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The short-term impact of trade liberalisation on poverty in Zambia in the 1990s

Introduction

In Zambia, trade liberalisation was implemented as one of the most important pillars of the structural adjustment programmes (SAPs) in the early 1990s. The dramatic open-door policy invited foreign investments, goods and services, while the other major reforms of agricultural policy and privatisation played an active role to prepare the domestic economic situation for liberalising the trade markets towards the capitalistic international markets. Therefore, in terms of assessing the impact of trade liberalisation on poverty, it is essential to consider the impact of other important policies at the same time rather than trade liberalisation alone; in other words, it is difficult to analyse the poverty impact of trade liberalisation alone. Moreover, the focus of this paper is on income poverty but not other definitions of poverty or income inequality. In order to analyse the short-term impact of trade liberalisation on poverty, I am going to describe the economic situation in the pre-reforming era and the Structural Adjustment Programmes (SAPs) followed by the analysis of the impact on growth and poverty.

From independence to the 1980s

The heavy dependence on mining and manufacturing sectors structured the urban-biased population and economy in Zambia. Since independence in 1964, the mining sector greatly contributed to the country's economy by transferring the earnings from its exports to import substitution industry (World Bank 1994, p.i). This growth process constructed the population structure between the urban and the rural areas. The urban population of the total population had increased from 17 per cent to 40 per cent by 1980 and stood at 38 per cent in 1998. However, the growth of the mining sector was no longer as active as it had been by 1991, the first year of the SAPs, although the governmental enterprises still generated three quarters of the GDP. Thus, the growth pattern made Zambia urbanised although the major urban industries weakened by the beginning of the 1990s.

The Structural Adjustment Programmes

As described as 'one of the more open countries in Africa' (Thurlow and Wobst 2008, p.223), the country actively adopted trade liberalisation policies under the SAPs since 1991 after the new government, the Movement for Multi-Party Democracy, took over the country. There were notable reforms in three major issues

implemented in order to make the economy more open: agriculture reform; privatisation; and trade liberalisation.

First of all, the major reforms in agriculture in the early 1990s were the abolition of consumer subsidies on food and trade liberalisation of grain. During the pre-reforming era, the government widely invested in agriculture through offering subsidies for agricultural inputs and for agricultural credit; and guaranteeing a national price and subsidising transport costs particularly for maize (World Bank 2007a, p.108). In 1994, the import and export trade in agriculture became liberalised, although the minimum and the maximum price of maize were still determined by the government; and exports of maize and maize products also became banned again in 1996 (Litchfield et al. 2003, pp.1290; Seshamani 1998, p.543).

Secondly, privatisation was also rapidly and widely implemented over the 1990s, which aimed to increase efficiency of industries. By 1997, the government had completed dissolving or privatising more than 80 per cent of the parastatal enterprises particularly in agricultural and manufacturing sectors, such as milling and textile companies, although there was a delayed privatisation of the mining sector due to political pressure (Thurlow and Wobst 2004, p6 and Seshamani 1998, p.543).

Lastly, in order to proceed towards more open trade market, the government dramatically converted trade policies in the early 1990s. In particular, the change in tariff policy was significant. The implementation of lowering the average level and dispersion of tariffs led the minimum tariff rate of 20 per cent from 0 per cent and the maximum tariff rate of 40 per cent from 100 per cent during the period from 1990 and 1993 (IMF 1997, p.19). As a result of further reduction of tariff rates in the following years, the average rate declined to 19 per cent in 1996. Besides, the strong passion of the government for the open-door policy is seen from a reaction over illegal trades. When the government could not prevent a number of illegal imports of finished products at zero rate tax, on which were supposed to be imposed the maximum tariff rate of 40 per cent, under an exemption or through smuggling, they needed to protect their domestic producers from receiving unpleasant losses from those foreign products. On behalf of the domestic industries, the government rather abolished exemptions for government imports and cut 15 per cent in tariffs on most products, instead of endeavouring to stop those illegal imports (IMF 1997, p.20). Moreover, an open general license (OGL) system, which required approval of the Foreign Exchange Management Committee with a licensing fee, was abolished for import in

1993. Thus, the certain level of trade liberalisation was dramatically accomplished within a short term of the early 1990s by rapidly reducing tariffs and abolishing the OGL for import.

Thus, Zambia rapidly opened their economy to the international markets.

The impact of the SPAs on growth

As the country aimed, it is widely understood that openness to the international trade markets is crucial to achieve sustainable economic growth in the long run. Supporting this statement, Dollar and Kraay (2001, p.9) emphasise that 'openness' in terms of growth is as essential as the other policies of the 'good rule of law' and 'fiscal discipline'. However, there is a frequent problem that an open-door policy does not immediately lead to pleasant outcome. Therefore, it often matters when openness results in economic growth. Winters et al. (2004, p.76) believe that there may be an increase in efficiency and benefits in the medium term, and more fruits including imports of new technology, knowledge, goods and the benefits of competition between enterprises in the long term. In this section, I am going to identify the period of short term after the trade liberalisation, and analyse the impact of the SAPs on growth in agricultural, manufacturing and mining sectors, in order.

Firstly, applying the hypothesis of Winters et al. to the Zambian case, the short term period of the post trade liberalisation may be the 1990s. The series of ambitious policy conversions dramatically constructed a basement of the country to enter the capitalistic international markets in the 1990s. As a result, Zambia has accomplished steady growth in GDP per capita in the 2000s, which the country had never achieved for the decades (World Bank 2007a, p.64). In fact, the per capita GDP more than tripled from 309.8 dollars in 2000 to 953.3 dollars in 2007, after a gradual decrease by about a hundred dollar over the 1990s (Figure 1). Taking this dramatic progress in growth following the declining period into account, Zambia may have experienced an adjustment period for the change in the economic structure and trade liberalisation in the 1990s. Therefore, it may be possible to regard that the country entered the middle-term period of the post liberalisation periods when countries could start reaping the benefits of trade liberalisation, as the previous literature believes. Thus, the 1990s seems to be defined as a short term period of the post trade liberalisation in Zambia. Therefore, I am going to discuss the impact of the SAPs in the 1990s on growth in this section.

Secondly, the agricultural sector seemed to derive positive outcomes for its aim from the SAPs. Firstly, there appeared to be a major aim of the reforms to increase competitiveness and efficiency of the agricultural sectors through the abolition of the subsidies and privatisation. Prior to internationally opening the markets, strengthening the domestic agriculture was one of the most urgent issues for Zambia. In particular, the development of the agricultural sectors had been greatly delayed by the heavy consumer subsidies over the pre-reforming period, because the subsidies seemed to focus on quantity of food supply to urban regions but not efficiency of producing food in rural regions; in other words, the subsidising policy seemed to be a protection of urban biased industries rather than agricultural development in rural areas. Thurlow and Wobst (2004, p.32) favourably argue that the major aim of the subsidising policy was to secure food supply and to keep low food prices for urban areas. As a result, the subsidising policy promoted inefficient agricultural activity. The high level of subsidies encouraged remote farmers and other farmers who live in unsuitable areas for the production of maize to grow maize as well as farmers at the skirts of urban areas or other efficient regions for maize production (Seshamani 1998, p.545). Thus, the country needed to develop agricultural competitiveness and efficiency through the stoppage of the subsidies. Secondly, there were three of the major outcomes of this implication to be emphasised, rather than the 2.2 per cent of the annual growth rate of the agricultural sector. Firstly, there was a decrease in maize production and an increase in the production of cash crops. In fact, the proportion of maize lands significantly shank by approximately 15 per cent from 70 per cent for a decade by the end of the 1990s (Zulu et al. 2001, p.2; Howard and Mungoma 1996, p.1). Also, a cash crop of sugar became one of the leading agricultural products for export, which accounted for approximately 32 per cent of total agricultural exports every year for the second half of the 1990s (World Bank 2007a, p.114). Thus, the agricultural diversification increased efficiency in agriculture by reducing inefficient production of maize and enhancing production of cash crops. Secondly, privatising parastatal milling companies increased the capacity of the small unregistered millers in the food markets. During the pre-reformed era, those official millers could purchase much cheap grain than the small unofficial millers due to the government subsidies, which created the monopolistic structure of agricultural markets. Also, the liberalisation of domestic movement of grain products dramatically increased the commercial

opportunities of those small local millers (Seshamani 1998, p.544). Because of these changes, the small millers became able to purchase maize directly from farmers as well as the governmental millers. Therefore, the privatisation increased market competition, which caused the large losses of the parastatal millers and benefited the small millers. Finally, a reduction of the budget for the agricultural subsidies contributed to stabilising inflation. As Seshamani (1998, p.545) points out, the major problem of the heavy subsidy was a considerable contribution to the rapid increase in inflation through generating the high level of budget deficits. In fact, the maize-related budget alone occupied 20 per cent of the annual budget of the country before the reform. Therefore, the policy reforms showed a significantly positive outcome in inflation, as well as the success in eliminating a large proportion of the governmental budget. The figure 2 shows that the trend of a dramatic rocket up in inflation rate peaked at 166 per cent in 1992 and plummeted to below 30 per cent. Thus, the SAPs enhanced efficiency, crop diversification, market competition, and inflation stabilised.

Finally, the manufacturing and mining sectors appeared to gain negative effects from the SAPs in the 1990s. From the policy achievement of privatisation, the country was likely to improved preparedness for reaping the benefits from trade liberalisation in the future, by raising efficiency. There was a rapid plunge in employment in the formal sector by 15 per cent to less than 10 per cent during the period from 1991 to 1998; from 64800 workers to 39434 workers in the mining and from 75400 to 43320 in the manufacturing (McCulloch et at. 2000, p.6; Table 1). However, in a short term of the 1990s, there were negative effects in both manufacturing and mining sectors. Firstly, the dramatic privatisation and trade liberalisation may have weakened the domestic manufacturing industries. Although the policy of trade liberalisation appeared successfully to deliver more various ranges of goods and services to Zambian consumers, a high pace of privatisation and a rapid reduction of tariffs destroyed the domestic manufacturing industries. In fact, the government endeavoured to mitigate the shock of manufacturing industries through a reduction of the average tariff on raw materials by 4 per cent to 12 per cent between 1994 and 1996 (IMF 1997, p.20). Nonetheless, the combination of an increase in pressures from foreign competition, a rise in the price of raw materials and weak domestic demand persistently made manufacturing sectors gradually deteriorate their competitiveness and become exhausted (Table 2). As the

International Monetary Fund (1997, p.22) reports, 70 per cent of the manufacturing enterprises were too weak in the competitive markets to utilise even more than 60 per cent of their productive capacity. As a result, a real decline in output of the manufacturing industries reached at about 3 per cent a year on average from 1990 to 1997. Drawing a particular case of manufacturing collapse, Simutanyi (1996, p.831) also reports that 47 clothing manufacturing enterprises went bankrupt, which generated a large number of unemployment of about 8500 workers in the textile industry alone by the end of the year of 1993. Thus, the high pace of the open door policy through privatisation and trade liberalisation seemed to damage the domestic manufacturing industry in the 1990s. Secondly, the steep declining value of copper, which was the leading export production, lowered its production, which reduced its employment. The value of copper declined by approximately 38 per cent between 1990 and 1997 (Table 3). This absolutely significant drop of the value limited the productive activity of the mining sector. The volume of copper production decreased by about 26 per cent over the period (Table 3; Figure 3), which may have contributed to reduce employment. This implication of reducing inefficient investments of the government in this low-profitable mining sector was likely to last until the privatisation of the state own mines became active due to the recovery of the copper value in the 2000s (Thurlow and Wobst 2004, p.6 and p.10). Therefore, the lowering production caused by the value change in copper seemed to reduce employment in the mining sector.

Thus, the short-term impact of the SAPs in growth shows the positive result of agricultural development in rural areas and the decline in urban-based manufacture, which accelerated the collapse of the urban economy by adding to an initial problem of the weakening mining sector.

The impact of the SAPs on poverty

The different patterns of growth in each sector may have created the different impacts on poverty in each region. Therefore, I am going to discuss the impact of the SAPs mainly on poverty in two different levels: urban and rural, following an overview of poverty at the national level.

Firstly, the country experienced an increase in poverty in urban areas and a decrease in rural areas between 1991 and 1998. There were about 9 per cent increases in headcount in urban and 7 per cent decline in rural (Table 4). Similarly,

the other two indicators of poverty depth and severity show the same trend as worsening poverty in urban. Moreover, the growth incidence curves demonstrate the high standard of average annual consumption growth in low income percentiles in rural and the negative growth in almost all percentiles in urban (Figure 4). This may reflect the agricultural growth and slumping industries in each region. Thus, the SAPs seemed to eliminate rural poverty while increase urban poverty.

Secondly, the pattern of poverty in urban areas seemed to be largely affected by the collapse of mining and depression of manufacturing sectors. Because both of two industries were the major providers of employment in populous urban regions, in which about 40 per cent of the total population lived, the collapse of those labour-intensive sectors highly contributed to generating poverty through increasing unemployment in urban areas. Although the decline in formal employment through the privatisation policies increased the wages of those remaining workers: by more than 200 per cent in the parastatal sectors; 143 per cent in the local governments; in 43 per cent in the central government and the private sectors (McCulloch et al. 2000, p.7), effective supports for unemployed people were not implemented. Moreover, despite the fact that the trade liberalisation and privatisation grew trade sector, the industry may not be able to have created sufficient works for those people. Thus, without effective measures to mitigate the adjustment shock, the depression of the mining and manufacturing sectors created a great deal of poverty through generating unemployment.

Thirdly, decomposing the impact on rural poverty, there may be three major contributors to affect the poverty condition: cash crops, grain prices and population dynamics. Firstly, the flourish of cash crops through the series of reforms may have greatly contributed to eliminating poverty. In particular, the contribution of cotton to the poor economy was significant. Compared to other cash crops, cotton allowed relatively more smallholders to grow. After the SAPs, the number of cotton-growing households became tripled up to 114000 by 2003, which accounted for 9 per cent of the total rural households (World Bank 2007, p.114). Moreover, in terms of creating employment, cotton cultivation has a relative advantage over maize because cotton is much more labour-intensive and the rural areas have sufficient free family labour (2007, p.111). Although it is also true that many cash crops including cotton, sugar tobacco and coffee did not allow all of the rural farmers to grow due to weather conditions and market competitiveness, those still produced employment for the rural

poor including many farmers who were forced to shift to subsistence farmers after the abolition of the protection policies for maize. Therefore, the development of cash crop cultivations may have played an active role to reduce poverty and to mitigate the adjustment shocks through creating employment. Secondly, a rise in grain price may have supported to improve the poor economy. Despite an increase in food imports, the rise in competitiveness of the small millers over the parastatal millers and the abolition of the agricultural subsidies seemed to contribute to increasing the grain prices after the agricultural reforms, although frequent draughts made the judgement difficult (Figure 5). In Zambia, smallholders produce two-third of the total maize, which is the staple food (World Bank 2007a, p.108). Also, half of the rural farmers were grain sellers rather than subsistence farmers. Therefore, the soaring grain prices could possibly benefit those poor farmers. Thirdly, population dynamics seems to be significant when poverty is decomposed in provinces rather than in urban and rural due to migration within the country. The Table 5 shows that Lusaka, the capital, and the Copperbelt experienced the largest increase in total poverty headcount by 23.4 per cent and by 14.7 per cent, due to the negative effects of the structural adjustment. However, there were different reasons for the poverty patterns in each province. As Mulenga and Van Campenhout (2008, p.301) argue, the poverty in the Copperbelt was led by a rise in rural poverty due to migration of the exodus from the urban centres within the province. This population shift may be caused by the impact of a collapse of the mining sectors. As a result, the rural poverty was almost offset by those poor migrants. On the other hand, the poverty in Lusaka was led by an increase in urban poverty. It may be because of a depression of the manufacturing sectors. Thus, the dramatic change in the sectoral growth relocated population and poverty.

In conclusion, the growth in agriculture contributed to decreasing poverty and the negative growth in manufacturing and mining sectors increased poverty. Also, this various changes in growth generated some poverty movement between rural and urban areas.

Conclusion: Policy lessons

The short-term impact of trade liberalisation on poverty in Zambia was identified through the different patterns of sectoral growth in the 1990s. An increase in openness resulted in the positive growth in agricultural sector and the depression

in manufacturing sector. In addition to an initial problem of declining mining sector, a collapse of manufacturing sector accelerated urban poverty while the agricultural growth reduced poverty. Moreover, the changes in growth relocated population and poverty in the country.

As a policy lesson, the government should have further protected one of the major industries of manufacturing sector in the urban areas, in which about 40 per cent of the total population lived. Due to a faster pace of trade liberalisation than an empowerment of competitiveness of the domestic manufacturing sector, the sector lost the competition in the international market, which generated increasing poverty. Thus, trade liberalisation should not be implemented at least until the major industry of countries gain sufficient competitiveness to win in the international market.

References

Dollar, D. and Kraay, A. (2001) Growth Is Good for the Poor. *World Bank Policy Research Working Paper*, Vol. 2587, The World Bank, Washington D.C. [Online] Available from: www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2001/05/11/000094946_01042806383524/Rendered/PDF/multi0page.pdf [accessed 4 January 2009]

Litchfield, J., McCulloch, N. and Winters, L. A. (2003) Agricultural trade liberalization and poverty dynamics in three developing countries. *American Journal of Agricultural Economics*, Vol. 85, pp. 1285-1291

Howard, J. A. and Mungoma, C. (1996) Zambia's stop-and-go revolution: The impact of policies and organizations on the development and spread of hybrid maize. [Online] Available from: ageconsearch.umn.edu/bitstream/11274/1/ps26.pdf [accessed 22 April 2009]

International Monetary Fund (1994) Zambia- Statistical Appendix. *IMF Staff Country Report*, No. 99/43, International Monetary Fund, Washington, D.C.

International Monetary Fund (1997) Zambia- Selected Issues and Statistical Appendix. *IMF Staff Country Report*, No. 97/118, International Monetary Fund, Washington, D.C.

McCulloch, N., Baulch, B. and Cherel-Robson, M. (2000) Poverty, inequality and growth in Zambia during the 1990s. *IDS working paper*, Vol. 114, pp. 1-50

Mulenga, S. and Van Campenhout, B. (2008) Decomposing poverty changes in Zambia: Growth, inequality and population dynamics. *African Development Review*, Vol. 20 (2) pp. 284-304

Seshamani, V. (1998) The impact of market liberalisation on food security in Zambia. *Food Policy*, Vol. 23 (6) pp.539-551

Simutanyi, N. (1996) The politics of structural adjustment in Zambia. *Third World Quarterly*. Vol. 17 (4), pp. 825-839

Thurlow, J. and Wobst, P. (2004) A Country Case Study on Zambia. *Operationalising Pro-Poor Growth*, The Department for International Development [Online] Available from: http://www.dfid.gov.uk/pubs/files/oppgzambia.pdf [accessed 8 January 2009]

Thurlow, J. and Wobst, P. (2006) Not All Growth is Equally Good for the Poor: The Case of Zambia. *Journal of African Economies*, 15 (4) Oxford University Press, pp. 603-625

Thurlow, J. and Wobst, P. (2008) The Role of Agriculture in Pro-Poor Growth: Lessons from Zambia. In: Klasen, S., Grimm, M. and McKay, A. eds. *Determinants of Pro-poor Growth*, Palgrave Macmillan, pp. 219-240

Uematsu, C., Thamana, L. and Sakurai, T. (2006) District level analysis of drought responses and resilience index. Research Institute for Humanity and Nature [Online] Available from: www.chikyu.ac.jp/resilience/files/ReportFY2006/ResilienceFY2006_15_E-Umetsu.pdf [accessed 22 April 2009]

Winters, L. A. McCulloch, N. and McKay, A. (2004) Trade Liberalization and Poverty: The Evidence So Far. *Journal of Economic Literature*, vol.XLII, pp. 72-115

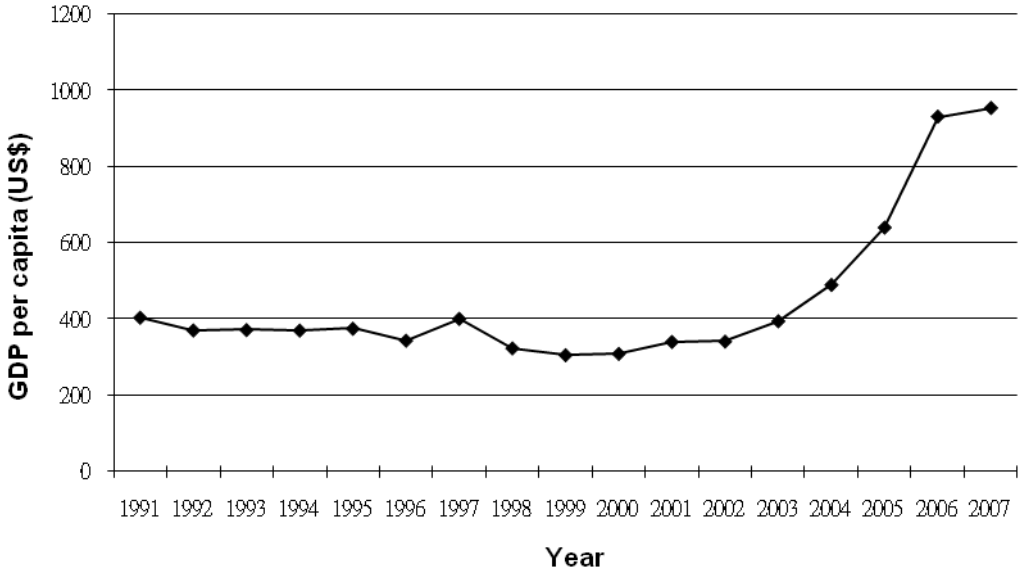
World Bank (1994) *Zambia Poverty Assessment*. Washington D.C. [Online] Available from:www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/1994/11/10/000009265_3961006155856/Rendered/PDF/multi_page.pdf [accessed 1 January 2009]

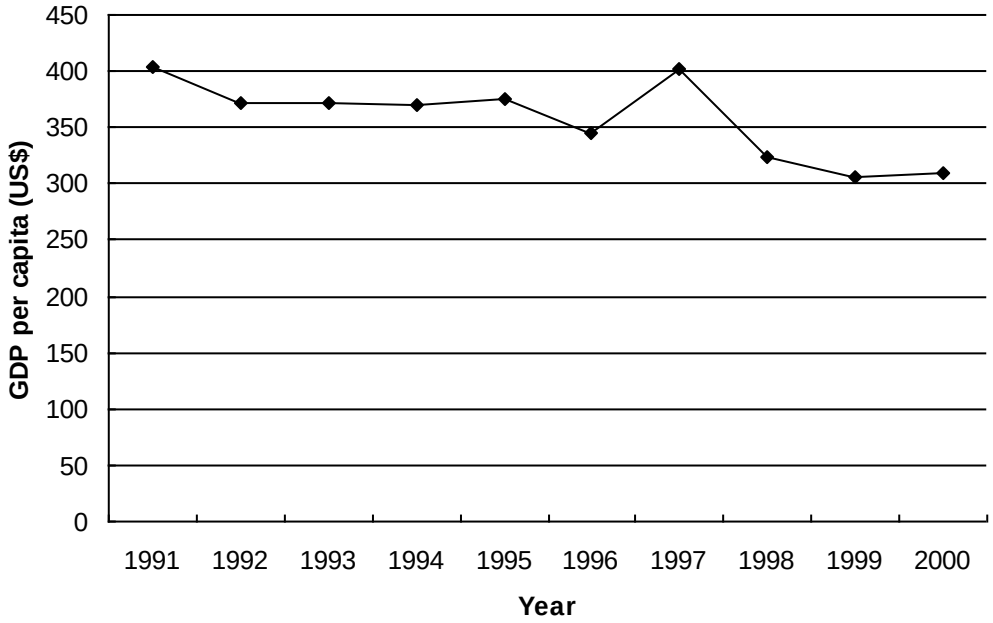
World Bank (2007a) Poverty and vulnerability assessment. Washington D. C. [Online] Available from: www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/10/04/000020439_20071004094458/Rendered/PDF/325730ZM.pdf [accessed 9 April 2009]

World Bank (2007b) *World Development Indicators*. [Online] Available from: ddp-ext.worldbank.org/ext/DDPQQ/member.do?method=getMembers&userid=1&queryId=135 [accessed 10 January 2009]

Zulu, B., Nijhoff, J.J., Jayne, T.S. and Negassa, A. (2001) Is the glass half-empty or half full? An analysis of agricultural production trends in Zambia. [Online] Available from: www.aec.msu.edu/fs2/zambia/polsyn2zambia.pdf [accessed 22 April 2009]

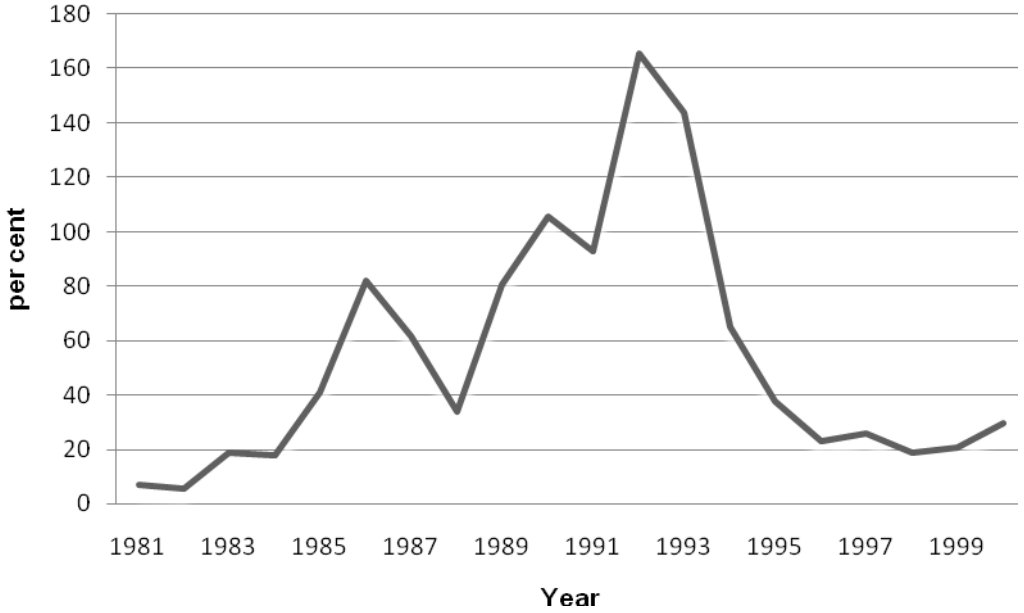
Figure 1: The trend of GDP per capita (US$)





Source: World Bank (2007b)

Figure 2: The trend of inflation rate (%)



Source: World Bank (2007b)

Table 1: Employment in economic sector (in number of employees)

	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture, forestry, and fishing	79800	77800	82000	82800	79300	69079	68300	58898
Mining and quarrying	64700	64800	62100	58200	51200	52215	47700	44498
Manufacturing	77100	75400	73600	67600	57100	55654	47400	47118
Electricity and water	7100	7600	8400	5700	5100	5047	4400	5009
Construction	33400	33100	27800	22100	17500	10518	13100	17106
Transport and communications	33800	34300	31000	29000	29000	36542	46800	48893
Distribution and trade (wholesale and retail)	55100	53200	51300	49300	49900	41398	38300	45963
Finance and insurance	32900	35800	39000	37000	34100	41890	37600	37862
Public administration	159400	162200	170700	168300	173800	172604	175800	169814
All sectors	543300	544200	545900	52000	497000	484967	479400	475161

Source: IMF (1997)

Table 2: Annual growth rate (%) in sectors

	1985-91 Pre-reform period	*1991-98 Structural adjustment*
GDP	**1.6**	**-0.3**
Agriculture	2.8	2.2
Industry	2.2	-4
Manufacturing	5.8	0.8
Services	0.7	1.6

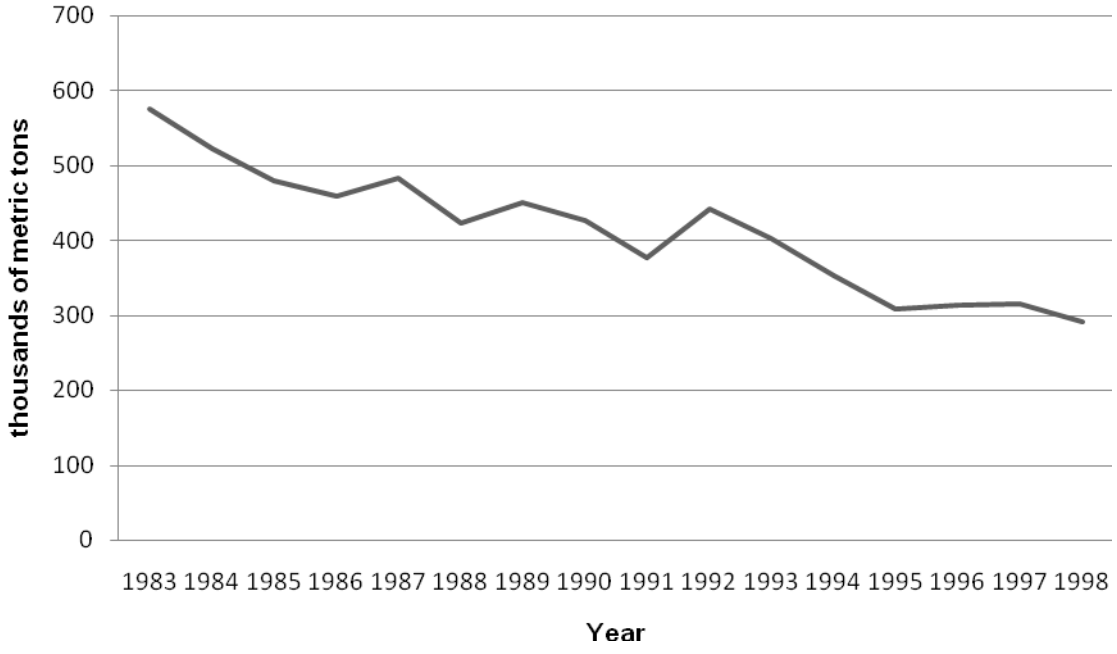
Source: Thurlow and Wobst (2008)

Table 3: The trend of value and volume of copper production

	1990	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**
Copper value (millions of US. Dollars)	1055	895.1	880	717.2	729.2	851	567.7	649.4
Volume of copper production (thousands of metric tons)	426.6	376.9	441.5	403.1	353.5	307.9	313.9	314.7

Source: IMF (1994)

Figure 3: The trend of volume of copper production



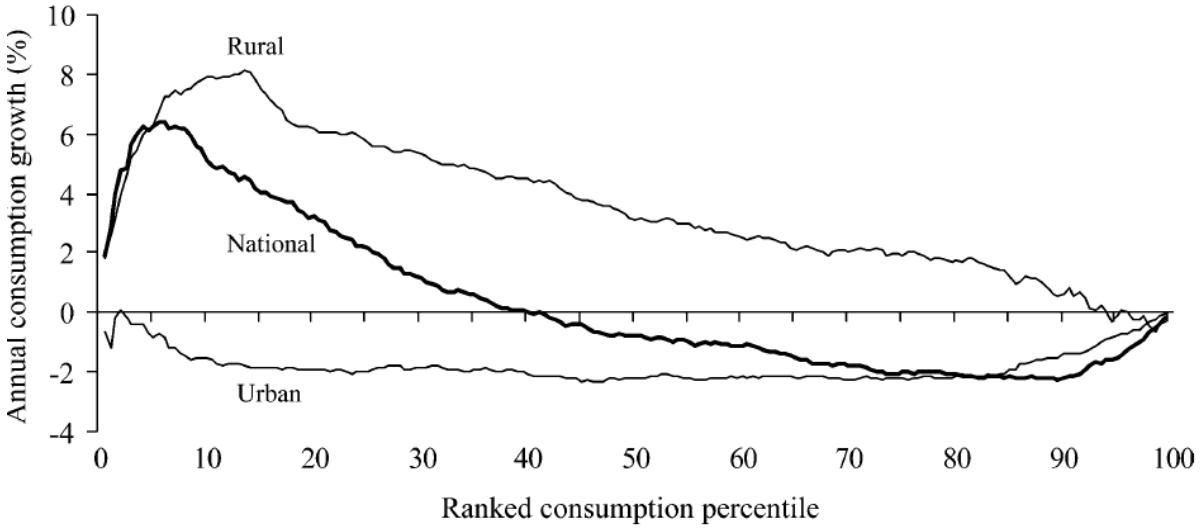
Source: IMF (1994)

Table 4: Poverty profile between 1991 and 1998

	HEADCOUNT		POVERTY GAP		SQUARED POVERTY GAP	
	1991	**1998**	**1991**	**1998**	**1991**	**1998**
National	**56.5**	**59.8**	**32.4**	**27.6**	**23.2**	**16.2**
Urban	28.2	37.3	9.8	13	4.9	6.3
Rural	80.1	73.3	51.1	36.4	38.4	22.1

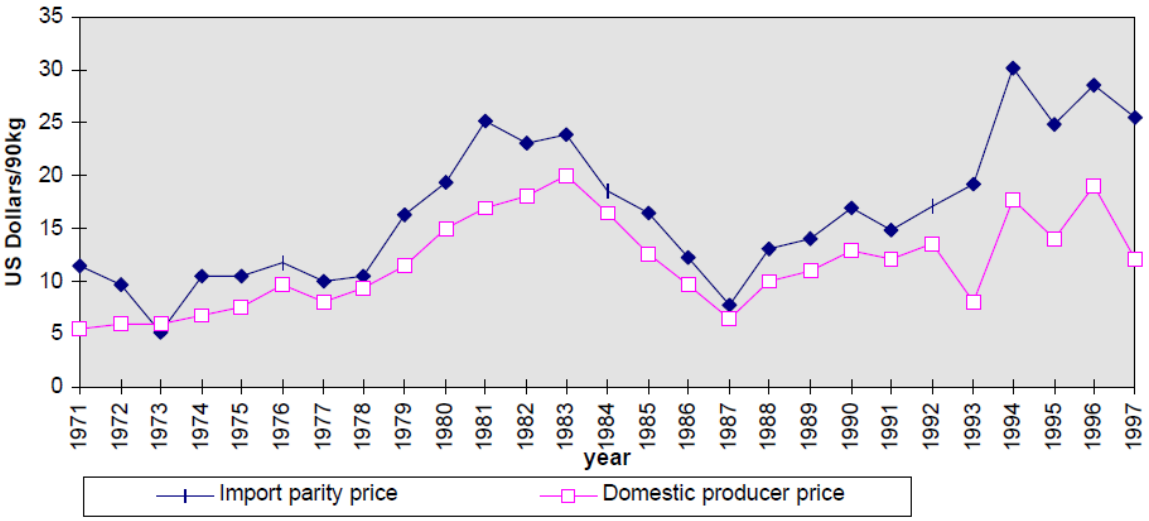
Source: Thurlow and Wobst (2008)

Figure 4: National, Rural and Urban growth incidence curves



Source: Thurlow and Wobst (2006)
Note: The growth incidence curve shows growth rates of each income percentile between 1991 and 1998.

Figure 5: Domestic producer prices and import parity prices for maize



Source: Wichern et al. (1999); IMF (1997)
Note: The import parity price is the c.i.f. price at the nearest port plus transportation and other costs, and a profit margin. Both the import parity price and the domestic producer price are computed for Lusaka. Droughts took place in 1991/92, 1994/95 and 1997/98 (Uematsu et al. 2006, p.3).

Table 5: Poverty profile by province

	HEADCOUNT RATE			SQUARED POVERTY GAP		
	1991	**1996**	**1998**	**1991**	**1996**	**1998**
Central	69.8	84.1	78.9	25.9	31.5	29.3
Copperbelt	55.5	70.8	67	12.1	18	18.2
Eastern	84.3	89	82.9	46.4	42.4	29.2
Luapula	83.9	88.4	85.4	39.8	34.5	31.4
Lusaka	31	51.3	54.4	6.6	11.7	12.5
Northern	83.6	90.8	85	41.6	41.8	31.3
North-Western	77.8	89	76	36.2	35.8	24.9
Southern	78.4	86.1	78.4	40.9	35.3	29.5
Western	84.5	89.2	90.3	46.6	44.3	37.5

Source: Thurlow and Wobst (2004)