grams in 1989 to 1.65 tonnes in 1990, and an estimated 7.24 tonnes in 1991. At a value of USD 39 mn. in 1991 (EIU, Tanzania Country Report, 1992, No. 3, 16), the official export value of gold has now easily surpassed that of coffee (the traditional major official export). All this is despite the fact that at least 50 per cent of gold produced in Tanzania continues to be smuggled out. Moreover, recent revised estimates indicate that the number of people involved in gold mining is actually greater than the combined number of employees in government and parastatal employment.

Since the late 1980s the World Bank has belatedly acknowledged the role of mining in the structural adjustment countries like Tanzania (cf. World Bank, 1989,1992). However it has completely misread the content and significance of this role. There are several aspects of this misreading. In the first place African mining is said to have spectacularly declined in levels of investment and production during the 1980s. Secondly, this "decline" was identified with falling levels of foreign direct investment as a result of state restrictions and controls over such activities, cumbersome regulatory procedures, unattractive taxation arrangements and weak macro-economic performance. As a result of this, Sub-Saharan Africa is said to have missed the benefits of the boom in certain minerals in the 1970s and 1980s. It is said that currently therefore, Africa needs to create an "enabling environment" for the international mining industry. This would make possible a partnership between host governments and the foreign private mining companies which have the capital and expertise to support new exploration and development.

> Taking a minority interest in new ventures is sufficient for governments to keep abreast of mine developments and protect the national interests. All this will require African governments to rethink their roles and their policies for the mining sector. The main elements of an enabling environment reiate to foreign exchange regime, taxation, repatriation of profits, and the regulatory and institutional framework. By financing specialised advisory services, the donor community could help African governments to negotiate technically sound and fair mining agreements. (World Bank, 1989,125)

According to this perspective, the only "success story" in African mining during the decade has been Ghana, precisely because it has adopted policies of this kind. After the introduction of a new investment code, set of taxation rules and regulatory framework after 1986, recorded gold production rose from 277,000 ounces (1983) to 400,000 ounces (1989), reflecting expanded interest and investment by foreign private capital.'

In fact all these positions are erroneous. As will be shown, while foreign private direct investment certainly declined in Tanzanian mining during the 1970s and 1980s, this was by no means identical with a decline in production. A thriving unrecorded gold industry emerged on a huge scale. More recently, moreover, Tanzania too has adopted an "enabling environment" for foreign private investors, but in the mining sector its effect is likely, if anything, to depress production levels.

THE POLITICS OF INTERPRETING ECONOMIC CHANGE IN TANZANIA

Since the mid-1970s, studies of the Tanzanian experience of extremely deep socio-economic crisis have typically focussed on the nature and effects of the "socialist" moves initiated in 1967. Most have taken to task state policies and ideology and depicted it as the root-cause of the crisis. Radical studies have generally regarded the crisis as a result of the so-called "unscientific" nature of these policies and ideology which rejected "proletarian ideology and leadership", resulting in enhanced dependence on international capitalism and the entrenchment of "bureaucratic bourgeois" interests (Shivji, 1976; Ake, 1979; Babu, 1981). Acceptance of IMF conditionalities has been regarded as an attempt to consolidate this state of affairs. Correspondingly, the IMF/World Bank project was viewed in terms of international class interests, and seen as an attempt to stimulate exports to enable repayment of debts and liberalise trade in order to increase northern exports (Campbell and Stein, 1992).

Within this perspective, a few authors have also noted that the recent economic liberalisation process has marked a considerable shift in types of economic activities occupying centre stage in Tanzania. While insisting that "socialist" Tanzania was all along capitalist, Shivji (1992, 49, 69) argues that with "post socialism" there has been a rehabilitation of the "former saboteurs" and that "in an immediate sense, adjustment manifests itself as trade Iiberalisation based on parallel market economy; an economy of smuggling, on the one hand, and dumping of consumer commodities, on the other...".

Emerging more or less concurrently with discussion along these lines was a different form of discourse which instead viewed the crisis in terms of Tanzanian state policies and ideology "retarding the development of capitalism" in the countryside by reducing (potential) rural capitalists to "middle peasants". These studies marshalled the theoretical edifice of Lenin's criticism of the Russian Narodniks and Bill Warren's (1973; 1980) criticism of the dependency school. For these authors Tanzania's "socialist" policies lacked a proper class foundation, while capitalism was depicted as still having a progressive role to play (Mueller, 1980; Shao, 1982a; 1982b). From a different perspective but in a similar vein came the criticisms of Hyden (1980; 1983), who viewed the crisis in terms of the failure of the state to create markets which could "capture the peasant", who instead "voted with his feet" to remain in the "economy of affection".

A third position which also privileged the role of "socialist" policies, was articulated from the late 1970s by the World Bank and others. This identified "socialism" with a privileging of the role of the state sector in Tanzania, at the expense of the peasant one and with the effects of mismanagement, inefficiency and bankruptcy. According to this analysis, Tanzania's future progress depended on a reversal of "socialist" policies. However, for this position "socialist" economic policies should be replaced permanently by capitalist ones, whereas for Warren they merely needed postponing until a class basis for them had appeared.

Support for liberalisation and for market forces to determine the allocation of resources rather than the state began to gain ground by the early 1980s among local economists and some sections of the government bureaucracy. It was expressed ideologically in terms of a "defence" of the welfare of the majority of the peasants. Theoretically it also drew some support from stances which viewed the crisis in terms of "retarded capitalism" and the "economy of affection". Studies by the ILO (1978), Ellis (1980), Hanak (1981) and others provided empirical data on the decline of rural-urban terms of trade. Initial local ideological expression of this position was articulated by "Candid Scope" (1981), who advocated reforms to allow greater scope for private enterprise and private accumulation, basing himself on a specific textual interpretation of Nyerere's ideas about "socialism". Doubts within the state about the fully fledged adoption of this position in the early 1980s were expressed in continued rhetoric against the "enemies of socialism from within", and suggestions that it would be the Asian bourgeoisie whose commercial interests had been expropriated who had the experience and international connections to most benefit from market solutions.

The influence of this third position was eventuclly consolidated by a burgeoning set of studies on the operation of the "informal sector" or "second economy". Bagachwa (1981; 1982) concluded that the development of this sector reflected survival mechanisms by informal entrepreneurs (themselves mainly low income earners) in the context of a failure of the official economy to provide income-earning opportunities. Furthermore, the development of the sector was depicted as a reaction by both urban and rural dwellers to the "pathology of the state", since it expressed "opposition" to inefficient government regulations, the stifling of formal economic activities, a failure of legal institutions and control mechanisms and a failure of agriculture to support the rapidly growing population. Its most significant features however were said to be its dynamism and efficiency. The "second economy" showed what capitalism in Tanzania could actually achieve, even in the face of supposed obstruction and persecution by the state (Maliyamkono and Bagachwa, op. cit., 134).

In this connection, Tripp (1989, 45–6) has argued that individual strategies for survival and pressures "from below through parallel marketing systems ... laid the basis for many of the liberalisation measures that the state adopted later". Thus, the "informal economy" was a catalyst for change as it forced a "redefinition of the boundaries of state control". The state was gradually forced to recognise the "way people go about procuring a livelihood". This adjustment was also a movement toward an ideal. Activities in the "second economy" were conceptualized as "adaptations to social or market forces working towards societal harmony or equilibrium" (ibid., 33). Liberalisation measures thus came to be depicted as embodying a genuinely popular content.

Many international studies have also imputed an essentially political nature to the "second economy" and its role in social and economic change in African societies. MacGaffey's (1991) definition of "second economy" while not necessarily insisting on the illegality of these activities in relation to the state, nonetheless attributes their tendency to avoid taxation and deny the government revenues the significance of an "initiative from below". Simultaneously, the activities in question are represented as an "autonomous form of accumulation" through which means of survival can become sources of accumulation of wealth to be [re]invested in productive enterprises. As in the studies by MacGaffey (1983; 1987; 1991), Bates (1983), Kasfir (1984), Rothchild and Chazan (1988) and so on, reconceptualisation of state/market relations in terms of the existence of the "second economy", "informal sector", "parallel markets", etc. is aimed at demonstrating that policy reforms designed to overcome the crisis need to harness the energy of these activities and to politically rehabilitate them. In MacGaffey's (1991, 23) formulation, studies which highlight the "second economy" thus have "important implications for international aid donors, for potential investors, both foreign and national, and for government planners".

An implication of this position is that the crisis can in any event be resolved by "good governance" and more appropriate policies. Bad policies, and failure to manage the economies or adjust to the behaviour of the producers are taken to be causes, rather than mere symptoms which demonstrate the existence of a problem. A second implication is that the "second economy" is economically separate from and opposed to the "first". However, as Roitman (1990,676–7) has correctly observed:

> Because production and trade are social acts, it is not sufficient to examine how market forces make workers out of people, because social formations (which are constantly redefined by capital, the state, and producers themselves) determine which choices and alternatives within the productive process are themselves legitimate. Since social structures are the loci in which relations of production and power in society are formed, they therefore determine specific patterns of commodification.

In a nutshell, various productive relationships constitute a unified system which has to be understood in relation to integral production systems. They are not simply a set of alternatives from which people "choose". Such "choices" are mythological, since individuals/groups are not equipped with the same chances given the forms of exploitation and domination "which control, propagate and/or resist capital..." (ibid.).

The dualism and idealism of the "second"/ "parallel"/ "informal" economy thesis needs to be challenged if any proper understanding of the nature of African social formations — or the African economic crisis — is to be reached. As Bangura and Gibbon (1992, 15) have noted, this position "posits two contrasting models of resource allocation with different structures of opportunities — one based on state interventions leading to price distortions and economic rents for a privileged few; and a second based on free competitive markets which allocate resources optimally." Moreover, all analysis of unrecorded economic activity revolves around its supposed "non-stateness". The formation of a class of parasitic rent-seekers is thus seen as occurring only in and through the state, while the existence of a class of "autonomous entrepreneurs" is postulated outside it.

Mamdani (1991) on Uganda and Galli (1990) on Guinea Bissau have actually demonstrated that the groups involved in the "second economy" do not occupy separate market and production systems; rather, they are part and parcel of an entire system of production, exchange and distribution around which particular forms of social and political relations are embedded. "Informal" or "second" economy channels of accumulation and power are just as much a product of the post-colonial state as are purely state-based forms of accumulation. When the ILO first popularised this duality, critics already demonstrated that social relations, whether in the formal or informal sector were primarily differentiated not around degrees of state regulation, but around the control and access to the means of production, transformation of the labour process and forms of accumulation (LeBrun and Gerry, 1975).

This means that in both the recorded and the unrecorded economy there are various forms of contradictory relations, exploitation and oppression. Also found within both of them—albeit in highly subordinate forms—may be elements of social differentiation with progressive implications, i.e., involving the formation through competition of indigenous private capital. A danger, however, with the use of terms such as "accumulation from above" and "accumulation from below" (cf. Mamdani, 1987) to refer to these is that it tends to suggest an alternative form of dualism. Such different types of accumulation may indeed be properly identified but as contradictory tendencies of a single system rather than as physically separate economic processes.

To explain what constitutes the mechanisms, the conditions of existence or the nature of the crisis in Tanzania or any other social formation, it is necessary to explain these contradictory tendencies in the process of accumulation. If one removes dualism, then it is clear that the crisis in Tanzania, as elsewhere in Africa, is a result of the nature of private accumulation through the state enterprises and *also outside them*. Activities in the so-called second economy—embodying these forms of accumulation—have contributed to the crisis, rather than their emergence simply having resulted from it. For example, it is these forms of accumulation which are partly responsible for the fiscal crisis and the collapse of sources of state revenue (taxation), as they systematically deprive government of revenue (as Mamdani, 1991, has observed, fiscal crisis relates to the question of revenue and not only expenditure).

It has also been observed that in Uganda and Guinea Bissau liberalisation and the outpouring of loans and grants from donors in the name of supporting an "enabling environment" for private entrepreneurs has often ended up encouraging non-productive rather than productive activities and that major beneficiaries turn out to be members of the state class and the traditional bourgeoisie, for whom production increasingly gives way to merchant and commercial activity (Mamdani, ibid. ; Galli, op. cit.). Thus, arguably, adjustment has generally strengthened existing accumulation forms rather than supported the development of new, more dynamic ones. This has been partly the result of a process of legitimisation but largely through the increasing levels of (donor)liquidity available to them.

On the other hand, adjustment also has certain other consequences. For example, by creating a situation in which certain forms of foreign investment become easier it may lead to increased forms of competition for either or both dominant and subordinate elements of local accumulation forms. In this process, changes in the balance of forces between different contradictory elements in the local accumulation form may be affected. An examination of gold mining in Tanzania demonstrates the importance of these considerations.

GOLD MINING IN TANZANIA

Mining activities in Tanzania are historically traceable to the pre-colonial period. Most known activities at the time consisted in the mining and working of iron, copper and salt. Unlike the other minerals which were primarily exploited by Africans, gold was exploited on some scale by Arab traders (Parker,1992; Illiffe,1979; Koponen,1986; Kjekshus, 1977). With the establishment of German colonial rule, other minerals were discovered in economic quantities, including mica, garnet, coal, and uranium (IBRD,1961, 253). The recovery of gold and garnet in scattered operations were the principal mining activities in the early years of colonization undertaken by German diggers.

British rule (1918–61) was associated with an intensification of mineral prospecting. Mining laws were enacted in 1921 and 1929. A Department of Geological Survey was set up in 1923. The 1929 law was however designed to discourage small-scale "enterprising individuals". It was introduced to control the accelerated gold rush which began to take place around this time and to discourage the emergence of a "class of poor whites" as the Secretary to Native Affairs, P. E. Mitchell used to cynically call settlers and diggers who eked out a bare subsistence. The colonial government was in favour of bigger concerns, and large-scale companies based in Britain and South Africa indeed began to take an interest in gold mining in Tanzania by 1928.

Small mechanised gold mining operations had been operated in Musoma and Lake Victoria districts and along the Lupa river near Lake Rukwa since 1921. The latter had become the country's chief source of gold by the mid-1920s. Before the large-scale companies could set up their operations, the 1929–32 economic slump and droughts resulted in a decline in the production of alluvial gold. But the economic slump discouraged the large companies also, who in any case would have been facing stiff competition for labour and resources from the small miners as the law failed to stop their activities. Two hundred Europeans from what is now Zaire and Zambia and from within East Africa flocked to the Lupa to prospect and dig gold in 1931 alone, and were followed by hundreds more in the next four years. According to the mines inspector, they arrived in Lupa by "bicycle, on foot, riding on donkeys, or anything on four wheels which could be induced to move" (Roberts, 1986, 556).

With this gold rush by the small miners, there was a doubling of production from 1929 levels by 1932. Production continued to rise until 1936. In the second half of the 1930s dry blower machines were introduced by small-scale gold miners, thus allowing production of gold during the dry season as a continuation of alluvial production during the rainy seasons. However, by this time the gold rush had already subsided, as many of the diggers were able to find more reliable sources of income in other sectors and alluvial gold production was increasingly being replaced by the more technically demanding reef mining. Big capital now renewed its interest in gold mining.

Sekenke became the most important gold mine in the late 1930s. It had been taken over by the South African Central Gold Mines company in 1928 although it was not developed until later. Other South African and British mining companies which undertook development in Musoma and Mara areas included: Tanganyika Diamond and Gold Development Co. (South Africa), Anglo-Transvaal Consolidated Investment Co. (South Africa) and South Nyanza Development Co. (British). There were also some Asians from within the country and outside with interests in mining. An example is Nanak Chande, one of the wealthiest Indians in the Lake Victoria area who owned two inines managed by a South African Boer. The Soriano group from Asia, with interests in the Philippines took over a major mine reef which had been previously developed by East African Goldfields in Lupa (Roberts, ibid.). Asians moreover by now comprised most of the skilled employees found in the industry.

It is estimated that by 1938 gold mining companies employed about 11,000 Africans and alluvial gold mining, which was more labour intensive and dominant in Lupa, employed approximately a further 12,000. Many of the labourers who were employed in Lupa came from what are now Zambia and Malawi, while around Lake Victoria labour was mostly local. These immigrants were young people, very often unpaid or paid very little and living under very poor and unhealthy conditions (ibid., 557–8). The same working conditions existed in the mines around Lake Victoria. The only difference was that the presence here of cotton growing as an alternative source of income constantly threatened labour supply to the mines and resulted in a high turn-over and frequent desertions.

At the same time, a group of African skilled small-scale miners (referred to as "artisans" in current studies) had also emerged by 1935. Many of these were Malawians who had been previously assisting European small-scale miners. In some mines they came to constitute a permanent labour force, and as a result "two years later, several Asian artisans had been displaced by Africans" (ibid., 559). Other Africans operated independently on a group basis, relying on the local merchant class as an outlet.

Besides competing for labour with the cotton economy, the main impact of gold mining on the surrounding areas was in terms of increased demand for foodstuffs. There were farmers who migrated to take new lands near the goldfields in Mbeya. Some of these extended their operations by adopting the plough or in some circumstances irrigation. Mainly as a result, hybrid maize seeds were already being distributed in the Southern Highlands by 1937. Fifteen years later, more than 700 ploughs were in use in the rice fields around the goldfields in the Southern Highlands. Such transformations also took place in the Lake Victoria mining areas in the late 1930s under the stimulus of rising demands for food and the arrival of Luo entrepreneurs from Kenya. These transformations resulted in differentiation among the rural producers, whereby some rural producers were increasingly being employed seasonally on the farms of others who had extended their operations (Illiffe, 1979, 316 and 393–4).

By the early 1940s gold was well-established as the most important economic mineral and its production had peaked at an average of four tonnes a year. By this time the output value of gold was only exceeded by sisal. But the government gained very little revenue from gold mining in the form of royalties, rents and fees despite its importance as an export commodity in these years. Out of the revenues from the industry, the government was only able to compensate "for earlier deficits incurred by the offices of mines and geological survey". The price of gold throughout the period remained low, since it was mainly purchased by the financial institutions (such as the Bank of England) which had a low demand for the commodity. As a result, the government invested little in the industry, either in the form of labour recruitment, provision of infrastructure or economic protection. In the case of the Lake Victoria area the government's attitude towards the industry was largely negative, reflecting the importance attached to cotton production.

With the advent of World War II gold production began to decline, mainly because of "war economy supply" priorities. From 1941, "mining companies were denied priority for supplies of machinery, gold prospecting was banned until the end of the war, and labour became genuinely scarce" (Roberts, op. cit., 560). The fortunes of gold declined further with the discovery of diamonds at Mwadui in Shinyanga in 1939 by Dr. Williamson. By 1945 diamond exports accounted for the single largest component of export value and gold production had declined to an average of two tonnes a year. Production of diamonds was able to rise steadily as it was backed by a "number of Indian merchants in Tanganyika and a task force of Italian prisoners of war.... By 1946 [there were] 6,000 workers... with their families..., and over 200 armed guards" at Mwadui (Epstein, 1982, 89). Active government support for diamond mining (including taking up equity in the private companies and even proposing nationalization (in 1946) was due to the fact that diamonds "earned at that time more foreign exchange for (the colonial government) than almost any other export, and the British ...(were) understandably concerned with preserving its value" (ibid., 90).

Minerals contributed **3** per cent to recorded GDP by 1950. At around 15 per cent of total exports by value, their overseas earnings were nearly as much as those of coffee or cotton. Diamonds accounted for roughly two-thirds of mineral production by 1960, although by this time gold production had risen to 3.5 tonnes from its previous low levels (IBRD, op. cit.). With the government's actions in the 1940s, coupled with the relative unimportance of gold in the international monetary system which was to last until 1970, it had become unprofitable for large companies to develop gold mining. Throughout the period prior to 1970, the gold price remained at only USD 35 per ounce.

The most important gold mine of the inter-war period, at Sekenke (Lake Victoria area) which was operated by Tanganyika Central Gold Mines, along with other less large mines, were closed by the late 1940s. The only big mine which continued to operate until the early 1960s and produced well over half of total gold production was that owned by Tanganyika Concessions in Geita. This remained the largest gold mine in East Africa (employing around 2,200) until it was closed in 1966. Although greatly improved in terms of efficiency from the 1950s, it constantly faced financial problems. The only other remaining mining activities by the 1950s were those of the medium scale companies which operated in Lupa (Saza and Ntumbi), Mpanda (Mukwamba), Mwanza (Geita and Mawe Meru), Musoma (Buhemba and Kiabakari), Singida (Sekenke-Iramba), Shinyanga (Nzega) and Ruvu River. The small-scale producers who had emerged in the 1930s, who used labour intensive methods, and whos activities were articulated with merchant capital were also still in operation. Some of those who had been previously employed by the mining companies which were closing down joined the ranks of "artisanal" miners barely surviving on the activity.

Commercial gold mining declined rapidly before and soon after independence from three tonnes per annum in the early 1960s to 10 kg in the 1970s. It officially ceased entirely in 1972. The Three Year Development Plan for Tanganyika (1961–1964) which had been prepared by the World Bank considered that the development of the country depended fundamentally on the transformation of agriculture and animal husbandry. A contribution from mining to development was merely something to be hoped for — probably in the future. On the other hand the Plan's authors advised the government to modify its mining policies "as necessary, to increase the attraction and (give) encouragement to further prospecting by private interests", chiefly through providing favourable tax incentives in the early stages of mine development (IBRD, op. cit., 8 and 269). In any case, since many of the companies which had been previously interested in gold prospecting were South African based, trade sanctions on South Africa from 1961 made it impossible for them to operate in Tanzania irrespective of the tax regime. Those which were not South African were also disadvantaged, by the fact that they could not import cheap mining inputs from South Africa.

However, the disappearance of large-scale operations and officially recorded production did not eliminate gold mining activities. The large number of skilled people experienced in loaning, gold prospecting and underground mining methods who were laid off by the companies which closed down increasingly moved into "self-employed" mining. "Artisanal" mining, continuing to rely on the market provided by Asian, Arab and Greek merchants existed throughout the period when large-scale mining companies ceased to operate. Most of this gold was smuggled into Kenya (Jones, 1981, 113 and 122) before being trans-shipped elsewhere. Intensification of "artisanal" production increased further with the laying off of more miners in 1976 as a result of a decline in diamond production.

These small-scale mining activities were illegal from the state's point of view as the 1929 law remained in operation. Under this law, prospecting by private firms had to be in association with the government, which in turn granted licences to qualified adults at its own discretion for a nominal fee. The government could issue an exclusive prospecting licence for an area of up to eight square miles or a negotiated special exclusive prospecting licence covering a larger area. It could also control prospecting activities by formally closing any district or a whole territory for any specified minerals, or simply by withholding prospecting licences. During the colonial period, government had prohibited prospecting throughout the country for diamonds (except for Williamson Diamonds Co. in the 1940s), coal, helium and salt. In certain specified areas it had also prohibited prospecting for gold, gypsum, meershaum, kaolin, radioactive minerals and materials for cement production.

The international scene in regard to gold demand began to change from 1969. From this year, the demand for industrial gold began to rise by 12 per cent per annum. Simultaneously, there was a huge increase in the US budget deficit and a corresponding decline in US gold stocks, which created a crisis in confidence in the dollar as a universal currency. Consequently, the price of gold began to rise from 1971. Further price increases were to be fuelled by a surge of speculation on the free gold market, as a result of which the price rose to USD 49.25 per ounce by 1972 (Green, op. cit., 3).

The international financial chaos of 1973 together with the inflationary fears accompanying the threatened devaluation of the dollar sent the price of gold to USD 132 an ounce in July. By 1975, it had reached USD 197.50 an ounce, whereafter it fluctuated inversely with movements in the US dollar value. The price of gold rose dramatically from USD 330 to USD 507 an ounce in 1982, only to collapse in early 1985 to USD 300. Later in the year it sharply rose again, only to ease back to USD 400 after 1986 (Green, op. cit., 3–4).

With the opening of a free market in gold from 1971, the nature of the gold market also substantially altered. While two-thirds of gold had been bought by the monetary authorities between 1948 and 1965, which in turn had kept the price of gold and its supply constant or below its value, 60 per cent of gold coming into the market by 1986 went into jewellery, 14 per cent to industry, 14 per cent to private bar hoarding, while bullion coins took up the balance (ibid., 5). Switzerland emerged as the fulcrum of the European industry, with a concentration of private bank-owned small refineries. Major markets included the Middle-East and India, where there was very high demand for jewellery. Therefore, there was a renaissance in gold mining internationally from the early 1970s reminiscent of the nineteenth century boom.

Officially, gold production in Tanzania failed to respond to this rapid increase in world prices to the extent that by 1989, registered gold production was still only 116 kg. Studies examining this sector in Tanzania (e.g.Parker, op. cit. and Jourdan, op. cit.), place responsibility for this on Tanzania's "socialist" policies, in particular nationalisations in other sectors. According to Parker (ibid., 19) and Jourdan (ibid.), outside investors became interested in investing in minerals in Tanzania only in the 1980s, because the government had by then abandoned its failed policies and changed tax, employment and exchange control regulations. By 1992, there were 67 companies licenced in mineral drilling, although all of them were merely represented by agents (Daily News, 5 August 1992).

Actually however, Tanzania's mining law was changed in 1979 and was designed to encourage large-scale foreign companies. Instead, the big mining houses in South Africa, which had been profitable even when gold earned only USD 35 an ounce, were reaping sufficiently huge profits at home to not risk moving into uncharted territory.

The Tanzanian government's own attempts to take advantage of the new profitability of gold through the establishment of the State Mining Corporation (STAMICO) also proved to be doomed. STAMICO attempted to reactivate production of gold from alluvial sources by using large-scale production techniques (Jones, op. cit., 111). This was despite the fact that it could not run the buck reef mines which it had taken over in 1971. Such large-scale operations required a massive injection of capital from the government if they were to bear fruit. This was not possible at a time when the state had already begun to face a fiscal crisis.

Attempts by STAMICO to attract large capital in the 1970s and early 1980s in the form of aid or joint public-private investments also failed, even with the new government mining law which came into operation in 1979. Under this law, government participation in such ventures was no longer mandatory, and local small-scale miners could for the first time legally peg claims and work on them. Foreign gold mining companies only began to appear in 1984, although then, indeed it was under the same 1979 Mining Act which provided the legal and political framework and incentives for large-scale mining.

Further reforms of the mining law were passed by the government in 1982–83. In 1987 it also approved a gold and gemstones trade rationalisation policy which established a framework for privatization of minerals trading activities (liberalised in 1989). Current investment incentive packages in the country include low corporate taxes, exemptions from customs and sales duties, reduced royalty payments, increased foreign exchange benefits by allowing retentions of up to 70 per cent, and the creation of an Investment Promotion Centre (IPC) to provide accelerated clearance for investments in a number of sectors, including mining. By 1992, agreements reached between government and foreign private investors for prospecting and mining rights took the forms of royalties levied at 3 per cent of income, a 10 per cent government stake in the company and normal income tax levels (IPC 1992).

Of the sixty-seven companies currently licenced in the mining sector, about twenty had applied for prospecting licences in gold by 1992. Interestingly, almost none of the foreign companies which were given exclusive rights in gold mine development since the mid-1980s have opened new mines. For example, Dar Tardine Tanzania (the representative of a Swiss company) was given exclusive rights in 1984 to an area which covered 80 per cent of the most attractive gold prospects in the northern part of the country (Mara, Mwanza and Singida). By 1988, the company had managed to shut out other investors in the area but had not explored or developed new prospects. Instead, it was involved in an experimental retreatment of the Buhemba (Musoma) dump by cyanide leaching, producing only 40 kg per annum. It was also involved in a project with STAMICO to send teams of purchasers into "illegal" gold mining areas to buy gold at open market prices (Jourdan, op. cit., 9). This company fell under parliamentary investigation for smuggling in the same year. By 1991, it had lost all its prospecting licences, and is currently involved in a legal wrangle to get them back (EIU, Tanzania Country Report, 1991, No. 3, 19). Likewise, the Canadian Placer Dome company was granted an exclusive licence to work on the important Bulyanhulu deposit. However, it relinquished the prospect "apparently for internal reasons" (Parker, op. cit., 82). In fact the only mechanised gold production operations in Tanzania so far are Tan-Can Gold Ltd. in Nzega and Mans Mining in Lupa. The remaining companies seem more interested in recovery operations on older sites and the activities of the "artisanal" miners.

This reflects changes in the economics and technology of gold production. At current price levels (USD 330–360 per ounce), deep mines are hardly economic anywhere in the world, and few new ones are likely to open. On the other hand, new low-cost organic chemical technologies have been developed in recent years which allow the recovery of gold from easily accessible sites and materials which were previously considered too low grade to merit corporate investment. Some of these technologies — which are even portable — are particularly suited to "mopping up" gold from old workings of various descriptions. The 1980s have seen an expansion of so-called "junior" small mining houses based in Australia, Canada, and parts of Europe (e.g. Ireland) which specialise in precisely these operations, which in Tanzania they profitably combine with buying gold from small miners.

Alongside the foreign mining companies there are several Tanzanian players. These include the Bank of Tanzania, which since 1989 has itself been buying from small miners at parallel market prices and three types of local company, described as follows by Parker:

> Local Tanzanian companies are of three main types. Several artisan miners often, with assistance from foreign companies, are trying to develop their claims into mechanized mines (Chipaka, Kiganga, Four Gold Miners). Local businessmen, often Asians or Greeks, establish companies to formalize the gold dealing which they have probably been doing illegally for years. The most interesting are those set up by Tanzanian geologists or mining administrators. (Bungu, Engineering Associates, ibid., 82)

The activities of the small miners (so-called "artisans", galampsey, *creusseurs* or *pailleurs)* have in recent years mainly been undertaken at old mines and areas where known alluvial deposits existed up to the early 1970s. Their numbers experienced a spectacular boom in 1976 with the discovery of a hitherto unknown large gold deposit at Bulyanhulu (now recognized as a world class deposit) in the southern part of Lake Victoria and the influx to it of workers who had been laid off in diamond mining (Bills et al, 1991, 292). Since then the small miners have continued making totally new discoveries in many parts of the country every year, to the extent that by 1990 it was estimated that there were about 300 gold mining sites and an unknown number of gemstone sites operated by "artisanal" miners (Parker, op. cit., 20).

Despite the activity being illegal from the government's point of view, mining communities of 10,000 up to 25,000 people were being "unofficially" established within a space of a few weeks in these years, with a "high degree of internal organisation". Since the Village Act, which passed land ownership to village governments as corporate bodies, had already been introduced by this time, these activities must have been undertaken with the knowledge or participation (direct or indirect) of party and government officials at some levels. The same is indicated by the complete lack of enforcement of the mining law. Within a year of the discovery of Bulyanhulu, for example, "50,000 people were reported to be working the reef or providing support services to miners". Recent estimates are that there are 300,000[1] people operating at gold sites. (Bills, op. cit., 292)

Bulyanhulu miners were cleared from the site by the state in favour of STAMICO and international mining interests in 1978. Despite this, illegal mining on an unquantifiable scale continued at this site and others throughout the country. It is estimated that in the past 15 years or so, between eight to fifteen tonnes of gold have been produced by these small-scale miners annually. According to the Business *Times* (7 December 1990) about half current foreign exchange earnings (about USD 172 mn.) or almost three times the value of coffee exports were lost annually through the unofficial gold trading channels in the 1980s.[2]

Despite the 1979 legal reform, it was therefore not until the 1989 liberalisation in mineral trading that many small miners' operations became official. Since then, previously unofficial claimants have begun pegging their claims in the name of a single owner or partnership (a syndicate of miners). Village governments have also pegged claims on behalf of villages. The latter have been administered by village leaderships which have also kept "records of visitors, people liv-

[1] This is about a half of the official figures of wage employment which by 1990 stood at 633 380, and more than all public sector employment. Officially, the number of people in mining activities has fallen to only 7,000! Parker (op. cit., 101) more conservatively estimates 300,000 at all mining sites (gold, gemstones and other) in Tanzania. Certain Tanzanite sites have huge populations. In 1990 25,000 people were removed from one at Marelani in Arusha (EIU, Tanzania Country Report, 1991, No. 1, 21). When the author visited the site in 1993 he found 50,000 persons there.

[2] One of the main such channels seems still to be via Kenya. This may also be a channel for Zairian smuggling. The Kenyan connection involves an interesting combining of legal and illegal activity and probably also large-scale fraud. A Kenyan company, Goldenberg International, claimed to be exporting almost KSh. 1 bn (USD 16 mn.) worth of diamonds per month in 1992. Kenya produces no diamonds or any other mineral in significant quantities. Of course, Goldenberg0s claims were also tied to efforts-to fraudulently obtain billions of Kenya shillings from certain politically-connected banks, which were in turn used to speculate on the foreign exchange market (cf. Financial Times, 24 March 1993). (Editor).

ing and mining on the claim and gold production (official or unofficial)" (Bills, op. cit.). The claimholders do not work on the pits, instead they lease the claims to a series of "pit owners" who are given control of a few metres of strike length. The pit owners in turn employ four to six miners who do the actual work.

With regard to production relations therefore, the claimholder usually becomes a capitalist landowner (receiving an agreed share of the mined ore or the product of an agreed number of labour shifts), while the pit owner is a small capitalist or sub-contractor who in turn employs workers. Under such arrangements, the pit owner either works at the claimholder's expense or at his own expense (pit owners are invariably men). In the former case the pit owner and the workers are paid in the form of retaining the proceeds of a "shift" of their own for one to three days a week. In the latter, the claimholder receives the proceeds of a shift for one to two days a week. The miners themselves receive a share of the mined ore which the pit owner retains. While the rates of the share of the mined ore between the claimholder and the pit owner may vary, on average the former gets about 30 per cent and the latter takes the rest. At this point, either the bagged crude ore is auctioned to others who purchase and treat it, or it is treated inclividually by the claimholder or the pit owner.

Production methods are simple and labour intensive. Mechanized equipment (such as compressors, jackhammers, water pumps or even explosives) are a rare phenomenon at the sites. Even that which is available is in extremely bad shape. Mining is done by hand using "outworn pickaxes, sledge hammers, chisels and shovels" (ibid.). The team of miners which is organised by the pit owner carries out shaft sinking and extraction of gold ore. Shafts are sunk at a rate of up to three meters a day, and waste rock and ore is hoisted to the pit surface by baskets or sacks. The broken quartz reef is sorted by hand.

Grinding, crushing and recovery of gold is done with rented equipment and hired labour (mostly old men). Then others are hired to pound. This is the most highly paid labour, and within a gold field there may be up to twenty groups of four to fifteen workers who do this job. The pounded product is sieved so as to remove the oversized product and repound it. Repounding is done by children who are a source of cheap labour. Gold recovery from sand is done by sluicing and finally amalgamating with mercury. Finally tailings are sold for regrinding and rewashing, a job which is undertaken indoors by women in mining and surrounding villages.

The fortune makers in this process, as in most historic gold rushes, are firstly the claimholders . These basically comprise the rural bourgeoisie and village leaders (who are in a position to register claims at local offices and at the Ministry of Water, Energy and Minerals), some syndicates of small-scale miners, some Asian and Greek businessmen, employees of the official mining sector and urban party and state bureaucrats. Secondly come the merchants—dealers who are "notoriously shy over the observance of their activities [who] congregate around margins of the workings with scales and a practised eye for fraud, and the true density of gold and the typical fineness of each field" (ibid., 294). It is these who smuggle out gold and recycle the foreign exchange earned from it through importation of consumer goods. These groups are the main beneficiaries of the liberalisation measures, which have partly formalised these activities.

The pit owners' fortunes are mixed. A few make it, depending on the richness of the deposit, but most do not. Most pit owners are themselves workers, the difference being that they employ others and are not permanently controlled by the claimholder. Their tendency is to drift to wherever there are better prospects. The majority of the workers are losers in these operations. Other losers are the poor rural dwellers who lose their lands after claims have been pegged.

Many mining camps are highly organised. Some claim holders erect quarters so as to attract a permanent labour force to the camps. Once a camp is established, within weeks there follows a chain of entrepreneurs—second-hand clothes dealers, tailors, beer sellers, prostitutes and those who establish food stalls, kiosks and "hotels". The camp also starts being serviced by water sellers. The organisation of the camps embodies considerable social differentiation, ranging from "high street" to "low ones". Even the nature of means of transport reflects the same segmentation (from bicycle taxis to buses to four wheel drive vehicles). Party (CCM) officials and the "traditional" defence groups (Sungu Sungu) are also present in these camps (ibid., 295).

The way that current operations are carried out and the manner in which camps are organised has a number of implications for the people of the areas and the physical surroundings. Massive land erosion and deforestation occurs as a result of the concentration of most mining on shallow, soft ore areas which are abandoned immediately there are water or air problems. The use of mercury—at least one tonne was *officially* imported for mining use in 1991 (*Sunday News*, 4 October 1992)—to capture gold from sediments has meanwhile serious environmental and health implications in terms of pollution, neurological problems and birth defects. Other mining-related health problems include the spread of AIDS, diseases arising from unhealthy sanitary conditions, pulmonary problems and deaths from major collapses.

CONCLUDING REMARKS

As has been shown above, the legal framework and attitude towards private mining investment in Tanzania has over the years become relatively favourable. Yet so far it has proved difficult to attract large-scale mining companies. In the case of developing countries generally it has been observed that "newly liberalized investment codes have not precipitated a rush by private companies and the investments that have been made have tended to be cautiously selective both in terms of countries and commodities" (Andrews, 1991, 50). Ghana's meteoric boom in large-scale gold mining, supposedly the result of an "enabling environment", is unlikely to be generalised to other countries in Africa given the specificity of Ghana's history of mining investments. As indicated, most of the new foreign direct investments in Tanzania are small-scale and in recovery processes.

It is obvious that the World Bank's thesis that mining in Africa was hampered by controls and inappropriate policies, and that what is required is an "enabling environment" is based on false premises. It rests at the very least on confusion between mining in general and mining by very large-scale foreign private companies. Controls and "inappropriate policies" were never relevant for the small-scale, so-called artisanal, sector whose fortunes fell and rose with fluctuations in the gold price and labour market changes. Nor have Tanzania's laws ever been hostile to foreign private mining companies, even before the legal changes of 1979.

These laws followed the direction which the World Bank has since been advocating and yet they failed to attract investments in gold until new technologies accessible to "junior" foreign companies became available. The World Bank's argument is also based on the false assumption that there was an actual fall of production of minerals in Africa, when huge quantities of artisanal production were going unrecorded (over 40 per cent of gold in Sub-Saharan Africa is still produced by "artisanal" miners). The fact is, while production may have fallen for large companies and for bulk minerals which require heavy investment (e.g. copper, iron ore, phosphates, etc.), orthodox statistics tell us practically nothing about the realities of production of gold, diamonds, and other gemstones.

Given the changing nature of production processes and relations in the industry, coupled with the price and demand situation in the world market, most commercial mining companies in the case of Tanzania are likely to continue to take licences for mercantile, or at best, recovery purposes as DTT did in the 1980s. Actual mining is likely to remain in the hands of the so-called artisans, because of the latters' extreme cost advantage. These allow a high level of "uneconomic" production. As Bill et al state "In consequence it is on occasion possible for the artisanal miners to highgrade deposits that would be too low in overall grade for commercial companies to consider" (ibid., 293).

The new technologies which emerged in gold mining from the 1970s interlock with and help reproduce existing production relationships in gold. These remain even now quasi-feudal with merchant capital dominating. Larger capital (foreign or local) — commercial, state or industrial — has itself been operating mainly in a mercantilist form, hence fettering further technical transformation. The World Bank and the advocates of the "second economy" dualism are hence in practice championing the dominance of merchant capital in production. They are defending forms of accumulation which tally well with the expansion of the world market but which in the process undermine productive accumulation and encourage an "economy of plunder". The advocates of the "second economy" thesis reproduce this position because of their failure to grasp the fact that petty commodity production and small-scale enterprises are essentially an expression of fragmentation within capital. The latter constitutes the very logic of existence of capital and its reproduction (competition-monopoly-competition).

These forms of accumulation have definite implications in the process of class formation in Tanzania. Within the mining villages the producers are differentiated and this differentiation forms part and parcel of differentiation in the surrounding areas and class differentiations in society at large, under forms of accumulation which combine competitive market relations (accumulation from below) with the manipulation of state and international connections (accumulation from above). The unity and contradictions of these two forms of accumulation and their political implications locally and at the country level have not been studied in Tanzania.

Those in Tanzania who criticised the World Bank and IMF from a radical position have usually counterpoised to them the autonomous organisations of the "civil society", and have ended up in espousing all sorts of social movements as agents of change from below. This has usually been done without an examination of the specific modes of politics being generated at different production sites — the factory, the farm, the mine, the plantation and home. It is difficult, if not impossible, to grasp the real nature of future politics from below without understanding the changes that are taking place in the accumulation process and struggles around it.

Currently for example, small-scale mining — despite its crude methods of production, its oppressive social relations and its overall congruity with and stimulation of compradorialism in the national economy — is providing a means of livelihood to many people in the form of profits or wages, besides stimulating other forms of local level capitalist growth. The granting of prospecting licences to large or "junior" international mining houses is bound to generate definite conflicts between "artisanal" production, which concentrates on shallow deposits usually situated in the bulk mines and that of the international companies, which are likely to claim these same sites (and enjoy legal priority to them). The latter's "mining", as Bills et al (op. cit.) have observed, tends to sterilise a working area for several years during exploration and feasibility studies. This clashes with interests of local operatives and claimants. Already, the granting of licences by IPC to large capital is increasingly resulting in conflicts. This, for example, has been the case in Dodoma where a Korean company was given land belonging to several villages for mineral prospecting, and also in Arusha where a foreign company was given land belonging to twenty-five villages in Kiteto district to establish a game farm (*Daily* News, 5 August 1992). Besides this, the foreign companies will without question employ only a fraction of the current labour force with severe implications for the basically healthy capitalist development of agriculture and services in mining areas.

REFERENCES

Ake, C. (1979), "The Congruency of Ideologies and Political Economies", in P. Gutkind and E. Wallerstein (eds.), *The Political Economy of Contemporary Africa,* Sage Publications, Beverly Hills.

Andrews, C. B. (1991), "Mining Investment Promotion: A View from the Private Investor", *Natural Resources Forum,* February.

Bagachwa, *M*. S. D. (1981), "The Urban Informal Enterprise Sector: The Case Study of Arusha Town", *ERB Paper,* No. 81.4, University of Dar es Salaam.

Bagachwa, M. S. D. (1982), "The Dares Salaam Urban Informal Sector Survey", in ILO, *Tanzania Basic Needs in Danger,* Addis Ababa.

Bagachwa, M. S. D. (1989), "The Nature and Magnitude of Second Economy in Tanzania", *Tanzania Economic Trends,* Vol. 2, No. **3.**

Babu, A. M. (1981), *African Socialism or Socialist Africa?,* Tanzania Publishing House, Dares Salaam.

Bangura, Y. and P. Gibbon, (1992), "An Introduction to Some Conceptual and Empirical Issues", in P. Gibbon et al (eds.), *Authoritarianism, Democracy and Adjustment* **,** Scandinavian Institute of African Studies, Uppsala.

Bates, R. H. (1983), *Essays on the Political Economy of Rural Africa,* Cambridge University Press, Cambridge.

Bills, J. H. et al (1991), "Artisan Mining in Lake Victoria Gold Fields, Tanzania", SAMAX Ltd., London.

Campbell, H. and H. Stein, (eds.) (1992), *Tanzania and the IMF: The Dynamics of Liberalization,* Westview Press, Boulder.

Candid Scope (1981), *Honest to My Country,* TMB, Tabora.

Economist Intelligence Unit (EIU), London (various).

Ellis, F. (1980), "Agricultural Pricing Policy in Tanzania 1970–1979: Implication for Agricultural Output, Rural Incomes, and Crop Marketing Costs", Economic Research Bureau, University of Dar es Salaam.

Epstein, E. J. (1982) *The Diamond Invention,* Hutchinson and Co., London.

Financial Times, London.

Galli, R. (1990), "Liberalization Is Not Enough: Structural Adjustment and Peasants in Guinea Bissau", *Review of African Political Economy,* No. 49.

Green, T. (1987), *The Prospect for Gold: A View to the Year 2000,* Rosendale Press, London.

Hanak, E. E. (1981), "The Tanzania Balance of Payments Crisis: Causes, Consequences and Lessons for a Survival Strategy", M. A. Dissertation, University of Dar es Salaam.

Hyden, G. (1980), *Beyond Ujamaa in Tanzania: Underdevelopment and an Uncaptured Peasantry,* Heinemann, London.

Hyden, G. (1983), *No Shortcuts to Progress: African Development Management in Perspective,* Heinemann, London.

IBRD (1961), *The Economic Development of Tanganyika,* John Hopkins Press, Baltimore.

Illiffe, J. (1979), *Modern History of Tanganyika,* Cambridge University Press, Cambridge.

ILO (1978), *Towards Self-reliance in Tanzania,* Addis Ababa.

Investment Promotion Centre (IPC) (1992), "Mining Potential and Investment Opportunities in Tanzania", Dar es Salaam (mimeo).

Jones, J. V. S. (1981), *Resources and Industry in Tanzania: Use Misuse and Abuse*, Tanzania Publishing House, Dar es Salaam.

Jourdan, P. (1990), "The Mineral Industry in Tanzania", Institute of Mining Research, University of Zimbabwe, Harare.

Kasfir, N. (1984), "State, Magendo, and Class Formation in Uganda", in N. Kasfir (ed.), *State and Class in Africa*, Frank Cass, London.

Kjekshus, H. (1977), *Ecology Control and Economic Development in East African History*, Heinemann, London.

Koponen, J. (1986), *People and Production in Late Colonial Tanzania*, Finnish Society for Development Studies and the Scandinavian Institute of African Studies, Helsinki.

Lebrun, O. and C. Gerry, (1975), "Petty Producers and Capitalism", *Review of African Political Economy*, No. 3.

MacGaffey, J. (1983), "How to Survive and Become Rich amidst Devastation: The Second Economy in Zaire", *African Affairs*, No. 82.

MacGaffey, J. (1987), *Entrepreneurs and Parasites: The Struggle for Indigenous Capitalism in Zaire*, Cambridge University Press, Cambridge.

Macgaffey, J. (1991), "Initiatives from below: Zaire's 'Other Path' to Social and Economic Restructuring", in Hyden G. and M. Bratton (eds.), *Governance and Politics in Africa: Perestroika Without Glasnost?*, Lynne Rienner, Colorado.

Maiiyamkono, T. I. M. and M. S. D. Bagachwa (1990), *The Second Economy in Tanzania*, James Currey, London.

Mamdani, M. (1987), "Extreme but not Exceptional: Analysis of the Agrarian Question in Uganda", *The Journal of Peasant Studies*, Vol. *14*, No. 2.

Mamdani, M. (1991), "Uganda: Contradictions in the IMF Programme and Perspective", in Ghai, D. (ed.), *The IMF and the South*, Zed Press, London.

Mueller, S. (1980), "Retarded Capitalism in Tanzania", *Socialist Register*, Merlin Press.

Ndulu, B. (1986), "Stabilization and Adjustment Policies and Programmes in Tanzania 1978–85", WIDER Country Study, No. 16, Helsinki.

Parker, M. (1992), *The Mining Industry in Tanzania*, Dodoma, Tanzania.

Roberts, A. D. (1986), "The Gold Boom of the 1930s in Eastern Africa", *Journal of the Royal African Society*, Vol. 85, No. 341.

Roitman, J. L. (1990), "The Politics of Informal Markets in Sub-Saharan Africa", *The Journal of Modern African Studies*, Vol. 28, No. 4.

Rothchild, D. and N. Chazan (eds.) (1988), *The Precarious Balance: State and Society in Africa*, Westview Press, Boulder.

Shao, J. (1982a), "Theories of Underdevelopment and Imperialism: Charles Bettelheim or the Comedy of Errors?", in Y. Tandon (ed.), *University of Dares Salaam Debate on Class, State and Imperialism*, Tanzania Publishing House, Dares Salaam.

Shao, J. (1982b), "Democracy in Africa: Problems and Prospects", Syracuse University, New York (mimeo).

Shivji, I. G. (1976), *Class Struggles in Tanzania*, Tanzania Publishing House, Dares Salaam.

Shivji, I. G. (1992), "The Politics of Liberalisation in Tanzania: The Crisis of Ideological Hegemony", in Campbell, H. and H. Stein, *Tanzania and the IMF: The Dynamics of Liberalization,* Westview, Boulder.

Tanzania Economic Trends, Economic Research Bureau, University of Dar es Salaam.

Tripp, A. M. (1989), "Defending the Right to Subsist: The State versus the Urban Informal Economy in Tanzania", WIDER Working Paper, No. 59, Helsinki.

Warren, B. (1973), "Imperialism and Capitalist Industrialization", *New Left Review,* No. 81.

World Bank (1989), *Sub-Saharan Africa: From Crisis to Sustainable Growth*, World Bank, Washington D.C.

World Bank (1991), *Tanzania Economic Report: Towards Sustainable Development in the 1990s,* Washington D.C.

World Bank (1992), "Strategy for African Mining", Africa Technical Department Series, *Technical Paper,* No. 181.

Publications of the research programme on "the political and structural adjustment in Sub-Saharan Africa"

Gibbon P., Y. Bangura and A. Ofstad (eds.) (1992), *Authoritarianism, Democracy and Adjustment. The Politics of Economic Reform in Africa*, Scandinavian Institute of African Studies, Uppsala, jointly with United Nations Research Institute for Social Development and Chr. Michelsen Institute.

Gibbon, P. (1992), "Population and Poverty in the Changing Ideology of the World Bank" in Hammarskjold M., B. Egero and S. Lindberg (eds.), *Population and the Development Crisis in the South*, PROP Publication Series, No. 2, Lund.

Gibbon, P. (1992), "The World Bank and African Poverty, 1973-91" *Journal of Modern African Studies*, Vol. *30*, No. 2.

Gibbon, P. (1992) "A Failed Agenda? African Agriculture Under Structural Adjustment, with Special Reference to Kenya and Ghana", *Journal of Peasant Studies*, Vol. *20*, No. 1.

Gibbon, P. (ed.) (1993), *Social Change and Economic Reform in Africa*, Scandinavian Institute of African Studies, Uppsala.

Gibbon P., K. Havnevik and K. Hermele (1993), *A Blighted Harvest: The World Bank and African Agriculture in the 1980s*, James Currey, London (forthcoming).

Gibbon, P. (1993), "The World Bank and the New Politics of Aid", *European Journal of Development Research* (forthcoming).

Chachage, C. S. L., M. Ericsson and P. Gibbon (1993), "Mining and Structural Adjustment. Studies on Zimbabwe and Tanzania", Scandinavian Institute of African Studies, *Research Report*, No. 92.

Neocosmos, M. (1993), "The Agrarian Question in Africa and the Concept of 'Accumulation from Below': Economics and Politics in the Struggle for Democracy", The Scandinavian Institute of African Studies, *Research Report*, No. 93 (forthcoming).

Research Reports available for purchase from the Institute

10. Linne, Olga, *An Evaluation of Kenya Science Teacher's College.* 67 pp. Uppsala 1971. SEK 45,-.
11. Nellis, John R., *Who Pays Tar in Kenya?* 22 pp. Uppsala 1972. SEK45,-.
13. Hall, Budd L., *Wakati Wa Furaha. An Evaluation of a Radio Study Group Campaign.* 47 pp. Uppsala 1973. SEK 45,-.
14. Ståhl, Michael, *Contradictions in Agricultural Development. A Study of Three Minimum Package Projects in Southern Ethiopia.* 65 pp. Uppsala 1973. SEK 45,-.
15. Linne, Olga, *An Evaluation of Kenya Science Teacher's College.* Phase II 1970-71.91 pp. Uppsala 1973. SEK 45,-.
21. Ndongko, Wilfred A., *Regional Economic Planning in Cameroon.* 21 pp. Uppsala 1974. SEK 45,-. ISBN 91-7106-073-1.
22. Pipping-van Hulten, Ida, *An Episode of Colonial History: The German Press in Tanzania 1901-1914.* 47 pp. Uppsala 1974. SEK 45,;. ISBN 91-7106-077-4.
23. Magnusson, Ake, *Swedish Investments in South Africa.* 57 pp. Uppsala 1974. SEK 45,-. ISBN 91-7106-078-2.
24. Nellis, John R., *The Ethnic Composition of Leading Kenyan Government Positions.* 26 pp. Uppsala 1974. SEK 45,-. ISBN 91-7106-079-0.
25. Francke, Anita, *Kibaha Farmers' Training Centre. Impact Study* 1965-1968.106 pp. Uppsala 1974. SEK 45,-. ISBN 91-7106-081-2.
26. Aasland, Tertit, *On the move-to-the-Left in Uganda* 1969-1971.71 pp. Uppsala 1974. SEK 45,-. ISBN 91-7106-083-9.
27. Kirk-Greene, A.H.M., *The Genesis of the Nigerian Civil War and the Theory of Fear.* 32 pp. Uppsala 1975. SEK 45,-. ISBN 91-7106-085-5.
28. Okereke, Okoro, *Agrarian Development Programmes of African Countries.* 20 pp. Uppsala 1975. SEK 45,-. ISBN 91-7106-086-3.
29. Kjekshus, Helge, *The Elected Elite. A Socio-Economic Profile of Candidates in Tanzania's Parliamentary Election,* 1970.40 pp. Uppsala 1975. SEK 45,-. ISBN 91-7106-087-1.
37. Carlsson, Jerker, *Transnational Companies in Liberia. The Role of Transnational Companies in the Economic Development of Liberia.* 51 pp. Uppsala 1977. SEK 45,-. ISBN 91-7106-107-X.
40. Ståhl, Michael, *New Seeds in Old Soil. A study of the land reform process in Western Wollega, Ethiopia 1975-76.* 90 pp. Uppsala 1977. SEK 45,-. ISBN 91-7106-112-6.
46. Abdel-Rahim, Muddathir, *Changing Patterns of Civilian-Military Relations in the Sudan.* 32 pp. Uppsala 1978. SEK 45,-. ISBN 91-7106-137-1.
47. Jonsson, Lars, *La Révolution Agraire en Algérie. Historique, contenu et problèmes.* 84 pp. Uppsala 1978. SEK 45,-. ISBN 91-7106-145-2.
49. Bhagavan, M.R., *Inter-relations Between Technological Choices and Industrial Strategies in Third World Countries.* 79 pp. Uppsala 1979. SEK 45,-. ISBN 91-7106-151-7.
52. Egero, Bertil, *Colonization and Migration. A summary of border-crossing movements in Tanzania before* 1967.45 pp. Uppsala 1979. SEK 45,-. ISBN 91-7106-159-2.
56. Melander, Göran, *Refugees in Somalia.* 48 pp. Uppsala 1980. SEK 45,-. ISBN 91-7106-169-X.
58. Green, Reginald H., *From Südwestafrika to Namibia. The political economy of transition.* 45 pp. Uppsaia 1981. SEK 45,-. ISBN 91-7106-188-6.
59. Isaksen, Jan, *Macro-Economic Management and Bureaucracy: The Case of Botswana.* 53 pp. Uppsala 1981, SEK 45,-. ISBN 91-7106-192-4.
60. Oden, Bertil, *The Macroeconomic Position of Botswana.* 84 pp. Uppsaia 1981. SEK 45,-. ISBN 91-7106-193-2.

61. Westerlund, David, *From Socialism to Islam? Notes on Islam as a Political Factor in Contemporary Africa.* 62 pp. Uppsala 1982. SEK 45,-. ISBN 91-7106-203-3.
64. Nobel, Peter, *Refugee Law in the Sudan. With The Re-fugee Conventioizs and The Regulation of Asylum Act of* 1974.56 pp. Uppsala 1982. SEK 45,-. ISBN 91-7106-209-2.
66. Kjaerby, Finn, *Problems and Contradictions in the Development of Ox-Cultivation in Tanzania.* 164 pp. Uppsala 1983. SEK 50,-. ISBN 91-7106-211-4.
68. Haarl v, Jens, *Labour Regulation and Black Workers' Struggles in South Africa.* 80 pp. Uppsala 1983. SEK45,-. ISBN 91-7106-213-0.
69. Matshazi, Meshack Jongilanga & Tillfors, Christina, *A Survey of Workers' Education Activities in Zimbabwe, 1980-1981.* 85 pp. Uppsala 1983. SEK 45,-. ISBN 91-7106-217-3.
70. Hedlund, Hans & Lundahl, Mats, *Migration and Social Change in Rural Zambia.* 107 pp. Uppsala 1983. SEK 50,-. ISBN 91-7106-220-3.
71. Gasarasi, Charles P., *The Tripartite Approach to the Resettlement and Integration of Rural Refugees in Tanzania.* 76 pp. Uppsala 1984. SEK 45,-. ISBN 91-7106-222-X.
72. Kameir, El-Wathig & Kursany, Ibrahim, *Corruption as* a *"Fifth" Factor of Production in the Sudan.* 33 pp. Uppsala 1985. SEK 45,-. ISBN 91-7106-223-8
73. Davies, Robert, *South African Strategy Towards Mozambique in the Post-Nkornati Period. A Critical Analysis of Effects and Implications.* 71 pp. Uppsala 1985. SEK 45,-. ISBN 91-7106-238-6.
74. Bhagavan, M.R. *The Energy Sector in SADCC Countries. Policies, Priorities and Options in the Context of the African Crisis.* 41 pp. Uppsala 1985. SEK 45,-. ISBN 91-7106-240-8.
75. Bhagavan, M.R. *Angola's Political Economy 1975-1985.* 89 pp. Uppsala 1986. SEK 45,-. ISBN 91-7106-248-3.
77. Fadahunsi, Akin, *The Development Process and Technology. A case for a resources based development strategy in Nigeria.* 41 pp. Uppsala 1986. SEK 45,-. ISBN 91-7106-265-3.
78. Suliman, Hassan Sayed, *The Nationalist Movements in the Maghrib. A comparative approach.* 87 pp. Uppsala 1987. SEK 45,-. ISBN 91-7106-266-1.
79. Saasa, Oliver S., *Zambia's Policies towards Foreign Investment. The Case of the Mining and Non-Miizing Sectors.* 65 pp. Uppsala 1987. SEK 45,-. ISBN 91-7106-271-8.
80. Andrae, Gunilla and Beckman, Bjorn, *Industry Goes Farming. The Nigerian Raw Material Crisis and the Case of Textiles and Cotton.* 68 pp. Uppsala 1987. SEK 50,-. ISBN 91-7106-273-4.
81. Lopes, Carlos and Rudebeck, Lars, *The Socialist Ideal in Africa. A debate.* 27 pp. Uppsala 1988. SEK 45,-. ISBN 91-7106-280-7.
82. Hermele, Kenneth, *Land Struggles and Social Differentiation in Southern Mozaiirbique. A case Study of Chokwe, Lirnpopo 1950-1987.* 68 pp. Uppsala 1988. SEK 50,- ISBN 91-7106-282-3.
83. Smith, Charles David, *Did Colonialism Capture the Peasantry? A Case Study of the Kagera District, Tanzania*34 pp. Uppsala 1989. SEK 45,-. ISBN 91-7106-289-0.
84. Hedlund, Stefan & Lundahl, Mats, *Ideology as a Determinant of Ecoizomic Systems: Nyerere and Ujamaa in Tanzania.* 54 pp. Uppsala 1989. SEK 50,-. ISBN 91-7106-291-2.
85. Lindskog, Per & Lundqvist, Jan, *Why Poor Children Stay Sick. The Hunzan Ecology of Child Health and Welfare in Rural Malawi.* 111 pp. Uppsala 1989. SEK 60,-. ISBN 91-7106-284-X.
86. Holmen, Hans, *State, Cooperatives and Development in Africa.87* pp. Uppsala 1990. SEK 60,-. ISBN 91-7106-300-5.
87. Zetterqvist, Jenny, *Refugees in Botszuana in the Light of International Law.* 83 pp. Uppsala 1990. SEK 60,-. ISBN 91-7106-304-8.

88. Rwelamira, Medard, *Refugees in a Chess Game: Reflections on Botswana, Lesotho and Swaziland Refugee Policies.* 63 pp. Uppsala 1990. SEK 60,-. ISBN 91-7106-306-4.
89. Gefu, Jerome O., *Pastoralist Perspectives in Nigeria. The Fulbe of Udubo Grazing Reserve.* 106 pp. Uppsala 1992. SEK 60,-. ISBN 91-7106-324-2.
90. Heino, Timo-Erkki, *Politics on Paper. Finland's South Africa Policy 1945–1991.* 121 pp. Uppsala 1992. SEK 60,-. ISBN 91-7106-326-9.
91. Eriksson, Gun, *Peasant Response to Price Incentives in Tanzania. A Theoretical and Empirical Investigation.* 84 pp. Uppsala 1993. SEK 60,-. ISBN 91-7106-334-X.
92. Chachage, C. S.L., Magnus Ericsson & Peter Gibbon, *Mining and Structural Adjustment. Studies on Zimbabwe and Tanzania.* 107 pp. Uppsala 1993. SEK 60,-. ISBN 91-7106-340-4.

The mining sector has played an historically central role in the economy of Africa, but large-scale investment in it declined after 1970. Structural adjustment and the dismantling of apartheid opens up the possibility of a revival of such investment, but also raises questions about the terms on which it will take place and the fate of local small-scale mining industries.

These two studies examine tensions between large- and small-scale mining in Tanzania, and the emergence of new forms of relation between international mining houses and the national state in Zimbabwe.

Chachage Seithy L. Chachage teaches in the Department of Sociology, University of Dar es Salaam, Tanzania.

Magnus Ericsson is a member of the Raw Materials Group, Stockholm, Sweden and a researcher at the Institute for Mining Research, University of Zimbabwe.

Peter Gibbon is a researcher at the Scandinavian Institute of African Studies.

Nordiska Afrikainstitutet
(The Scandinavian Institute of African Studies)
P O Box 1703
S-751 47 UPPSALA, Sweden

ISSN 0080-6714
ISBN 91-7106-340-4