2 ~ Decline and Structural Change

2.1 Introduction

This chapter reviews the performance of the Zambian economy over forty years, 1965-2005, as the basis for the subsequent analysis of poverty and the policies that would enable the country to meet the Millennium Development Goal target of reducing poverty by half in 2015 from its level in 1990. To understand the story behind the statistic of growth and structural change one must consider a much longer period, in order to place Zambia's decline in historical context.

From the initial occupation of the country by the British to independence, Northern Rhodesia was part of a regional division of labour. While this division derived from Zambia's mineral endowments, it was not the result of disembodied market forces, but rather an administrative process consciously designed by the colonial authorities.

The regional conflict manifested most violently in an insurrection in Southern Rhodesia, which undermined Zambia's post-independence development, as explained below. This conflict was also the outcome of the consciously designed division of labour, which created a powerful settler population in the state that became 'Rhodesia'. Had British colonial policy in Central Africa been different, for example, restricting the economic and political role of expatriates as in West Africa, there would have been no war in 'Rhodesia', no apartheid-type labour regime in the mines of Northern Rhodesia, and no breakdown in Zambia's international transport and communication links.

While exacerbated by external and internal management and economic factors, the decline and eventual collapse of Zambia's mining sector can be traced to the consequences of colonial rule. The privatisation of mining is a major part of the story, considered here rather than in the chapter on privatisation due to the dominant role of copper in the performance and structural change of the economy. Having reviewed the colonial period and the decline of copper, the chapter can consider economic performance during 1965-2005. This relatively brief discussion is elaborated rigorously in Chapters 4 and 5.

2.2 Colonial Division of Labour in British Central Africa

The British South Africa Company (BSAC) acquired Northern Rhodesia in the 1890s

mainly for the purposes of mineral prospecting. The company had obtained land rights over the territory by a series of treaties with local chiefs. In order to finance the territorial administration and to create a supply of wage labour, the BSAC introduced a tax on adult males, which could only be paid in cash. Failure to pay this 'head tax' resulted in forced labour to clear the debt to the BSAC. The establishment of Northern Rhodesia as a settler colony created the demand for cheap African labour for European farming and other enterprises. Although many Africans went voluntarily, working conditions, particularly in the mines, were quite bad, resulting in a high turnover of labour.[10]

In 1924, after almost three decades of company rule, the British Colonial Office assumed the administration of Northern Rhodesia, and allowed the BSAC to retain its mineral rights, which would prove extremely lucrative when large reserves of copper were found. World demand for copper increased dramatically with the growth of electrical and automobile industries in the United States and Europe, and by 1930 four large mines had been developed on the Copperbelt of Zambia: Nchanga and Nkana owned by the Anglo American Corporation, and Roan Antelope and Mufulira by the Rhodesian Selection Trust. Despite the Great Depression of the 1930s, copper mining industry grew rapidly (see Figure 2.1), with the value of exports increasing five-fold from 1930 to 1933.

Thus began the dominance of copper in the economy and society. A range of colonial government policies including taxation of Africans, forced labour, land and agricultural policy contributed to the deterioration of quality of life in the rural agricultural communities and reinforced this situation. For example, African farmers were restricted in the crops they could grow in order to limit the income earning alternatives to working in the copper mines. The mining companies invested in a railway across the country and other infrastructure to support their activities, but this infrastructure left rural areas virtually untouched.

In 1953, the Colonial Office joined Northern Rhodesia, Southern Rhodesia and Nyasaland into the Federation of Rhodesia and Nyasaland. The motivation for the Federation was economic. According to the advocates of federation, a larger market would be created, basic infrastructure could be more effectively planned, and the economies of the three territories were designed by colonial policy to be complementary: Northern Rhodesia would specialise in mining; Southern Rhodesia, another settler colony, would focus on agriculture and manufacturing; and, Nyasaland, the most densely populated of the three, would be a source of labour. The effect of the Federation was to create an artificial specialisation.[11] Northern Rhodesia financed the development of the Federation, with almost £100 million extracted from the territory between 1953 and 1963, most of which was used for industrial development in Southern Rhodesia (Lanning and Mueller 1979).

Northern Rhodesia was developed as an integral part of the larger southern African economy and transport system. Imports of equipment, machinery and other supplies came through by the South African and Southern Rhodesian railway systems that linked to Cape Town, Durban and Beira. Copper exports used the same routes. Coal for the mines was supplied by Wankie Colliery in Southern Rhodesia. The Federation tightened this bond by building the Kariba Power Station in Southern Rhodesia near the border between the territories. These common services would prove a major obstacle to Zambia's development after unilateral declaration of independence by 'Rhodesia'.

The unbalanced development of the Northern Rhodesian economy was aggravated by colonial policy in the agricultural sector, which encouraged a small number of European settlers at the expense of African farmers. In order to foster European settlement, land along the 'line of rail' was rese-

rved for European farming. So-called Native Reserves were established in 1928-1929 for those forcibly expelled from this land. Access to markets by African farmers in the Native Reserves was constrained by poor transport, though in Southern Province African farmers increased the production of maize for the market. This growth of commercial farming by Africans created concern among European farmers, who feared that it would drive down prices. In response, the colonial authorities created the Maize Control Board in 1936, which instituted producer price supports above the world level and reduced competition from African farmers though a system of quotas. The Board paid African farmers a lower price for their maize than Europeans received (Dodge, 1977).[12]

As early as 1946, there was call for diversification of the economy by encouraging, rather than discouraging, African farming. Although the colonial government stated its intention to increase expenditure on African agriculture and rural development, in practice expenditure remained low, particularly after the establishment of the Federation.[13] As a consequence of colonial policy, the incomes in the rural agricultural sector remained low and stagnant, prompting migration to the mines and other urban areas.

Agricultural production was also negatively affected by the absence of ablebodied men in the villages because it was often stratified strictly along gender lines. This was particularly the case in the *Chitemene*[14] system where men were responsible for cutting down trees for burning while the women did most of the planting and harvesting. Africans were considered temporary workers whose home, and therefore social support structure, remained in the village. The wages paid in the early colonial period were at 'single' rate and so what emerged was a situation in which wages were kept artificially low.

In keeping with the intention for Northern Rhodesia to be a settler colony, expenditure by the colonial administration tended to be concentrated along the 'line of rail', with public investment supporting the copper mining industry and commercial farming. An analysis by Baldwin shows that forty-five percent of government expenditure in the 1950s was on power, water and communications along the 'line of rail', less than three percent for rural development, and only slightly more for agriculture, forestry and veterinary services combined (Baldwin 1966).

Consistent with the plan for Northern Rhodesia to be a settler colony, skilled work was reserved for Europeans, and Africans were restricted to unskilled labour formalised by different wage scales based on race. Although the mining companies paid better wages and provided better facilities than in other sectors, social policies governing African workers were based on the presumption that they were 'migrant labour' (Roberts 1976) with their primary residence in villages. This approach continued even after both employers and government accepted permanent African labour settlement in the mining areas. By 1964, the average European miner earned seven times what the average African miner earned (Lanning and Mueller 1979); not withstanding that many Africans had the skills to replace European workers. With apprenticeships restricted to Europeans and colonial policy toward African education extremely basic (only four years provided), formal skill development by Africans was extremely limited.

2.3. Copper in Zambia

The Decline of Copper

The collapse of copper mining in the 1990s represented the culmination of a trend that had begun long before. In the years immediately prior to independence the mining companies reduced their levels of investment in the mining industry in Zambia, perhaps because they feared the consequences of independence and majority rule; this continued after independence. The de facto disinvestment by the companies was indi-

cated by dividend payments from 1964 to 1969 consuming eighty percent of profits.

This mismanagement of the copper sector by the companies reinforced the post-colonial government's political commitment to assume the 'commanding heights' of the economy, though a series of partial nationalisations.

The intention to take ownership of fifty-one percent of the mines was announced by President Kaunda in his Matero Speech in August 1969. To this end, the government established the Zambia Industrial and Mining Corporation (ZIMCO) as a holding company with two subsidiaries. Mindeco Limited would hold the government's interest in the mining companies, Nchanga Consolidated Copper Mines (NCCM) jointly owned with the Anglo-American Corporation and Roan Consolidated Copper Mines (RCCM) with the Roan Selection Trust. Indeco Limited would hold investments in the other mining-related enterprises. NCCM and RCM were merged in April 1982, to form the Zambia Consolidated Copper Mines (ZCCM).

With controlling shares in the hands of mining companies, the government, in practice, assumed responsibility for the risks involved in this industry at the global and operational levels.[15] When majority ownership passed to the public sector in 1969, the intention was to increase investment, which had been in decline previously.[16]

This intention would not be realised due to unforeseen events. As noted in Chapter 1, the Unilateral Declaration of Independence by Southern Rhodesia in 1965 dramatically increased transport and intermediate goods costs. Initially, Zambia used the railway which was jointly owned with the white regime. However, hostility between the two countries escalated, leading to the closure of the border in 1972. This made it necessary to find alternative transport routes and sources of inputs as quickly as possible. A road link through Tanzania partly resolved this problem, but was not efficient. Problems in transport resulted in shortages of materials and improvisation in the production process, with the result that production costs increased substantially.

The high cost and turnover of skilled expatriate staff in the mines exacerbated the problems associated with 'Rhodesian' independence. Accustomed to an *apartheid* labour regime in the mines, many expatriates left the country, with a substantial number going to Rhodesia and South Africa. By necessity this replacement occurred rapidly (so-called Zambianisation), before sufficient skills had been developed.

As a result of low investment during the pre-independence years, the disruption of transport due to UDI, and the need to rapidly replace expatriate labour, Zambia was unable to take advantage of the years during which the price of copper increased. In 1969, Zambia was the largest producer of copper among developing countries, and the third largest producer after the United States and the former U.S.S.R., with production twelve percent of world production (Bostock and Harvey 1972). By 1990, Zambia produced only five percent of world production, compared to Chile and the United States each with eighteen percent; Canada eight percent, and the then-U.S.S.R. seven (USG 1998). Over the long term, exports declined from 622,900 metric tonnes in 1972 to 228,000 on the eve of privatisation in 1999 (See Figure 2.2).

The financial and operational problems affecting ZCCM had a detrimental effect on the production quality and costs, as well as level. As equipment and inputs became difficult to obtain the operations of the mines deteriorated, and Zambia passed from being a low cost to a high cost producer. According to Kangwa (2001), ZCCM produced at 83.1 cents per pound in March 1993, while Codelco of Chile was at 73.3 cents per pound.

In this context it must be stressed that ZCCM was a major provider of social services in the mining areas through provision of schools, hospitals and health centres, housing, water and sanitation facilities, elec-

tricity, recreation clubs, even churches. The social services were provided at subsidised rates to employees and their families, and were superior to those of the local councils. The management of these services required an extensive administrative system. As discussed below, privatisation would have a devastating effect on social provision in the mining areas.

As well as its direct operations, ZCCM generated much of the public revenue. Following independence, the new government put in place an ambitious development programme, which would be funded by revenue from copper mining. Thus, the decline of copper had a direct and dramatic impact on the ability of the government to carry out public investment. A major goal of this investment was the diversification of the economy, to be realised through public sector participation and ownership in manufacturing and services. Therefore, the decline of copper not only implied a short term fiscal crisis, but a fundamental deterioration in the country's long term development.

Privatisation of Copper

The new government elected in 1991 embarked on a radical shift in economic policy within the framework of multilateral stabilisation and adjustment programmes, a key element of which was the proposed privatisation of the copper sector. The government came under heavy influence from donors and lenders who were convinced that ZCCM represented a drain on public resources, and which could not be reformed within the public sector. The sell-off of ZCCM became a condition for development assistance, and the more important international agencies viewed privatisation as a pre-condition to economic development itself. This view was justified by the expectation that privatisation would mobilise new capital that would revitalise the industry. This would stimulate growth after two decades of decline, rejuvenate exports, and generate revenue for development expenditure. Privatisation would also stimulate the growth of other industries and services, and create opportunities for local suppliers and contractors. In the event, these expectations would go spectacularly unfulfilled.

The government initiated the divestiture process with the Privatisation Act of 1992. The act established the Zambia Privatisation Agency (ZPA) as an autonomous agency of the government to plan, implement and monitor the privatisation of state enterprises. The privatisation of state owned enterprises progressed quickly with the salient exception of the programme's keystone, the mining sector. In a decision that would subsequently provoke considerable criticism and cynicism, the government abruptly removed the entire mining sector from the ZPA's terms of reference. In a rather surprising development, the international agency most directly involved, the World Bank, endorsed an ad hoc process for mining privatisation.[17]

In 1993, as part of this process, and unlike the privatisation of other public sector companies, the government established a negotiating team for the mining industry separate from the ZCCM.[18] After consideration of a number of options it was decided that ZCCM would be sold in parts. The sale began in 1997 with the Konkola and Kansanshi Mines, but negotiations over the Nchanga and Nkana parts of the sector, as well as the Chambeshi Acid and Cobalt plants, was much more protracted. These negotiations, with a group called the Kafue Consortium collapsed in 1998, leading to an offer by the Anglo-American Corpora-tion that the government accepted in March 2000.

There is little controversy that privatisation of ZCCM took place under great pressure from international agencies whose leverage over the government was considerable due to its dependence on aid.[19] The parties completed the privatisation with remarkable speed, which may explain the rather startling omission from the contract of any penalty clause should the buyer not fulfil its obligations. This omission would prove extremely costly, because the Anglo-

American Corporation (AAC) withdrew from the Konkola Copper Mines (KCM) in 2002, less than two years after purchasing majority ownership. The International Financial Corporation of the World Bank, which purchased a minority share as part of the agreement[20], also withdrew, threatening the loss of two-thirds of Zambia's copper production. Equally, if not more, controversial had been the award of the Luanshya mine to the Benani Group in June 1997.

Only later did it emerge that the company had little experience in mining and was unable to provide the capital necessary to finance the operations and development of the mine. After three years the company was in receivership. More generally, the terms of mining privatisation had an extremely high opportunity cost in terms of public revenue. Associated with the agreement were: a reduction in the corporate tax rate from thirty-five to twenty-five percent; exemption from customs duty on inputs up to US$ 15 million; reduction of the mineral royalty from two percent to six-tenths of a percent; exoneration from excise duty on electricity; an increase in the period for which losses could be carried, from ten to twenty years; and, exemption from the withholding tax On interest, dividends, royalties and management fees.

The effect of these so-called incentives was that it would be decades before the government received substantial revenue from the new mining companies. Instead of providing a strong basis for future growth, the seriously flawed privatisation process represented yet another structural obstacle to overcome. The first half of the 2000s saw a recovery of the sector from a very low base. Should the recovery of copper be sustained, it will make the diversification of the economy all the more necessary. The dominance of copper over the economy in the past was part of the process that resulted in long term decline and massive indebtedness, both internal and external. Economic diversification would be the key to avoiding a return to decline and debt.

2.4 Economic Performance, 1965-2005

Introduction

Upon independence in October 1964, the new government of Zambia faced a daunting task. Popular expectations were high, fuelled by nationalist enthusiasm and the pledge by the Kaunda government to correct the glaring imbalances and inequities created by colonial rule. While a social democrat more than a socialist, Kaunda was strongly influenced by the ideology of state socialism. In great part this resulted from the support for independence provided by the Soviet Bloc countries. As a consequence, a semblance of central planning was introduced, more virtual than real. The official ideology of humanist socialism, aimed at attaining political and economic independence from western industrial countries, contrasted sharply with the reality of heavy dependence on expatriate technical skills and external financial assistance.

Zambia had one of the highest per capita incomes in Africa in 1964. However, the per capita income statistic hid dismally low human development. Colonial education policy in North Rhodesia had more in common with the Portuguese in Mozambique than the British approach in West Africa and Uganda, indicated by there being fewer than a hundred university graduates at independence. Due to this legacy of the colonial period and the under developed structure of the non-mining economy, implementing the new government's state-led development policy was a practical impossibility.

Copper dominated the economy at independence, and would do so for thirty years despite attempts through government planning and later 'market forces' to diversify. This dominance would come to an end through disaster not design, the unintended collapse of the copper sector. In the years immediately after independence, copper appeared as the vehicle to development and modernisation, and to these ends the government took fifty-one percent ownership of the sector and wholly nationalised a substantial part of the manufacturing sector, all

public utilities, and key elements of transport and communications. Financial institutions were underdeveloped, catering to mining and the rest of the formal sector. Given the lack of skills and, essentially, translanted planning institutions, it was not surprising that political interference, managerial inefficiency, and lack of accountability undermined the potential for diversification. These systemic problems reinforced an economic decline fundamentally caused by instability in the world copper market and the regional political tension described above.

During 1985-1991 the government, now holding power into its third decade, introduced market based policies in the framework of multilateral loan conditionality. Continued decline resulted in severe underutilisation of capacity in the formal sector, which remained largely in public ownership. While the altered policy regime incl-uded incentives designed to attract investment, the decline of the economy and continued administrative ineffectiveness undermined whatever effect they might have had. Lack of growth and the obviously negative welfare and distribution effects of the conditionality-based policies led the government to abandon the policies. As a consequence, relationships with the multilaterals deteriorated to the point of hostility, the effects of which would persist for twenty years.

In 1991 the Kaunda period came to an end through elections, and from a position of extreme weakness the new government committed itself to a radical adjustment programme inspired by the World Bank and supported by almost all donors and lenders. With the exception of the countries in transition from central planning, it may be the case that no other country passed through economic liberalisation so radical and rapid as Zambia did during the first half of the 1990s. By definition, countries undergoing radical policy change, be it wise or reckless, lack a stable policy framework, and policy instability is rarely consistent with market-based growth. Zambia proved no exception to this rule; it would be almost ten years before the long decline of the economy would be reversed.

The structural adjustment programme brought profound changes to a country ill structured to accommodate them. Trade liberalisation introduced competition, which the state enterprises were unprepared to meet. The liberalised economic environment, when combined with extremely high borrowing rates, proved in practice to be biased against Zambian producers.

The harsh environment was compounded by uncertainties in the business environment arising from unstable macroeconomic conditions and unpredictable changes in implementation of the economic policy instruments. High prices for utilities such as electricity, water, telephones and fuel further worsened the difficulties faced by domestic industries.

This dismal forty years of decline and instability is presented in statistics in the following pages. Before entering into detail, the central message from those forty years should be stressed: neither strong public intervention and ownership, nor radically neo-liberal policy frameworks have achieved the economic diversification and equity required for sustainable growth in Zambia. The challenge for this report is to find an alternative to those policy extremes that would enable Zambia to prosper in the long term and achieve the MDGs in the medium term.

Economic performance & Structural Change

By any conceivable measure, the growth performance of Zambia has been dismal, a chronicle of decades of relentless economic decline. Table 2.1, per capita GDP growth divided by five year periods, and 2.2, growth of GDP for the full forty years, period a range of measures of the depth of this decline from 1961 to 2000 where the 2000s will be considered after reviewing these four decades.

Over the eight five year periods, Zambia ranked in the bottom half of the per capita growth 'league' in every case, ranging from a

'best' of twelfth from the bottom (1965-69) to a worst of third from the bottom (1975-79). In no five year period was the rate as high as one percent, and for the last five it was negative. Perhaps even more striking are measures in Table 2.2, which refer to growth of GDP. The second column shows the percentage of years in which each country's growth rate was above the regional average for years that the country had data. By this measure, Zambia comes third from the bottom, above only Madagascar and Sierra Leone. The consistently low growth rate is indicated by the standard deviation of the country's growth rate, which was also below the regional average.

The consequence of the low growth rate over four decades is shown in Figure 2.3, which provides an index of total GDP and per capita GDP at 1994 prices. The index of GDP per capita declined almost continually during 1965-1995, to fall from close to 150 to below 80, then stagnating for the rest of the 1990s before rising modestly in the 2000s. Figure 2.4 shows the growth rates graphically as a three year moving average, and between 1965 and 2000 for per capita income only seven data points are substantially above zero.

During these decades of economic decline, the production structure of the economy underwent considerable change, primarily as a result of the absolute and relative decline of mining in the 1990s rather than the growth of other sectors (see Figures 2.5 and 2.6). Up to the early 1990s, despite low growth rates, there was a tendency for the productive sectors to increase relatively, with a slight upward trend in mining, manufacturing and agriculture, though the regional drought in the early 1990s resulted in a brief, severe drop in the latter. After the early 1990s, mining began a rapid decline, from above twenty percent of aggregate value added in 1991 to well below ten percent at the end of the decade. Over the same years, the manufacturing share stagnated and agriculture declined, implying by definition an increase in the residual category 'services'. Since the share of value added in the public sector declined or did not increase over these years, it follows that redundant workers fell into low-remuneration 'informal' activities. Thus, the structural change one observes is that of an economy in decline, with households increasingly struggling to subsist in activities of low productivity. This shift from gainful employment to poverty is discussed in the next chapter.

As the Zambian economy descended and foreign exchange from copper declined, pressure increased on the balance of payments. Figure 2.7 shows imports and exports as a share of GDP from the early 1990s to 2004. After an approximate balance between the two in the early 1990s, the trade gap widened sharply to reach ten percent of GDP in 2000, and remain at an unsustainable level. The trade gap was covered by growing indebtedness, primarily to multilateral lenders (see Figure 2.8). The unsustainable trade and current account deficit resulted in a loss of control of the nominal exchange rate. After relative exchange rate stability from independence to the mid-1980s, the exchange rate collapsed in the late 1980s, and collapsed even more in the early to mid 1990s (see Figure 2.9). This collapse generated rampant inflation, which approached hyper-inflation levels during 1990-1995. As the note to Figure 2.9 reports, the exchange rate explains almost three-quarters of the inflation rate from 1997 to 2004, when a fixed regime could no longer be sustained.

Thus, the instability of the Zambian economy followed a straightforward sequence of causality, the decline of foreign exchange earnings from copper, severe balance of payments pressure, and collapse of the exchange rate, resulting in uncontrollable inflation. Perhaps the most surprising aspect of this process was that the apparently large inflows of multilateral loans in the first half of the 1990s did not dampen the inflation, but were coincident with it approaching hyper level. This unexpected

result can be explained by Figure 2.10, which shows total ODA grants and loans, and grants and loans net of external interest payments. During the high inflation of the 1990s, net grants and loans were a negative four to six percent of GDP. To put the matter simply, ODA funds entered the Central Bank, immediately to flow out to pay external debt to the lending agencies making those loans.

The instability provoked by the international copper market lends urgency to the diversification of Zambia's exports. Therefore, exchange rate movements in the mid-2000s must be viewed by the objective observer with considerable alarm. From the beginning of 1997 to the middle of 2003, the nominal exchange rate depreciated by half, approximately in line with inflation, such that the real exchange moved within a relatively narrow range (see Figure 2.11). However, in the second half of 2003 the real exchange rate began to rise, slowly for two years, then almost exponentially at the end of 2005 and into 2006. In seven months, from July 2005 through February 2006, it rose by almost fifty percent. Such a real appreciation of a currency is typically associated with catastrophic economic events, such as hyper-inflation aggravated by exchange controls, while in Zambia it has been associated moderate growth and an open capital account.

Whatever the cause of the appreciation, it is a disaster for export diversification. The Zambia National Farmers' Union has shown this in a study of the impact of the exchange rate on agricultural exports (ZNFU 2006). Far from a sign of economic strength, the appreciation of the exchange rate is a symptom of the limitations of a regime of tight monetary and restrictive fiscal policy, in the context of a boom in the exports of a volatile commodity. On a few issues there is little controversy among economists. One of the areas of agreement is that an appreciating real exchange rate discourages the production of traded commodities. It is unlikely that anyone familiar with the Zambian economy would consider this a desirable or rational policy outcome. A real exchange rate at its early 2006 level is a ticket for the return journey to copper dependency.

The policy to check the nominal appreciation and reverse it is clear and simple to understand faster growth. Faster growth would draw in imports, which could be financed in excess of exports by the reduction in debt service (see Chapter 5) and official development assistance. The faster growth would be achieved through a more rational fiscal policy whose expenditure would be sufficient to achieve the MDGs (again, see Chapter 5). Direct expenditure of ODA funds by the government, without those funds passing through the Bank of Zambia, would be an important measure to check the rise of the nominal exchange rate, as the IMF has argued in a recent paper on 'scaling up' aid.[21] Thus, 'sound macro policy' in Zambia would be expansionary, and 'unsound policy' would be a restrictive policy which accommodates a debilitating rise in the real exchange rate.

2.5 Summary and Conclusions

From soon after independence, Zambia entered into a long term economic decline, resulting from a combination of falling copper prices and regional conflicts afflicting its neighbours. This decline was exacerbated by a legacy that left the country ill-prepared for independence due to its de facto status as a settler state in the colonial period, with institutionalised racial divides. One consequence of the colonial legacy and fall of copper prices was a lack of diversification of the economy, which would prove disastrous in the 1990s.

The decline and then collapse of the copper sector left the country deeply in debt, with a severely constrained fiscal situation (pursued in detail in Chapter 6). The fiscal constraints would limit the extent that the government could respond to the most dangerous threat to development in the

country's history, the HIV/AIDS pandemic. In the chapters which follow, this report analyses the country's severe poverty, its link to HIV/AIDS, and proposes measures to create the fiscal space to both deal with that malady and generate the public investment necessary to foster poverty reducing, sustainable growth.

11 There has been some suggestion that the Northern Rhodesian economy had a better chance of diversification had the Federation not been created (Franklin, 1963).

12 This served to discourage Africans from increasing their acreage and was justified by the idea that the cost of production was lower for African farmers.

13 '…since Northern Rhodesia was considered [by the colonial authorities] to have the least agricultural potential of the three territories, it is fair to assume that a relatively small expenditure was planned for the development of agriculture-both European and African' (Dodge 1977, 21).

14 Chitemene System involves the cutting of tree branches in a field to be used for crop production. The cut branches are collected and heaped around the same field. Once dry, the branches are burnt; the remaining ash providing fertility for the field. This system is common in the Northern and Luapula Provinces from where most of the mine labour was drawn.

15The mission team was told by a high official in the Ministry of Mines that:

> *After independence, the government took over a mining sector that was technologically Backward, with equipment installed in the early part of the twentieth century. Under nationalisation, capital investment was low and modernisation was slow. However, important innovations occurred during nationalisation, when Zambia became the first country to introduce acid-soluble copper technology. (Interview at the Ministry of Mines, 1 November 2004)*

16 To quote:

> *Investment and modernisation were constrained by the regional political circumstances after independence. With UDI in Zimbabwe [Rhodesia], copper could no longer be exported by the existent routes through South Africa and South Rhodesia. So severe was the problem that copper ore was taken by plane to Tanzania. (Interview at the Ministry of Mines, 1 November 2004)*

17 'After ZPA had written the TOR for mining privatisation, the WB urged by the government to take mining out of ZPA hands, and implement it through an ad hoc process, which it agreed to. The negotiating team for mining privatisation included staff of the national mining corporation, which violated the Privatisation Act, which called for independent negotiators' (Interview at the Zambian Privatisation Agency, 1 November 2004).

18 This became controversial as the process was not considered transparent and problems that arose later were blamed on this decision by government. There are at least two views on the role of the ZCCM negotiating team. One holds that the ZCCM representatives pursued their narrow self-interests in the negotiations, while the other view holds that the advice of ZCCM experts was largely ignored by both the government and external agencies. A Ministry of Mines official stated, 'We [experts in ZCCM] knew what worked and what did not work, but the WB did not listen to us' (Interview at the Ministry of Mines, 1 November 2004).

19 'Public pressure from the donors to sell off ZCCM at a time of falling world demand for copper made it a buyers' market' (Kangwa, 2001, 23). At the May 1998 Paris club meeting, the Zambian government promised to complete the privatisation of ZCCM by July of that year. The lengthy negotiations between the government and the Kafue consortium resulted in some donors delaying release of their contributions to the US$530 million balance of payments they had pledged at the Paris meeting. The British government, in announcing their discontinuation of aid to Zambia, cited the failure by Government to complete the privatisation of ZCCM assets as the reason that prompted their action.

20 It is a common view among Zambian officials involved in the negotiations that the role of the IFC as a minority purchaser represented a conflict of interest: 'The WB was advising the government on privatisation, indeed, urging great speed, while the IFC was negotiating as one of the buyers' (interview with an official of the Task Force on Corruption, 2 November 2004)

21 The IMF 'manual' on scaling up aid flows states:

> *Absorption and spending are policy choices. If the government spends aid resources directly on imports…spending and absorption are equivalent, and there is no directly impact on…the exchange rate, the price level, or the interest rate. But if a country receives the foreign exchange resources and the government immediately sells them to the central bank…spending is likely to differ form absorption. (Gupta, Powell & Yang 2006, 11)*

Table 2.1: Per capita growth rates in the Sub-Sahara, by five year periods, 1961-1990

Country	1961-64	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-00
Angola	na	na	na	na	na	.1	-19.5	10.2
Benin	.2	.6	.4	-1.0	.8	-1.3	1.0	2.5
Botswana	3.6	5.0	17.5	5.7	9.2	6.7	2.5	2.3
Burkina Faso	.9	1.4	.8	.7	.2	2.2	-.2	2.9
Burndi	-.2	1.3	4.7	2.3	.4	2.4	-2.5	-4.2
Cameroon	1.2	-.7	1.5	5.4	6.8	-2.2	-7.0	2.2
CAR	-1.1	.7	.2	-.6	-1.9	-1.3	-3.1	1.5
Chad	-1.1	-.3	-2.4	-3.6	1.0	4.6	-1.8	.1
Congo DR	.7	1.0	.0	-5.2	-1.7	-2.4	-12.5	2.3
Congo, Rep...	.8	1.8	4.7	-.7	11.2	-5.0	-2.7	-3.4
Cote d'voire	5.8	2.8	2.6	3.8	-6.7	-2.4	-2.4	3.2
Eq Guinea	na	na	na	na	na	-2.3	2.5	25.6
Eritea	na	na	na	na	na	na	5.4	-.2
Ethopia	na	na	na	na	-.7	-1.9	-.2	2.7
Gabon	6.4	5.7	12.5	.1	-.5	-2.8	-1.3	.4
Gambia	na	1.2	.7	2.3	2.2	-1.5	-.5	.7
Ghana	.3	-.9	2.1	-3.2	-4.3	1.4	1.3	1.9
Guinea	na	na	na	na	na	2.0	2.0	1.7
Guinea-Biasu	na	na	-1.3	-1.1	.5	.1	1.4	4.0
Kenya	.7	3.6	5.1	1.7	-.8	1.9	-1.7	1.4
Lesotho	7.1	3.1	11.6	6.6	2.7	.3	-.4	-.7
Madagascar	-.8	1.3	-.8	-.8	-5.0	-.9	-2.0	.8
Malawi	-.8	5.4	4.5	.7	-1.3	-1.0	-2.1	4.4
Mali	na	-.5	.0	6.0	-3.2	-.7	-1.4	2.5
Mauritania	7.1	3.6	2.8	-1.8	-1.3	.5	-.1	1.8
Mauritius	4.5	-1.5	5.0	5.5	-.5	7.2	4.2	3.7
Mozambique	na	na	na	na	-8.8	3.1	.8	6.5
Namibia	na	na	na	na	.0	.4	3.3	.3
Niger	2.1	-2.6	-3.5	1.7	-7.7	2.1	-3.8	.4
Nigeria	1.3	-1.6	8.1	.2	-7.2	1.6	1.3	.0
Rwanda	-6.6	4.5	-1.0	4.7	.4	-.2	-11.5	9.5
Senegal	na	-8.8	-.7	.6	-1.5	.5	-1.1	2.9
Seychelles	2.2	-.1	5.9	5.9	-1.5	5.0	4.2	.2
Sierra Leone	na	2.2	1.2	-.5	.4	-1.0	-5.8	-6.6
South Africa	3.7	3.8	3.9	-1.4	1.1	-1.3	-1.5	.3
Swaziland	11.3	6.4	12.1	4.4	2.4	3.4	1.6	1.6
Tanzania	na	na	na	na	na	.0	-.5	2.0
Togo	7.9	4.3	1.4	-.6	-1.9	1.1	-4.5	2.3
Uganda	na	na	na	na	1.0	.6	2.7	4.9
Zambia	.7	.8	.5	-4.0	-2.2	-.8	-2.7	-.2
Zimbabwe	na	3.1	6.4	-4.3	1.3	1.2	-.4	.9
Average	2.2	1.5	3.3	.9	-.5	.5	-1.4	2.0
Zambia's rank	16/26	20/30	22/32	30/32	29/36	26/40	32/41	34/41

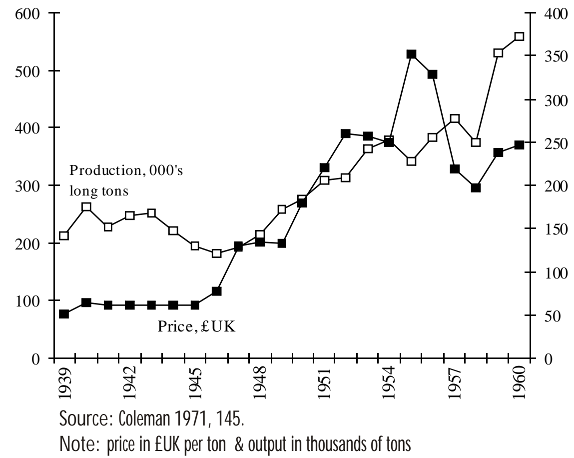
Table 2.2: Indicators of growth & instability, the sub-sSahara, 1961-2000

Country	Data yrs	%>Aver	Grw rate	Stdey	Relative grw rate
Botswana	40	92	9.9	5.7	2.73
Uganda	14	83	4.2	1.0	1.38
Guinea	18	81	2.2	8.6	0.75
Gabon	40	68	5.5	11.1	1.52
Eq Guinea	16	64	5.2	5.0	1.73
Mauritius	40	63	5.2	6.5	1.43
Swaziland	40	61	5.4	4.5	1.61
Cote d'voire	40	61	4.7	5.8	1.29
Malawi	40	61	4.4	5.6	1.21
Lesotho	40	58	5.9	7.9	1.63
Mozambique	20	56	2.9	8.1	0.52
Kenya	40	55	4.9	5.3	1.35
Seychelles	40	55	4.7	6.5	1.29
Gambia	34	53	4.0	3.4	1.13
Ethopia	19	53	2.6	8.0	0.47
Togo	40	53	4.1	6.8	1.13
Rwanda	40	53	3.3	12.2	0.90
Congo, Rep...	40	53	4.5	6.4	1.24
Angola	20	50	1.8	8.0	0.31
Benin	40	50	3.2	3.4	0.89
Mauritania	40	50	3.6	6.6	1.01
Eritrea*	8	50	4.6	4.4	1.37
Zimbabwe	40	47	4.3	5.8	1.18
Nigeria	40	47	3.6	8.0	0.98
Guinea-Biasu	30	46	2.2	8.6	0.66
Ghana	40	45	2.5	4.6	0.68
Burkina Faso	40	45	3.4	3.4	0.95
Senegal	40	45	2.5	4.5	0.68
South Africa	40	42	3.3	3.9	0.90
Sudan	40	42	3.3	6.4	0.92
Cameroon	40	42	3.5	6.6	0.95
Burundi	40	42	2.7	6.6	0.75
Tanzania	12	40	3.3	5.2	1.14
Mali	33	39	2.9	5.1	0.81
Niger	40	39	1.7	6.5	0.48
Chad	40	34	2.0	7.8	0.55
CAR	40	32	1.5	4.1	0.41
Congo DR	40	32	.2	6.3	0.06
Namibia	20	28	2.1	3.4	0.37
Zambia	40	26	1.9	4.8	0.52
Madagascar	40	24	1.5	3.5	0.40
Sierra Leone	40	21	.9	5.5	0.56
Totals	1433		3.5	6.5	1.00

Notes:

Countries ordered by percentage of years with a growth rate above the regional mean. Number of years refers to those with the GDP growth statistic. Grw rate is the average growth rate for the years covered. %>average is the number of years the country's growth rate was greater than the regional average for the years covered by its data (to one percentage point). Stdev is the standard deviation of the growth rate for the years covered. Relative growth rate is the country average divided by the cross-country mean for the years covered for that country.

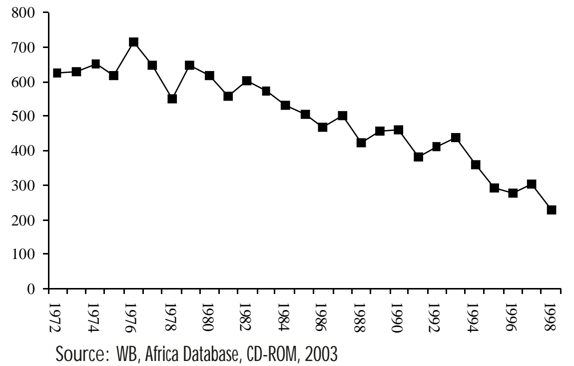
Figure 2.1: World copper price & output in Zambia, 1939-1960



Source: Coleman 1971, 145.

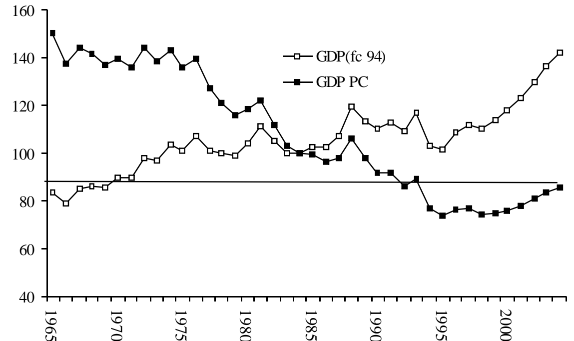
Note: price in £UK per ton & output in thousands of tons

Figure 2.2: Copper production in thousands of metric tons, 1972-1998



Source: WB, Africa Database, CD-ROM, 2003

Figure 2.3: GDP and GDP per capita, factor cost, 1965-2004



Source: The source for this and subsequent tables unless otherwise noted is Ministry of Finance and National Planning, Macroeconomic Indicators, issues for 1997-2005.

Note: 1984 = 100.

Figure 2.4: GDP and GDP per capita, growth rates, 1964-2004 (3 year moving average)

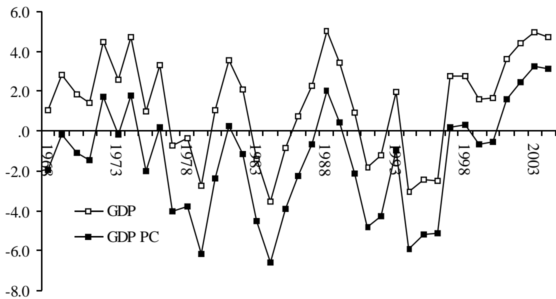


Figure 2.7: Exports and imports as percent of GDP, 1992-2004

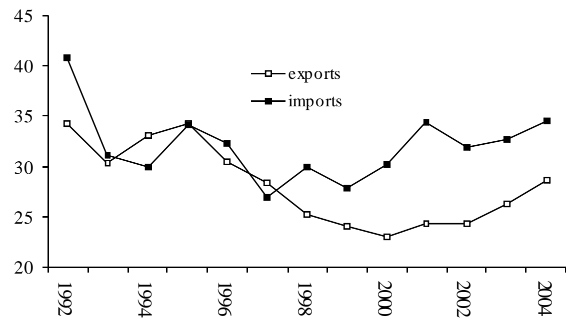


Figure 2.5: Sectoral shares in aggregate value added, 1965-2004

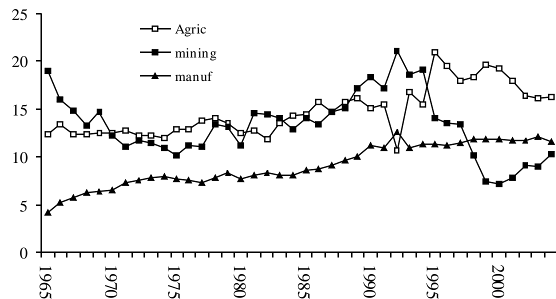


Figure 2.8: External balances as percent of GDP, 1992-2004

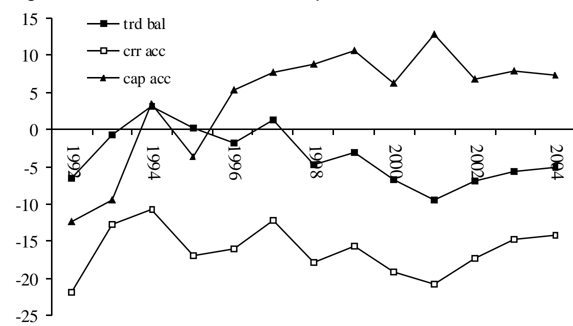


Figure 2.6: Growth rates by sector, 1965-2004, 3 year moving average

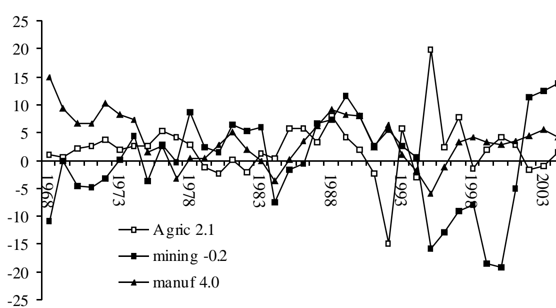
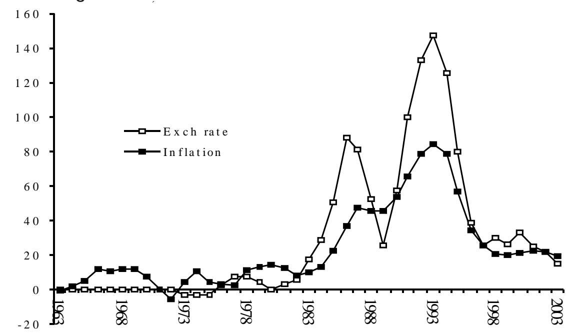


Figure 2.9: Zambia: Changes in the nominal US Dollar exchange rate & inflation, 1960-2004



Note: The exchange rate was fixed at .71 Kwachas to the US dollar during 1960-1972, and for 1973-75 at .64. From 1977 through 2004, the simple regression of the annual inflation rate and exchange rate was the following, where Xt and Pt are the logarithmic rates of change of the exchange rate and the GDP price deflator, respectively:

Pt = .108 + .696[Xt] Adj R-square = .711, F = 74.22
(2.97) (8.61) Degrees of freedom = 25

Figure 2.10: ODA grants and loans, total and net of interest payments, shares of GDP, 1992-2004

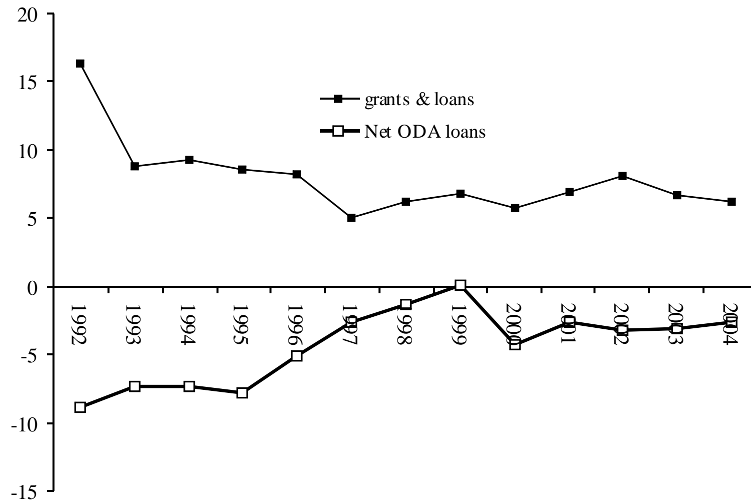
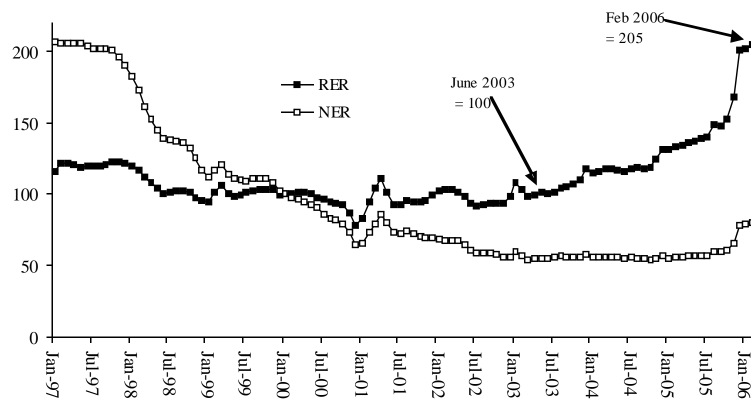


Figure 2.11: Nominal and inflation adjusted('real') exchange rate, January 1997-February 2006 (Jan 2000=100)



NER nominal exchange rate (Kwacha to the US$)
RER real exchange rate (nominal exchange rate divided by the US GDP deflator, and multiplied by the Zambian GDP deflator.