

Global Financial Crisis Discussion Series

Paper 10: Zambia

**Manenga Ndulo, Dale Mudenda,
Lutangu Ingombe and Lillian Muchimba**



Global Financial Crisis Discussion Series Paper 10: Zambia¹

**Manenga Ndulo, Dale Mudenda,
Lutangu Ingombe and Lillian Muchimba**

May 2009

Overseas Development Institute
111 Westminster Bridge Road
London SE1 7JD

¹ This study was prepared by researchers from the Department of Economics at the University of Zambia. This study is part of a wider research project coordinated by the Overseas Development Institute (ODI) London and supported by the UK Department for International Development (DFID) and the Dutch Ministry of Foreign Affairs, but it does not necessarily reflect their views.

Contents

Figures and tables	iii
Acronyms	iv
Abstract	v
1. Introduction	1
2. Context setting	2
3. Impact of the financial crisis	5
3.1 Financial flows	5
3.2 Trade	12
3.3 Remittances	17
3.4 Overseas development assistance	17
4. Growth and poverty	19
4.1 Growth	19
4.2 Investment	20
4.3 Employment	21
4.4 Poverty	21
4.5 Debt	22
4. Policy response	23
5.1 Actual	23
5.2 Potential/options	24
5. Conclusion	27
References	28
Annex 1: Statistical tables	29
Annex 2: Social protection and the global economic crisis	31

Figures and tables

Figure 1: Incidence of poverty in Zambia, 1991-2006 (%)	3
Figure 2: Trends in the all share index, 2000-2008	7
Figure 3: Monthly weighted base lending rate, 2008 (%)	8
Figure 4: Performance of the monthly exchange rate, 2008 (K/US\$)	9
Figure 5: Monthly inflation rates, 2008 (%)	10
Figure 6: Behaviour of the LUSE all share index, 2008	11
Figure 7: Turnover of foreign portfolio investors on the LUSE, 2008 (US\$m)	12
Figure 8: Trends in the share of NTEs and copper in total exports, 2000-2008 (%)	13
Figure 9: Trends in monthly copper prices, 2008 (US\$ per tonne)	14
Figure 10: Trends in monthly exports and imports, 2008 (US\$m)	15
Figure 11: Trends in monthly copper production and exports, 2008 (tonnes)	16
Figure 12: Share of copper and NTEs in total exports, 2008 (% of total exports)	16
Table 1: Resource flows, 2000-2007 (US\$m)	5
Table 2: Distribution of assets, loans and deposits of commercial banks, 2005 and 2007 (% of total)	6
Table 3: Assessment of bank performance, 2005 and 2007	6
Table 4: Overview of the Zambian stock exchange, 2000-2008 (US\$m)	7
Table 5: Overview of foreign portfolio investment on stock exchange, 2003-2008 (US\$m)	8
Table 6: Performance of the export sector, 2000-2008 (US\$m)	13
Table 7: Distribution of NTEs, 2006-2008 (% of total)	14
Table 8: Trends in comparative monthly export prices, 2008	15
Table 9: Actual and projected growth rates, 2007-2010 (%)	20
Table 10: Distribution of mining sector tax revenues, 2008 (K billions)	22

Acronyms

AIDS	Acquired Immunodeficiency Syndrome
BoZ	Bank of Zambia
CSO	Central Statistical Office
EAZ	Economics Association of Zambia
EITI	Extractive Industries Transparency Initiative
FDI	Foreign Direct Investment
FNDP	Fifth National Development Plan
FSP	Food Security Pack
GDP	Gross Domestic Product
HIPC	Heavily Indebted Poor Country
HIV	Human Immunodeficiency Virus
ICT	Information and Communication Technology
IMF	International Monetary Fund
LUSE	Lusaka Stock Exchange
MCDSW	Ministry of Community Development and Social Welfare
MCTI	Ministry of Commerce, Trade and Industry
MDG	Millennium Development Goal
MoFNP	Ministry of Finance and National Planning
MTEF	Medium-term Expenditure Framework
MUZ	Mine Workers Union of Zambia
NGO	Non-governmental Organisation
NTE	Non-traditional Export
ODA	Official Development Assistance
PRS	Poverty Reduction Strategy
PSDP	Private Sector Development Programme
PWAS	Public Welfare Assistance Scheme
SCTS	Social Cash Transfer Scheme
SME	Small and Medium-sized Enterprises
UK	United Kingdom
US	United States
WFP	World Food Programme
ZDA	Zambia Development Agency
ZRA	Zambia Revenue Authority

Abstract

This study explores the impact of the global financial crisis on Zambia through its effects on trade, foreign direct investment (FDI), development assistance and remittances, which are the major transmission mechanisms of the crisis to the country. The crisis has produced macroeconomic imbalances. Inflation and interest rates have risen and stock prices have fallen. Foreign portfolio flows have been adversely affected. The kwacha has depreciated against the major currencies. The trade balance has been affected. Mines have scaled down their investments, production and employment, and some mining units have been closed, with about 8100 jobs lost. Secondary industries supporting the mines in the copper belt and tourism sector have been affected. The government could address the crisis through fiscal monetary and exchange rate policies, but for policies to be effective they must be accompanied by growth-enhancing structural policy measures. These include economic diversification and improvement of the business environment. Other requirements are governance reforms in the mining sector, social protection and a package of austerity measures.

1. Introduction

The current global financial crisis is generally expected to have severe economic and social ramifications in all sub-Saharan African countries. The impact might be greater than that of previous global crises because these countries have become integrated with the global economy more than ever before during the past two decades.

The current global financial crisis began at a time when Zambia was emerging from decades of severe macroeconomic imbalances, negative real growth and falling per capita incomes, and finally getting optimistic about the prospects for sustained economic growth and poverty reduction. The optimism stemmed from the observation that, over the past decade, improved economic management, rising copper prices and external support from both bilateral and multilateral donors had created opportunities and high hopes for improved economic prospects. This is espoused in the Fifth National Development Plan (FNDP) and Vision 2030, wherein Zambia aims to achieve middle-income country status by 2030 (MoFNP, 2006).

The impact of the global financial crisis on the economy threatens Zambia's prospects for continued growth. It is therefore necessary and important to trace the effects of the global financial crisis in the country. The crisis will have both short- and medium-term effects, according to how long it lasts. Indications are that the crisis might take longer to dissipate, two to three years, depending on the policy response to the crisis of the major industrial countries.

The severity of the effects of the crisis on Zambia will depend on the ability of the economy to withstand external shocks, which in turn will depend on previous economic performance and the macroeconomic stability of the economy. An understanding of the depth of macroeconomic stability requires an analysis of the performance of the economy. Section 2, therefore, reviews the domestic context within which the present crisis is taking place, by looking at the performance of the economy between 2000 and 2007. Section 3 looks at the impact of the crisis in terms of global resource transfers, which form the mechanisms for transmission of the crisis into the domestic economy. Section 4 looks at the impact of the crisis on growth and development. Section 5 looks at the policy implications of the crisis and Section 6 concludes.

2. Context setting

Zambia has for a long time represented an extraordinary case of an undiversified and landlocked economy, exhibiting a very high dependence on a single mineral resource for its exports. The economy is highly vulnerable to external shocks and has grappled with negative economic growth and declining per capita incomes for decades. However, Zambia has, in the recent past, experienced positive economic growth. Real gross domestic product (GDP) grew by almost 50% from K2499 billion in 2000 to K3737 billion in 2008. The economy grew at an average rate of 4% per annum between 2000 and 2003, increasing to an average rate of 5.6% between 2004 and 2008. This positive growth performance resulted in increased GDP per capita, which trebled from US\$315 in 2000 to \$918 in 2007. This was supported by prudent macroeconomic policies and generally favourable external sector conditions.

The services sector was the largest contributor to GDP, at 66% in 2008, followed by the agriculture and manufacturing sectors, contributing 12% and 10%, respectively. The lowest contribution came from the mining sector, at 8%.

The services sector has been the main contributor to GDP and employment in the country over the years. The sector GDP grew at 7% in 2006 and 8.1% in 2007, driven by the transport, storage, communications, tourism, construction and wholesale and retail trade sub-sectors. It is also the largest source of formal sector employment: in 2008, 70% of formal sector employees were engaged in the services sector.

The agriculture sector also grew between 2000 and 2008, on account mainly of good weather and increased private investment. The sector is dominated by the production of maize and other cash crops, such as tobacco, sorghum, groundnuts and cotton. Sugar and floricultural and horticultural products are among the top non-traditional export (NTE) products. The sector also generates substantial employment. In 2008, it generated 13% of total formal employment. Furthermore, it is the largest source of informal sector employment, estimated at over 71% (CSO, 2007). The sector is the main source of livelihood for over 65% of the population, some of whom are engaged in the production of cash crops for export, such as cotton and tobacco. This makes them vulnerable to external price shocks emanating from the global financial crisis.

The manufacturing sector performed well between 2000 and 2008, growing by 3.5% in 2008. This was mainly because of the rapid growth in the food processing, wood and wood products, paper and paper products, beverages and tobacco and wires and copper cables sub-sectors. The sector employed 10% of formal sector workers in 2008. Most production is for local consumption, with the surplus exported to regional and European markets, the latter being the major destination for products such as sugar, copper cables and wires. Moreover, most of the inputs in the manufacturing sector are imported into the country. In this sense, the sector is likely to be vulnerable to the effects of the crisis.

The mining sector experienced unprecedented growth between 2000 and 2008, with its contribution to GDP increasing from 6.4% in 2000 to 8.4% in 2008. Mineral production was generally buoyant because of increased private investment and capacity utilisation in the privatised copper mines, boosted by investment in new copper and nickel mines. In addition, metal prices remained favourable, with the copper price reaching a peak of US\$8985 per tonne in July 2008 before slumping back to \$2902 per tonne at the close of 2008. In 2008, the sector made up 8% of formal sector employment. Although this makes the mining sector the lowest generator of formal sector employment in the country, it is the largest employer on the copper belt, where it is the economic anchor of the region, being the largest source of employment in terms of both direct and indirect employment. It is also the generator of substantial secondary economic activities on the copper belt. Furthermore, the sector is the major source of export earnings for the country. In 2008, it accounted for over 74% of total export earnings.

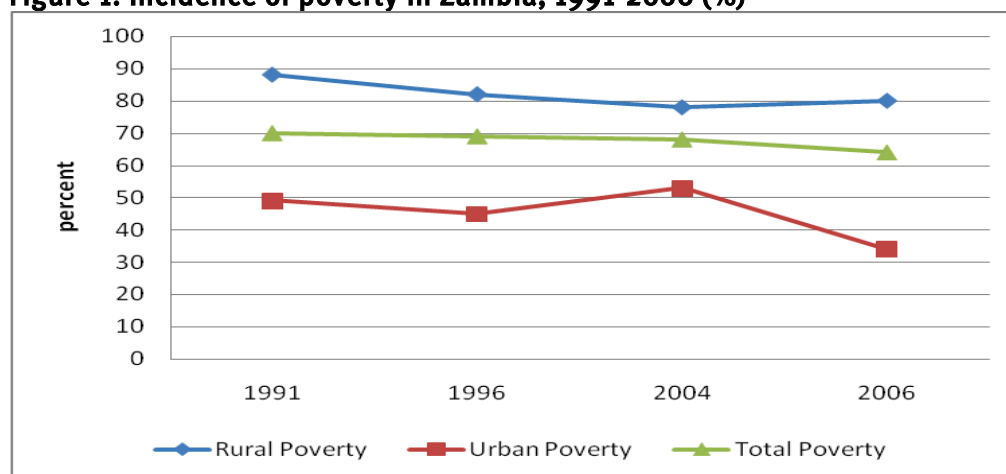
Favourable economic performance between 2000 and 2008 resulted in an improvement in the country's macroeconomic variables. Zambia experienced an improvement in the level of inflation: a single-digit inflation rate was achieved in 2006, after 25 years of double-digit inflation. However, this record was quickly eroded, with the inflation rate increasing to 12.5% in 2008. On the other hand, the exchange rate remained relatively stable, and the banks' average lending base rate declined from 40% in 2000 to 18% in 2007.

This improved economic performance had a positive effect on investment and domestic savings. The country's capital formation rose from 16% of GDP in 2000 to 22% in 2007. The share of domestic savings in GDP rose from 17% in 2000 to 23% in 2007. The share of domestic savings and capital formation in GDP compares favourably with the average rates of 23.3% for domestic savings and 21.8% for capital formation for sub-Saharan African countries in 2007 (IMF, 2008). Furthermore, favourable economic performance resulted in an improvement of the balance of payments position. The current account deficit reduced from 15% of GDP in 2000 to a surplus of 1.1% of GDP in 2006. It slid back to a deficit of 9% of GDP in 2008. Despite this, the country's gross international reserves improved. Import cover continuously increased, from 2.2 months in 2006, to 2.5 months in 2007 and 2.8 months in 2008. The strong performance of the current account between 2000 and 2007 can be attributed to the increased foreign exchange earnings from the export of copper and NTE products.

It is clear that the country achieved a level of positive growth rates and improved macroeconomic performance between 2000 and 2008. It experienced positive growth rates for eight consecutive years for the first time since the early 1970s. It grew at an average of 5% between 2000 and 2008. This growth in GDP over the period is a result of strong expansion in the mineral, agriculture and services sectors, supported by prudent macroeconomic policies and favourable external sector conditions. However, this growth rate remains far below the projected 7% required for Zambia to achieve sustainable growth and attain the Millennium Development Goals (MDGs) by 2015.

This positive growth performance resulted in increased GDP per capita. This has given the country an opportunity to address issues of poverty that have become endemic in the country. Figure 1 shows incidence of poverty in Zambia, demonstrating that total poverty was estimated at 64% in 2006, down by 7% between 2000 and 2006. The impact was greater on urban poverty compared with rural poverty: between 2004 and 2006, urban poverty reduced by 19%, with rural poverty increasing by 2%. This severe poverty situation is exacerbated by the high income inequalities that exist in the country, more pronounced in rural areas than in urban areas. The Gini coefficient is estimated at 0.66 for urban areas and 0.54 for rural areas (CSO, 2007).

Figure 1: Incidence of poverty in Zambia, 1991-2006 (%)



Source: Constructed by authors from CSO (2007).

The positive growth experienced by the country between 2000 and 2008 gave policymakers an opportunity to start tackling the issue of poverty, in terms of both policy and the effectiveness of the growth process in resolving issues of employment and poverty. The aim was to grow the economy at about 7% per annum in the medium term and come up with a fiscal regime that would, together with external resources, generate resources to foster development and poverty reduction. The most important impact of the global financial crisis is in undermining this process.

3. Impact of the financial crisis

The impact of the global financial crisis in Zambia was felt during the third quarter of 2008. The economy performed well during the first two quarters of that year, but was adversely affected by three major events. Increased food and fuel prices pushed up the rate of inflation. The death of President Mwanawasa increased levels of uncertainty and expectations of the economy, which tended to depreciate the exchange rate. However, the most important and immediate shock was in the third quarter of 2008, when copper prices collapsed. This produced first-round effects.

The major transmission mechanisms of the global financial crisis are financial flows, trade, remittances and official development assistance (ODA) from developed countries. Table 1 shows the behaviour and magnitude of some of these flows between 2000 and 2007, to analyse their impact on the economy.

Table 1: Resource flows, 2000-2007 (US\$m)

Year	FDI	Private inflows	ODA	Remittances
2000	121.7	5.6	-	-
2001	71.7	7.5	349	-
2002	298.4	0.3	639	-
2003	347.0	2.3	589	36.3
2004	364.0	0.1	1,125	48.4
2005	356.9	122.4	935	52.9
2006	615.8	50.4	1425*	57.7
2007	835.9	41.8	1045	59.3

Note: * Might include Heavily Indebted Poor Country (HIPC) Initiative debt relief.

Source: BoZ et al. (2008); IMF (2008).

Table 1 shows that ODA is the most important resource inflow into the country, estimated at 13.2% of GDP in 2006. This is followed by foreign direct investment (FDI), estimated at 5.7% of GDP in 2006. Foreign private capital portfolio inflows are very volatile, although they have become prominent since 2005, amounting to US\$50.4 million and estimated at 0.5% of GDP in 2006. There are few data available on remittances, but those on hand show that remittance inflows are stable and increasing, estimated at \$57.7 million in 2006, or 0.5% of GDP, the same level as foreign private capital portfolio inflows.

3.1 Financial flows

3.1.1 Financial sector

The financial sector is still relatively undeveloped as regards its potential and as reflected in limited financial intermediation. In 2008, the sector comprised 14 commercial banks, 19 non-bank financial institutions, a national savings and credit bank, a development bank, 19 bureaux de change, 12 leasing companies, seven insurance companies and a credit reference bureau. There is also a stock exchange, with 19 listed and nine quoted companies in 2008. There are no price and exchange controls. There are neither controls nor restrictions on interest rates and credit allocation. There is free entry to investment in all sectors and a 100% repatriation of profits and dividends. This makes the sector potentially vulnerable to external shocks. In this section, we focus on commercial banking and the stock market as most likely to be the transmission channels for any contagion effects on the economy as a result of the financial crisis.

The banking sector is very open, allowing for foreign ownership of banks. There are 14 commercial banks in the sector. Eight are foreign and four are domestically owned. Two have state participation and are joint ventures between the state and foreign owners. The parent foreign banks come from the UK, US, South Africa, Zimbabwe, China and Nigeria. The subsidiaries of foreign banks from the UK and

South Africa dominate the market share of the banking sector in terms of assets, loans and deposits. They account for over two-thirds of the sector's total assets, 60% of the loan portfolio and over 60% of deposits (see Table 2). In 2006, Barclays Bank controlled 20% of total assets, 32% of loans and 18% of deposits. Standard Chartered Bank controlled 16% of total assets, 15% of loans and 18% of deposits. Citibank controlled 7% of total assets, 3% of loans and 6% of deposits. Domestic banks account for the lowest proportion of the share of total assets, loans and deposits.

Table 2: Distribution of assets, loans and deposits of commercial banks, 2005 and 2007 (% of total)

Nature of ownership	2005			2007		
	Assets	Loans	Deposits	Assets	Loans	Deposits
Subsidiaries of foreign banks	61.7	72.7	58.6	63.8	65.2	60.2
Banks with state participation	25.6	15.1	29.3	20.6	16.5	23.8
Domestic banks	12.7	12.2	12.1	15.6	18.3	16

Source: BoZ (2006; 2008).

The financial condition and performance of the banking sector between 2006 and 2008 was largely satisfactory, in stark contrast with the late 1980s and early 1990s, when the sector was volatile and had many bank failures. The sector recorded positive growth in total assets and earnings. Capital adequacy and liquidity ratios have remained high, asset quality has improved, banks are profitable and bank supervision has increased (BoZ, 2008). An assessment of the overall performance is given in Table 3.

Banks are adequately capitalised. The primary regulatory capital improved for most of the period between 2006 and 2007 (BoZ, 2008). The increase in capital levels can be explained by the rise in retained earnings, paid-up capital and subordinated debt. In 2008, all banks met the minimum capital adequacy ratios of 5% and 10% for primary regulatory capital and total regulatory capital, respectively. The primary regulatory capital ratio stood at 15.9% and the total regulatory capital ratio was 18.6% in 2007. However, primary regulatory capital declined to 7% while total regulatory capital remained constant at 18.6% in 2008. The decline in primary regulatory capital owes to the banks' shift to assets with higher risk profiles, dominated by net loans and leases to the private sector (MoFNP, 2009).

The quality of assets between 2006 and 2008 was also satisfactory. The level of non-performing loans to total gross loans and advances declined from 11.3% in 2006 to 8.8% in 2007. Total assets grew by 24.4% between 2007 and 2008. The asset structure of the banks continued to be dominated by net loans and leases. The gross non-performing loans to total gross loans ratio and net non-performing loans to total regulatory capital ratio improved from 8.8% and 9.6% in 2007 to 7.2% and 5.2% in 2008, respectively (BoZ, 2009b).

Table 3: Assessment of bank performance, 2005 and 2007

Indicator	Capital adequacy		Assets adequacy		Earnings		Liquidity	
	2005	2007	2005	2007	2005	2007	2005	2007
Strong	13	0	6	0	8	0	1	0
Satisfaction	0	11	7	10	2	9	7	8
Fair	0	1	0	2	2	2	5	3
Marginal	0	0	0	0	1	1	0	1
Unsatisfactory	0	1	0	1	0	1	0	1

Source: BoZ (2006; 2008).

The earnings performance of the banks was satisfactory. Pre-tax profits increased by 19.3% in 2006, and by 1.6%, from K536 billion in 2007 to K544.3 billion in 2008 (BoZ, 2009b; MoFNP, 2009). The increase in profitability was a result largely of a rise in both interest and non-interest income. Furthermore, Bank of Zambia (BoZ) regulatory oversight has been tight. This is a consequence of the experiences of the banking crisis in the late 1980s and early 1990s.

These characteristics have protected the sector from direct impacts of the external financial crisis. Furthermore, the financial system is bank dominated and the banks have generally not been engaged

in off-balance sheet activities or invested in illiquid securitised assets, mainly limiting exposure to structured credit products from abroad. The stock market grew slowly and significantly between 2000 and 2008. The major impetus of growth was the listing of privatised state companies: there are now 28 companies participating on the stock market, 19 listed and nine quoted companies.

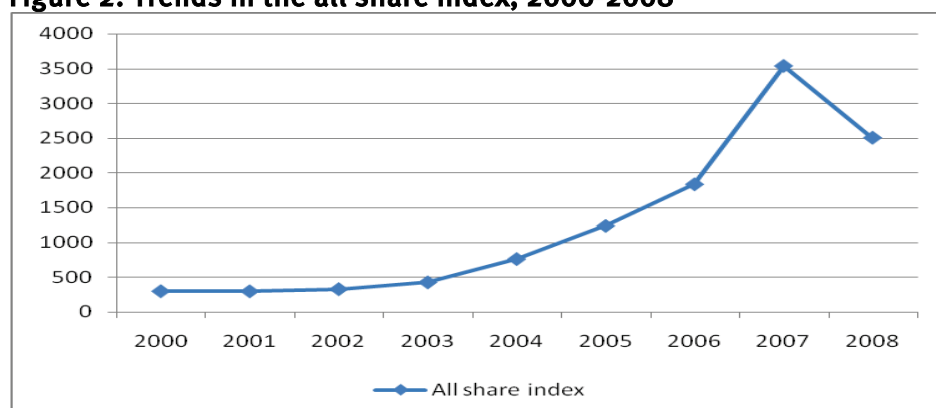
Table 4: Overview of the Zambian stock exchange, 2000-2008 (US\$m)

Year (1)	Trades (no) (2)	Turnover (3)	Market capitalisation (4)	Market capitalisation/GDP (%) (5)	Turnover ratio (6)=(3/4)	Total value added ratio (7)=(3/GDP)
2000	1836	6.1	236	13.0	0.026	0.002
2001	2141	48.8	248	10.7	0.197	0.013
2002	1565	2.5	246	8.05	0.010	0.001
2003	2103	11.5	768	21.2	0.015	0.003
2004	1993	7.0	1650	38.1	0.004	0.001
2005	2519	15.50	2456	28.7	0.006	0.002
2006	3662	25	3188	40.0	0.008	0.002
2007	6199	72.4	4827	54.6	0.015	0.007
2008	8384	167.8	4106	37.8	0.041	0.011

Source: LUSE database (2008).

The key indicators on the performance of the stock exchange are demonstrated in Table 4. These show an improvement in overall stock market performance between 2000 and 2008. However, the market has remained relatively small, accounting for less than 1% of GDP. Its total value added ratio increased marginally, from 0.2% in 2000 to 0.3% in 2003, increasing further to 1.1% in 2008. Market capitalisation grew from US\$336 million in 2000 to \$4106 million in 2007, and as a percentage of GDP from 13.0% in 2000 to 54.6% in 2007, but declining to 37.8% in 2008. The number of trades grew at an average rate of 24% per annum during the period 2000-2008. The turnover was impressive, increasing from \$6.09 million in 2000 to \$167.84 million in 2008. Figure 2 depicts the all share index between 2000 and 2008. The index steadily increased between 2000 and 2007 to a maximum of 3533 in 2007, then collapsed by 29.1% to 2505 in 2008. This can be attributed to reduced demand for shares as a result of the global financial crisis (MoFNP, 2009).

Figure 2: Trends in the all share index, 2000-2008



Source: Constructed by authors from LUSE database (2008).

The stock market has large participation of foreign portfolio investors. This is shown in Table 5, which demonstrates that total foreign turnover increased from US\$1.2 million in 2002 to \$122 million in 2008. Foreign investors accounted for an average of 66% of the total turnover on the stock exchange between 2002 and 2008. This indicates a higher level of participation by foreign portfolio investors on the stock market and makes the stock market vulnerable to external shocks.

Table 5: Overview of foreign portfolio investment on stock exchange, 2003-2008 (US\$m)

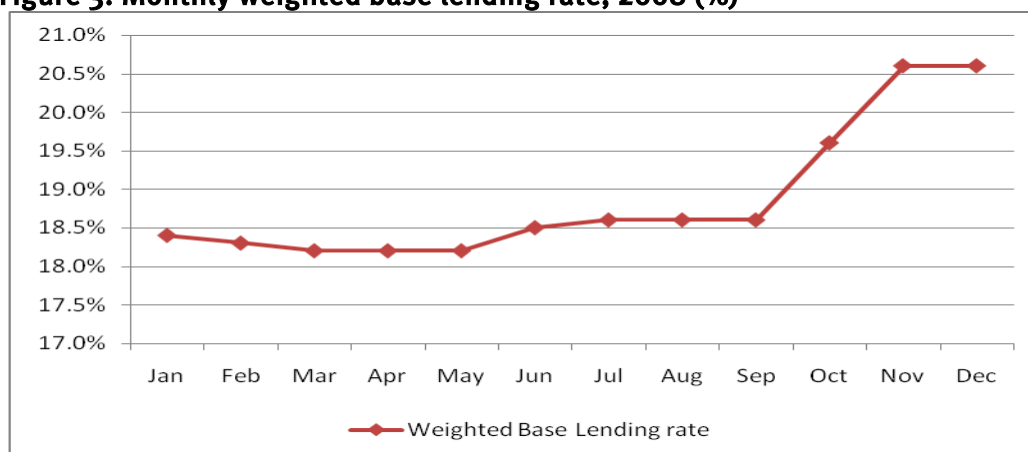
Year	Inflows	Outflows	Total foreign turnover	Foreign as % of total turnover
2002	0.5	0.7	1.2	47
2003	4.6	2.3	6.9	62
2004	4.8	4.8	5.4	78
2005	8.3	2.9	11.2	72
2006	11.7	3.7	15.4	62
2007	30.6	18.0	48.6	67
2008	58.3	64.0	122.3	73

Source: LUSE database (2008).

As has been shown, the financial condition and the performance of the financial sector have been largely satisfactory, although the sector is relatively underdeveloped, with limited interdependence with the global financial world. The stock exchange has large participation from foreign portfolio investors. The effects of the global financial crisis on the financial sector will follow from the collapse of the country's exports. The main contagion effects of the crisis are likely to be through the credit crunch in the banking sector, the exchange rate, the inflation rate and the stock price index on the Lusaka Stock Exchange (LUSE).

The credit crunch

The economic crisis has had a discernible impact on credit markets, which started to show during the third quarter of 2008. Figure 3 shows the behaviour of the weighted base lending rate during 2008. Initially, the lending rate declined during the first quarter. It gradually increased in the second and third quarters and increased rapidly in the fourth quarter. This has had an impact on bank lending.

Figure 3: Monthly weighted base lending rate, 2008 (%)

Source: Constructed by authors from BoZ database (2008).

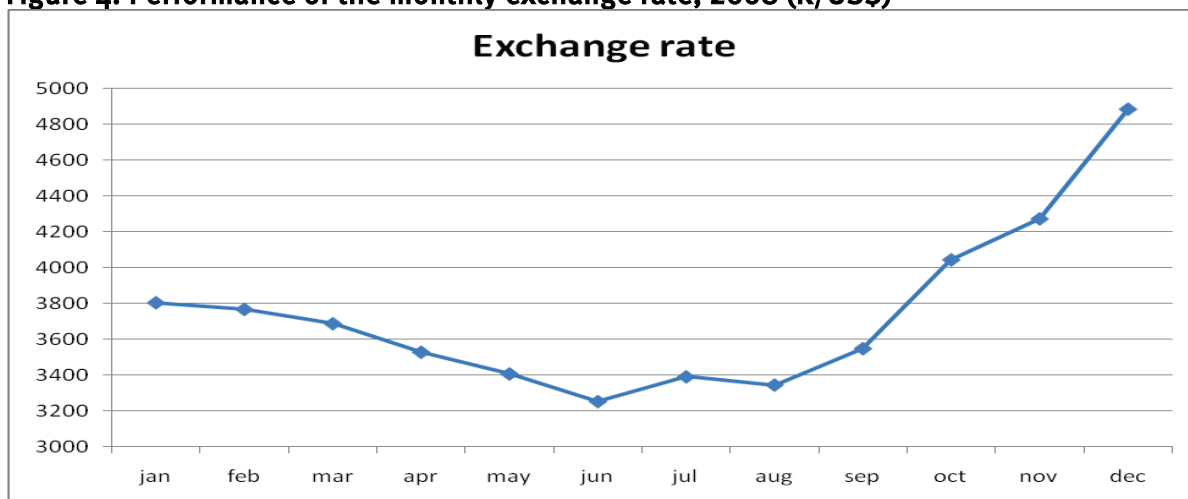
Moreover, the financial sector has, in the recent past, drawn increasingly on external sources for equity and debt finance and bank deposits (EAZ, 2008). This source is likely to dry up. During the past few years, banks and non-financial institutions have increased their lending to small and medium-sized enterprises (SMEs) and the household sector. With the economic crisis, especially on the copper belt, many of these SMEs, workers and households will be unable to service their loans. This is likely to lead to increased defaults and the consequent increased risk and cost of lending to these sectors. Already there is evidence that banks have become more circumspect in lending to such sectors. All these factors contributed to the increase in lending rates during the fourth quarter of 2008.

The exchange rate

There was an immediate impact on the exchange rate with the fall in copper prices in the fourth quarter of 2008, with the kwacha depreciating rapidly from October. From January 2008, the kwacha had been appreciating slowly, until about June 2008, when it started depreciating. This is shown in Figure 4. There is a direct relationship between the exchange rate and copper prices. The fall in the price of

copper affects investor confidence. Investors then move their funds to safe havens. There was reduced supply of foreign exchange from the copper mines as a result of the fall in the copper price. There were, further, reduced portfolio inflows and increased portfolio outflows by foreign portfolio investors as a result of the uncertainty created by the global financial crisis. For instance, the supply of foreign exchange to the market by mining companies in the second quarter was US\$325.5 million. This increased by 8.5% to \$353.3 million in the third quarter. However, the amount supplied declined in the fourth quarter by 27% to \$256.7 million (BoZ, 2009a). Furthermore, the foreign exchange rate in Zambia exhibits high volatility. This is mainly because of the small size of the foreign exchange market and the lack of diversification in the export sector.

Figure 4: Performance of the monthly exchange rate, 2008 (K/US\$)



Source: Constructed by authors from BoZ database (2008).

The depreciation of the exchange rate should increase the profitability of NTEs. One might recall that the viability of the cotton sector was nearly destroyed by the overvaluation of the kwacha between 2005 and 2006, when the kwacha appreciated strongly. However, the global crisis has had two different effects on the diversification process in Zambia. One is to encourage NTEs by making them profitable through a depreciated local currency. Unfortunately, the crisis has dampened demand for these exports, with consequent lower prices. A case in point is the export of flowers from Zambia to Holland, the main export market for Zambian flowers. The market has been experiencing low demand and lower prices for flowers, which has adversely affected flower growers in Zambia, to the extent that some flower growers have had to scale down their production and direct their sales to the domestic and regional market, which is small. Some have substituted flower production with vegetable production. This adjustment has adversely affected employment in the sector, since some workers have had to be laid off.

The inflation rate

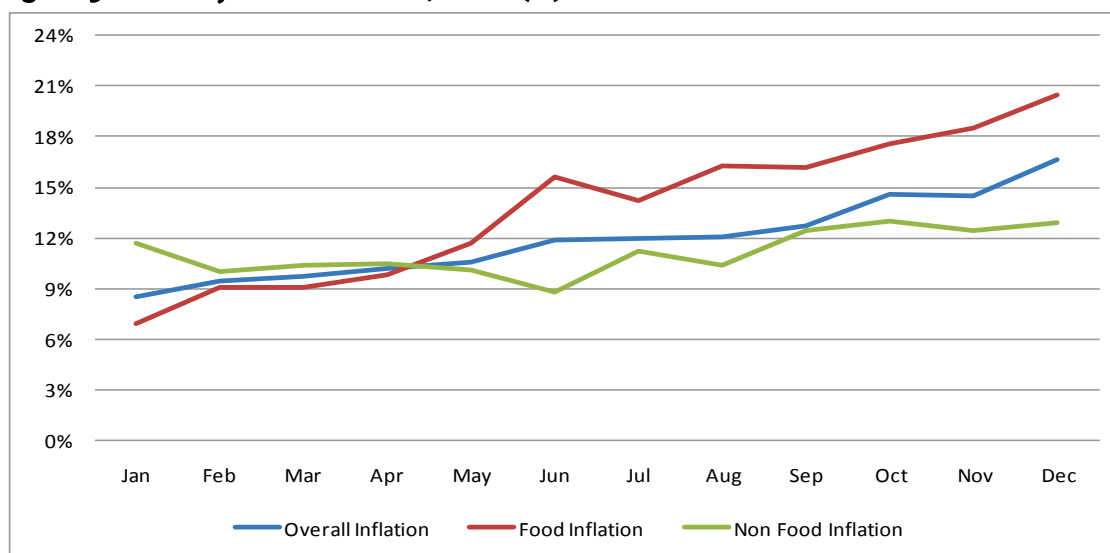
The global financial crisis adversely affected the inflation rate during the third quarter of 2008. The rate had, however, already started rising during the second quarter. Figure 5 shows the trends in overall, food and non-food inflation during 2008. Overall inflation rose from 8.5% in January to 16.6% in December. This rise is attributed to the increase in food prices driven by low food supply and increased production and transportation costs (BoZ, 2009b). During the first quarter, food inflation was below the overall inflation rate, whereas non-food inflation was above. The trend changed during the second quarter of the year, when food inflation increased sharply, from 12% in June to 20% in December, whereas non-food inflation increased from 9% to 13%.

The increase in non-food inflation can be attributed to the pass-through effect of the depreciation of the kwacha against the major currencies during the second half of the year. This was further exacerbated by the depreciation of the kwacha during the third and fourth quarters. During these two quarters, the non-food inflation rate increased by 15%, partially as a result of the impact of the global financial crisis, which led to the depreciation of the kwacha by 44% against the US dollar. During the first and second

quarters, domestic fuel prices surged upwards, owing to the high prices of petroleum on the world market. This resulted in an increase in the import bill and upward adjustment of the prices (BoZ, 2009b; CSO, 2009).

The annual inflation rate in 2008 was 12.5%. It is expected that the global financial crisis will continue to put pressure on the exchange rate, producing a marginal increase in the annual inflation rate. The impact is likely to be insignificant because the inflation rate has been driven mainly by food inflation. The inflation rate is only likely to worsen if the copper price falls below US\$3000 per tonne in 2009 and 2010, assuming global oil prices remain stable.

Figure 5: Monthly inflation rates, 2008 (%)



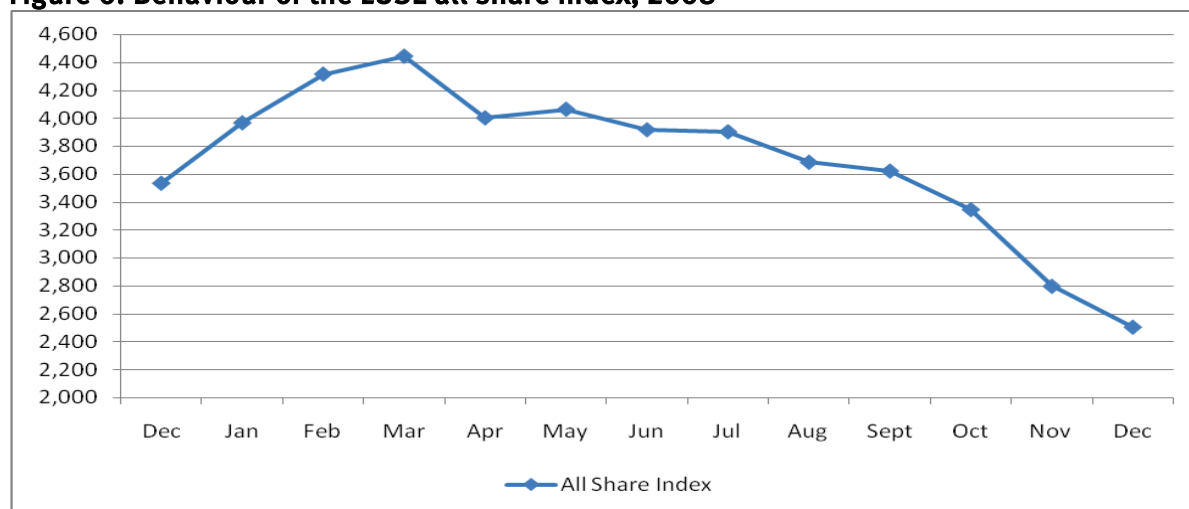
Source: Constructed by authors from CSO database (2008).

The stock price index

The LUSE has high participation of foreign portfolio investors, in 2008 accounting for 73% of the total turnover. Their behaviour on the market has impacted negatively on the all share index. There has been increased risk aversion to kwacha-denominated assets. This has affected both equities and government Treasury bills markets. Portfolio investors in equities on the stock market liquidated their investments in equities and externalised the money. This is reflected in the foreign portfolio flows on the market. Foreign portfolio inflows were at their lowest during the fourth quarter of 2008, amounting to US\$1.21 million. This compares unfavourably with inflows of \$28.6 million in the second quarter and \$24.5 million in the third quarter of 2008. However, most of the portfolio outflows took place during the second and third quarter of 2008. These amounted to \$13.0 million and \$33.3 million, respectively. In the fourth quarter of 2008, the portfolio outflow was much lower, at \$11.1 million.

Consequently, the performance of the equity market was not satisfactory in 2008 (MoFNP, 2009). This can clearly be attributed to the global financial crisis, which negatively affected demand for domestic equities. The decline in demand for equities pushed down the prices of most stocks. This resulted in a decline of the LUSE all share index, as shown in Figure 6. Between March and December 2008, the all share index declined consistently, by an average of 5% per month.

Figure 6: Behaviour of the LUSE all share index, 2008



Source: Constructed by authors from LUSE database (2008).

3.1.2 Private capital flows

Foreign direct investment

FDI has been a very important resource inflow into Zambia, as shown in Table 1. There is considerable evidence that FDI can affect growth by complementing and facilitating domestic investment. It also creates new job opportunities (Ajayi, 2007). The country therefore needs substantial inflows of FDI in order to facilitate and enhance the growth process and poverty reduction. It follows that any adverse impact on FDI as a result of the global financial crisis will negatively impact growth and will tend to increase the incidence of poverty in the country.

FDI inflows increased significantly between 2000 and 2008, although growth has been uneven. It actually fell by 40% in 2001 and 2% in 2005, but grew at an average rate of 50% per annum during the period. It increased from 3.8% of GDP in 2000 to 5.6% of GDP in 2007, averaging at about 5.6% of GDP between 2000 and 2007. It is estimated at US\$938.6 million in 2008. However, FDI has lagged behind ODA as a resource flow into the country. FDI is concentrated in mining. The most important sectors for FDI in 2007 were mining, financial, wholesale and retail trade, transport and tourism. The major sources were Australia, Switzerland, Canada, South Africa, India and China.

FDI is a major resource transfer that is likely to be affected by the global financial crisis. FDI is the third major external resource transfer after trade and ODA. Any major decline of FDI inflows into the country is likely to affect growth adversely. However, there do not seem to be any discernible negative impacts on inflows of FDI into Zambia. The mining sector, the major destination of FDI, had already completed its major investment projects by the end of the second quarter of 2008. Nevertheless, there does seem to be a holding-back and some scaling-down on investment projects. This tendency is strong in the mines but also discernible in other sectors of the economy. This is likely to affect only marginal investments but the situation is likely to change if the global crisis continues for a longer period.

On the other hand, investment pledges at the Zambia Development Agency (ZDA) do not seem to have been affected during 2008. Pledges picked up during the second half of 2008, with total investment pledges valued at US\$10,325 million in 2008. Postulating that about 65% of the pledged investment is actualised, we get an estimated investment level of \$6711 million for 2008. These investment pledges were concentrated in the mining, energy and manufacturing sectors, with pledges of \$7296 million, \$1307 million and \$1098 million, respectively (ZDA, 2009).

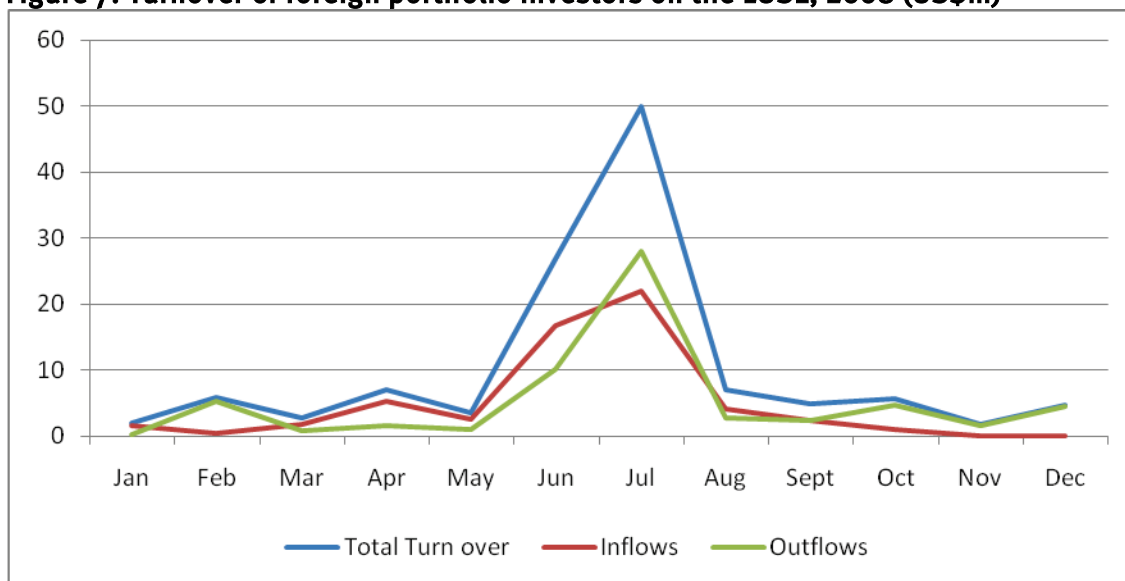
Foreign portfolio investment

Portfolio investment inflows have not been significant, as shown in Table 1. This is mainly because of the previous severe macroeconomic imbalances, which increased risk, and the relatively

underdeveloped financial sector. However, with the growth in the economy and the confidence that macroeconomic stability has brought to the economy, there has been an increase in portfolio investment inflows into the economy, especially during the past few years. Inflows increased from a low of US\$5.6 million in 2000 to a high of \$122.4 million in 2005, and seem to be characterised by high volatility. The major portfolio inflows go into government securities and equities at the stock exchange. Investment in government securities is more significant than investment in equities. In 2007, debt securities were mainly from Kenya, the UK and Bahrain. Equity investment was mainly from South Africa and Australia.

Portfolio investment in equities and government securities has been adversely affected by the global financial crisis and the resultant fall in copper prices. The fall in copper prices and the consequent devaluation of the kwacha has affected the expectations of foreign portfolio investors. This has led to increased risk aversion to kwacha-denominated financial assets and has induced a reduction in the demand for these assets and an outflow of funds as these assets are liquidated. There was an under-subscription of government Treasury bills, as investors did not roll over their investments and pulled out of the Treasury bills market. There was also an adverse impact on the equities market. Many foreign investors sold off their shares on the stock market, especially during the third quarter of the year. Figure 7 shows the turnover of foreign portfolio investors on the LUSE. Turnover in foreign portfolio investment declined substantially, especially during the third quarter. Foreign portfolio gross inflows declined to US\$1.2 million during the fourth quarter, from a high of \$28.6 million in the third quarter of 2008.

Figure 7: Turnover of foreign portfolio investors on the LUSE, 2008 (US\$m)



Source: Constructed by authors from LUSE database (2008).

3.2 Trade

Zambia has since 1992 remained one of the most open trade regimes in Africa, with a rating of 2 on the International Monetary Fund's (IMF's) restrictiveness scale ranging from zero to 10, 10 being the most restrictive (MCTI, 2005). The share of total trade in GDP stood at 65% in 2008. This high dependence makes the country more vulnerable to external shocks. The export sector has been the most dynamic segment in terms of generating foreign exchange earnings and resources to foster growth in the country. Between 2000 and 2008, total exports grew by more than six times, increasing from US\$746 million in 2000 to \$5089 million in 2008. Total exports in 2008 represented 31% of GDP. The impetus for this growth came from the enhanced investments in the mines and the high copper prices. Both copper exports and NTEs, which comprise primary agricultural products such as sugar, cotton, tobacco and fresh flowers, grew. Copper production was boosted by the opening of new mines and increased

capacity utilisation by the old mines. Consequently, the country had enormous foreign exchange and potential resources to finance growth and poverty reduction.

Imports grew tremendously, from US\$978 million in 2000 to \$4007 million in 2007, estimated at 34% of GDP in 2007. Imports were high during the period mainly because of the investment in the mines. Meanwhile, the balance of payments deficit improved considerably, from 18% of GDP in 2000 to 2.4% of GDP in 2007. The country had in 2006 a rare phenomenon, a balance of payments surplus of 1.1% of GDP. Zambia was therefore able to accumulate reserves of 2.2 months of imports in 2006. These increased to 2.5 months and 2.8 months of imports in 2007 and 2008, respectively (MoFNP, 2009).

However, all these resources and earnings are buttressed by the production and export of a single commodity: copper. This has made the economy very vulnerable to external shocks, and the sector a major transmitter. Between 2000 and 2008, copper earnings averaged about 70% of total export earnings. The average copper price reached a high of US\$7126 per tonne in 2007, from a low of \$1560 per tonne in 2002. The overall terms of trade index climbed continuously during the period. Table 6 shows the performance of the export sector between 2000 and 2008.

Table 6: Performance of the export sector, 2000-2008 (US\$m)

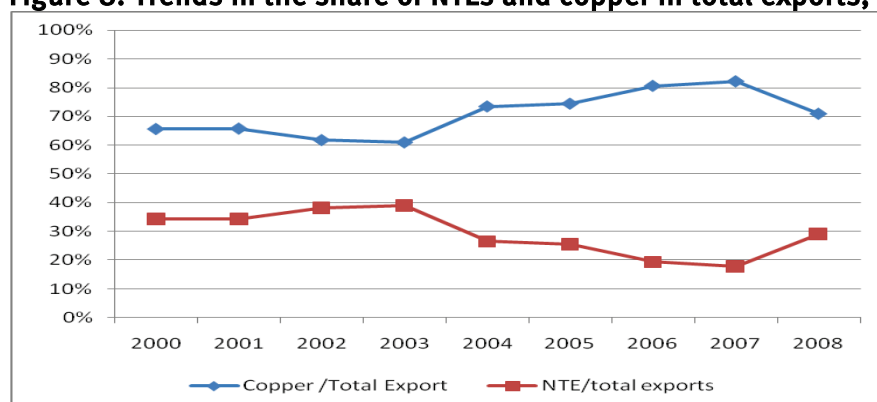
Year	Imports	Exports	NTEs	Copper price (per tonne)	Terms of trade**
2000	978	746.2	256.23	1813.5	-
2001	1253	884.1	302.47	1578.3	-
2002	1204	965.2	368.33	1559.5	107.3
2003	2151	1065.0	415.18	1779.1	87.8
2004	2580	1824.7	484.91	2865.9	88.8
2005	2580	2208.2	565.69	3678.9	120.1
2006	3024	3890.7	757.2	6474.33	128.6
2007	4007	4617	826.59	7126.41	204.3
2008	5060	5089	1480*	6437.64	-

Notes: * Preliminary; ** 2000 = 100.

Source: CSO database (2008); ZDA database (2008); AfDB and OECD (2008).

For many decades, policymakers have urged a policy of export diversification into non-traditional products. This is meant to increase the range of exports so as to reduce the severity of external shocks and impact positively on poverty reduction in the country. This has not been significantly successful. The value of NTEs has increased tremendously, from US\$256 million in 2000 to \$1480 million in 2008, but their share in total exports declined from 38% in 2003 to 19% in 2007, before increasing slightly to 28% in 2008. This is shown in Figure 8.

Figure 8: Trends in the share of NTEs and copper in total exports, 2000-2008 (%)



Source: Constructed by authors from CSO database (2008) and ZDA database (2008).

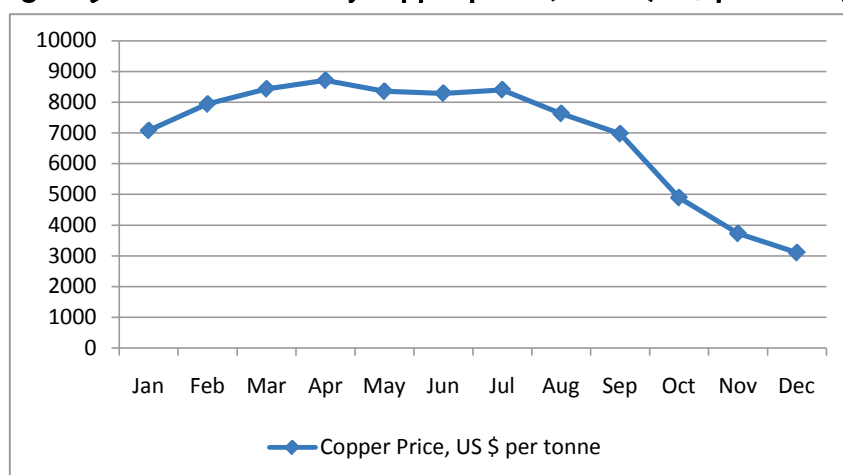
The main non-traditional products exported between 2006 and 2008 were copper wire, cane sugar, burley tobacco, cotton lint and fresh flowers. This is shown in Table 7 below.

Table 7: Distribution of NTEs, 2006-2008 (% of total)

Year	2006	2007	2008
Copper wire	23.1	23.6	17.6
Cane sugar	7.2	9	6.5
Burley tobacco	9.3	7.6	8
Cotton lint	8.2	4.5	3.8
Electrical cables	13.7	18.2	5.9
Fresh flowers	4.6	4.6	2.6
Cotton yarn	2.5	1.5	0.8
Fresh fruits and vegetables	3.3	3	2.9
Gemstones	2.4	3.5	3.5
Other	23.6	35.5	51.2
Total	100	100	100

Source: ZDA (2007; 2008; 2009).

The global financial crisis has led to reduced demand for Zambia's exports, as a result of a fall in global demand arising from the slowdown in global economic growth. This has led to a fall in prices of all the country's exports. The fall has been steepest in copper. The prices of other export products, like sugar, cotton and coffee, have also fallen, but at a much lower rate than those of copper and cobalt. This is illustrated in Table 8. This fall in copper prices has transmitted a major shock to the country, to which the economy has to adjust. Figure 9 shows the trend in monthly copper prices during 2008.

Figure 9: Trends in monthly copper prices, 2008 (US\$ per tonne)

Source: Constructed by authors from BoZ database (2008).

The impact of the crisis was therefore felt during the third and fourth quarters of 2008. In August 2008, the price of copper fell by 9%, from US\$8407 per tonne in July. This trend continued until it hit a price of \$3105 per tonne in December 2008. This price was the lowest during the year, although still higher than the average price of \$1814 per tonne that prevailed at the time that the mines were privatised in 2000. Table 8 shows the comparative price trends in selected exports in the export sector during 2008.

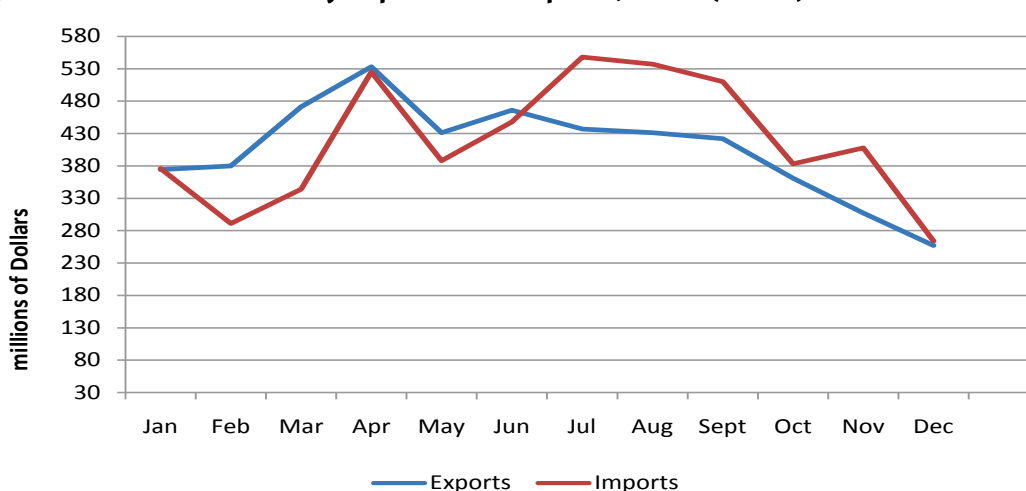
Table 8: Trends in comparative monthly export prices, 2008

Month	Cotton US cents/lb	Cobalt US\$/lb	Sugar US cents/lb	Terms of trade index Mar=100	Copper US\$/ tonne
Jan	73.2	41.46	32.7	68.1	7079.0
Feb	75.1	43.11	32.6	95.3	7941.1
Mar	80.2	44.95	33.2	100	8434.3
Apr	75.4	42.76	32.9	74.2	8714.2
May	74.1	39.09	32.6	81.1	8356.1
Jun	77.0	31.14	32.6	76	8292.0
Jul	77.3	19.24	33.0	58.3	8407.0
Aug	78.0	19.14	31.3	58.6	7633.8
Sep	73.6	39.46	29.8	60.4	6975.1
Oct	62.3	18.06	28.1	68.8	4894.9
Nov	55.1	25.7	25.5	55	3729.2
Dec	55.1	10.41	24.6	71.2	3105.1

Source: BoZ database (2008); IMF (2008).

A look at the fall in export prices shows that there is more price variability and a steeper fall in mineral exports, like copper and cobalt, than in agricultural exports, like sugar and cotton, during the year. This might have policy implications for the export diversification strategy in Zambia, in that diversifying the economy into agricultural exports introduces more stability in the export sector. It further creates opportunities for agro-processing industries to develop in the country.

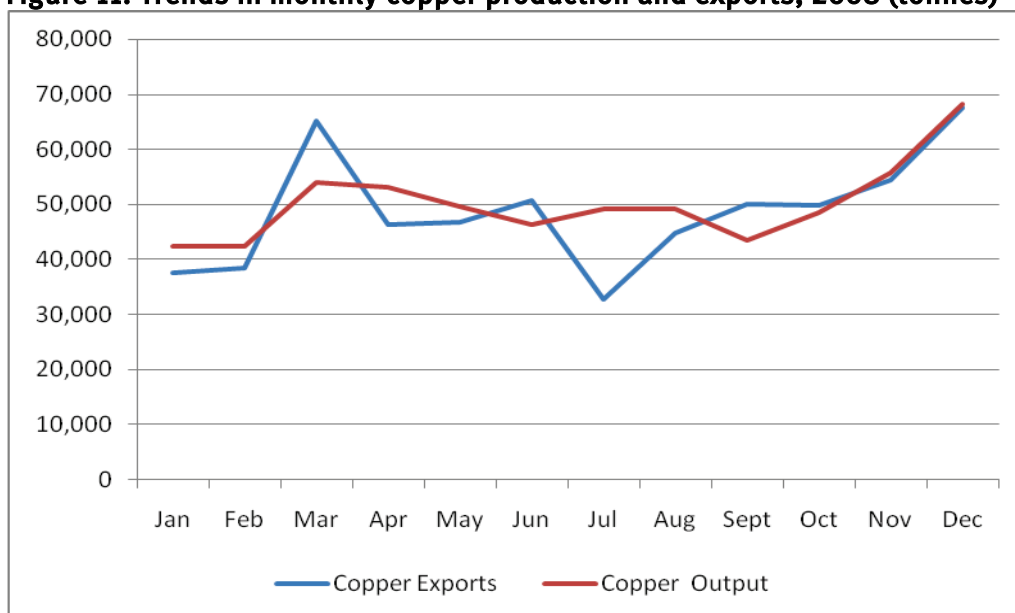
The fall in the copper price significantly reduced export earnings during 2008. Copper earnings fell by 3.6% in August 2008. These were estimated at US\$325 million. Exports continued to fall, and reached \$161 million in December 2008. This was 57% lower than the export earnings of May 2008, which were the highest during the year. Figure 10 shows the monthly trend of exports and imports in the year.

Figure 10: Trends in monthly exports and imports, 2008 (US\$m)

Source: Constructed by authors from BoZ database (2008).

Export earnings continued to fall despite efforts by mining companies to arrest this by maintaining production and reducing stocks. Few adjustments were made in production: mining companies focused the adjustment on cutting costs and reducing employment levels. Figure 11 shows the monthly production and export of copper in 2008.

Figure 11: Trends in monthly copper production and exports, 2008 (tonnes)

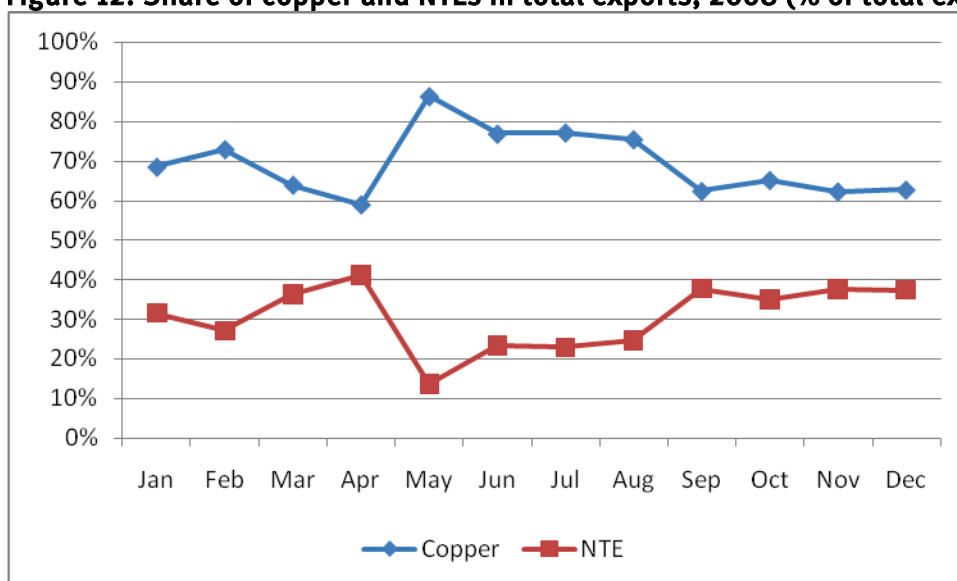


Source: Constructed by authors from BoZ database (2008).

Unfortunately, the fall in copper export earnings was fortified by the fall in the earnings of NTEs. The fall was not as severe as that of copper. During December 2008, NTEs were estimated at US\$96 million. However, on an annual basis, NTEs performed better in 2008 than in any other year between 2000 and 2007. They were estimated at on average \$497 million per annum. Figure 12 shows the trend in the shares of NTE products and copper in total exports during the year.

The increased NTEs in 2008 were driven by exports of cement and lime, wheat and mesulin, gas oil, burley tobacco, gemstones, fresh fruits and vegetables and processed food. However, products such as copper wire, electrical cables, cane sugar, fresh flowers, cotton lint and cotton yarn recorded reduced earnings. The main export destination for cement, lime, burley tobacco and processed foods is the regional market. The major markets are the Democratic Republic of the Congo, Malawi, Zimbabwe and South Africa. However, most of the high-value products, such as fresh flowers, cotton lint, sugar and fresh vegetables, are exported to European countries, such as the UK, Germany, Netherlands, Belgium, Finland and Switzerland.

Figure 12: Share of copper and NTEs in total exports, 2008 (% of total exports)



Source: Constructed by authors from CSO database (2008) and ZDA database (2008).

Thus, the impact of the global financial crisis was to reduce the price of copper and other export products significantly. This weakened the performance of the export sector and created a serious trade deficit during the year. The balance of trade was initially positive in the early part of the year, between January and June 2008. There was a negative balance of US\$111 million in July 2008. This was continued in the month of December, with a negative balance of \$7 million.

3.3 Remittances

Remittances can be a major source of external resources, financing domestic investment and fostering growth. They can also be an important tool for poverty reduction among households. There are very few data available on remittance flows in Zambia (Hougaard et al., 2008). The limited data that are available indicate that the flow of remittances increased steadily between 2003 and 2007. This has been fostered by the liberalisation of the economy, the rapid expansion of the use of information and communication technologies (ICTs) and the increasing number of Zambians who have sought work outside the country during the past decade. There is underreporting on remittances through formal channels, and a substantial amount of remittances go through informal channels, although BoZ is designing systems to capture and record the flows. The most notable amounts are remittance inflows in the form of workers' remittances, but these are not as significant as those of countries like Uganda, Senegal and Lesotho. The share of remittances in GDP in those countries in 2007 was estimated at 7.2%, 8.5% and 28.7%, respectively. The trend of remittances in Zambia is shown in Table 1. Remittances in 2003 were estimated at US\$36.3 million. These increased to \$59.3 million in 2007. This is 7.1% of FDI and 0.5% of GDP. Remittances are therefore less important than FDI and ODA as external resource transfers into the economy.

It is very difficult to discern the impact on remittances of the global financial crisis for the country because there are no high-frequency data available. However, one might speculate that the adverse change in the inflow of remittances by Zambians working abroad as a result of the global financial crisis is unlikely to have a significant impact on the economy. This is because migration out of Zambia is low. Most Zambians working abroad are skilled professionals, such as nurses and doctors, come from middle- and high-income groups and are in the middle ages of their careers (Hougaard et al., 2008). These are unlikely to be affected by the global financial crisis because they are in stable professions. However, there is a need for more information and data on remittances. The country also needs to invest in information-gathering tools and to introduce incentives to encourage people to remit through formal rather than informal channels.

3.4 Overseas development assistance

ODA has been an important external resource flow for the Zambian economy. For many years, it has been greater than both FDI and reported remittances. Most of it goes into budget support, projects and support to non-governmental organisations (NGOs). Its level obviously depends on political factors. In Zambia, most of it goes into health, education and poverty reduction activities. The government budget depends on 60% donor support. Table 1 shows the increasing trend of ODA between 2000 and 2007. It is important to be aware that estimates of ODA are very unreliable and will differ significantly depending on the source of information. Nevertheless, although the absolute levels might be in doubt, the trend is generally acceptable. The level of ODA support increased from a low of US\$349 million in 2001 to a high of \$1425 million in 2006. This is more than twice the level of FDI and 13.2% of GDP. The key donors are the UK, US, Denmark, Netherlands, Sweden and Norway.

ODA's position as a major external resource transfer into the economy, more than FDI and reported remittances, has not been changed by the global financial crisis. Zambia continued to receive ODA support during 2008, despite the crisis. This is likely to continue even during 2009. The country received all the ODA that had been pledged in 2008: donors have honoured their pledges in the FNDP, because they had already made their commitments and disbursement plans long before the crisis set

in. ODA disbursement plans are usually made on a long-term basis and in Zambia most ODA is already committed up to 2010. In some cases, there was a scaling-up of ODA in 2008. Any adverse changes are likely to be in 2010, if the crisis persists in 2009.

There have been some internal shifts in ODA support, from vertical projects to general budget support. Most ODA support is targeted at the health, education and governance sectors. This means that the social protection interventions in health and education are safe. Many local NGOs supported by donors are involved in health, education and poverty reduction activities. Some of these NGOs are supported by Northern NGOs, some of them by government budgets. The crisis is likely to affect resource flows to these NGOs from the Northern NGOs because of the crisis that their own countries face. However, there is no further evidence on this yet.

4. Growth and poverty

4.1 Growth

The global financial crisis has had an impact on growth. The economy performed well during the first and second quarters of 2008. It was in the third quarter, when the prices of copper came down, that we saw initial effects. The economy was slightly off target. The long-term objective in the FNDP was for the economy to grow at 7%. However, in the budgetary process, the Ministry of Finance and National Planning (MoFNP) used a growth rate of 6%, which was the actual growth rate in 2008. In terms of future growth, the government had to withdraw the medium-term expenditure framework (MTEF) for 2009-2011 in December 2008 in order to revise the projected growth rates. The original MTEF projected growth to be 7% in 2009 and 2010, but this was revised to 5% and 5.5%, respectively, in light of the worsening global financial crisis (MoFNP, 2009). The global financial crisis has therefore produced a slowdown in the growth rate.

The sectors that were significantly affected by the global financial crisis are mining, tourism and manufacturing and construction activities connected to the mining sector. The most severe impact was on the mines, where the fall in copper prices had an immediate consequence. This had effects on production and employment and generally on the profitability of the mines. Mine owners had to take actions that would maintain production and profitability. In this response, it is important to distinguish fundamentally between the old mines and new mines. The two have very different cost structures. The largest burden of adjustment is in the old mines. The new mines seem to be performing better and have actually continued to invest in the sector. It is also important to note that the current crisis in the mining sector came immediately after an earlier turmoil in the sector, caused by abrupt changes to the mining fiscal and regulatory regime (EAZ, 2008). This incident caused a loss of confidence in the sector among foreign investors and increased the level of distrust and suspicion of mining companies among the government and the public. Unfortunately, the current crisis has only exacerbated this distrust.

The major mines are Konkola Copper Mines, Mopani Copper Mines, Chambeshi Metals, First Quantum Minerals, Non-ferrous China – Africa, Chibuluma Mine and Lumwana Mine. There is some homogeneity in the response of the mining companies to the crisis. The mines have tried to reduce the cost of production. They have increased production, closed mining units, laid off workers, reduced the scope of work done by mining contractors and suspended contract labour and recruitment. In addition, mines have suspended overtime work, renegotiated supply contracts so as to reduce supplier prices, deferred payments to suppliers and contractors and deferred exploration and non-essential capital expenditures.

Mopani Copper Mines has tried to maintain production at a minimum of 12,000 tones of finished copper per month. It has reduced the scope of work for contractors by 40% and the use of contractors' labour by 30%, and has suspended hire contracts and recruitments. The mine expects to lay off 215 workers at Nkana and 467 workers at Mufulira during 2009. Konkola Copper Mines has reduced expatriate staff by 18%. It has laid off workers. Total job losses at Konkola Copper Mines in 2008 could be estimated at 6667 workers. Chambeshi Metals closed down Luanshya copper mines, with 1719 workers laid off. The Chambeshi smelter was closed, and 240 workers and 267 contract workers lost their jobs. First Quantum Minerals has renegotiated its supply contracts. It has deferred other non-essential exploration and capital expenditure programmes and has reduced working hours from 12 hours to eight hours per shift, with 70 workers laid off.²

On the other hand, new mines, like those of Lumwana and Chibuluma, seem not to have been significantly affected by the lower copper prices. This is mainly because their cost of production is low. Furthermore, Lumwana, for example, hedged 30% of its first three years of production. This gives it an

² These figures are from an interview survey of mining owners, suppliers, contractors and mine workers unions.

ability to survive lower copper prices. Financing arrangements have also helped. For example, Equinox has an equity-based cost overrun facility of US\$45 million in place at Lumwana mine. This could be used if the copper price collapses further.

The closure of Luanshya mine and Chambeshi Metals, and some mining units of Mopani Copper Mines and Konkola Copper Mines, as well as the reduction in the scope of work by contractors and the reduced revenues from almost all of the mines, has serious consequences for hundreds of firms that are contracted by the mining units to undertake certain activities and supply certain services in the mines, such as drilling, construction and business services. These firms had already experienced losses in the fourth quarter of 2008. Some workers have already been laid off. Contractors who are still engaged with the mines and need to import most of the raw materials have also recorded a drop in profitability because of the depreciation of the kwacha.

The tourism sector is another sector that felt the effects of the global financial crisis in 2008. Over 70% of tourists who come to Zambia are from Europe and the US. The main source countries in Europe are Germany, France and the UK. This makes the tourism sector in Zambia vulnerable to the global recession. During the third quarter of 2008, occupancy rates in hotels reduced by 50% in Livingstone and 25% in Lusaka.³ In response, operators in the tourism sector laid off workers and reduced working hours during the last quarter of 2008.

The obvious impact of the global financial crisis on the mining and tourism sector has been to reduce output and employment. This will ultimately affect the overall growth rate of the economy. However, the main driver of growth in the country is the mining sector. Therefore, any projections on future growth in Zambia in view of the global financial crisis will depend largely on the level of the copper price. Table 9 shows actual and predicted growth rates between 2007 and 2010. The uncertainty of the current global economic crisis makes it difficult to predict the growth rate in the next two years. We assume that the situation will be worse in 2009 and get better in 2010.

Table 9: Actual and projected growth rates, 2007-2010 (%)

Year	2007	2008	2009	2010
Projected growth**	7	7	5	5.5
Actual growth	6.2	6	4.5*	5*

Note: * Estimated; ** government projections.

Source: MoFNP (2008; 2009).

The IMF has predicted a growth rate of 4.2% in 2009 and 5.5% in 2010. However, if the copper price falls below US\$3000 per metric tonne in 2009 and in 2010, we can predict that the growth rate is likely to be at 4.5% in 2009 and 5% in 2010. The growth process is likely to be more constrained by energy bottlenecks, inefficient services sectors and infrastructure problems. This is a lower growth rate than expected, in both 2009 and 2010. This will generate less employment and will have less impact on efforts to reduce the incidence of poverty in Zambia.

4.2 Investment

There was no real serious impact of the global financial crisis on investment in 2008. This might be because of the lag effect. Major changes in investment are likely to reveal themselves only during 2009. They are likely to be small, especially if the copper price picks up. This is evident from the investment pledges, with all their limitations, made by end-2008. Sectors such as mining, energy and financial services have received major investment pledges. India and China have continued to invest in Zambia, with the most in the mining sector, despite the global economic crisis. It can therefore be postulated that, during the next three years, there is likely to be FDI of about US\$6 billion.

³ Interviews with various tourist operators and the Ministry of Tourism and Natural Resources.

4.3 Employment

It is estimated that in 2008 there were 30,000 mine workers in Zambia, out of whom 8100 have already been laid off.⁴ This represents a 27% reduction in mining labour. This is likely to be an underestimate of the true number of job losses in the mines, because the figure is mainly for miners who are members of the Mine Workers Union of Zambia (MUZ) and thus does not include workers employed by contractors and suppliers to the mines. Most mines employ only a few key staff and leave the other jobs, such as drilling and construction, to these contractors, who also have to lay off workers once their contracts are terminated or their scope of work is reduced. Workers in the support industries, like construction and other mining-related activities, are also affected. There is also a large informal sector on the copper belt, whose business activities depend on mine workers. Other sectors that have seen job losses are floriculture, horticulture and tourism.⁵ The situation may be worse in 2009 and 2010 if the crisis is prolonged and as the second-round effects spread to the rest of the country.

The impact on workers and their families is adverse, more so because there is no social protection system other than terminal benefits, to which laid-off workers are entitled. Terminal benefits are being hampered by the fact that most workers have borrowed from banks and non-bank financial institutions. On retrenchment, banks are allowed to deduct outstanding balances from terminal benefits. Most of the retrenches end up with no terminal benefits at all.

4.4 Poverty

Zambia had good growth during the period 2000-2007, achieving an average growth rate of 4.9% per annum. Despite the crisis, a growth rate of 6% was achieved in 2008. However, there has been an insignificant impact on reducing the overall poverty rate. The benefits of growth have been limited to urban areas, where there has been a decline in poverty. Poverty in rural areas is still very high, with 80% of people living below the poverty line. This is compared with the national average of 64%. There has been a huge increase in per capita incomes, but poverty reduced by only 7% between 2000 and 2007. The poverty situation is likely to be worse in rural areas in both 2009 and 2010, given anticipated reduced growth rates. Poverty elasticity of growth in Zambia is estimated at 20%. With growth rates of 5%, poverty can be reduced by only 2%. This is extremely low. The layoff of workers in the mining sector and associated firms without any form of social protection is likely to worsen the situation. As a coping mechanism, most of the laid-off workers tend to engage in informal sector activities such as street vending.

The mining sector can be an important sector for generating revenues to foster growth and poverty reduction. These revenues can finance social sectors such as education, health, infrastructure and social protection. Although Zambia experienced increased mining activities between 2000 and 2008, no significant increased government revenues flowed from the mining sector. On the whole, mining revenue has contributed little to government revenue, mainly because of generous incentives and accelerated depreciation allowances given to the mines during the negotiations for privatisation. However, with the high copper prices, the expiry of most of the accelerated depreciation allowances, the opening of new mines with different conditions and the new mining tax regime, introduced in 2008, it was expected that the contribution of mines to tax revenue would increase substantially. Mining taxes were expected to increase from 1.4% of GDP in 2007 to 4.6% of GDP in 2009 (Whitworth, 2008). This is still an insignificant contribution when compared with the contribution mines made to government revenue in the 1960s (between 40% and 60% of total tax revenue). This compares unfavourably with the 10% of total tax revenue that the mines contributed in 2008.

The global financial crisis has therefore come at a time when the mines are already contributing very little to government revenue. This situation was clearly reflected and confirmed during 2008 (see Table

⁴ Based on a survey of mining stakeholders such as the Chamber of Mines and after triangulation with the MUZ.

⁵ It is not easy to capture the job losses in the tourism and other sectors without a full survey.

10). The sector contributed K1005 billion to total tax revenue in 2008. This was only 10% of total tax revenue and 1.8% of GDP. It is interesting to note that the mines contributed about the same amount of tax revenue in the first quarter of 2008 and in the fourth quarter of 2008 after the crisis. This is about K150 billion and about 7% of total tax revenue.

Table 10: Distribution of mining sector tax revenues, 2008 (K billions)

	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	2008
Total tax revenue	2113.6	2402	2667.3	2495.2	9678.1
Mining company tax	116.1	154.6	146.8	24.2	441.7 (4.6)*
Windfall tax	-	-	118.3	7.7	126.0
Mineral royalty	18.2	85.7	95.8	59.3	259.1 (2.7)
Export duty on copper concentrates	19.1	23.1	70.8	64.9	178.1 (1.8)
Total mines contribution	153.4 (7.3)*	263.4 (11.0)	431.7 (16.2)	156.1 (6.3)	1004.9 (10.4)

Note: * As a % of total revenue.

Source: ZRA database (2008).

This loss of potential revenue from the mines as a result of the crisis reduces the government's fiscal space to finance social sector expenditure programmes such as education, health and infrastructure for poverty reduction. This will adversely affect Zambia's ability to achieve its own development objectives stipulated in the FNDP, and to meet the MDGs by 2015.

4.5 Debt

There has been no major impact of the global financial crisis on either external or domestic debt. The government policy to borrow on concessional terms will protect the debt from the previous explosion. However, domestic debt was affected by the rise in interest rates. Total external debt stock increased by 8.6%, from US\$2086.9 million in 2007 to \$2267.2 million in 2008 (MoFNP Economic Report, 2009). There was a 2.5% increment in the domestic debt by the government from the 2007 level. The global financial crisis did, however, affect debt repayments, given the kwacha's depreciation.

5. Policy response

The expectation among policymakers is that the crisis will last for two to three years. Most believe that the situation for Zambia will be much worse in 2009 as compared with 2008. What we have in 2008 are first-round effects, affecting mainly the export sector. In 2009, the crisis will spread to other sectors. However, it is thought that the severity of the crisis will lessen during 2010. There is an expectation that the price of copper will not fall below US\$3000 per tonne. This is a comfortable price for both the new and old mines. With this kind of expectation, what has been the policy response of the government?

5.1 Actual

The government has not responded urgently and definitively. It has responded to the immediate issues arising, especially those emanating from the mining sector, in a very defensive way, for example urging mining companies not to lay off workers and not to close down loss-making mining units. Stakeholders and the private sector held a workshop⁶ in early January 2009 where they offered policy responses and urged a coordinated response. Government failed to embrace most of these suggestions. The only discernible government response has been in terms of fiscal policy, monetary policy and exchange rate policy. Government has not taken any identifiable austerity measures to address the crisis. There is a feeling from policymakers that the economic crisis will just wither away. On the other hand, the private sector and civil society have failed to urge government to move in with austerity measures to address the crisis. It looks like 'business as usual' for the government, stakeholders and the private sector.

The government has pursued a prudent expansionary fiscal policy, intended to stimulate the economy. It intends to spend 25.4% of GDP in 2009, compared with 24.8% of GDP in 2008. The 2009 budget will be financed 70% from domestic revenues, 18% from donors and 12% from domestic borrowing. To support this expansionary budget and meet the shortfall from domestic revenues, government will increase domestic borrowing from 1.3% to 1.8% of GDP. Government will spend on areas constraining growth. This will be done while safeguarding spending in social sectors. Spending is therefore targeted at the private sector, infrastructure, health, education and social protection. Meanwhile, the government aims to pursue a prudent monetary policy that lowers inflation. The government hopes to achieve a lower inflation rate of 10% despite the crisis. The actual inflation rate in 2008 was 12.5%.

The government has maintained a flexible and market-determined exchange rate as a policy that is critical in responding to the crisis and as a means of building a dynamic economy (Musokotwane, 2009). This is despite intense political pressure to review this policy. Changes in the exchange rate are seen as an adjustment mechanism to respond to the external shock. However, BoZ has tried to reduce the volatility in the exchange rate by increasing the supply of foreign exchange to the market. During the fourth quarter of 2008, BoZ made net sales of US\$127.5 million to the inter-bank market in an effort to dampen the rate. This has tended to deplete foreign exchange reserves. Thus, gross international reserves at BoZ dropped by 23% between July and December 2008. These were estimated at \$1435.9 million in July 2008. They fell to \$1109 million in December 2008 (BoZ, 2009). If the crisis persists and BoZ continues to pursue this policy, reserves are likely to be depleted.

In addition to these macroeconomic policies, the government offered several concessions to the mining sector to reduce cost of production and increase profitability. This would give the mining companies space to adjust to the economic crisis. The government abolished the windfall tax and increased capital allowance to 100% as an investment incentive. However, these incentives are effective only from 1 April 2009. Furthermore, customs duty on heavy fuel oil reduced from 30% to 15%; tariffs on copper powder, copper flakes and copper blisters were removed. Copper and cobalt concentrates were included on the value added tax import deferment scheme.

⁶ The meeting was held under the auspices of the Economics Association of Zambia (EAZ). The recommendations were to feed into the 2009 budget and policymaking.

5.2 Potential/options

The duration and resolution of the crisis will ultimately depend on the effectiveness of the measures that advanced countries are taking to address the crisis. There is, of course, considerable uncertainty about the outlook. The impact could be significantly worse than most observers have postulated, in the case of further distress and further reduced growth in the advanced industrial countries. The prospect for Zambia, as a commodity exporter, depends significantly on the price of copper. If the price of copper does not fall below US\$3000 per tonne, the economy is likely to weather the crisis, provided it pursues optimal policy responses and the crisis is over by 2011. There is no evidence that policymakers in Zambia are pursuing this line of action. Under this scenario, we expect the growth rate in 2009 to be 4.5% and 5% in 2010. This is contingent on the country pursuing optimal macroeconomic policies supported by significant growth-enhancing structural and austerity programmes.

5.1.1 Fiscal policy

To address the crisis and maintain macroeconomic stability, Zambia should pursue a limited expansionary policy that restricts the budget deficit to no more than 3% of GDP in the long run. The expansionary stimuli should be targeted at investments in infrastructure and investments in health and education. Loss of revenue from the mines should not impact the budget adversely. The government can raise significant revenues from saving on the use of resources in government and implementing significant austerity measures. The fiscal stimuli should not raise the budget deficit permanently. Government domestic borrowing should continue to be limited at levels of 1.5-2% of GDP.

5.1.2 Monetary policy

Government should continue to pursue prudent and tight monetary policy with the aim of reducing the inflation rate at below 10%. This policy is optimal to prevent inflation pressures in the economy: the inflation rate had already accelerated to 16.6% in 2008 as a result of pressures from food and oil prices and, later in the year, the exchange rate. However, this should not be done with the cost of further slowing growth. There are those who have argued for a loose monetary policy. This would not be optimal for Zambia, especially when there is rampant waste and unproductive expenditure in government.

5.1.3 Exchange rate policy

The government should continue the flexible market-determined exchange rate policy with intermittent interventions by BoZ to smooth volatility. This should be done with full regard for the exhaustion of foreign exchange reserves. Such a policy is crucial for the diversification of the economy. The foreign exchange market in Zambia is volatile mainly because it is small and has a single product export base. Therefore, the problem of volatility can be resolved only by structural policies, such as diversification of the economy.

5.1.4 Growth-enhancing structural policies

The government should support the macroeconomic policies necessary to help resolve the crisis by ensuring that the macroeconomic situation is robust and stable. So that resources move efficiently to growth-constraining economic and social sectors, government needs to pursue growth-enhancing structural reforms and austerity measures that save on public resources and remove waste from the management of public resources. Reforms and measures that could ensure optimal results include diversification, governance reforms in the mining sector, social protection, investment climate reforms, public sector reforms and several austerity measures. The crisis is offering an opportunity for Zambia to make such structural reforms that will in the long run improve the country's management.

Diversification of the economy

One such measure is to make reforms and take actions that enhance the policy of diversification of the economy away from its almost total dependence on copper as the only export commodity. Zambia's prospects of generating sustainable growth and eradicating poverty depend principally on how it

resolves this issue. The major bottlenecks are the lack of an agriculture policy that meaningfully diversifies the economy and poor infrastructure in rural areas. One possible policy response from advanced industrial economies comes to mind here. Efforts should be made to ensure that a percentage of the fiscal stimuli packages of the advanced countries be targeted at support for Aid for Trade programmes in developing countries. These should be restricted to investment in infrastructure projects in developing countries.

Business climate

The country should move strongly to implement measures that improve the business climate, reduce the cost of doing business and improve service delivery. Stakeholders have identified the necessary measures. What is needed is for government to implement these measures.⁷

Governance reforms in the mining sector

Mining is obviously still a very important sector in generating resources for the development of the country. The resources generated for government are still very low compared with in the 1960s. More so than for any other sector in the country, there is a great deal of distrust, between the mining companies and labour on the one hand and the mine owners and society on the other. This distrust transcends the usual labour–capital conflict. The turmoil early in 2008 that ensued from the unilateral and abrupt changes to the mining fiscal and regulatory regime and the layoffs resulting from the global crisis has only worsened this. Such a strategic sector needs to ensure trust and information flows on what is happening in the sector. Government needs to reform and define how this sector should operate. The policy decision here would be to accelerate the operationalisation of the Extractive Industries Transparency Initiative (EITI), which the government has already agreed to in principle (EAZ, 2009). This will ensure that both government and society have information on what is happening in the sector.

Public sector reforms

The Zambian public service has been going through reforms for over a decade. However, whatever gains were achieved earlier have now been reversed. The public service is inefficient and has lost a great deal of its original professionalism. It also suffers from major limitations in implementation capacity. There is therefore a need to review the structure, the appointments system and human resource training in the public service.

Social protection

One of the lessons learned from the impact of the global economic crisis is the critical need for a social protection scheme for mine workers. There are social protection schemes currently running, but most of these address social protection issues through pension and cash transfer schemes in rural areas. Obviously, it would be very costly for government to fund and manage a national social protection scheme. However, given the fragility of the mining sector in terms of external shocks, government might wish to encourage the mining sector to develop a social protection scheme for the miners. This could be in the form of a sinking fund that the mining companies can contribute to in good times and the mine workers can access in times of recession.

Austerity measures

The government has not taken any austerity measures to try and save on resources in government. The government needs to introduce cost-saving measures in the public sector to cut wastage of public resources. The savings are potentially enough to cover the loss of tax revenue from the mines and increased domestic borrowing that government expects to incur in the 2009 budget. Credibility of government with regard to addressing the issues arising from the crisis and the lack of social protection depends on how it deals with the issue of waste in the use of public resources.

Some of these measures include cutting the size and structure of the government and making it relevant to the country's economic and development needs. One way to move on this is to appoint a technical committee to advise on the optimal number of ministries for the country's level of

⁷ The EAZ workshop and the Private Sector Development Programme (PSDP) urged for the implementation of these measures.

development. This could then be legislated in Parliament. There can also be savings in the use of the government fleet, both in its management and its disposal. Most importantly, there is a need for an institution that can continuously monitor the use and effectiveness of government operations, so as to continuously remove waste in the management of public resources (EAZ, 2009).

6. Conclusion

The Zambian economy grew at an average of 5% during the period 2000-2008, after decades of negative growth and declining per capita incomes. The positive growth and the accompanying macroeconomic stability gave the country an opportunity to push for sustainable growth and start addressing the issue of poverty. The global financial crisis has threatened to reverse these gains. The major global resource transfer mechanisms are private capital flows, ODA, remittances and trade. The most important resource transfer mechanisms in Zambia are FDI, ODA and trade. Remittances and private portfolio flows are insignificant but growing in importance.

The impact of the global financial crisis is mainly through trade. The impact has been severe, because the export sector in Zambia is dominated by the export of one product: copper. This contributes about 70% of total export earnings. With the fall in copper prices as a result of the global financial crisis, the impact in the mining sector has been large.

The immediate impact was reduced copper earnings. This adversely affected the profitability of the mines. Export earnings declined by 11% in 2008 from the previous year. Consequently, the balance of trade was reduced from US\$610 million in 2007 to \$29 million in 2008. Furthermore, mining units were closed and workers laid off. It is estimated that 8100 workers were laid off from the mines in 2008. Workers have also been laid off in other sectors, such as tourism, floriculture and horticulture.

In the financial sector, the reduced inflow of foreign exchange led to the depreciation of the kwacha by 50% against the US dollar in 2008. This was aggravated by the increased net outflow of portfolio investment. The depreciation of the kwacha and the rising food prices fuelled inflation, which surged from 9% in January to 16.6% in December 2008. FDI and ODA have not been greatly affected.

The global financial crisis has had an adverse effect on the growth rate of the economy. The government had projected growth rates of 7% for 2009 and 2010. These have been adjusted to 5% for 2009 and 5.5% for 2010 because of the global financial crisis. We have predicted that, if the copper price does not fall below US\$3000 per tonne, the economy will grow at 4.5% in 2009 and 5% in 2010. These reduced growth rates will obviously have an adverse impact on the growth process and poverty reduction.

The government has not shown any urgency in responding to the crisis. The government should continue to use fiscal, monetary and exchange rate policy in response to the crisis. A robust macroeconomic environment is crucial to the successful implementation of adjustment policies. However, for these policies to be effective, they must be accompanied by growth-enhancing structural reforms and measures. These measures will include the diversification of the economy, improving on the business climate and reducing the cost of doing business. Other measures include the implementation of governance reforms in the mining sector, social protection and a package of austerity measures that improve efficiency and remove waste in the management of the public sector.

References

- African Development Bank and Organisation for Economic Co-operation and Development (2008) *African Economic Outlook for 2007/8*. Paris, France: OECD.
- Ajayi, S.I. (ed.) (2007) *Foreign Direct Investment in Sub-Saharan Africa: Determinants, Origins, Targets, Impact and Potential*. Nairobi, Kenya: AERC.
- Bank of Zambia (2006) 'Annual Report'. Lusaka, Zambia: BoZ.
- Bank of Zambia (2008) 'Annual Report'. Lusaka, Zambia: BoZ.
- Bank of Zambia (2009a) 'The Emergence of the Global Economic Crisis and its Impact to Social Economic Development in Zambia'. Paper presented at the ZCTU Top Leadership Workshop, Livingstone, Zambia. 3 March.
- Bank of Zambia (2009b) 'Statement of the Monetary Policy January 2009 – June 2009'. Lusaka, Zambia: BoZ.
- Bank of Zambia, Central Statistical Office and Zambia Development Agency (2008) *Zambia's Foreign Private Capital Flows and Investor Perception Report*. Lusaka, Zambia: BoZ, CSO and ZDA.
- Central Statistical Office (2007) *Living Conditions Monitoring Survey 2006*. Lusaka, Zambia: Government of the Republic of Zambia.
- Central Statistical Office (2009) 'Monthly'. Various issues.
- Economics Association of Zambia (2009) *Business Unusual*. Lusaka, Zambia: EAZ.
- Fundanga, C.M. (2008) 'Policy Implications for Zambia of the Global Economic Crisis'. Paper presented to the EAZ Forum, Lusaka, Zambia. 13 January.
- Hougaard C., H. Bester and D. Chamberlain (2008) 'The Landscape of Remittances in Zambia'. Report prepared for Finmark Trust Zambia.
- International Labour Organization (2008) *Zambia, Social Protection Expenditure and Performance Review and Social Budget*. Geneva, Switzerland: ILO.
- International Monetary Fund (2008) *Regional Economic Outlook Sub-Saharan Africa*. Washington, DC: IMF.
- Mbulu, R. (2009) 'The Impact of the Global Financial Crisis on the Mining Sector in Zambia – Implications and Recommendations to Weather the Storm'. Paper presented to Caritas Members of Parliament Workshop, Lusaka, Zambia. 30 March.
- Ministry of Commerce Trade and Industry (2005) *Zambia Diagnostic Trade Integrated Study*. Lusaka, Zambia: MCTI.
- Ministry of Finance and National Planning (2006) *Fifth National Development Plan, 2006-2010*. Lusaka, Zambia: Government of the Republic of Zambia.
- Ministry of Finance and National Planning (2008) *Medium-term Expenditure Framework, 2009-2011*. Lusaka, Zambia: Government of the Republic of Zambia.
- Ministry of Finance and National Planning (2009) *2009 Budget Address*. Lusaka, Zambia: Government of the Republic of Zambia.
- Ministry of Finance and National Planning (various) *Economic Report* (various issues).
- Musokotwane, S. (2009) 'Recent Developments in the Foreign Exchange Market'. Ministerial Statement, National Assembly, Lusaka, Zambia. 25 February.
- te Velde, D.W. (2008) *The Global Financial Crisis and Developing Countries*. Background Note. London, UK: ODI.
- Whitworth, A. (2008) 'Zambian Fiscal Performance, 2002-2007'. Draft.
- Zambia Development Agency (2007) 'Exporter Audit for 2006'. Lusaka, Zambia: ZDA.
- Zambia Development Agency (2008a) 'Exporter Audit for 2007'. Lusaka, Zambia: ZDA.
- Zambia Development Agency, (2008b) 'Investment Pledges Memo'. Lusaka, Zambia: ZDA.
- Zambia Development Agency (2009) 'Exporter Audit for 2008'. Lusaka, Zambia: ZDA.

Annex 1: Statistical tables

Statistics are based on official data from CSO, BoZ and MoFNP used for policy analysis. Where data are in conflict with other sources, discretion has been used to choose the most consistent data.

Table A1.1: Main economic indicators, 2000-2008

Sector	2000	2001	2002	2003	2004	2005	2006	2007	2008**
Real GDP growth rate (%)	3.5	4.9	3.3	5.1	5.4	5.2	6.2	5.4	6
GDP per capita (US\$)	314.5	346.7	349.6	389	490.8	654.9	917.4	917.6	1181.2
Composition of GDP (%)									
Agriculture	17.2	16.0	15.2	15.2	15.0	14.2	13.7	12.9	12.2
Mining	6.4	7.0	7.9	7.7	8.4	8.6	8.7	8.5	8.4
Manufacturing	10.5	10.4	10.7	10.9	10.9	10.6	10.6	10.2	10.1
Services	59.8	60.2	60.9	61.5	61.7	62.9	63.9	65.5	66.3
GDP market prices (US\$)	3239	3640	3776	4318	5448	7269	10817	11121	14,795.3
Inflation (%)	30.1	18.8	26.7	17.2	17.5	15.9	8.2	8.9	12.5
Exchange rate (K/US\$)	3111	3608	4307	4743	4772	4464	3578	4003	3753.5
Weighted base lending rate (%)	46.7	45.9	43.1	40.4	29.8	28.1	23.1	18.1	19.05
Fiscal deficit (% of GDP)	-2.1	-2.39	-4.1	-5.1	-2.9	-0.9	4.3	-2.1	-2.6
Gross capital formation (% of GDP)	16	17.6	20.7	24.3	28.4	23.2	24.5	21.8	23.0
Gross domestic saving (% of GDP)	17.3	17.7	18.7	18.2	17	23.3	25.4	23.3	25.0
Current account deficit (% of GDP)	-18.	-20.8	-17.3	-14.8	-11.4	-9.10	1.10	-2.40	-9.10
Gross international reserves (US\$m)	268.34	116.50	464.8	272.2	269.5	425.7	438.95	1080.2	1109

Notes: * 1994 = 100; ** Preliminary.

Source: MoFNP (2008).

Table A1.2: Turnover of foreign portfolio investors on the LUSE, 2008 (US\$m)

Month	Total turnover	Inflows	Outflows
Jan	1.94	1.62	0.32
Feb	5.79	0.50	5.29
Mar	2.87	1.91	0.96
Apr	6.96	5.32	1.64
May	3.62	2.50	1.12
Jun	26.89	16.69	10.20
Jul	49.93	21.92	28.01
Aug	7.04	4.16	2.88
Sep	4.93	2.48	2.45
Oct	5.77	1.01	4.76
Nov	1.81	0.12	1.69
Dec	4.72	0.08	4.64

Source: LUSE database (2008).

Table A1.3: Trade trends in the export sector, 2008 (US\$m)

Month	Total	Copper	NTE	Total	Copper	Copper
	Exports	Exports		Imports	Exports (tonnes)	Output (tonnes)
Jan	374	256	118	376	37,356	42,369
Feb	380	277	103	291	38,371	42,450
Mar	471	301	171	344	65,042	54,103
Apr	533	314	219	525	46,125	53,142
May	431	372	59	388	46,717	49,569
Jun	466	358	109	448	50,638	46,424
Jul	437	337	100	548	32,625	49,175
Aug	431	325	106	537	44,676	49,089
Sep	422	263	159	510	49,983	43,470
Oct	361	235	126	383	49,629	48,477
Nov	307	191	115	408	54,393	55,795
Dec	257	161	96	264	67,496	68,275
Total	4870	3390	1480	5,022	583,051	602,338

Source: BoZ and CSO database (2009).

Annex 2: Social protection and the global economic crisis

Manenga Ndulo and Abson Chompolola

Introduction

This appendix looks at social protection in Zambia. It provides a rapid initial picture of the current situation in the country. There is an attempt to discern any changes or shifts in social protection as a result of the current global economic crisis. We briefly look at the incidence of poverty and the employment situation in Zambia because this is the bedrock of any social protection activities. In Sections 3 and 4 we look at the current social protection policy and give an overview of the current major social protection activities. We look at the budgetary allocations to the social sector in Section 5 and ODA support in Section 6. We conclude in Section 7.

The poverty and employment situation in Zambia

Zambia suffers from a high incidence of poverty. According to the Living Conditions Monitoring Survey (CSO, 2007) for 2006, 51% of the population in 2006 was living in extreme poverty. If you include the moderately poor, the percentage of poor people increases to 65%. That is, more than half the population can meet neither their minimum food requirements nor other basic requirements, like healthcare, shelter and education. Table A2.1 shows the spread of this poverty. The incidence of poverty is higher in rural areas than in urban areas. In 2006, poverty was twice as high in rural areas than the urban areas. This is an incidence of 34% and 80%, respectively. This is of major policy concern, because 65% of the country's population lives in rural areas. Furthermore, poor infrastructure makes the targeting of beneficiaries and the delivery of social protection activities very limited and costly.

The positive growth that the country has enjoyed in the recent past has only managed to reduce the poverty rate marginally, from 70% in 1991 to 64% in 2006. Even in this case, there was more impact on urban poverty than rural poverty. Between 2004 and 2006, urban poverty was reduced by 19%, whereas rural poverty increased by 2%. The poverty situation is exacerbated by the high income inequalities that exist in the country, more pronounced in rural areas than urban areas. The Gini coefficient is estimated at 0.66 for urban areas and 0.54 for rural areas (CSO, 2007).

Table A2.1: Trends in incidence of poverty, 1991-2006 (%)

Year	1991	1996	2004	2006
Rural poverty	88	82	78	80
Urban poverty	49	45	53	34
Total poverty	70	69	68	64

Source: CSO (2007).

The size of the labour force has remained relatively constant in the recent past (CSO, 2007). This constituted 64% of the population in 2006. Table A2.2 shows the labour force and formal sector employment in 2004 and 2006. The major employer is agriculture, employing 71% of workers in 2006. The services sector was second. Its share was 23% of total formal employment. The lowest shares in employment are in manufacturing and mining: 4% and 2% of formal sector employment, respectively.

Table A2.2: Labour force and employment, 2004 and 2006

Year	2004	2006
Labour force	4,919,000	4,902,000
Formal employment	751,376	771,780
Formal sector ratio	15.27	15.74
Unemployment rate	16.0	14.0

Source: CSO (2007).

The number of people employed in the recent past increased because of the major investments in the mining sector after the privatisation of the mines. This increased marginally, by 2.7%, between 2004 and 2006. One of the immediate impacts of the global economic crisis is to threaten this marginal increase. Because there is a large informal sector that is a major absorber of shocks from formal sector employment, it would be interesting to look at the formal sector ratio. This is the percentage of workers employed in the formal sector. This seems stable, at 15.3% and 15.7% in 2004 and 2006, respectively. Comparatively, the unemployment rate decreased from 16% to 14% between 2004 and 2006. Unemployment is higher in urban areas than in rural areas. In 2006, this was estimated at 35% and 5% for urban and rural areas, respectively. Furthermore, female unemployment, at 41%, was higher than male unemployment, estimated at 25%. The rate of unemployment and the size and dynamism of the informal sector has implications for any social protection strategy.

Social protection policy

Some elements of social protection in Zambia predate independence, in the form of the Public Social Welfare Scheme, started at the end of the World War II and inherited at independence. This was administered as a welfare scheme, mainly for the elderly and destitute. The focus on social protection for the poor and vulnerable started during the poverty reduction strategy (PRS) process and was accepted as government policy in 2005 with the FNDP.

The need for social protection in Zambia is clear. There is extreme poverty and a high level of vulnerability in the country, with 64% of the population poor. High vulnerability has been induced by three main factors. The high prevalence of HIV/AIDS is currently predicted at 15.8%. There have been failures in agricultural production, on which most people depend for a livelihood (about 65% of the people live in rural areas and are engaged in agriculture). This is compounded by recurring droughts and floods, which in some cases have created havoc for entire farming communities. Then there are macroeconomic shocks. These were very evident in earlier decades, but have been reduced by improved macroeconomic performance in the recent past. High levels of unemployment and the failure of government to provide the necessary social services to the population evidence macroeconomic shocks. In this situation, the global economic crisis, by leading to reduced GDP growth, increased unemployment and reduced government revenue, will lead to increased risks and vulnerability for the poor population.

The government has identified social protection as a major component in programmes on poverty reduction, economic growth and equity (MoFNP, 2006a). Consequently, the Social Protection Strategy was formulated in 2005 (MCDSW, 2005). This has now supported and reinforced the existing number of social protection interventions that already exist.

The overall goal of social protection in Zambia is to protect and promote the livelihoods and the welfare of the critically poor and people with the greatest vulnerability to risks and shocks (MCDSW, 2005). Social protection programmes are therefore targeted at groups exposed to risks and shocks. The programmes and measures are wide ranging. The government, NGOs, donors and communities themselves implement these programmes.

In spite of the global financial crisis, the government is still committed to rolling-out of the Social Protection Strategy. However, spending on social protection in the 2009 budget has been reduced. In any case, most of the spending in the budget has been directed to clearing arrears owed by the government to the contributory social protection schemes.

Overview of the social protection programmes

There are five major social protection programmes operating in the country. There are also small ones run by NGOs and local communities. However, the main ones in terms of impact and coverage are the Public Welfare Assistance Scheme (PWAS), the Social Cash Transfer Scheme (SCTS), the Food Security Pack (FSP), the School Feeding Programme and the Urban Self-help Programme. Table A2.3 shows the estimated number of beneficiaries in these schemes and programmes in 2006.

Table A2.3: Beneficiaries of main social protection schemes, 2006

Scheme	Beneficiaries	
	2005	2006
PWAS	107,415	166,559
SCTS	39,500	64,700
FSP	40,000	34,942
School Feeding Programme	19,520	173,980

Source: ILO (2008).

The PWAS covers the whole country and has over 100,000 beneficiaries. The scheme predates independence. The beneficiaries get support for better nutrition and health, income support, child protection, education and occupational training. The main funding comes from the government.

The SCTS is concentrated in Eastern and Southern Provinces. It is still a pilot scheme, to be extended to the rest of the country. It is estimated that the scheme pays cash benefits to about 7000 households (34,942 persons) in the project areas. Currently, mainly donors fund this scheme. There are plans to integrate the SCTS with the PWAS during scale-up.

The FSP provides agricultural inputs and training to poor and vulnerable small-scale farmers in rural areas. Currently, about 45,000 small-scale farmers benefit from the scheme each year. The government funds the scheme.

The World Food Programme (WFP) funds the School Feeding Programme. It provides school meals and take-home rations to schoolchildren from poor and vulnerable households. In 2006, more than 170,000 children benefited from the scheme.

The last major programme, in terms of impact and coverage, is the Urban Self-help Programme. This is an urban-based project concentrated in peri-urban areas. The scheme provides employment through public works programmes, such as those on roads and drainage. It can provide short-term employment to up to 50,000 people.

These schemes are important, and many poor and vulnerable people benefit from them. However, given the magnitude of the incidence of poverty in the country, the schemes are insufficient and fail to cover most of the poor and vulnerable people. The main problems are poor targeting and low benefits, but this is mainly because of a lack of resources. Government currently spends about 0.2% of GDP and 1% of total government expenditure on these schemes (ILO, 2008). Other than the PWAS and the FSP, donors support most of the schemes. However, government has indicated in the FNDP that it will scale up the SCTS as its major social protection strategy.

There are no dedicated specialised social protection programmes for such vulnerable people as street children, disabled persons and persons living with HIV/AIDS. However, the major challenge of the

schemes is funding. With the current prospects of reduced growth, and consequently government budgetary resources, the schemes are likely to face dwindling budgetary allocations.

Budgetary allocations and actual disbursements to the social sector

The economy has continuously experienced positive growth rates since 2000. The GDP real growth rate has averaged over 5% per annum. This owes to high copper prices, increased mining investments and the macroeconomic stability that the economy has achieved. However, because of the global economic crisis, projections are that the real growth rate will be reduced to 4.5% in 2009 and 5% in 2000. This is if copper prices do not fall below US\$3000 per metric tonne. This is likely to have an adverse impact on the Social Protection Strategy that the country was planning to scale up.

Table A2.4 shows total government expenditure and growth rates during 2005-2008. During the past few years, the government has not substantially increased government expenditure. It has, however, tried to reduce government expenditure during 2009. The 2009 budget estimate is put at K15,279 billion. This is 24.2% of GDP, about 2% less than the average for the period 2005-2008, which was 26.6%.

The major problem for government is the lack of capacity to spend the budgeted amount. The average actual government expenditure for 2005-2008 is 24.3%. It is interesting to note that, for all the years under consideration, actual expenditure has been slightly lower than the allocated expenditure in the budget. This has major implications for the implementation of government programmes, such as those in social protection.

Table A2.4: Government budget and GDP growth, 2005-2009

Year	Government expenditure (K'b)		Real GDP growth (%)	
	Estimate	Actual	Estimate	Actual
2005	9779.02 (30.1)**	8845.7 (27.3)	6.0	5.2
2006	10,236.8 (26.1)	8618.1 (22.0)	6.0	6.2
2007	12,042.4 (25.5)	10,720.1 (23.6)	7.0	6.2
2008	13,761.4 (24.8)	13,402.6 (24.2)	7.0	6.1
2009	15,279.0 (24.2)	15,279.0*	5.0	4.5*

Notes: * Projected actual; ** as a percentage of GDP.

Source: MoFNP (2007a; 2008a; 2009a; 2009b).

Table A2.5 shows government expenditure in the social sectors. This includes health, education and social protection. Spending on health and education should be a major aspect of the budget and is intrinsic to social development. It increases the capacity of households to handle risks and reduce vulnerability. Increased health and education expenditures will fortify the Social Protection Strategy in the country. The budgetary allocations to the social sector nearly doubled between 2005 and 2009. They increased from 16% of total expenditure in 2005 to 31% of total expenditure in 2008. The actual expenditures on social sectors also increased, from 5.4% of GDP and 19.9% of total expenditure in 2005 to 7.7% of GDP and 31.7% of total expenditure, respectively. The distribution of government expenditure is shown in Table A2.5. Generally, disbursements have fallen short of planned expenditures, except in 2005, when health expenditure and expenditure on social protection were above targeted levels. Disbursements to social protection were twice the planned expenditure partly because of increased expenditure on disaster relief following the partial drought in the previous farming season. Given this scenario, it is envisaged that actual disbursements to the social sector will

still fall below the planned expenditure unless the government and donors stick to their commitments, given the current economic crisis and the consequent demand for social protection.

Table A2.5 shows that the total amount of resources from both government and donors totalled K4243.2 billion in 2008. About 26% of this went to health, 50.6% to education and 13.9% went to social protection.

Table A2.5: Distribution of government expenditure to the social sector (K billions)

	Health	Education	Social protection	Total social sector
2005	480.0 (5.4)*	1062.6 (12.0)	220.4 (2.5)	1763.0 (19.9)
2006	603.1 (7.0)	1269.6 (14.7)	170.0 (2.0)	2042.7 (23.7)
2007	802.0 (7.5)	1752.0 (16.3)	296.3 (2.8)	3220.7 (30.0)
2008	1098.9 (8.2)	2146.1 (16.0)	588.1 (4.4)	4243.2 (31.7)
2009**	1823.4 (11.9)	2628.0 (17.2)	374.2 (2.4)	4825.6 (31.6)

Notes: * Percentage of total expenditure; ** figures for 2009 represent proposed and not actual expenditure.

Source: MoFNP (2006b; 2007a; 2008a; 2009a; 2009b).

The 13.9% share of social protection in total social sector resources in the budget is deceptive because the bulk of the expenditure on social protection goes to the public service pension fund, which runs a contributory social protection scheme for public service workers. Social protection expenditure allocations to the public pension fund remained consistently above 70% of total allocations to social protection and have been increasing since 2005. The 2009 budget allocated 80.8% of social protection funds to the public service pension fund. This is a substantial increase from the 75.5% in 2008.

The lesser amount of expenditure on social protection goes to other social protection programmes. These include PWAS, care for the aged and orphaned and vulnerable children and youth development schemes. These account for less than 30% of the total social protection budget. Their share has reduced from 27.9% in 2005 to 19.2% the 2009 budget.

Overseas development assistance

Donor support is very significant in the budgetary process in Zambia. This is reflected in the amount of resources that support the budget and fund several projects in the country. Table A2.6 shows the magnitude of donor resources for both the budget and for projects in the country. In 2008, total donor support was estimated at US\$485.3 million. This is about 3.3% of GDP and 15.6% of total expenditure. These resources are channelled through the budget as budget support and project support. Project support is also reflected in the budget.

Table A2.6: Total ODA, 2005-2009 (US\$m)

Year	Budget support		Project support		Total ODA	
	Proposed*	Actual	Proposed	Actual	Proposed	Actual
2005	85.6	134.1	643.7	336.4	796.8	470.5
2006	134.8	153.9	638.9	211.2	830.7	365.1
2007	132.0	145.4	685.4	267.8	842.9	413.2
2008	168.4	175.9	562.5	309.4	730.9	485.3
2009	147.0	-	499.8	-	646.8	-

Source: MoFNP (2006c; 2007b; 2008b; 2009b).

Note: * The amount proposed by the government and reflected in the government budget. This corresponds to the amount pledged by the donors.

It is evident that most ODA comes in the form of project support. In 2008, ODA in the form of budget support was 36.2% of total ODA. Project support was 63.8% of ODA. The government's policy is to encourage budget support as opposed to project support. This has led to an increase in budget support as a proportion of total ODA over time.

Thus, budget support in both 2008 and 2009 increased. It is interesting to note that donors seem to be more committed to budget support. It appears that all disbursements towards budget support have always been fulfilled: this has been the trend since 2005. In addition, budget support has been consistently rising, except for a marginal decline in the 2009 allocation. On the other hand, although project support has a greater share in the budget, its actual disbursements have consistently been below the proposed allocation. The significance of all this is that funding for social protection from donors seems to come from ODA project support. It is therefore likely to be affected by the movement from project support to budget support.

Table A2.7 shows the distribution of ODA in terms of direct budget support to the social sectors: education and health. This is shown as a percentage of total ODA. We have no information on total project support ODA to the social sectors.

Table A2.7: Distribution of ODA to social sector, 2006-2009 (US\$m)

	Health	% of total health expenditure	Education	% of total education expenditure	Social protection	% of total social protection expenditure
2006	147 (17.7)*	92.3	93 (11.2)*	20.2	1.7 (0.005)*	0.13
2007	135 (16.1)	41.9	65 (7.7)	14.4	1.1 (0.003)	0.01
2008	157 (21.5)	37.2	70 (9.5)	12.3	1.2 (0.003)	0.01
2009	129 (20.0)	36.9	44 (6.7)	8.6	6.6 (0.010)	0.10

Note: * Percentage of ODA in parenthesis.

Source: MoFNP database (2009).

It is evident from Table A2.7 that, of the three social sectors, health receives the bulk of budget support ODA. Furthermore, while the budgetary allocations to the health sector have been on the increase, the allocations for the education sector have been declining.

Policy response

Government

Policymakers felt the global economic crisis at the end of the second quarter of 2008. This immediately affected the revenue expectations of the government as it was preparing the 2009 budget. Consequently, it had to recall the MTEF document that it had issued earlier. It then had to revise the revenue projections and growth rates.

In the 2009 budget, the government tried to protect allocations to social sectors. However, some adjustments were made on the budget estimates for health and education. Funding for the recruitment of workers in the health and education sectors was cut. Other budget areas were also cut in order to protect funding to health and education in the face of reduced revenues. In addition, the government increased domestic borrowing in order to offset decreased revenues from the mining sector as a result of the global financial crisis.

Donors

There was no discernible policy change or shift among donors. The crisis did not seem to affect the level of ODA support to the budget. This is both in budget and project support. By the end of the year, the government had received most of the donor support that had been pledged by donors. As such, donors have followed up on their pledges in the FNDP. There was a small increase in budget support, although this had to do more with a reallocation of ODA between budget and project support.

Conclusion

The incidence of poverty in Zambia is high. It is estimated that in 2006, 64% of the population was poor and vulnerable. This situation is exacerbated by HIV/AIDS, a failing agriculture sector and macroeconomic imbalances. There is obviously a clear need for social protection. The country adopted a clear Social Protection Policy in 2005. There are now several social protection schemes in the country. There is, however, a need to scale up these activities in terms of both coverage and funding. Donors fund many activities in the social sector. In response to the global economic crisis, government has moved in to protect spending in the social sector. Donors have not scaled down their funding to the social sector as a result of the crisis.

References

- Central Statistical Office (2007) *Living Conditions Monitoring Survey 2006*. Lusaka, Zambia: Government of the Republic of Zambia.
- Central Statistical of Office (2005) *Living Conditions Monitoring Survey 2004*. Lusaka, Zambia: Government of the Republic of Zambia.
- International Labour Organization (2008) *Zambia, Social Protection Expenditure and Performance Review and Social Budget*. Geneva, Switzerland: ILO.
- Ministry of Community Development and Social Welfare (2005) *Social Protection Strategy*. Lusaka, Zambia: MCDSW.
- Ministry of Finance and National Planning (2006a) *Fifth National Development Plan, 2006-2010*. Lusaka, Zambia: Government of the Republic of Zambia.
- Ministry of Finance and National Planning (2006b) *Economic Report for 2005*. Lusaka, Zambia: Government of the Republic of Zambia.
- Ministry of Finance and National Planning (2006c) *2006 Budget Address*. Lusaka, Zambia: Government of the Republic of Zambia.
- Ministry of Finance and National Planning (2007a) *Economic Report for 2006*. Lusaka, Zambia: Government of the Republic of Zambia.
- Ministry of Finance and National Planning (2007b) *2007 Budget Address*. Lusaka, Zambia: Government of the Republic of Zambia.
- Ministry of Finance and National Planning (2008a) *Economic Report for 2007*. Lusaka, Zambia: Government of the Republic of Zambia.
- Ministry of Finance and National Planning (2008b) *2008 Budget Address*. Lusaka, Zambia: Government of the Republic of Zambia.
- Ministry of Finance and National Planning (2009a) *Economic Report for 2008*. Lusaka, Zambia: Government of the Republic of Zambia.
- Ministry of Finance and National Planning (2009b) *2009 Budget Address*. Lusaka, Zambia: Government of the Republic of Zambia.
- Overseas Development Institute (2009) 'Social Protection Extension'. ODI Rapid Research on the Financial Crisis. London, UK: ODI.

Table A2.8: Government spending, 2005-2009

	Total government expenditure	Social sector expenditure	Social protection	Health	Education
	(K billions)	% of total budget			
2005	8845.7 (27.3)**	19.9 (5.4)	2.5 (0.7)	5.4 (1.5)	12.0 (3.3)
2006	8618.1 (22.0)	23.7 (5.2)	2.0 (0.4)	7.0 (1.5)	14.7 (3.2)
2007	10,720.1 (23.6)	30.0 (7.1)	2.8 (0.7)	7.5 (1.8)	16.3 (3.9)
2008	13,402.6 (24.2)	31.7 (7.7)	4.4 (1.1)	8.2 (2.0)	16.0 (3.9)
2009*	15,279.0	31.6	2.4	11.9	17.2

Source: MoFNP (2006b; 2007a; 2008a; 2009a; 2009b).

Notes: * Figures for 2009 are estimates based on proposed budget; actual expenditures are expected to be lower given the performance of the historical budgets; ** percentage of GDP.

Table A2.9: Donor allocations, 2005-2009

	Total ODA		Social sector expenditure	Social protection	Health	Education
	(US\$m)	% of total budget	% of total budget			
2005	470.5 (6.5)*	23.7	N/A	(0.1)	-	-
2006	365.1 (3.3)	15.2	10.0 (2.2)	0.07 (0.02)	6.1 (1.3)	3.9 (0.8)
2007	413.2 (3.6)	15.4	7.5 (1.8)	0.04 (0.01)	5.1 (1.2)	2.4 (0.6)
2008	485.3 (3.3)	13.6	6.4 (1.5)	0.04 (0.01)	4.4 (1.1)	2.0 (0.5)
2009**	646.8	23.3	6.1	0.24	4.4	1.5

Source: MoFNP database (2009).

Notes: * Percentage of GDP; ** figures for 2009 are estimates based on proposed budget; actual expenditures are expected to be lower given the performance of the historical budgets.

Table A2.10: Social protection (major interventions)

Non-contributory schemes					
Social cash transfers		Public works/employment programmes		PWAS	
Coverage	Benefits	Coverage	Benefits	Coverage	Benefits
Vulnerable households and individuals in five districts. Beneficiaries: 39,500 in 2005; 64,700 in 2006. Scale-up strategy for cash transfers to extremely poor and incapacitated households in 2009	<ul style="list-style-type: none"> Cash grants: <ul style="list-style-type: none"> Income support Child grants scholarships 	Extremely poor but able bodied. 45,000 households in 2006	Food rations	Poorest and most vulnerable households countrywide. 107,415 in 2005 and 166,559 in 2006	<ul style="list-style-type: none"> Shelter Health Education Food

School Feeding Programme		FSP	
Coverage	Benefits	Coverage	Benefits
Children from poor and vulnerable households in food insecure districts. 19,520 in 2005 and 173,980 in 2006. Envisaged 210,000 orphans and vulnerable children from 400 schools in four provinces to benefit in 2007	<ul style="list-style-type: none"> Meals provided on site Take-home ration for low-capacity, incapacitated and non-viable households 	Small-scale vulnerable farmers. 40,000 in 2005 and 34,942 in 2006	<ul style="list-style-type: none"> Agricultural inputs, e.g. seeds Training in farming and food processing Marketing assistance

Contributory social protection schemes					
National Pension Scheme		Public Service Pension Fund		Local Authorities Superannuation Fund	
Coverage	Benefits	Coverage	Benefits	Coverage	Benefits
Employees in private and para-statal sectors. 355,200 members in 2005	<ul style="list-style-type: none"> • Retirement • Disability pension • Disability settlement • Survivors' benefits • Funeral grant 	Employees in public service. 112,479 members in 2005	<ul style="list-style-type: none"> • Retirement • Permanent invalidity • Survivors' benefits 	Employees in local authorities and utility companies. 21,642 members in 2006	<ul style="list-style-type: none"> • Retirement • Retrenchment • Dismissal • Ill health • Survivors' benefits

Source: ILO (2008).