

Zoning in on South Africa's Industrial Development Zones

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Industrial Development Zones (IDZs) have been and still are important vehicles used by developing countries to facilitate investment, create jobs and boost exports. The attractiveness of IDZs is characterized primarily by their association with the adjacent location of an airport or port, good basic infrastructure and duty-free imports of production-related raw materials and inputs to enhance the key export oriented focus of the zones.

In South Africa, the establishment of IDZs is a recent phenomenon intended to attract investment, increase exports and the competitiveness of South African products. Currently the country houses four IDZs in Port Elizabeth (Coega IDZ), East London (ELIDZ), Richards Bay (RBIDZ) and Gauteng (OR Tambo International Airport). In addition, further sites have been identified and already some are being developed.

The proliferation of IDZs in the country has led to increased interest in the subject. To date the lacklustre investment in the country's industrial development zones and their failure to meet their ambitious goals have attracted mixed reviews regarding the international competitiveness of South African IDZs.

Against this background, this paper therefore aims to contribute to the ongoing IDZ debate. It examines the objectives and rationale for IDZs in South Africa, reviews the context in which an IDZ policy is being promoted in the country and then evaluates South African IDZs' economic performance. Accordingly of added value, this paper also reviews the types of fiscal incentives offered by Southern African countries in attracting investments in their development zones.

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1. INTRODUCTION

The establishment of Industrial Development Zones (IDZs) in South Africa is part of a growing international Export Processing Zone (EPZ) phenomenon. Typically, an EPZ operates within a specific geographical area, target a specific sector and offers incentives to firms so that they can have a competitive advantage in their industrial exports.

In this paper, in terms of the approach of the concept, an Industrial Development Zone (IDZ) is defined as an insulated export area strategically linked to a port or airport, and offers fiscal and non fiscal incentives to industrialists so that their exports can be internationally competitive.

Throughout the world, there are over 3500 zones (see Table 1)¹ of which Sub-Saharan Africa's share of the world EPZs is estimated at around 2.6% and Asia's share is estimated at approximately a quarter (25.7%). The general prevailing strategy in setting up such zones is to attract investments (both local and foreign but with a special emphasis on foreign direct investment) "for the purpose of exporting manufactured goods, and generating local employment and economic development" (Broadman et al, 2007:155)².

Table 1: Estimates of Export Processing Zones

YEARS	1975	1986	1997	2002	2006
Number of countries with EPZs	25	47	93	116	130
Number of EPZs	79	176	845	+3000	+3500
-of which Asia- (millions)	-	-	-	+749	+900
of which Sub-Saharan Africa (thousands)	-	-	-	+64	+90
Employment (millions)	-	-	22.5	43	66
-of which Asia (millions)	-	-	-	37	55
-of which Sub-Saharan Africa (thousands)	-	-	-	431	860

Source: ILO (2007)

¹ILO (2007). 'ILO database on export processing zones (revised) in Boyenge' Geneva, International Labour Organization April 2007

²Broadman H., Isik G., and Plaza S. (2007) 'Africa's Silk Road:China and India's New Economic Frontier' Washington, D C: World Bank

For developing countries, Industrial Development Zones (IDZs) have been and still are important vehicles used to facilitate investment, create jobs and boost exports. The attractiveness of IDZs is characterized primarily by their association with the adjacent location of an airport or port, good basic infrastructure and duty-free imports of production-related raw materials and inputs to enhance the key export oriented focus of the zones.

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Against this background, this paper therefore aims to contribute to the ongoing IDZ debate. The remainder of this paper is organized as follows. Section 2 examines the objectives and rationale for IDZs in South Africa. Section 3 reviews the context in which an IDZ policy is being promoted in the country. Section 4 evaluates South African IDZs' economic performance. Section 5 reviews the types of fiscal incentives offered by Southern African countries in attracting investments in their development zones. Section 6 concludes.

2. OBJECTIVES AND RATIONALE FOR INDUSTRIAL DEVELOPMENT ZONES IN SOUTH AFRICA

Many governments have employed EPZs as a policy mechanism since the overall expectation is that the benefits of establishing such zones outweigh the costs. The South African government also shares this perception and IDZs are used as a policy tool for development and export-oriented growth.

The South African IDZ programme is aimed at raising the competitiveness of the manufacturing sector through "leveraging investment in export-oriented manufacturing industries and the export of value-added manufactured products" (DTI, 2008: 5)³. The emphasis on developing the manufacturing sector shows a positive engagement by the government to offset the decline in the share of employment in the country's traditional sector namely agriculture and mining.

³DTI (2008) 'The Department of Trade and Industry - Industrial Development Zone Programme Guidelines, February 2008.

An evaluation of the country's IDZ programme indicates that the IDZ programme is premised on the following three economic objectives and rationale:

1. **Internationally Competitive:** in an intensely competitive global environment, position South African manufacturing industries by location (proximity to port/airport); efficient logistics services; fiscal incentives and improvements of industrial infrastructure so that production and transaction costs are lessened and industrial exports can be given a boost.
2. **Internationally Attractive:** using fiscal and non fiscal incentives to attract foreign direct investment and reap the potential benefits of foreign knowledge and technology in production methods and deepen integration into the global production network.
3. **Industrially Synergistic:** encourage the development of *clustering* a phenomenon well-examined by Porter (1990)⁴ whereby cooperation-linkages between domestic and zone-based industries generate positive spillovers to the broader economy.

In addition to these economic objectives, this paper acknowledges that there are political considerations involved in determining the location of IDZs in South Africa. A number of scholars such as Lewis and Bloch(1998)⁵, Driver(1998)⁶, Hosking and Bond (2000)⁷, Hartzenburg (2001)⁸ and Luiz (2003)⁹ have all debated the relevance of spatial development initiatives in the country. In the case of the Coega IDZ and the ELIDZ initiatives, many critics including Luiz (2003) have questioned the economic merit of locating the two IDZs (with both auto clusters) in such close proximity to each other.

In defence of the zones, a reference is made to the region's relative abundance of common assets. This is an application of the logic of classical and neo-classical trade theorists, who sought to explain the patterns of international trade with reference to the comparative advantages that arise from the abundance of resources within the boundaries

⁴Porter M.E. (1990) 'The Competitive Advantage of Nations' Macmillan:London

⁵Lewis D., and Bloch R. (1998) 'SDIs: infrastructure, agglomeration and the region in industrial policy' Development Southern Africa,15(5):727-754

⁶Driver A. (1998) 'The Fish River SDI: new hope for industrial regeneration in the Eastern Cape?' Development Southern Africa,15(5):787-808

⁷Hosking S., and Bond P. (2000) 'Infrastructure for SDIs or Basic Needs? Port Elizabeth's Prioritisation of the Coega Port over Municipal Services' P&DM:Johannesburg

⁸Hartzenburg T. (2001) 'South African regional industrial policy: from border industries to spatial development initiatives' Journal of International Development, 13(6):767-777

⁹Luiz J.M. (2003) 'The relevance, practicality and viability of spatial development initiatives: a South African case study' Public Administration And Development,23:433-443

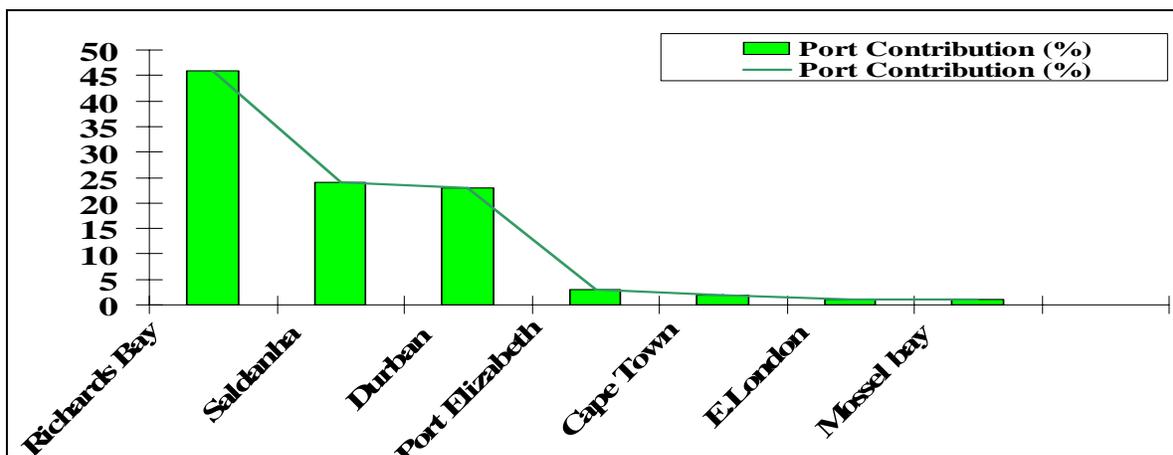
of particular countries. Additionally applicable is Porter's (1990)¹⁰ seminal work on the concept of industrial clusters. Porter argues that the competitive advantage of firms results from several interacting and connecting forces namely factor conditions, demand conditions, strategy, structure and rivalry and the related and supporting industries.

Evidently, while there is economic value in developing certain areas and establishing industrial zones in South Africa, this paper calls into question however, the underlying rationale of developing at enormous economic costs certain IDZs in the country.

A study by Hosking and Bond (2000) has warned against the viability of the Coega IDZ arguing that according to their calculations the opportunity costs are very high. For instance the ecotourism opportunity cost for the region was estimated at R50 million (per annum). The study also raised the environmental threats to the existing local industries - fishing and citrus.

Further, the construction of a new deepwater port (the Port of Ngqura) on the Coega river at a cost of R3.1 billion is not so convincing if one considers the existing port's relative share of the country's total port cargo activity. As indicated in Figure 1 below, in the year 2007, the country's total port cargo handled R183.3 million tons. Richards Bay remains the leader handling 46% of this total, with its tonnage comprising mainly coal, wood-chips, ferro-alloys, chrome ore and alumina. In second place, Saldanha's share of 24% comprised mainly of iron ore. Durban in third place (23%) handled mainly petroleum and general cargo. However, Port Elizabeth's share is only 3% with manganese ore as the main contributor (NPA, 2008)¹¹.

Figure 1: Share of South Africa's Total Port Cargo Activity



¹⁰Porter M.E. (1990) 'The Competitive Advantage of Nations' Macmillan:London

¹¹NPA (2008) 'National Port Authority Port Statistics' [http://www.transnetnationalportauthority.net/documents/pdf/portstats/august 2008](http://www.transnetnationalportauthority.net/documents/pdf/portstats/august%2008)

In the light of this, a natural question therefore is that given the proliferation of IDZs in the country and the co-varying economic and political objectives, the much-debated question remains as to which one leads the other.

3. CONTEXT OF THE IDZ POLICY IN SOUTH AFRICA

Although South Africa recently established its IDZs, the concept of an IDZ is however not new to the country. The fundamental concept of an IDZ is that it is covered by a policy framework that aims to promote certain policy objectives. Prior to the end of the 1980s and to a lesser extent in the 1990s, there was a key piece in the national industrial policy of the apartheid regime that resembles the country's IDZ policy. During the apartheid regime, a set of programmes was distinctly implemented to unlock the potentialities of certain areas by facilitating new investment in these areas. The government then promoted the potential benefits of a rise in the level of industrial investment, performance and exports. Collectively this set of programmes is known as spatial development initiatives. As the name indicates, spatial development initiatives are "distinguished from other national industrial policy programmes by the spatial dimension embodied in their objectives" (Lewis and Bloch, 1998:728)¹². Both South Africa's industrial development zones initiatives and spatial development initiatives have been involved with the identification of industrial locations in specific *unfavourable* areas and have used incentives to encourage firms to situate themselves in these areas.

Whilst *regional underdevelopment* is certainly a reality and a matter of urgency in many locations, however, one needs to acknowledge that "regional policy has had very limited success despite the enormous resources that governments around the world (including South Africa) have poured into it" (Luiz, 2003:435)¹³. To reiterate, it is well-known that South Africa has had poor success when *meddling in the space economy* (Lewis and Bloch, 1998)¹⁴ and "international experience suggests that if EPZs are located in backward areas with poor social and economic infrastructure and lack of industrial culture their performance is likely to be below expectation"(Aggarwal, 2005:59)¹⁵.

Against this cautionary background, it is nevertheless noted that the country's IDZ policy aligns with the country's Accelerated Shared Growth Initiative of South Africa (ASGI-

¹²Lewis D., and Bloch R. (1998) 'SDIs: infrastructure, agglomeration and the region in industrial policy' *Development Southern Africa*, 15(5):727-754

¹³Luiz J.M. (2003) 'The relevance, practicality and viability of spatial development initiatives: a South African case study' *Public Administration And Development*, 23:433-443

¹⁴Lewis D., and Bloch R. (1998) 'SDIs: infrastructure, agglomeration and the region in industrial policy' *Development Southern Africa*, 15(5):727-754

¹⁵Aggarwal A (2005) 'Performance of export processing zones: A comparative analysis of India, Sri Lanka and Bangladesh' *Indian Council For Research on International Economic Relations*, New Delhi

SA) adopted in February 2006. In the desire for shared growth and halving unemployment and poverty by 2014, the ASGI-SA underscores the objectives of transforming the country's economy into a sustainable, internationally competitive, rapidly growing, labour absorbing within an outward-oriented policy framework (ASGISA, 2007)¹⁶.

The country's IDZ policy (and future expectations thereof) supports the development of the manufacturing sector and fosters clustering. Support in this direction implies that the post-apartheid government is more inclined to a *supply-side industrial policy*. A supply-side industrial policy is aimed at improving the availability of productive factors and the efficiency with which such factors are used. Viewed from the supply-side, industrial policy is directed at raising production in the manufacturing sector.

For a justification of this view-point, consider the following standard production function:

$$Y = f(K, L, P)$$

Where Y = output, K = stock of capital L = labour force and P = productivity/efficiency

An industrial policy that raises the Y factor in the manufacturing sector necessitates the increasing of K, L and P factors. It is noted that P a much needed key factor should rise with the simultaneous improvements in the two productive factors K and L. If one takes into account the investment incentives (fiscal and non fiscal) offered by the country's IDZ programme combined with the existing subsidized learnership training programme, then there is certainly economic merit to this supply-side industrial policy approach.

4. SOUTH AFRICA'S IDZS PERFORMANCE

South Africa has only very recently embarked on the IDZ experiment. In fact, the Coega IDZ covering 11000 hectares is the country's first IDZ initiative – the Coega IDZ was established in October 1996 (Driver, 1998)¹⁷. After the Coega IDZ was gazetted in 2001 (Luiz, 2003)¹⁸, constructions on the Coega site began in August 2002. As yet, the zone is not fully operational.

¹⁶ ASGISA (2007) 'ASGISA-Annual Report 2007' Accelerated Shared Growth Initiative of South Africa The Presidency Republic of South Africa

¹⁷ Driver A. (1998) 'The Fish River SDI: new hope for industrial regeneration in the Eastern Cape?' *Development Southern Africa*, 15(5):787-808

¹⁸ Luiz J.M. (2003) 'The relevance, practicality and viability of spatial development initiatives: a South African case study' *Public Administration And Development*, 23:433-443

The Coega initiative is known to be the largest zone-project undertaken in the country and continent. The government has spent about R8 billion in developing this industrial project – R3.1 billion for a new deepwater port, R2 billion for infrastructure in the IDZ, R2.1 billion by the State electricity Eskom to upgrade the power supply and the State rail Transnet’s contribution is estimated at R500million for the upgrade of the rail facilities (Coega, 2008)¹⁹.

On the other hand, overshadowed by the much-publicised *grand* Coega IDZ, the East London IDZ covering 430 hectares is the country’s first operational zone and has a fully developed infrastructure and operational firms. The establishment of the East London IDZ is estimated at slightly over R200 million. The Richards Bay and Gauteng IDZs on the other hand, are a new addition to the country’s IDZs and not yet fully operational. Their positions are illustrated on the map in Figure 1²⁰ below.



Source: Ryan et al (2006)

In the light of this background, while it is too early to ascertain the economic impact of the zones, nevertheless a temporal examination of the country’s IDZs’ economic performance is undertaken. It is important to understand however that given the newness of their existence and the paucity of data a comparative analysis is therefore limited. This

¹⁹ Coega(2008)‘Coega Development Corporation Annual Report 2007’ <http://www.coega.co.za/files/fil3ddb-coega%20Annual%20report.pdf>

²⁰ Ryan G., Gounden Y., and Mushayanyama T. (2006) ‘Inventory of a Free Trade Zone: Industrial Development Zones in South Africa’ World and Health in Southern Africa project report 3.6.1 December 2006

paper focuses on two zones – the East London IDZ and the Coega IDZ both situated in the Eastern Cape region. Data collected for this section of the report is sourced mainly from the various newsletters and annual reports reported by the East London IDZ²¹ and Coega IDZ²².

Since IDZs in South Africa was established primarily to lure export-oriented investment, the zone performance is examined according to the following two indicators:

- Investment value in the zones
- Employment in the zones

Investment in the zones

A number of studies including Dean et al (2000)²³ and Nassimbeni (2001)²⁴ have investigated and confirmed the connection of the size of a firm and the growth of its foreign trade. In the light of this information, this paper takes the approach that a firm's export is positively related to its size i.e., in this case the size of its investment. It is expected therefore that the larger the investor the greater the potential export activity. As a proxy for size, the actual value of investment in the zone is used.

The Table 2 below presents the annual investment value on the zones for the period 2005-2007. Additionally, as a matter of interest, the number of investors located in the zones is also provided.

²¹<http://www.coega.co.za>

²²<http://www.elidz.co.za>

²³Dean D., Menguc B., and Myers C. (2000) 'Revisiting firms characteristics, strategy and export performance relationship' *Industrial Marketing Management*, 29:461-477

²⁴Nassimbeni G. (2001) 'Technology, innovation capacity and the export attitude of small manufacturing firms: a logit/tobit model' *Research policy*,305(2):245-262

Table 2: Size of investments in the IDZs

<i>IDZ – Number of Investors (cumulative)</i>	2005	2006	2007	Mean (2006- 2007)
East London	4	11	14	7
Coega(est)	n.a	9	12	6
<i>IDZ - Investment Value (cumulative)</i>	2005	2006	2007	Mean (2006- 2007)
East London	R300m	R775m	R920m	460m
Coega (est)	n.a	24b	30b	15b

Table 2 shows that in the last two years, the East London IDZ has managed to better the Coega IDZ performance in attracting investors in both years. However, on investment value the Coega IDZ outperforms the East London IDZ. In 2007, investment attracted into the Coega IDZ is estimated at around R30billion compared to R920million for the East London IDZ. At this juncture, it is important to highlight that out of the total R30billion investments attracted by the Coega IDZ, an aluminum smelter company is clearly the *anchor tenant* contributing alone R20billion towards this total. This shining performance in terms of investment value attracted into the Coega IDZ is however dimmed by recent reports in the media of a possible withdrawal of the aluminum smelter company. If indeed the case, then effectively this brings the 2007 Coega IDZ total investment value down by an estimated 67 percent.

Employment in the zones

Whilst there are different measures in examining the impact of employment in the zones, this paper focuses on the direct impact of employment. Table 3 below indicates that by 2007, both zones combined have had a positive impact of absorbing an estimated 3935 labour. In the last year, the East London IDZ alone managed to create 1313 direct jobs and the Coega IDZ an estimated 2622 direct jobs. Whilst the Coega IDZ clearly has managed in each of the last two years, to double the East London IDZ direct employment figures, however an abandonment of the aluminum smelter anchor project (expected to create 1000 direct jobs) in the Coega IDZ will reduce the 2007 Coega IDZ direct employment creation by an estimated 38%.

Table 3: Employment in the IDZs

<i>IDZ - Direct Employment</i> (cumulative)	2005	2006	2007	Mean (2006- 2007)
East London	540	1118	1313	657
Coega (est)	n.a	2227	2622	1311

Overall, this section of the paper shows that (despite South Africa's recent establishment of IDZs and a limitation of data for the zones), while it is quite apparent that South African IDZs have managed within the last couple of years to successfully attract investments, however the zones lacklustre performance in direct employment calls for a need to target and provide support for labour-intensive industries with good export potentials.

5. INDUSTRIAL DEVELOPMENT ZONES FISCAL INCENTIVES

A number of African countries have established industrial zones but few have been successful (Madani, 1999²⁵; Rutashobya, 2003²⁶). By 2007, there were 20 Sub-Saharan African countries engaged in the international economy through development zones and altogether employing just over a million labour. Arguably, in the sub-region, a notable success story alongside the well-known Mauritian case is Madagascar. It is hard to argue against the positive impact of EPZs on the two notable African countries labour market.

According to the International Labour Organization, total employment in EPZs in both countries amounted to 180512 people and interestingly Kenya with the largest number of zones in the sub-region employs only 38851 labour (ILO,2007)²⁷. This paper cautions the proliferation of zones within a country.

To attract investors in the zones, most zone-operating countries compete on a similar package of investment incentives including fiscal incentives. To date, given the mixed results of these Southern African zone-operating countries success in attracting investment in their zones, this section of the paper attempts to investigate the fiscal taxation incentives offered by three such zone countries – Mauritius, Madagascar and

²⁵Madani D (1999) 'A Review of the Role and Impact of Export Processing Zones' Washington, DC:World Bank

²⁶Rutashobya L. (2003) 'Exploring the potentialities of export processing free zones (EPZs) for economic development in Africa:lessons from Mauritius' *Management Decision*,41(3):226-232

²⁷ILO (2007). 'ILO database on export processing zones (revised) in Boyenge' Geneva, International Labour Organization April 2007

South Africa. Such investigations may provide some useful lessons and counter what Kaplinsky (1993)²⁸ calls *competitive devaluation*.

Fiscal taxation incentives

In hierarchy formation, Mauritius is the *mother* of all African zones in view of the fact that it is the first country to establish EPZs in Africa. From a tax perspective, at the inception of the EPZ sector, EPZ firms enjoyed a tax holiday for a specific number of years. Until a few years ago, investors could claim a tax credit of 60% for subscribing to shares engaged in spinning and weaving activities. Also, machinery qualified for accelerated tax depreciation namely 95% of the cost of machinery was tax deductible. Today, as to all companies alike, a flat rate of 15% applies. Regarding customs duty, raw materials and machinery are duty free. Yarn for instance is zero-rated for Value Added Tax (VAT) and all VAT incurred by an EPZ entity is refunded and exports zero-rated (Cheung, 2008)²⁹.

Relative to Mauritius, the establishment of EPZs in Madagascar is new. The Madagascar *Zone Franche* was implemented in 1989 and similar to Mauritius investments in the zones are primarily in the textile and clothing industries. The Madagascar *Zone Franche* grants exemption from tax on profits during the first five years then 10% beginning the sixth year. A noteworthy point is that the *Zone Franche* grants “total exemption from profit tax for a grace period of two years for labour-intensive farming and fishing companies and four years for industrial and service companies. These companies are liable for a fixed rate of 10% thereafter, which is far lower than the general rate of 35%” (Cling et al, 2007:3)³⁰

Comparatively to the above two zones-fiscal incentives, South Africa also offers a number of fiscal incentives including a limited six year tax holiday as well as accelerated depreciation (allowance to write off manufacturing asset over 4 years, 40% for cost in the first year and thereafter 20%), duty free imports and VAT exemption.

The Table 4 below summarizes and compares the taxation incentives offered in the three sub-African zones. Whilst all three countries offer similar tariff-free imports and exports, their corporate tax benefit structure varies. Overall, South Africa as the ‘newcomer’ is more competitive with regards to tax concessions and this therefore augurs well for the development of South African IDZs.

²⁸ Kaplinsky R. (1993) ‘Export processing zones in the Dominican Republic: transforming manufactures into commodities’ *World Development*, 21(11):1851-1865

²⁹ Chung W ‘Private email conversation’ Deloitte Mauritius, 24 Sept 2008.

³⁰ Cling J.P., Razafindrakoto M., and Roubaud F. (2007) ‘Export processing Zones in Madagascar: The impact of the dismantling of clothing quotas on employment and labour standards’ Institut de Recherche pour le Developpement, DIAL, Paris May 2007

Table 4: Taxation incentives in the zones

<i>COUNTRY</i>	Corporate and Domestic Taxes	Tariffs
Mauritius	15% corporate tax VAT refundable	Exemption from duties on raw materials and machinery Exports zero-rated
Madagascar	Tax holiday (limited to five years) VAT refundable	Exemption from duties on raw materials and machinery Exports zero-rated
South Africa	Tax holiday (limited to six years) and accelerated depreciation allowance VAT exemption	Exemption from duties on raw materials and machinery ; Exports zero-rated

6. CONCLUSION AND RECOMMENDATIONS

One of the most important policy issues facing South and Southern African governments is how to successfully diversify their economies into the manufacturing of exports. Many governments have therefore used industrial development zones as a policy tool to meet this challenge. African zones success cases (excl South Africa given the very recent establishment and the notable exception of Mauritius and Madagascar) are unimpressive relative to East Asia and the Latin American countries.

There are lessons that South Africa can draw from its past industrial policy experience and the industrial zones experience of neighbouring countries. To speed up the development of an export-oriented economy, the key to successful exporting has its origins in the “new trade theory” which underlines the technical efficiency of firms. Such efficiency is determined by policies which encourage economies of scale, innovation, exposure to foreign competition and the production of “new” goods. These factors combined with good public governance and investments in human capital determine industrial success.

Efforts to improve the zones-firm level competitiveness will have limited impact if framework conditions are threatened by political instability and rise in African HIV/AIDS epidemic. The government role in enabling framework conditions for

industrial development is universally recognized and whilst in this paper promoted, should be politically neutral and policy-making regarding IDZs evolutionary in nature to adapt and reflect changes in economic conditions.