

Zambia

1. Introduction

Zambia, a landlocked country in southern central Africa, has a surface area of 752,614 square kilometres and is bordered by eight other countries including Angola, Namibia, Botswana, Zimbabwe, Malawi, Mozambique, Tanzania and the Democratic Republic of Congo (DRC).

Since the early 1970s, Zambia has experienced a dramatic reversal of fortune: it has changed from a middle-income country into one of the world's least developed countries. According to the Living Conditions Monitoring Survey (Central Statistics Service, 2004), 68% of the Zambian population, which was estimated in 2004 as 10.9 million people, lives on less than one United States dollar (US\$1) a day. The Gross National Income (GNI) per capita, estimated in 2006 as US\$385, was 35% lower than the 1980 level of US\$585 (BOZ, 2005). In 2004, the country, according to the United Nations' Human Development Index, was ranked 164th out of 173 countries and had a Gini coefficient of 0.57 which indicated a high degree of income inequality. The 1970s was a period of long-term stagnation for Zambia while decline was a feature of the 1980s. During that decade, falling copper prices and production volumes, inadequate investment in (mostly state-owned enterprises) new capabilities and technology, periodic droughts and policy failures collectively had an adverse effect on the country's economy. Despite its vast yet untapped agricultural potential, Zambia's economy, much as it did in the pre-independence era, continued to depend heavily on copper mining activities for its foreign exchange earnings. The country's economic malaise was exacerbated by massive external borrowing that grew from the relatively low levels of US\$3.8-million for the period 1975-1984 to US\$7.1-billion, an amount which represented 170% of its 2004 GDP.

Although, from the mid-1980s onwards, economic reform and trade liberalisation was initiated following the preceding decade of economic deterioration, those attempts were generally unsuccessful because of a lack of external support and increased labour unrest. The United National Independence Party (UNIP)-led government, under the leadership of Dr Kaunda, who initiated gradual economic reforms in 1986, was voted out of power after the introduction of a multiparty democracy in 1991. Despite the unfavourable external environment, policy makers in the Movement for Multiparty Democracy-led government, under the auspices of the multilateral donors, adopted a rapid, comprehensive programme of macroeconomic and structural reforms. That programme was aimed at transforming the economy from a heavily protected and government-controlled economy, with a large and poorly

capitalised public sector, into a predominantly private sector-driven market economy, with diversified exports and less dependence on copper. Fiscal and monetary operations reforms were required, too. The foreign exchange markets and the trade regimes were liberalised and most state-owned enterprises were privatised. Prices and interest rates were not fixed and policies hindering private sector activities were removed. Numerous investment incentives were offered to attract FDI in order to encourage diversification and accelerate economic development. Furthermore, the state withdrew from the agricultural sector and maintained only the buffer stock. Foreign aid, from both bilateral and multilateral institutions, was linked to economic reform objectives. Today, Zambia is hailed as one of the most liberalised economies in sub-Saharan Africa and since 1991, its economy has undergone important and ambitious structural transformation.

2. Economy

Zambia's economy is heavily dependent on the extraction of minerals for the purposes of exportation. In the period 1991-2000, Zambia's economy remained depressed largely because of low production volumes and copper prices, recurring droughts, and distressed industries that could not adjust sufficiently well enough to compete effectively with foreign imports entering the country in the post-liberalisation period. Real GDP growth, averaging at 0.3% between 1991-2000, improved to an average of 4.6% between 2001-2004. A stabilised macroeconomic environment emerged in the period 2001-2004, mainly due to a rebound in mining and agricultural activities. The mining sector's rebound was driven by several factors which contributed collectively to creating a favourable climate for economy stability and growth: the complete privatisation of the mines in 2002 and their recapitalisation; the opening of new mines; and the rise in the international prices of copper. In 2004, metals contributed over 74% of Zambia's foreign exchange earning (of which 58% was generated from copper sales) while the remainder came from non-traditional exports (NTE). The contribution of copper revenues to foreign exchange earnings increased by eight percentage points, rising from 58% to 66% in 2005. Copper is likely to remain, for the foreseeable future, Zambia's main foreign export earner.

Recent macroeconomic trends for Zambia's economy are summarised in Table 1.



Table 1: Selected macroeconomic indicators: 2000 – 2005

	2000	2001	2002	2003	2004	2005
Real GDP growth	3.6	4.9	3.3	5.1	5.4	5.1
GDP per capita growth	1.5	2.9	1.5	3.3	2.9	3
Inflation	26	21.4	22.2	21.4	18	17.5
Savings to GDP ratio	2.9	12.1	13.7	15.3	12.5	NA
Gross Domestic Investment (GDI)	16.0	17.6	20.7	24.1	23	NA
Fiscal balance to GDP ratio	-7.2	-7.4	-5.6	-6	-3.3	-3.4
Current account deficit to GDP ratio*	-19.1	-20.7	-17.1	-15.9	-10.7	-11.9
Net FDI flows (US\$-million)	122	72	303	347	239	259
External debt (US\$-million)	6,310.50	7,292.1	7,140.0	6,495.0	7,080.0	4,528.0
US\$ exchange rate	3,110.80	3,610.90	4,398.60	4,733.30	4,778.90	4,710.58

*Excluding grants

Source: Bank of Zambia and the Central Statistical Office

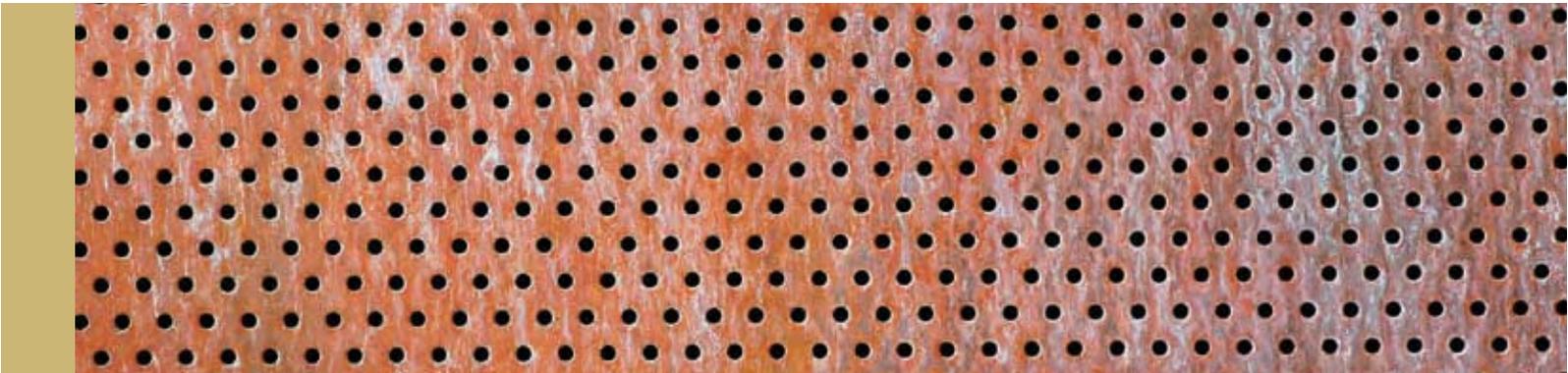
Although Zambia registered meagre growth rates in the 1990s, a period when reforms were still being undertaken, economic performance improved in the period 2000- 2004. The economy registered uninterrupted, positive, real growth over the period. Similarly, per capita GDP grew from 1.5% in 2000 to 3% in 2004. That growth was driven mainly by good performance in the mining industry, which grew by 13% as a result of massive private investment in the industry and favourable copper prices. In addition, improved performances in the agricultural sector, as a result of favourable climatic conditions, and in other sectors of the economy, including wholesaling and retail trading, contributed to that growth (Ministry of Finance and National Planning, 2005). Although Zambia's average growth rate remains meagre when compared to the 7% to 8% required for eradicating abject poverty by 2015, the growth rates have resulted in a minor reduction of poverty in that society, dropping from 73% in 1998 to 68% in 2004.

In terms of fiscal policy, the government's principle aim was to reduce fiscal deficits which, over the years, have been consistently above 5%. Fiscal performance was one of the reasons for accessing the International Monetary Fund's (IMF) poverty reduction growth facility. The fiscal deficit declined gradually from over 7% in 2000 to 3.3% in 2004. The deficit remained rather higher than 3% of GDP, mainly due to persistent shortfalls in external budget support, which led subsequently to domestic borrowing that amounted to 1.9% of GDP in 2004. The budget deficit fuelled inflation, with annual inflation remaining consistently above 18% for the period 2000-2004. For the period under review, the inflation rate declined, mainly because of prudent financial policies, a deceleration of food prices and a stabilisation of the exchange rates. By

the first quarter of 2006, inflation had dropped to a single digit, because of fiscal discipline that lowered the budget deficit and the appreciation of the Kwacha (Zmk) against the major currencies - the exchange rate dropped from as high as Zmk4780 per US dollar to as low as 3200 per US dollar. External debt was also reduced, falling from US\$7.1bn in 2002 to US\$4.5bn in 2005, primarily because of the debt relief available to Zambia, through the Enhanced Highly Indebted Poor Country Initiative (HIPC), and for which it qualified in 2000. As the country acceded to the HIPC Completion Point, a major prerequisite for donors to write-off debt and disburse aid, external debt dropped to an estimated level of US\$500m by 2006. The exchange rate remained stable for most of 2000-2005 yet in 2006, the local currency experienced huge appreciations which, in turn, impacted negatively on the competitiveness of the country's NTEs.

Since economic liberalisation in 1991, Zambia's investment policy has focused primarily on attracting foreign direct investment (FDI). FDI flows have increased from an average of US\$54m per annum previously to US\$122m in 2001. By 2005, FDI had more than doubled to US\$259m as a result of the strong FDI-related growth in the mining sector. That was triggered by privatisation in the sector, the opening of new mines and a more than 100% increase in the price of copper on the international market. General privatisation and investments in tourism-related ventures also attracted substantial FDI inflows into Zambia. Traditionally, South African and British companies are the main foreign investors in the country, yet, more recently, Chinese and Zimbabwean firms have contributed additional sources of investment.





Overall, Zambia's economic policies have been influenced by the multilateral-lending institutions' emphasis on reduction of external debt, improvement of economic efficiency and reduction of poverty in the country. Since 2000, Zambia has qualified as an HIPC country and in that same year, developed its own Poverty Reduction Strategy Paper (PRSP). A key area of focus therein is how to use the savings resulting from the debt written-off under the HIPC Initiative for increasing its levels of pro-poor expenditure. In a bid to attain the HIPC Completion Point, the Zambian government tightened its monetary and fiscal policies and, in accordance with the triggers set in conjunction with the multilateral-lending institutions, new appointments were frozen and the remaining state-owned enterprises were either privatised or commercialised, as was the case for the state-owned bank and the energy and telecommunication suppliers. The inadequacy of the donor-driven PRSP, in terms of a sectoral focus, led government to develop the Transitional National Development Plan (TNDP). Both the PRSP and TNDP frameworks emphasised poverty reduction, infrastructure development and macroeconomic stability as necessary conditions for national development, but neither outlined an explicit role for trade in Zambia's development. By April 2006, Zambia had attained the HIPC Completion Point, thereby reducing its debt substantially from over US\$7.1bn to US\$500m. Generally, for 2002-2005, the Zambian economy's performance improved considerably as the PRSP and TNDP were implemented. Real GDP growth averaged 4.7% per year, up from an annual average of 2.2% in the preceding four years, and that exceeded the 4% target identified in both the PRSP and TNDP frameworks.

3. Structure and patterns of trade

3.1 Trade balance

From 1991 onwards, Zambia's economic reforms created many important changes to the country's trade composition and the relative importance of its trading partners. Those changes were such that Zambia was perceived as having one of the most open trade regimes in Africa and, according to the International Monetary Fund's trade restrictiveness scale, which ranges from zero (unrestricted) to 10 (most restrictive), had a rating of 2.. The comprehensive trade reform programme, initiated in 1991, reduced significantly import duties, repealed import and export licenses and export bans and taxes, moved the country towards a market-determined exchange rate, and introduced a package of export incentives (DTIS, 2005). Consequently, the country's trading partners and export profile changed over time. As shown in Table 2, the country's merchandise imports and exports have grown. The performance of trade reveals that Zambia's trade has more than doubled over the period. That growth contrasts with the volumes of trade in the 1980s

and 1990s when Zambia's exports earnings were eroded by contracted mining volumes, falling copper prices and the failure of export base diversification efforts despite extensive liberalisation reforms. The successful privatisation of the copper mines, and the consequent re-investment therein along with increasing copper and other metal prices reversed the trend in the period 2000-2004. This has been re-enforced by growth in the non-traditional exports NTE sectors.

In terms of the trade balance, imports grew faster (by approximately 13%) than exports in 2000-2004. The size of the overall trade deficit increased steadily from ZMK 34,104 in 2000 to ZMK 2,668,169 in 2004. The increase in the size of the deficit was partly due to the higher demand for imports, as required by the refurbishment of the country's privatised mines, and the high costs of imports such as machinery, crude oil, chemicals, iron and steel. Zambia's trade with its primary trading partner, South Africa, grew by 31% over the period. South Africa is the main source of Zambia's current account deficit because it has replaced Asia and Europe as the primary source of intermediate inputs, machinery and vehicles imported into the country. Compared to the rest of SADC (RoSADC), South Africa accounts for almost half of Zambia's imports and exports markets.

The persistence of a perpetual trade deficit in the Zambian economy emanates from the narrow export-product base, limited market access and the poor terms of trade. The country's exports include mostly unprocessed or semi-processed intermediate products, such as non-ferrous metals, cotton yarn, unroasted coffee and tobacco, all of which are prone to export instability because of fluctuations in international prices, and imbalances in the domestic macroeconomic environment. The gap between the exports and imports can only be bridged if, firstly, export diversification is continued and secondly, the level of exports of value-added, final products is increased. Diversification to non-traditional exports has recently been threatened by the rapid appreciation of the Kwacha (see Box 1).

Table 2: Zambia's trade balance with the world, South Africa and with RoSADC: 2000-2004 (ZKw m)

	2000	2001	2002	2003	2004	Growth rate
Exports	2,652,041	3,537,104	3,931,802	4,478,604	6,983,562	24.27
Imports	2,686,144	3,900,351	4,814,828	7,321,295	9,651,731	37.54
Trade balance	-34,103	-363,247	-883,026	-2,842,691	-2,668,169	
Exports to South Africa	518,788	783,471	872,744	968,624	1,789,794	30.85
Imports from South Africa	1,495,298	2,178,554	2,628,122	3,544,613	4,458,445	30.63
Trade balance	-976,510	-1,395,083	-1,755,378	-2,575,989	-2,668,651	
Exports to rest of SADC (RoSADC)	772,456	1,033,931	1,391,564	1,994,134	3,475,718	44.26
Imports from RoSADC	1,848,404	2,638,354	3,194,898	4,819,648	5,384,621	31.53
Trade balance with SADC	-1,075,948	-1,604,424	-1,803,334	-2,825,515	-1,908,904	0



3.2 Exports and imports by region

Since trade liberalisation in 1991, Zambia's direction and composition of imports and exports have changed. Prior to liberalisation, high income countries, especially from Europe and Asia, absorbed more than 66% of Zambia's exports and were the source of over 60% of its imports. In that period, SADC absorbed only 3.8% of Zambian exports and supplied 8.1% of its imports. Between 1995-2004, as is evident in Table 3, that changed and as trade with the SADC region became so dominant that it outgrew its trade with the rest of the world. By 2004, the SADC region supplied 56% of Zambia's imports and absorbed about 50% of Zambia's exports. The SADC region is increasingly important to Zambia as a market for both its non-traditional and traditional exports.

Table 3: Exports and imports by region: 2004

Region	Exports value (ZKw m)	Exports (%)	Imports value (ZKw m)	Imports (%)
SADC	3,475,718	49.77	5,384,621	55.79
European Union	1,755,216	25.13	2,147,590	22.25
MERCOSUR ¹	989	0.01	31,795	0.33
Rest of Africa	58,260	0.83	179,973	1.86
Oceania	4,857	0.07	90,628	0.94
Rest of Americas	376	0.01	4,974	0.05
Rest of Asia	300,127	4.30	1,174,411	12.17
Rest of Europe	1,121,558	16.06	89,149	0.92
Eastern Asia	173,516	2.48	342,380	3.55
Other regions	92,945	1.33	206,209	2.14

Turning to regions beyond SADC, Zambia exported 25% of its exports to the European Union (EU) and, in turn, secured 22% of its imports from that region in 2004. Historically, the EU was the largest export market for Zambian minerals and the second largest destination of its NTEs including, for example, horticultural and floricultural products, cotton, coffee and tea, edible vegetables and other plants, tobacco, and sugar and sugar confectioneries. The dominance of mineral exports to the EU and Asia, as opposed to SADC, can be explained by several factors. Those include the higher levels of development in those regions; the preferential market access available to Zambia through the Generalised System of Preferences' (GSP) Everything But Arms (EBA) initiative; Zambia's eligibility under the Cotonou Agreement; and the fact that while minerals are inputs in heavy industrial manufacturing, most SADC countries not only have a narrow industrial base but also extract similar types of minerals. As noted previously, the shift in the market destinations away from the EU and Asia to the

¹ MERCOSUR consists of Brazil, Argentina, Uruguay and Paraguay.



SADC region cannot be explained fully by trade diversion, as is created by preferential reciprocal trade arrangements within SADC, because implementation of the SADC Trade Protocol commenced only in 2000. Other potential reasons for the trade diversion could include factors of geographical proximity and the traditional ties that Zambia has with its SADC neighbours.

The rest of Europe is Zambia's third largest trading partner and Asia, accounting for 3% of its exports and 4% of its imports, is its four largest trading market. The rest of Europe and Asia, as has already been pointed out, import Zambia's minerals as industrial inputs.

Box 1: Impact of exchange rate appreciation (ERA) on the performance of non-traditional exports

Between June 2005 and February 2006, the Zambian Kwacha appreciated by more than 40%, from about ZK4,755.35 in January 2005 to ZK 3,200 December 2005. The rapid appreciation of the currency emanated from higher copper revenues, which were due to increases in the volume and prices of copper, the net government savings secured following the country's attainment of the HIPC Completion Point, and the inflow of foreign direct investment. The appreciation of the currency subsequently reduced the international competitiveness of domestic products on the world markets and made imports cheaper. This had adverse effects on many exporters of NTEs and some of those companies either closed down or downsized their operations. Continued complaints from exporters, about the negative effects of the appreciation of the Kwacha, moved the Central Bank to undertake a study to determine the extent to which exporters were impacted negatively. Out of the 400 major exporters in the country, 149 companies participated in the survey and the following were the major findings:

The appreciation of the currency impacted negatively upon more than 73% of exporting companies, while 7% benefited from the appreciation and 20% were unaffected. Most of the adversely affected firms exported 80% to 100% of their output with less than 30% of their inputs imported. The negative impact of the appreciation led companies to, among others things, stop exporting or close down (26%), as was the case in the cotton sector; lay off workers, as occurred in the tourism sector; reduce output; increase local sales; shift from invoicing local suppliers in US dollars to Kwacha; and hoard exports.

The sectoral analysis found that there were variations in the number of companies impacted across the various sectors. In agriculture, 83% of the firms were adversely affected, 3% were favourably affected and 14% were unaffected. In tourism, 78% of the firms were adversely affected, 3% were favourably affected and 19% were unaffected. All gemstones exporters reported that they were adversely affected. In manufacturing, 57% of firms were badly affected. Most of the exporters noted that the adverse effect of the appreciation of the Kwacha was exacerbated by higher inflation, which stood at 15.9% in December 2005, and high interests rates, which were at an average rate of 27%. The Central Bank's study concluded that if government was to support export diversification, export growth, employment generation and economic growth, it had to pay attention to increased macroeconomic stability.

3.3 Top 10 sources of imports and destinations for exports

The top nine destinations of Zambia's exports in 2004 were South Africa, the United Kingdom (UK), United Arab Emirates (UAE), France, India, China, the United States of America (USA), Kenya and Tanzania.

Closer examination of these trading destinations reveals that Zambia trades mostly with South Africa, followed by the UK. South Africa's prominence as a major destination of Zambian NTEs has meant that it has displaced the EU and Asia as Zambia's major trading partner. That fact cannot wholly be explained by the SADC Trade Protocol because that particular trend started before the adoption and implementation of the Protocol. Possible reasons for South Africa's prominence could include its geographical location, which lowers transportation costs; the emergence of trade opportunities in the post- Apartheid era; increasing South African investment in Zambia; and the duty free offer to Zambia, by the Southern African Customs Union (SACU), on copper wire and sugar exports. In addition, Zambia also exports some products to preferential markets, like the US market, through third-party arrangements which involve South Africa. Zambia's major exports to South Africa include refined copper cathodes, copper electrical cables, scrap metals, and agricultural-related products like floricultural and horticultural products, cotton, sugar, tobacco and leather products. Within the SADC region, excluding South Africa, Tanzania, the Democratic Republic of Congo (DRC) and Zimbabwe are major markets. The main export to Tanzania is engineering products, mainly copper cables, which are inputs for its booming mining sector and which enter the Tanzanian market under the SADC Trade Protocol. Exports to the DRC and Zimbabwe are mostly processed and unprocessed food products, and chemical and pharmaceutical products. The significant rise in border trade (with?) is attributable to the disruptive political and economic events in the country and which have almost halted its agricultural activities. The bulk of trade between the two countries remains unrecorded. There is potential for more trade between these countries, which is why Zambia has been negotiating a bilateral trade agreement with the DRC.

In 2004, Zambia's major export destinations in Europe were the UK, Switzerland, the Netherlands and Belgium. While the UK has been a major trading partner, partly due to Britain's colonial influence, the rising share trade with other EU countries was fostered by the preferential market access that Zambia enjoys with the EU. Zambia, under the Cotton Agreement, has quota and duty free market access to the EU and recently, its sugar exports more than doubled due to the EBA's sugar quota. The main exports to the EU include sugar, cotton, floricultural and horticultural products, and metals. Meanwhile, China has become one of the major destinations of Zambian copper and precious stones.

Table 4: Top 10 sources of imports and destinations for exports: 2004

Exports				Imports		
Rank	Country	Value (ZKw m)	Share of total (%)	Country	Value (ZKw m)	Share of total (%)
1	World	6,983,562	100.0	World	9,651,731	100.0
2	South Africa	1,789,794	25.6	South Africa	4,458,445	46.2
3	United Kingdom	1,190,406	17.1	United Kingdom	1,370,223	14.2
4	Switzerland	1,118,869	16.0	United Arab Emirates	686,423	7.1
5	Tanzania	514,041	7.4	France	276,573	2.9
6	Democratic Republic of Congo	486,501	7.0	India	233,426	2.4
7	Netherlands	206,156	3.0	China	210,202	2.2
8	Malawi	205,186	2.9	United States	162,746	1.7
9	Taiwan	185,206	2.7	Kenya	156,264	1.6
10	Belgium	167,833	2.4	Tanzania	132,312	1.4%

South Africa has remained Zambia's main source of imports, although its share of total imports has declined over the past few years. The share of imports rose from an average of 32% in 1990-1992 to 69% in 2000-2002 and then declined, in 2004, to 46.2% at the expense of the EU and Japan. The huge import bill incurred by Zambia's new mining companies, which could have sourced their capital equipment from Europe and Asia, specifically Equinox and Vendetta from India, may account for 2004's declined share of imports from South Africa.

Within the SADC region, Tanzania features as a key import partner for specific imports of foodstuffs and clothing. Geographical proximity and the SADC Trade Protocol, which has progressively liberalised trade between the two neighbours, are reasons for Tanzania's importance as a trading partner. The two countries are also engaged in negotiating a bilateral trade agreement. The large import bill from Kenya can be attributed to the impact of the Common Market for Eastern and Southern Africa Free Trade Area (COMESA FTA) to which Zambia and Kenya are signatories.

After South Africa, the UK was Zambia's second largest source of imports. Industrial and construction motor vehicle equipment, pharmaceuticals and foodstuffs generally, are imported from the EU. Furthermore, Zambia imports petroleum products, construction materials and other foodstuffs from the Middle East, and specifically the UAE.

Over the years, Chinese investments and imports have increased. China supplies several products, such as clothing and capital equipment, the latter is used in the construction and mining sectors, to Zambia. Imports from the US, which are 1.7% of the total, have declined from an average of 2.2% in 2000-2002.



3.4 Fastest growing import and export partners

In the post-independence period, the government has sought to diversify economic production and end the country's dependence on copper. Currently, efforts are underway to create market diversification within Zambia's traditional and non-traditional exports sectors.

As Table 5 indicates, the fastest growing destinations for Zambia's exports for 2000-2004 were China, Taiwan and Tanzania. During that period, exports to China grew by more than 530%, while the exports to Taiwan grew by 375%. Exports to Tanzania increased by 190% while a range of other countries experienced more moderate levels of growth: Malawi (48%), DRC (39%), the Netherlands (35%), South Africa (31%) and Belgium (28%).

Table 5 also shows that exports to the UK declined by 4% over the same period.

Table 5: Fastest growing trade partners: 2000-2004

Imports			Exports		
Country	Value (2004) (ZKw m)	Average growth 2000-2004 (%)	Country	Value (2004) (ZKw m)	Average growth 2000-2004 (%)
United Arab Emirates	686,423	123.9	China	140,103	533.6
Kenya	156,264	117.4	Taiwan	185,206	374.7
France	276,573	100.4	United Republic of Tanzania	514,041	189.9
Finland	101,506	82.8	Malawi	205,186	47.7
United Republic of Tanzania	132,312	57.9	Democratic Republic of the Congo	486,501	38.7
China	210,202	51.7	Switzerland	1,118,869	36.2
India	233,426	48.4	Netherlands	206,156	35.3
United Kingdom	1,370,223	44.5	South Africa	1,789,794	30.9
Germany	101,894	36.2	Belgium	167,833	27.8
South Africa	4,458,445	30.6	United Kingdom	1,190,406	-3.9

The top five fastest growing destinations for Zambian exports have not been the country's traditional markets. The main drivers of that growth in exports these new market destinations are the economic growth occurring within those countries and their associated huge investments into Zambia. For instance, the growth of exports to China can be attributed to firstly, the industrial growth taking place there and the corresponding demand for raw materials, such as cotton, copper and tobacco², and secondly, the increase in Chinese investments in Zambia. Further, the recovery of copper mining, combined with the sharp rise in the copper prices on the world market, have contributed to the rapid growth in Zambia's exports to China.

² Zambia exports a substantial amount of tobacco to Malawi and Zimbabwe, countries where there are established auction and processing facilities.



Similarly, exports of precious stones, copper and cobalt, and the rise in prices thereof, accounts for the observed growth of exports to Taiwan.

The rapid growth in exports to Tanzania is due to the huge demand, by new mining companies there, for cathodes of refined copper, copper cables and electrical energy. Foodstuffs constitute most of the exports the DRC where there is a substantial demand for processed and unprocessed foodstuffs. Malawi imports large quantities of foodstuffs and tobacco, for auctioning and processing purposes, from Zambia.

Exports to Europe, and specifically to Switzerland, Belgium and the Netherlands, consist of non-traditional exports such as sugar, cut flowers, horticultural products, cotton and precious stones.

The sustainability of the Chinese market for Zambian exports depends largely on the continued good performance of the Chinese economy; something which is poised to continue for the foreseeable future. The major drawback for Zambia is that it exports a narrow range of raw materials, such as cotton and copper, to China. Export growth is likely to be sustained as global metal prices rise, driven by demands in China, and as the industrial base in Zambia expands.

On the supply side, Zambia does have a natural comparative advantage in metals because it appears to have a continuous source of supply for years to come. That supply has been enhanced by the establishment of new copper mines while the lifespan of old mines, such as Konkola Copper Mines (KCM), the largest mine for over 30 years, has been extended. Further re-investments are also being undertaken. For Zambia to benefit more from the metals market, it needs to ensure that it increases the value added to its exports to this market.

The potential of other export destinations, such as the DRC, which has an estimated population of 54-million people, should be explored. Within the SADC region, it is difficult to assess accurately the market potential there because a lot of trading occurs informally.

Although exports destined for South Africa have not grown as rapidly as they have for other countries in the region, South Africa is likely

to remain Zambia's major trading partner. This slower growth can be attributed to the differences in the levels of development between the two countries and the substantial nature of South African investments in the country. The potential sustainability of the South African market lies in the fact that it imports both traditional and non-traditional commodities, which are necessary inputs in South African companies' production processes, from Zambia.

In terms of non-traditional exports, Zambia has a comparative advantage in two sectors: agriculture and precious stones. New investment in agriculture, especially given the disruptions in Zimbabwe; the increased value addition occurring in the precious stones market; the country's favourable climate and its huge, untapped agricultural potential, where less than 14% of all arable land is used currently, all imply that the country can pursue a continued diversification policy and sustain diversified exports for many years to come. Nevertheless, the government has to manage the macroeconomic environment so that it does not impact negatively upon the non-traditional sectors. In 2005-2006, as was described earlier in the discussion of the impact of currency appreciation on exporting firms, the rapid appreciation of the Kwacha resulted in the closures of some export firms in the non-traditional exports sectors.

Zambia's imports trade profile is slightly different from its exports profile. Zambia's imports are mainly highly-valued consumption, intermediate and capital goods. Table 5 shows that the UAE, Kenya, certain EU member states, such as France, Finland, the UK and Germany, Tanzania, China, India and South Africa are countries from which Zambia imports a range of products. The increasing global price of oil and the demand for energy, especially among mining companies and other expanding industries in Zambia, are responsible for the growth of imports from the UAE. With regard to imports from Europe, capital goods account for most imports from Zambia's European trading partners. Within the SADC region, the COMESA FTA is responsible for the growth in imports from Kenya. Imports from South Africa are likely to continue to grow as South African investment within the country increases.

3.5 Commodity composition of trade

Tables 6 and 7 show the composition of Zambia's main imports and exports, respectively.

Zambia imports mainly high-valued consumption, intermediate and capital goods, as is required for investment in the industrial, agricultural and transport sectors of its economy. As Table 6 shows, most of the capital goods and consumer durables imported into Zambia are sourced from the rest of the world, particularly the EU and Japan, and South Africa. The most commonly imported products from these countries are machinery, metal products, chemical products, vehicles and aircrafts. It is a trend which reflects the fact that these products are produced predominantly by developed countries whose industrial structures do not differ significantly from those in South Africa. From the rest of SADC, Zambia imports mostly foodstuffs, such as vegetables, and non-food products, such as chemicals, which are inputs needed by its evolving industries.

Table 6: Commodity composition of imports: 2004

Product	Share of total imports from world (%)	Share of total imports from South Africa (%)	Share of total imports from RoSADC (%)
C01: Animals (live) and animal products; Section I	0.42	0.37	1.55
C02: Vegetable products; Section II	2.83	3.39	10.28
C03: Fats and oils (animal or vegetable); Section III	2.16	2.69	1.28
C04: Prepared foodstuffs, beverages, and tobacco; Section IV	1.27	1.68	3.52
C05: Mineral products; Section V	13.56	9.27	32.95
C06: Chemical products; Section VI	13.37	14.85	15.01
C07: Plastics and rubber; Section VII	6.00	9.06	4.17
C08: Leather products; Section VIII	0.12	0.05	0.04
C09: Wood products; Section IX	0.11	0.13	0.41
C10: Paper products; Section X	13.48	4.34	4.91
C11: Textile products; Section XI	3.23	2.18	4.49
C12: Footwear, headgear, and umbrellas; Section XII	0.53	0.33	0.29
C13: Stone, cement, and glass products; Section XIII	1.06	1.29	1.49
C14: Pearls and precious stones; Section XIV	0.03	0.02	0.12
C15: Metal products; Section XV	8.14	11.51	8.08
C16: Machinery; Section XVI	22.99	25.41	6.73
C17: Vehicles, aircraft, and vessels; Section XVII	8.52	11.22	3.19
C18: Photographic instruments, clocks, and musical instruments; Section XVIII	1.20	1.11	0.14
C19: Arms and ammunition; Section XIX	0.03	0.02	0.01
C20: Furniture, toys, and other products; Section XX	0.94	1.07	1.33
C21: Works of art and antiques; Section XXI	0.00	0.00	0.00
C22: Commodities not elsewhere specified (n.e.s.); Section XXII	0.00	0.00	0.00

Most of the machinery and vehicles imported into Zambia are sourced from South Africa and the rest of the world, and that is primarily because other SADC member countries do not have the ability to produce them. Overall, Zambia imports more capital equipment and industrial supplies than other products from its trading partners.

The composition of exports is dominated by the traditional exports of metal products. As Table 7 shows, metal exports, at more than 50% (or 30% in the case of the RoSADC) of the total, are Zambia's largest broad category of exports. Raw minerals are exported to developed countries as inputs for their industries. Those metals are then processed into, for example, wires which are then exported as final inputs. Exports to the countries in the RoSADC include mostly prepared foodstuffs (21%), vegetable products (18%) and chemical products (11%). The dominance of these particular export products to the RoSADC can be attributed to the high demand, due to political and economic instability, in the DRC and Zimbabwe for food products. Political disruptions in both countries have impacted negatively upon their own food production outputs, while droughts and crop failures have created recurrent food shortages in those markets.

Table 7: Commodity composition of exports: 2004

Product	Share of total exports to world (%)	Share of total exports to South Africa (%)	Share of total exports to RoSADC (%)
C01: Animals (live) and animal products; Section I	0.27	0.07	0.49
C02: Vegetable products; Section II	9.63	9.49	17.80
C03: Fats and oils (animal or vegetable); Section III	0.04	0.00	0.16
C04: Prepared foodstuffs, beverages, and tobacco; Section IV	6.55	1.37	21.62
C05: Mineral products; Section V	4.82	2.39	11.12
C06: Chemical products; Section VI	2.78	0.54	10.79
C07: Plastics and rubber; Section VII	0.16	0.09	0.47
C08: Leather products; Section VIII	0.29	0.26	0.06
C09: Wood products; Section IX	0.90	3.03	0.24
C10: Paper products; Section X	1.03	1.87	1.23
C11: Textile products; Section XI	9.86	25.97	2.12
C12: Footwear, headgear, and umbrellas; Section XII	0.45	0.00	1.08
C13: Stone, cement, and glass products; Section XIII	0.05	0.07	0.08
C14: Pearls and precious stones; Section XIV	1.94	0.09	0.77
C15: Metal products; Section XV	60.00	51.87	30.53
C16: Machinery; Section XVI	1.06	2.81	0.96
C17: Vehicles, aircraft, and vessels; Section XVII	0.07	0.01	0.26
C18: Photographic instruments, clocks, and musical instruments; Section XVIII	0.00	0.00	0.00
C19: Arms and ammunition; Section XIX	0.00	0.00	0.02
C20: Furniture, toys, and other products; Section XX	0.07	0.06	0.20
C21: Works of art and antiques; Section XXI	0.02	0.01	0.00
C22: Commodities n.e.s.; Section XXII	0.00	0.00	0.00

South Africa is the major destination for Zambian textiles products, accounting for 26% of exports, compared to textiles exports to the Ro-SADC and the rest of the world, equal to 2.1% and 9.9%, respectively. Textiles imports by South Africa are re-exported to the US under the Africa Growth and Opportunity Act (AGOA).

3.6 Fastest growing import and export commodities

3.6.1 Fastest growing export commodities

Table 8 lists Zambia's fastest growing exports. As shown in at table, the miscellaneous edible preparations category grew fastest, increasing by over 255%, between 2000-2004. That was followed by cereals, which grew at half that rate. For the period 2000-2004, miscellaneous edible preparations products were exported to the DRC and Zimbabwe, both of which have experienced production disruptions due to political and weather instability.

Tobacco and tobacco related products were the fourth fastest growing exports, increasing by 64%. In part, the instability in Zimbabwe contributed to that increase. Some displaced Zimbabwean farmers have redirected their investments, skills and capital into Zambia. That is likely to continue as Zambia replaces Zimbabwe as the dominant tobacco producer in the region. International tobacco companies are also looking for alternative supply sources, and Zambia is clearly a promising alternative.

Edible vegetables and certain roots also experienced growth between 2000 and 2004, and Zambia has a niche market in the EU, especially in the Netherlands and the UK, for such products.

Table 8 shows that exports of salt, sulphur and cements products have grown quite rapidly. Zambia exports most of these products to the SADC and COMESA regions. Cement is mostly exported to countries, such as Burundi and Rwanda, which are undergoing significant reconstruction after years of civil war.

In terms of trade with South Africa, Table 9 reveals that cotton and H12 code related commodities, like cotton seeds, vegetables and fruits, were the fastest growing commodities, increasing by more than 90%.

A shift, from the EU to South Africa, has occurred in the exports of cotton and cotton seeds. Factors responsible for that reorientation include the following: the increasing flow of textiles into the EU from Asian and eastern European countries; opportunities created by the AGOA and the SADC Trade Protocol; and the strengthening of the euro against the dollar. Zambia exports about 90% of all of its cotton yarn production to South Africa, which, in turn, uses it as inputs for the textiles manufacturing sector and then exports cotton apparel to the USA



Table 8: Fastest growing export products from Zambia

Product	Value 2004 (ZKw m)	Growth (2000-2004) %
H21: Miscellaneous edible preparations	25,349	255.40%
H10: Cereals	193,580	102.74%
H12: Oil seed, oleagic fruits, grain, seed, fruit, etcetera, n.e.s.	152,298	84.77%
H24: Tobacco and manufactured tobacco substitutes	267,591	64.29%
H07: Edible vegetables and certain roots and tubers	174,412	42.62%
H25: Salt, sulphur, earth, stone, plaster, lime and cement	83,814	23.00%
H17: Sugars and sugar confectionery	147,256	17.06%
H11: Milling products, malt, starches, inulin, wheat gluten	31,977	15.91%
H09: Coffee, tea, mate and spices	56,421	14.65%
H06: Live trees, plants, bulbs, roots, cut flowers, etcetera	63,729	-3.15%

under AGOA. Zambian cotton is of a very high quality and is not genetically modified. Its supporting industries are efficient and have local access to key inputs, such as seeds and chemicals, through privately run out-grower schemes. While seed-related products are exported for industrial inputs, vegetables (the remainder of which is exported to the EU) and other products are exported mainly to South Africa; incomes are higher there than in other regional markets and where prices for such products are beyond the latter consumers' reach (DTIS, 2005).

Exports of wood and wood articles, usually exported to South Africa, have grown rapidly as have exports of printed materials, which had growth rates above 60%. The export of base metals declined by 6% between 2000-2004.

Unlike South Africa, the fastest growing exports to the rest of SADC included miscellaneous edibles, fertilisers and cereals, and as shown in Table 10, all recorded growth in excess of 100% for the period 2000-2004. The main destinations in the RoSADC for these products were the DRC, Zimbabwe and Malawi; all have suffered food deficits over the period under review.

Tobacco exports grew by more than 80% and were exported mainly to Zimbabwe and Malawi, where there are auction and processing facilities, because such facilities are absent in Zambia. Zambia has also experienced rapid increases, equivalent to 65% and 41% in mineral products and cotton, respectively, to the RoSADC. Most of Zambia's cotton products are exported to Botswana and Mauritius and used as inputs in their apparel industries. Both countries are taking advantage of the market opportunities offered by AGOA.

Other products that have experienced growth for the period include salt, cement, sugar and confectionary, and milling products.

Table 9: Fastest growing exports to South Africa: 2000-2004

Product	Value 2004 (ZKw m)	Growth (2000-2004) %
H52: Cotton	463,480	92.87
H12: Oil seed, oleagic fruits, grain, seed, fruit, etcetera, n.e.s.	149,265	92.17
H44: Wood and articles of wood, wood charcoal	54,234	78.19
H49: Printed books, newspapers, pictures, etcetera	33,468	61.07
H26: Ores, slag and ash	31,427	48.69
H74: Copper and articles thereof	737,786	34.21
H85: Electrical, electronic equipment	43,611	26.28
H81: Other base metals, articles thereof	160,256	-6.22

Table 10: Fastest growing exports to RoSADC: 2000-2004

Product	Value 2004 (ZKw m)	Growth (2000-2004) %
H21: Miscellaneous edible preparations	24,991	389.75
H31: Fertilisers	140,217	145.97
H10: Cereals	189,466	101.41
H24: Tobacco and manufactured tobacco substitutes	225,757	87.30
H27: Mineral fuels, oils, distillation products, etcetera	112,393	64.67
H52: Cotton	32,880	41.29
H07: Edible vegetables and certain roots and tubers	73,262	39.48
H25: Salt, sulphur, earth, stone, plaster, lime and cement	74,266	25.59
H17: Sugars and sugar confectionery	101,885	20.79
H11: Milling products, malt, starches, wheat gluten	31,329	16.95

3.6.2 Fastest growing import commodities

Zambia's demand for imports has grown and, as is evident in Table 11, the imports of goods classified as H08, H07 and H25 products grew by more than 50% over the period. A detailed analysis reveals that H08 and H07 products include edible fruits, such as fresh oranges, apples and melons, and dried fruit. Zambia has a comparative disadvantage in these markets because of a lack of technology and appropriate skills as well as unfavourable climatic conditions. The code H25 consists of salt, sulphur and other construction materials, such as cement, and, as was noted above, this category also experienced considerable growth. The rapid growth in H11 is attributable to the partial drought that Zambia experienced in 2002-3 and which led to substantial imports of milling products such as maize meal, wheat and other related products. Other products in the H28 and H27 code categories are used mainly as inputs in other production lines. Inter-country investments, especially by the DRC's mining corporations, have led to a 37% growth in ores, slag and ash which were exported to Zambia for refining.

Zambia sources most of its imports from South Africa. In the period 2000-2004, cereals, explosives and pharmaceutical products were the fastest growing imports, and exhibited growth at 90%, 66% and 53% levels, respectively. A closer examination of the H10 category reveals that the fastest growing products were wheat and maize, imported to supplement Zambia's food deficits, while explosives were imported by the booming copper mines as inputs for their mining activities.

Apart from mineral fuels, imports of other products grew by more than 30%. Growth in most imports categories can be attributed to the large number of South African manufacturing and trading companies, like Shoprite and Spur, investing in Zambia. Such companies import products either as inputs into their production lines or as commodities for sale in the local market.

With regard to the RoSADC, Zambia's fastest growing imports were the commodities in the H28 category, comprising inorganic chemicals and precious metals, and the H08 category, consisting of edible fruits, nuts, melons and peel of citrus. For both categories, growth averaged at 95% and 87%, respectively. Apart from H08 products, which are imported as final goods, the inorganic chemicals, sourced from the RoSADC, are imported as intermediate goods which are demanded by local industries. The rapid growth in the intermediate inputs reflects Zambia's currently expanding industrial sector.

Imports of H25, H72 and H33 products grew by more than 50% for 2000-2004.

Among Zambia's top 10 imports, H31 commodities have exhibited the slowest growth, increasing by only 6.3%. Tables 13 and 12 reveal that cereals have been the fastest growing imports from South Africa, while H28-related imports, which include inorganic chemicals, have been the fastest growing imports from the RoSADC. Despite the variances in the rates of growth of imports, Zambia imports most of its top 10 imports from South Africa; that share is greater than the combined value of all imports from the rest of SADC in absolute terms. South Africa remains, therefore, Zambia's single largest trading partner.

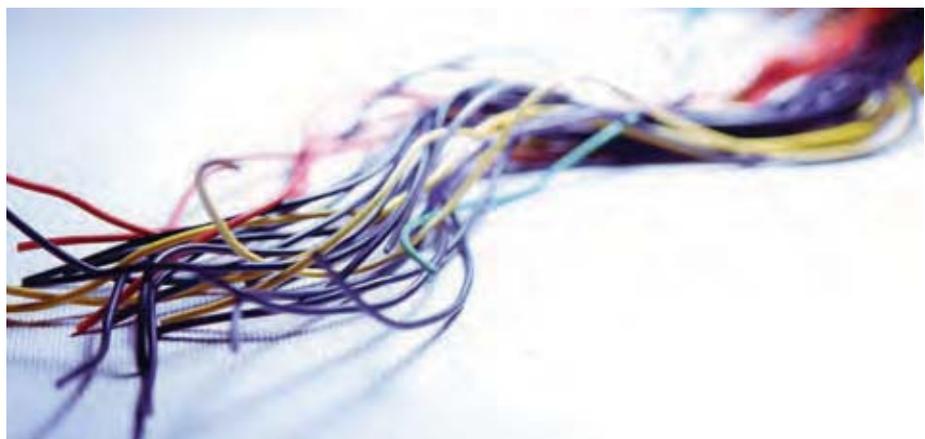


Table 11: Fastest growing imports from the world: 2000-2004

Product	Value 2004 (ZKw m).	Growth (2000-2004) %
H08: Edible fruit, nuts, peel of citrus fruit, melons	42,971	58.13
H07: Edible vegetables and certain roots and tubers	27,762	54.80
H25: Salt, sulphur, earth, stone, plaster, lime and cement	175,744	50.65
H11: Milling products, malt, starches, insulin, wheat gluten	40,664	44.92
H28: Inorganic chemicals, precious metal compound, isotopes	152,449	43.79
H10: Cereals	126,820	41.83
H15: Animal, vegetable fats and oils, cleavage products, etcetera	208,918	38.55
H27: Mineral fuels, oils, distillation products, etcetera	1,085,849	37.71
H26: Ores, slag and ash	46,874	29.26
H21: Miscellaneous edible preparations	24,154	6.10

Table 12: Fastest growing imports from South Africa: 2000-2004

Product	Value 2004 (ZKw m)	Growth (2000-2004) %
H10: Cereals	105,269	89.60
H36: Explosives, pyrotechnics, matches, pyrophorics, etcetera	54,400	66.06
H30: Pharmaceutical products	41,763	52.63
H25: Salt, sulphur, earth, stone, plaster, lime and cement	102,286	42.59
H29: Organic chemicals	62,185	36.61
H28: Inorganic chemicals, precious metal compound, isotopes	92,442	36.26
H15: Animal, vegetable fats and oils, cleavage products, etcetera	119,999	32.96
H31: Fertilisers	212,091	30.78
H34: Soaps, lubricants, waxes, candles, modelling pastes	25,694	30.49
H27: Mineral fuels, oils, distillation products, etcetera	309,385	4.53

Table 13: Fastest growing imports from the RoSADC: 2000-2004

Product	Value 2004 (ZKw m).	Growth (2000-2004) %
H28: Inorganic chemicals, precious metal compound, isotopes	29,499	95.31
H08: Edible fruit, nuts, peel of citrus fruit, melons	34,181	87.44
H25: Salt, sulphur, earth, stone, plaster, lime and cement	72,625	60.40
H72: Iron and steel	41,697	57.20
H33: Essential oils, perfumes, cosmetics, toiletries	25,564	56.52
H48: Paper and paperboard, articles of pulp, paper and board	43,731	43.54
H27: Mineral fuels, oils, distillation products, etcetera	187,254	43.28
H11: Milling products, malt, starches, inulin, wheat gluten	28,035	41.96
H26: Ores, slag and ash	45,265	36.59
H31: Fertilisers	47,590	6.32

4. Describing trade

While Zambia's export intensities for the SADC region have, over the period 2000-2004, continuously increased, rising from 18.5 in 2000 to 37.81 in 2004, its import intensities oscillated between 23.7 (in 2000) to 27.7 (in 2003) and then declined to 15.6 (in 2004). The trends in export and import intensities are captured in Table 14.

Zambia's Complementarity Index has hovered near to an index of one for the entire period. Considering that most of the countries in the SADC region are structurally similar to Zambia, one would not expect a huge volume of trade, especially inter-industry trade, to be taking place within the region. It is, therefore, encouraging to observe that South Africa, the largest source of imports and the main destination of the non-traditional exports, has continued to attract several Zambian export products.

Table 15 shows that Zambia's concentration imports and exports have not changed significantly for all aspects of trade. The Hirschman Index³ for exports is higher than that for imports for years in the period 2000-2004. The index for exports declined from 0.3 in 2002 to 0.1 in 2003, while imports declined from 0.03 to 0.22 for the same period. Exports have become less concentrated, which suggests that the government's efforts, to diversify the country's export base towards non-traditional exports, are gaining some ground. The concentration of exports to SADC remained essentially stagnant at the 0.3 level, while imports declined by 0.02, dropping from 0.038 to 0.011, over the period. The decline in the import index can be attributed to the huge imports of machinery and equipment from South Africa; these commodities were previously imported from other regions like the EU and Japan.



Table 14: Trade intensities for exports and imports in 2004

	2000	2001	2002	2003	2004
Intensity with SADC (exports)	18.50	13.99	22.48	36.11	37.81
Intensity with SADC (imports)	23.74	23.25	20.33	27.51	15.56
Complementarity index	1.06	0.89	1.05	1.11	1.06

³ The Hirschman Index measures the level of concentration of trade, in other words, the number of import and export commodities accounting for the total level of imports and exports. The index ranges from 0 to one, where one represents maximum concentration.

Table 15: Hirschman indices

	2000	2001	2002	2003	2004
Exports	0.295	0.282	0.299	0.206	0.145
Imports	0.026	0.016	0.012	0.010	0.022
Exports to SADC	0.196	0.217	0.231	0.226	0.190
Imports from SADC	0.038	0.016	0.015	0.012	0.011
Exports to South Africa	0.058	0.078	0.215	0.326	0.127
Imports from South Africa	0.046	0.024	0.020	0.026	0.033

5. Revealed comparative advantage

There are several theories which explain why international trade takes place. According to the Ricardian theory of comparative advantage, international trade arises because of differences in technology [access and use] between trading countries. The Heckscher-Ohlin (H-O) theory assumes that while technologies may be of similar levels in two or more trading countries, trade is triggered by cost differences in factor prices. Implied in the H-O theory is that it is the differences in pre-trade relative prices, underlined by demand and supply conditions, which triggers trade. The difficulty involved in measuring comparative advantage using the H-O model (Balassa, 1965) led to the introduction of Revealed Comparative Advantage (RCA) theory. RCA theory suggests that comparative advantage is revealed by observed trading patterns rather than by determining the underlying causes of comparative advantage. It is the latter theory which informs this discussion of Zambia's revealed comparative advantage in the international trade arena.

The results of RCA calculations for Zambia's exports are contained in Table 16. Tabulated there are the top 20 ranked RCA calculations which reveal that Zambia's RCA is greatest in base metals and articles thereof (H81), where it has an index value of 138.1, and in copper and articles thereof, which has an index of 60. The H81 code, dominated mostly by cobalt, has experienced important growth, both in terms of price and volumes, over the years. Given the new investments in the copper industry, along with the escalating copper and cobalt prices, H81 category products are likely to remain significant in Zambia's RCA profile.

Other products in which Zambia enjoys important comparative advantage are agricultural products which span several broad categories such as cotton (H52), tobacco (H24), sugar and sugar confectionary (H17), edible vegetables (H07), oil seed and oleagious fruits (H12), live plants (H06) and cereals (H10). In recent years, the good performance experienced by these products can be attributed to the combined effects of governmental policies and the support of the EU's export development project which grants long-term credit to investors in these

Table 16: Revealed comparative advantage with respect to the world: top 20 commodities (HS2): 2004

Product	Index value	Exports (ZKw m).
H81: Other base metals, articles thereof	138.07	1,107,782
H74: Copper and articles thereof	59.69	3,030,186
H52: Cotton	18.23	680,853
H24: Tobacco and manufactured tobacco substitutes	14.19	267,591
H17: Sugars and sugar confectionery	9.76	147,256
H31: Fertilisers	8.89	140,529
H07: Edible vegetables and certain roots and tubers	6.97	174,412
H12: Oil seed, oleagic fruits, grain, seed, fruit, etcetera, n.e.s.	6.23	152,298
H06: Live trees, plants, bulbs, roots, cut flowers etc	5.87	63,729
H10: Cereals	5.29	193,580
H11: Milling products, malt, starches, inulin, wheat gluten	5.07	31,977
H09: Coffee, tea, mate and spices	4.98	56,421
H25: Salt, sulphur, earth, stone, plaster, lime and cement	4.64	83,814
H36: Explosives, pyrotechnics, matches, pyrophorics, etcetera	3.68	6,684
H26: Ores, slag and ash	3.68	131,271
H49: Printed books, newspapers, pictures etcetera	1.87	52,593
H78: Lead and articles thereof	1.45	3,112
H21: Miscellaneous edible preparations	1.13	25,349
H71: Pearls, precious stones, metals, coins, etcetera	1.02	135,141
H67: Bird skin, feathers, artificial flowers, human hair	0.89	2,050

sectors. Those particular incentives have crowded-in private sector enterprise investment and have been supported, too, by the availability of preferential regional (specifically in South Africa and the DRC) and international (specifically in the EU) markets to which Zambia exports such products.

Beyond the top 10 categories, Zambia has some comparative advantage in mostly processed foodstuffs, such as milling products (H11) and coffee (H09), explosives (H36), ores, slag and ash (H26), printed materials, and precious stones (H71). All of those categories have a low RCA index value falling between five and one.

Generally, Zambia has comparative advantage in primary commodities to which little or no value is added. That fact is not in line with the government's intent to diversify and export value-added or finished products, which are less susceptible to erratic price fluctuations, to the global market. The Zambian government needs to develop policy which fosters competitive advantage so that it can diversify its exports profile and increase the value of the foreign exchange which is earned from those exports. If that remains unchanged, Zambia may experience export instability as a result of its macroeconomic imbalances, the natural calamities, like droughts, to which it is vulnerable, and the unreliability of the primary commodities' world market.

6. Intra-industry trade

The concept of intra-industry trade (IIT) refers to trade in differentiated products produced by the same industry or linked to a broad category of products and which are measured by the Grubel-Lloyd (G-L) index (Williamson and Milner, 1991). Generally, IIT is common between countries with overlapping demand arising from their similar economic structures⁴.

Table 17, which shows the G-L index as calculated at a four digit HS code level, reveals that Zambia's top 15 categories of products have a G-L index above 0.60. The narrowness of the commodity range in each category suggests that Zambia engages mostly in intra-industry trade with other countries. Given the fact that Zambian trade has shifted from markets in the EU, which have significant structural differences from SADC/COMESA countries, that finding is not surprising.

The ferro-alloys, cement, paper, household and sanitary products, and insulated wire and cables categories each have a G-L index greater than 0.9. Tobacco and tobacco related products, cobalt, animal products and unsweetened beverages have an index ranging between 0.85 and 0.80. Manufactured products, like jewellery, footwear, mineral or chemical fertilisers, processed foodstuffs, and domestic appliances, which includes electric motors, have an index ranging between 0.68 and 0.79.

In this review of Zambian trade, the overlapping demand hypothesis seems to be valid. Zambia's intra-industry trade is more pronounced with the RoSADC than with South Africa, which differs, relative to the rest of the region, in economic structure. That fact is captured in tables 18 and 19 where the G-L index reveals that there is a high concentration of intra-industry trade between Zambia and South Africa, specifically in documents of title bond and unused stamps related products, articles of asbestos-cement products, vegetables (which are mainly imported by South African chains stores like Spur and Shoprite), and insulated wire and cable related products. All of those categories of products have a G-L index above 0.70 compared with the next categories of products, comprising ferro-alloys, maize and live plants, which have a G-L index above 0.50.

Zambia has a much lower revealed IIT, where the G-L index is lower than 0.50, in goods such as blankets, electrical energy, cobalt ores, coffee, hair preparations and bovine or equine leather related products.

Generally, the G-L index shows that IIT with South Africa is concentrated in mostly intermediate goods and a few primary commodities; it is a trend fostered by the flow of South African investments into Zambia.



⁴ The G-L index estimates the proportion of total trade accounted for by IIT for that industry or sector.

Table 17: Intra-industry trade with the world: top 15 commodities (HS4) in 2004

Commodity	Grubel-Lloyd index	Exports (ZKw m)	Imports (ZKw m)
H7202: Ferro-alloys	0.97	4,847.99	5,098.12
H2523: Cement (portland, aluminous, slag or hydraulic)	0.97	32,108.44	30,040.68
H4803: Paper, household, sanitary, width > 36 centimetres	0.96	1,697.12	1,552.96
H8544: Insulated wire and cable, optical fibre cable	0.93	46,416.64	40,148.86
H2402: Cigars, cigarettes etcetera, tobacco or tobacco substitute	0.85	1,096.41	812.33
H2605: Cobalt ores and concentrates	0.85	22,567.77	16,532.24
H0511: Animal products n.e.s., dead animals (non-food)	0.84	564.56	407.12
H2201: Unsweetened beverage waters, ice and snow	0.82	745.32	522.82
H3102: Mineral or chemical fertilisers, nitrogenous	0.79	139,859.63	215,198.19
H6402: Footwear n.e.s., with outer sole, upper rubber or plastic	0.78	13,637.99	8,781.70
H7113: Jewellery and parts, containing precious metal	0.77	759.56	479.86
H6405: Footwear n.e.s., sole not leather, rubber or plastic	0.72	14,067.53	24,766.32
H1602: Prepared or preserved meat, meat offal and blood, n.e.s.	0.72	1,684.01	953.73
H0405: Butter and other fats and oils derived from milk	0.71	481.78	879.00
H8509: Domestic appliances, incorporating electric motors	0.68	820.15	1,584.36

Table 18: Intra-industry trade with South Africa: top 15 commodities (HS4) in 2004

Commodity	Grubel-Lloyd index	Exports (ZKw m)	Imports (ZKw m)
H4907: Documents of title (bonds etc), unused stamps etc	0.96	32,971.20	35,618.12
H6811: Articles of asbestos-cement and cellulose fibre cement	0.89	1,046.52	842.92
H0710: Vegetables (uncooked, steamed, boiled) frozen	0.87	2,942.04	2,255.48
H8544: Insulated wire and cable, optical fibre cable	0.73	40,230.17	22,925.79
H7202: Ferro-alloys	0.60	2,164.22	5,097.97
H1005: Maize (corn)	0.56	1,766.16	4,499.42
H0602: Live plants nes, roots, cuttings, mushroom spawn	0.51	1,160.12	399.50
H6301: Blankets and travelling rugs	0.44	759.85	2,657.77
H2605: Cobalt ores and concentrates	0.35	5,630.36	1,186.04
H2716: Electrical energy	0.31	8,362.21	44,909.18
H0910: Other spices	0.30	559.74	3,226.07
H7302: Railway and tramway track material of iron or steel	0.26	518.94	3,456.22
H0901: Coffee, coffee husks and skins and coffee substitutes	0.25	8,375.57	1,196.16
H3305: Hair preparations	0.22	519.14	4,202.97
H4104: Bovine or equine leather, no hair, not chamois, patent	0.20	1,028.21	114.98
Weighted average of total intra-industry trade			

Table 19: Intra-industry trade with the RoSADC: Top 15 commodities (HS4) in 2004

Commodity	Grubel-Lloyd index	Exports (ZKw m)	Imports (ZKw m)
H2710: Oils petroleum, bituminous, distillates, except crude	0.97	90,926.64	95,868.17
H1202: Ground-nuts, not roasted or otherwise cooked	0.97	745.53	699.16
H5201: Cotton, not carded or combed	0.96	13,857.98	14,877.56
H3401: Soaps	0.91	17,751.55	21,174.66
H6405: Footwear n.e.s., sole not leather, rubber or plastic	0.91	643.22	532.64
H9404: Mattress supports, mattresses, bedding	0.88	638.31	817.98
H2523: Cement (portland, aluminous, slag or hydraulic)	0.86	25,771.52	19,603.03
H4901: Printed reading books, brochures, leaflets etcetera	0.84	988.07	1,364.83
H6401: Waterproof footwear, rubber, plastic (Wellingtons etcetera)	0.82	805.23	562.50
H5209: Woven cotton n.e.s., >85% cotton, >200g/m2	0.80	480.06	322.69
H8474: Machinery to sort, screen, wash, etcetera mineral products	0.74	805.46	1,372.23
H4407: Wood sawn, chipped lengthwise, sliced or peeled	0.74	563.84	963.53
H8429: Self-propelled earth moving, road making, etcetera machines	0.74	6,104.54	3,555.39
H3808: Insecticides, fungicides, herbicides etcetera (retail)	0.73	2,107.36	1,207.61
H2201: Unsweetened beverage waters, ice and snow	0.71	698.59	385.03



Turning from South Africa to the rest of the SADC region, the G-L index for Zambia's trade with the RoSADC is actually higher than that with South Africa, and the lowest index has a value higher than 0.70. The highest G-L index, which is above 0.90, is recorded for products that include petroleum products, ground nuts, cotton, soaps and footwear. Petroleum oils are re-exports to oil-deficit neighbouring countries, while cotton-related products are exported to neighbouring countries for processing and use as intermediate inputs in those garments industry; the latter has not performed well in Zambia.

Zambian products such as mattresses and beddings, cement, printed reading materials, waterproof footwear, woven cotton, machinery, wooden products, insecticides, fungicides and unsweetened beverages incorporate those which are merely re-exports, such as machinery-related products, some soaps and insecticides. Compared to the trade with South Africa, the IIT with the RoSADC is mainly in final and intermediate products. IIT is enhanced by long borders because those borders make it cheaper for residents, living along the borders, to source products from neighbouring countries and to overcome transport costs associated with products purchased from the country's industrial centres.

7. Summary of trade agreements planned and currently in force

7.1 Regional agreements

In the post-colonial era, integration in Africa has been perceived as a means of achieving industrialisation and modernisation because those actions are assumed to be able to encourage trade, secure economies of scale and foster market access. Consequently, many African countries belong to more than one regional grouping as part of the intent to maximise their own market opportunities. Overlapping membership of regional bodies and trade arrangements is a pervasive trend in southern and eastern Africa and, importantly, there are more than five Regional Trade Agreements (RTAs), including COMESA, EAC, IOC, SADC and SACU, among others (Khandelwal, 2004), in operation there. Zambia, too, is a signatory to a number of trade agreements at the bilateral, regional and multilateral level, including the SADC and COMESA agreements, among others⁵.

In addition to these trade agreements, Zambia is currently negotiating yet more bilateral agreements with other countries in order to enhance its exports. Among the agreements currently in existence and being negotiated, there are arrangements with the DRC, Nigeria, Tanzania, Zimbabwe, Botswana, Slovakia, India, China, Belarus and the Czech Republic. Zambia is also a participant in the Mozambique-Malawi-Zambia trade triangle.

The need for bilateral trade agreements arises, in part, from the fact that some countries, such as the DRC, have not implemented regional trade agreements and have, consequently, made it difficult for Zambia to export to these destinations. At a multilateral level, Zambia has been a member of the General Agreement on Trade and Tariffs (GATT), the precursor of the World Trade Organisation (WTO), since 1980 and became an original member of the WTO in 1994. The country continues to be an active member of the WTO.

7.2 Overlapping membership

In the region, Zambia is a founder member of both the SADC and COMESA, so its membership overlaps both agreements. Zambia also hosts the COMESA secretariat. The two regional groupings are pursuing economic cooperation and integration programmes in the areas that include trade, investment, transportation standards and power. Dual membership of COMESA and SADC involves choosing which particular set of rules to follow when conducting business. From a trade perspective, Zambia trades more with SADC than with COMESA.



⁵ See Box 2.

Overlapping membership tends to be costly and can generate complex structures that result in conflicting and confusing commitments. At times, that can retard development. Zambia is also incurring membership fees and administrative costs for both SADC and COMESA. Previously, the level of integration in the various RTAs did not pose any serious threats to the problem of overlapping membership yet recently, two main developments have made it necessary for Zambia to consider seriously having membership in only one regional grouping agreement. The first reason is related to the EU's push for regional economies to create customs unions as a pre-condition for the EPA under the Cotonou Agreement.

The second reason is linked to the fact that both SADC and COMESA are moving towards forming customs unions. Technically, it is impossible for a country to be a member of more than one customs union, as only one external tariff needs to be applied in its economy. As a consequence, Zambia's current dilemma involves choosing which of the two regional groupings to join exclusively. The decision is politically challenging because Zambia hosts the COMESA secretariat. Overall, the country will need to consider the potential economic gains, the range of political, traditional and cultural ties, and any regional infrastructure development gains when choosing between the two regional groupings.

8 Conclusion

From the 1990s onwards, Zambia has experienced improved macroeconomic conditions. Since 1974, the country's economy has registered positive economic growth rates and, in the period 2000-2005, those rates averaged at 4%. Overall, Zambia's inflation rates declined and its exchange rates stabilised, while its external debt dropped from US\$7.1bn in 2002 to less than half-a-billion dollars in 2006. That massive decline was the result of debt forgiveness associated with the country's qualification under the HIPC initiative. Despite these successes, Zambia's poverty levels are colossal, where over two-thirds (68%) of the populace continue to live on less than a dollar a day.

For the period 2000 -2005, Zambia's overall import and exports bills increased. Imports were mostly comprised of mining equipment, machinery, demanded by both new and old recapitalising mines following their privatisation, and intermediate goods.

The majority of the imported machinery and intermediate goods were obtained from South Africa, Europe and Asia, with almost half of those imports originating from South Africa alone. Intra-industry trade, mainly in chemicals and foodstuffs, took place mostly between Zambia and Zimbabwe, Malawi, Tanzania and Kenya. Exports increased, largely as a result of the revival of the copper industry and the increase



in copper prices on the global market. The resurgence of traditional exports was reinforced by efforts aimed at diversifying Zambia's exports into the NTEs such as vegetables, unprocessed and semi-processed agricultural products, gemstones and manufactures such as cables. The main destinations for those exports were South Africa, the EU, Asia (specifically China, Taiwan and India) and the RoSADC. Most of Zambia's exports are sent to countries and regions where it enjoys preferential market access.

Despite the increases it has experienced in exports, Zambia's potential to increase its exports is not being exploited fully. The low volume of exports is due to firstly, a lack of cooperation between Zambian exporters who resist exporting jointly and in large volumes to satisfy large market offers, and secondly, due to the lack of cheap capital available for investment.

In addition, most of Zambia's products, such as vegetables, cotton, gemstones and leather, are exported either in raw or semi-processed form. That reduces export earnings and limits diversification of the export base; the lack of technical skills and capital needed to process such products compound this situation. Furthermore, Zambia faces a number of export market access problems linked to technical barriers to entry. This is the case for Zambian sugar exports to the SADC and the EU regions, which are limited by quotas, and for other goods, such as cotton, which need to be processed only up to a specified level.



Box 2: Trade agreements to which Zambia is a signatory

SADC: SADC is an association of 14 southern African states. The SADC aims to create a Free Trade Area (FTA) by 2010. The process of dismantling trade barriers is on track. As a way of protecting its weak industrial structure, Zambia gives South Africa general offers that are not as flexible as those it offers to the rest of SADC (RoSADC). The restrictive Rules of Origin (RoO) inhibit Zambian export growth to the SADC region. Furthermore, Zambia expects to lose up to 35% of its customs duty revenue once the FTA is operational. In terms of trade, Zambia obtains over 60% of exports and 70% of imports from the region.

COMESA: COMESA consists of countries in eastern and southern Africa, including Angola, Burundi, Comoros, the Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia and Zimbabwe. COMESA is the second largest regional export market for Zambia's non-traditional exports, especially construction materials and other processed and unprocessed foodstuffs.

The Cotonou Agreement: The Agreement, also called the ACP-EC partnership agreement, is a partnership agreement between 79 members of the African, Caribbean and Pacific (ACP) group of states on one hand and the European Union and its member states on the other hand. It was signed in Cotonou; Benin, on 23 June 2000. The agreement covers many aspects including trade cooperation. Its trade aspects will be renegotiated after eight years to make them fully compatible with WTO obligations. During this time, the European Union will give non-reciprocal, preferential, free of duty and charges access to products from ACP states. Special provisions apply to some agricultural products; especially to sugar. Since the non-reciprocity principle violates the WTO principal of the most favoured nation, the Cotonou Agreement was given a waiver up to December 2007; thereafter, it is expected to be refined into a form of free trade area known as the economic partnership agreement (EPA). Zambia is negotiating an EPA under the eastern and South African configuration.

EBA: The EBA is an EU initiative for duty-free and quota-free access to all products, except for arms, originating in least developed countries. It took effect on 5 March 2001 for all products, although full liberalisation has not been implemented for sugar, rice and bananas. The latter will receive free access in stages up until 2009. Zambia exports more sugar to the EU under the EBA agreement than under the Cotonou Agreement, although the complexity of the rules of origin, technical barriers to trade and supply side constraints limit Zambia's ability to exploit fully the EU market.

AGOA: AGOA was passed as part of the Trade and Development Act of 2000 that provides beneficiary countries in sub-Saharan Africa with liberal access to the U.S. market for a list of products. Zambia is designated as AGOA-eligible. Generally, Zambia has not taken advantage of this market due to high transportation costs, stringent penetration requirements and other supply side constraints. Despite these constraints, Zambia still exports to the U.S. through third party countries like South Africa, Botswana and Mauritius.

Canadian Market Access Initiative: Exporters from 48 least developed countries (LDCs), of which 34 are in Africa, can now sell products into the Canadian market without having to pay duties or comply with quotas for most products. Exceptions do exist and include dairy, poultry and egg products, which remain subject to duties and quotas. Prior to the Canadian Market Access Initiative, which came into force on 1 January 2003, about half of Canada's imports from LDCs were subject to tariffs of an average of 19% (Ministry of Commerce, 2005). The objective of the Market Access Initiative is to reduce poverty through increased investment and economic development that results from the reduction of trade barriers. Zambia has, to date, not benefited from this initiative.

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